CONAIR

BLEND IT
COOL IT
CONVEY IT
FEED IT
GRIND IT
DRY IT
EXTRUDE IT
STORE IT

EQUIPMENT CATALOG

Website

WWW.CONAIRGROUP.COM

For the latest information on Conair products and services – and much, much more – please visit the new Conair website at www.conairgroup.com. We built this site to be a complete resource, with expanded and reorganized product information, how-to hints and tips in our Knowledge Center, and one of the most comprehensive calendars of plastics industry events in the industry. The new site is also the home of the Conair BuyNow online store, which provides fast, easy, round-the-clock access to select new and used Conair equipment. With colorful graphics, easy-to-use navigation, and full-content search tools the Conair website makes it easy to navigate your way to productivity and profitability.

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Pathways to Profitability

The road to success is not a straight one. Along the way there are obstacles to be overcome and complex decisions to be made. When it comes to making the choices directly related to plastics-processing efficiency, no company is better positioned to help you find your way than Conair. We supply auxiliary equipment and systems that manage and condition raw materials, that optimize processing conditions and product quality, and that recover value from scrap and off-spec parts. More than that, however, we can show you how you can use these technologies to solve problems, cut waste, save energy and improve process yield – and put yourself on a pathway to profitability.

Ready to Serve You – Worldwide

The plastics industry never sleeps and neither does Conair. When your day ends, it's a new morning on the other side of the world. A new opportunity to grow your business arises. A new challenge to profitability demands a timely solution. In India, in China, in Brazil, in the United States, or wherever your business takes you, Conair is there.

Conair's sales department is comprised of industry applications experts with unparalleled experience and expertise. Whether your process involves molding, extruding or compounding, our representatives can help you select the equipment and develop the systems you need to increase your productivity and profitability. Then, to keep your plant running efficiently, Conair's parts and service staff is available 24 hours a day, 365 days a year, throughout the US and Canada and in many other countries too. It's a wide, wide world of opportunity and Conair is ready to help you along your path to profitability.

To find the sales representative nearest you, call 1 800 654 6661 (US only), 724 584 5500 (international) or visit us online at www.conairgroup.com.

Sales

WORLDWIDE SALES LOCATIONS

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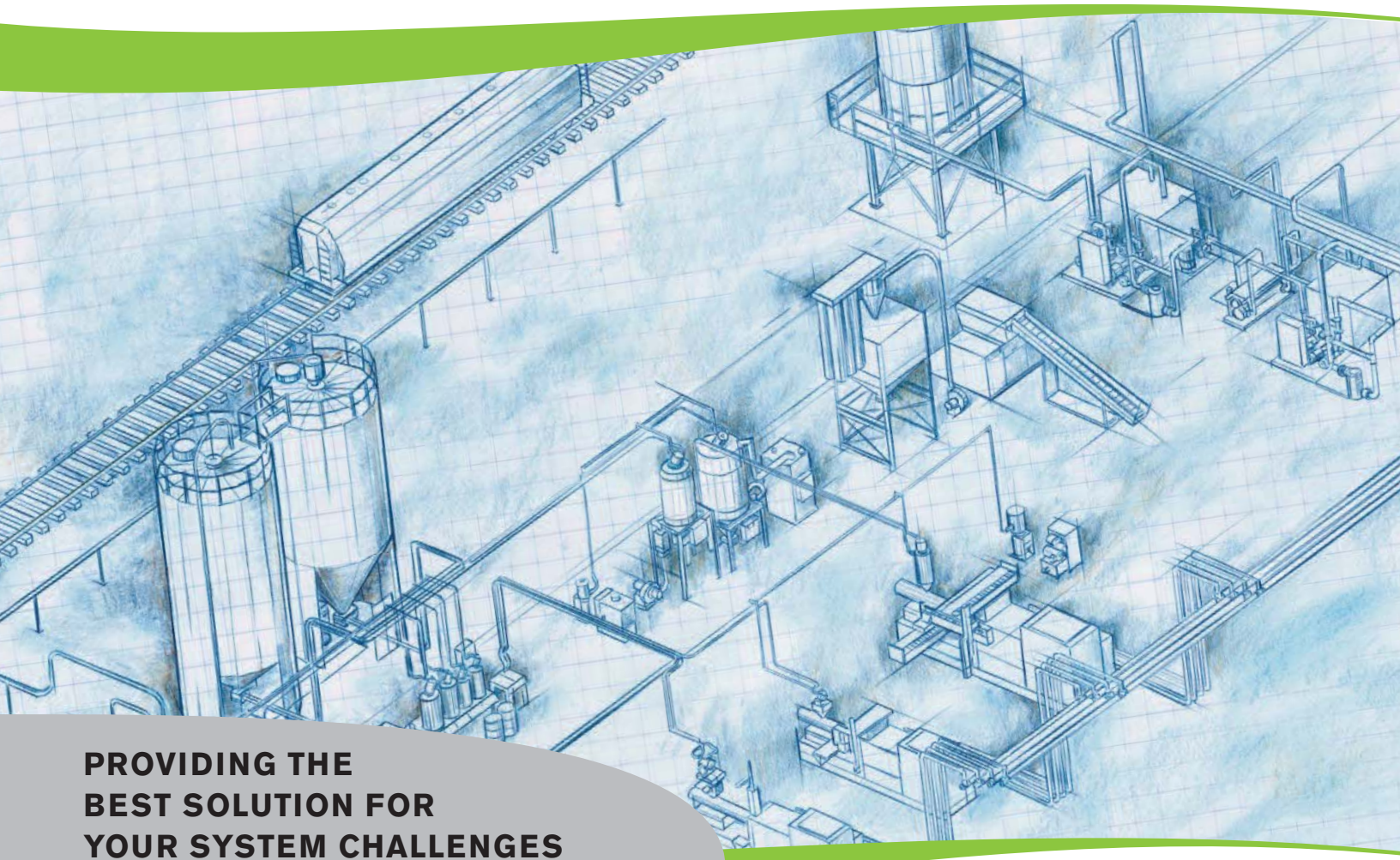
Systems Capabilities

THE CONAIR DIFFERENCE



PROVIDING THE BEST SOLUTION FOR YOUR SYSTEM CHALLENGES

Conair offers the most reliable, high-quality auxiliary equipment in the world. But the real Conair difference-maker is that Conair listens to what matters to you. We make sure that we understand what you need and we partner with you to develop the best, the most innovative, engineered system solution for your process.

There is not a single piece of equipment in your plant that can produce a saleable product by itself. Your plastics-processing operation is a system, with dozens of components assembled to produce a quality product that can be sold at a profit. Yet, most people don't see all of those individual loaders, dryers, chillers and other peripherals for what they really are – elements in a complex manufacturing system. Conair does, however, and no other company brings the same kind of experience, diverse product line, process-engineering capabilities or organizational depth to your project. Conair has the knowledge and expertise to put you on the path to profitability from day one, whether you need a single piece of equipment delivered quickly or an entire plant designed and built from the ground up.

1. PROJECT MANAGER – Front-to-back accountability for your entire project including delivery, installation and start-up. Count on you Conair systems team to keep you well-informed throughout the entire project. All Conair Project Managers have obtained a Project Management Professional certificate.

2. SYSTEM SPECIFICATION – An in-depth, custom-prepared specification focused on your requirements. This documentation clearly defines the critical operating parameters of your process and the particulars of your system right from the start.

3. FLOW SCHEMATIC – A powerful visualization of your system specification clearly explains the entire project in advance. These drawings, provided early in the process, help to facilitate dynamic discussions for your system design and performance. Revisions are simple and transmittable via email.

4. TECHNOLOGY/RESEARCH CENTER – This facility, located at the Conair headquarters in Cranberry Township, PA, provides a real-word environment for accurate trials and testing.

5. TOTAL INTEGRATION RESPONSIBILITY – All equipment is selected and designed to operate as an integrated system backed by the Conair Performance Warranty.

6. IN-HOUSE DESIGN AND ENGINEERING – Industry best applications and systems-integration expertise with all equipment supported from one location ensures an optimal system design to fit your performance and budget expectations.

7. MANUFACTURING – World's leading builder of auxiliary equipment – unmatched in scope, breadth, quality and reliability. Equipment produced in a world-class manufacturing facility assures consistent quality and aesthetics, provides for total control over delivery and schedules, as well as simplifying procurement.

8. TOTAL TIMELINE MANAGEMENT – Easy-to-read Gantt charts track your system through the paces to make sure that the equipment arrives when you need it. These web-based documents are available online to allow you constant monitoring of your project.

9. SCOPE OF WORK DOCUMENT – Up-front delineation of responsibilities for every portion of the project assures that no aspect of the job is overlooked. Spells out customer, contractor and Conair responsibilities.

10. INSTALLATION DRAWINGS – Three-dimensional drawings expertly prepared by our in-house designers show specifics on all mechanical, electrical and compressed air details. These drawings promote total understanding of the equipment, piping and utility placement and can be overlaid on your existing plant layout where applicable.

11. INDUSTRY-LEADING CENTRAL CONTROLS – Optional Control-Works central control provides a standard platform to integrate all Conair equipment. Supervise, monitor and control your entire plant from one or more PCs.

12. PROJECT DOCUMENTATION – A project CD contains every essential document for your job. At least two copies are made, one housed in Conair's vast documentation library the other delivered to your facility.

13. EXPERT INSTALLATION – Experienced Conair factory-certified installation contractors make sure all systems are installed with energy efficiency, reliability and superior aesthetics in mind. Installation crews complete all aspects or your system including rigging, piping, plumbing, mechanical and electrical requirements.

14. TRAINING PROGRAMS – Seasoned technical experts are available to provide training tailored to your specific needs. Training is available at your site or at any Conair location worldwide.

15. START-UP SERVICES – Ensures that your system is up, running and meeting or exceeding your performance expectations.

16. GLOBAL PRESENCE – Conair international offices can help with your systems installations worldwide. Conair has sales, parts and service support spanning the globe with sales offices in more than forty countries. We have the expertise you'll need in export crating, shipping, documentation and brokerage.

17. PARTS – 24/7/365 – One phone number any time of the day or night helps keep you up and running shift after shift.

18. SERVICE – 24/7/365 – Around the clock uptime support from seasoned Conair experts.

19. PREVENTIVE MAINTENANCE PROGRAMS – Factory-trained Conair service personnel can be scheduled to perform preventative maintenance procedures on your Conair equipment – once a year, quarterly, monthly – whatever best fits with your needs.

20. 100% PERFORMANCE WARRANTY – Ground-up, full-operational warranty that gives you total peace of mind. This warranty is over and above the standard product guarantees, and covers all aspects of products, piping, electrical and mechanical issues.

Parts and Service

EXPECT MORE FROM CONAIR

You can't make money if critical processing equipment is down. That's why we design and manufacture Conair equipment to be as rugged and reliable as any in the industry. Inevitably, though, you'll have an operational issue or you'll need to replace a worn part. That's when you'll appreciate the aftermarket support for which Conair is so well known. In fact, our parts and service teams represent a major part of the value that comes with a Conair equipment purchase. With knowledgeable people, immediate response, maintenance training and guidance, we'll keep you up and running, productive and profitable for as long as you own your Conair equipment.

24/7 PARTS AND SERVICE

Your success is dependent on making high-quality parts day-after-day and shift-after-shift. You need immediate contact with your suppliers if a problem arises. We offer this peace of mind service to you. Our Instant Access hotline provides emergency parts ordering and service, 24 hours a day, 7 days a week. You can expect us to keep you up and running.

WORLD-WIDE COVERAGE

We are where you need us.

- Twenty-two parts and service representatives successfully handle more than 1,000 customer contacts a day.
- Nearly all parts orders are shipped the same day.
- Inventory of over 50,000 parts.
- Coverage where you need it – 30 direct certified field-service technicians plus a number of strategically located factory-trained service technicians.

From California to Shanghai, you can expect Conair to be there when you need us.

UNPARALLELED EXPERTISE

When you call you're looking for quick and accurate resolutions to your product or processing problem from someone who knows your product and understands your business. Our highly-trained, experienced professionals are ready to help you with fast, easy, no-hassle part ordering and service consultation. You can expect prompt attention – your parts and services needs handled with speed and efficiency.

TRAINING

Educating your personnel on the proper use of your Conair equipment will make your organization more efficient and more profitable. That's why we offer training on all of our equipment. We'll train your people on the proper use and maintenance of your equipment right at your plant or at our facility. All training sessions can be tailored to your particular requirements. You can expect us to help you get the most from your auxiliary equipment.

PREVENTATIVE MAINTENANCE PROGRAM

Unscheduled downtime is the most difficult, unpredictable part of running an efficient, profitable plant. Preventative maintenance prevents that unscheduled downtime. Factory-trained Conair Service personnel can be scheduled to perform preventative maintenance procedures on your Conair equipment – once a year, quarterly, monthly – whatever best fits with your needs. You can expect us to preserve and enhance your equipment reliability.

USEFUL PARTS AND SERVICE INFORMATION ON-LINE – WWW.CONAIRGROUP.COM

From the support link on the website navigation bar you'll find useful service and parts information. Under the service link you can fill out a form to request service, learn more about our training programs, view preventative maintenance checklists, and even download archive manuals. Under the Conair Parts link you will find our entire Conair Parts Catalog. If you need help identifying the spare part you need, view the spare part identification guide of your product. Conair equipment manuals are available online for your convenience. You can expect us to provide state-of-the-art support documentation.

CONTACT

Conair Service

Email: service@conairgroup.com

Call 800-458-1960, press 1 for Service.

Conair Parts

Email: parts@conairgroup.com

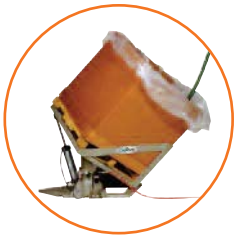
Call 800-458-1960, press 2 for Parts.

2 TON

Material Storage

Whether your plant consumes resin by the railcar on a daily basis, or you want to buy in bulk when the price is right, or you simply need to store regrind so it can be profitably re-used, you've got thousands or even millions of dollars riding on proper storage. From portable hoppers and surge bins to outdoor silos that are six stories tall, Conair has storage vessels – structurally tough, contamination-free and environmentally controlled – to meet your exact needs.

- Silos
- Stationary and Mobile Surge Bins
- Gaylord Tilters
- Rail-Car and Truck Unloading Systems
- Bulk Conveying Systems



Maintenan
Shop
2

Conveying

Getting resin from Point A to Point B... it seems like such a simple task. And yet it is absolutely critical to the smooth, profitable operation of your plant. Whether you need to supply material to just a few machines or a hundred or more, Conair material handling equipment is designed for maximum efficiency and ease of use. From loaders that are simple to clean and maintain, to user-friendly controls that can be programmed to prioritize material deliveries where they are needed most, count on Conair for systems that convey a quick return on investment.

- Self-Contained Vacuum Loaders
- Compressed Air Material Loaders
- Central Vacuum Receivers
- Conveying System Controls
- Vacuum Pumps
- Material Distribution Systems
- Material Line Valves

Drying

Profitable processing of engineering materials like polycarbonate, nylon or PET requires a Conair dryer. That's because these hygroscopic resins absorb moisture from the air and, if it is not removed before processing, it will cause cosmetic problems and degradation of critical mechanical properties in the finished product. There are no shortcuts to proper drying, but Conair can show you how to get the most from these materials, driving productivity and quality up, while keeping energy costs to an absolute minimum.

- Electric Dryers – Central and Mobile
- Gas-Fired Dryers
- Compressed Air Dryers
- Hot Air Dryers
- Drying Hoppers
- ResinWorks® – Central Drying Systems
- Crystallizers
- Drying Monitors
- EnergySmart™ PET Drying Systems

CONAIR

Blending/ Feeding

Accuracy in feeding and blending is essential to profitability, especially when you are dealing with expensive materials like certain colorants and additives. Conair TrueBlend™ blenders can help. No blender is more accurate or easy to set up and operate properly. The totally enclosed mixing section prevents leakage and spills so that you can make every pellet count. With easy-to-use gravimetric feeders and economical volumetric feeders, you can use less expensive ingredients and still remain confident about end-product quality. Whether you are feeding a few pellets a minute or blending thousands of pounds per hour, Conair equipment will contribute handsomely to your bottom line.

- Gravimetric Blenders – Standard and High-Heat Models
- Gravimetric Feeders
- Volumetric Feeders

Heat Transfer

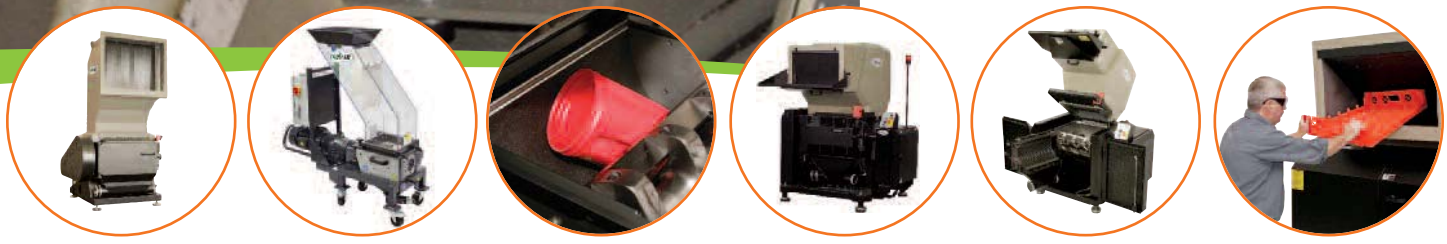
Shorter molding cycles, faster extrusion rates, energy efficiency and improved quality in every part and product – these are factors that contribute to plant productivity and profitability. Variable-frequency drives and the latest refrigerant technology help you save energy and prevent environmental damage. Whether you need hot water for high-temperature molding, cold water for part cooling or tempered water for extrusion of pipe, profiles or tubing, Conair has the ideal heat-transfer solution.

- Thermolator® Temperature Control Units
- Portable Chillers
- Cooling Towers
- Central Chillers
- Pump Tanks
- Strainers and Filters
- Tower Heat Exchangers

Granulation

For many years, even successful plant managers looked on scrap as an inevitable by-product of plastics production and they built this “cost” into their profitability calculations. Today, we realize that what used to be called scrap is actually valuable surplus material. With Conair granulators and scrap-reclaim systems you can be sure you are returning as much value as possible to your process, while reducing the amount of waste going to landfill.

- Beside-the-Machine Granulators
- Central Granulators
- Shredders
- Conveyors
- Evacuation Systems
- Elutriation Systems
- Fines Separation Equipment
- Blower Packages
- Negative Pressure Systems



Upstream/ Downstream Extrusion

Few processes are as highly competitive as plastics extrusion. Your profitability depends on getting the most out of every pound or kilo of material you run and maximizing the value every foot or meter of product you make. With upstream weighing and blending systems, and downstream sizing, cooling, cutting and handling equipment, Conair extrusion products help you increase both throughput and product quality in film and sheet, tubing, pipe and profiles.

- Vacuum Sizing Tanks
- Cooling/Spray Tanks
- Belted and Cleated Pullers
- Servo Rotary Knife Cutters and Traveling Saws
- Takeaway Conveyors
- Extrusion Line Control
- Film Scrap Reclaim Systems

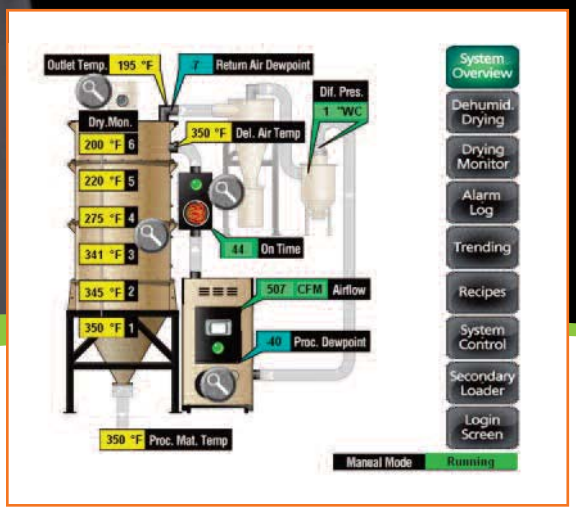
CONAIR
Duraloxal

EnergySmart™

Precision Drying

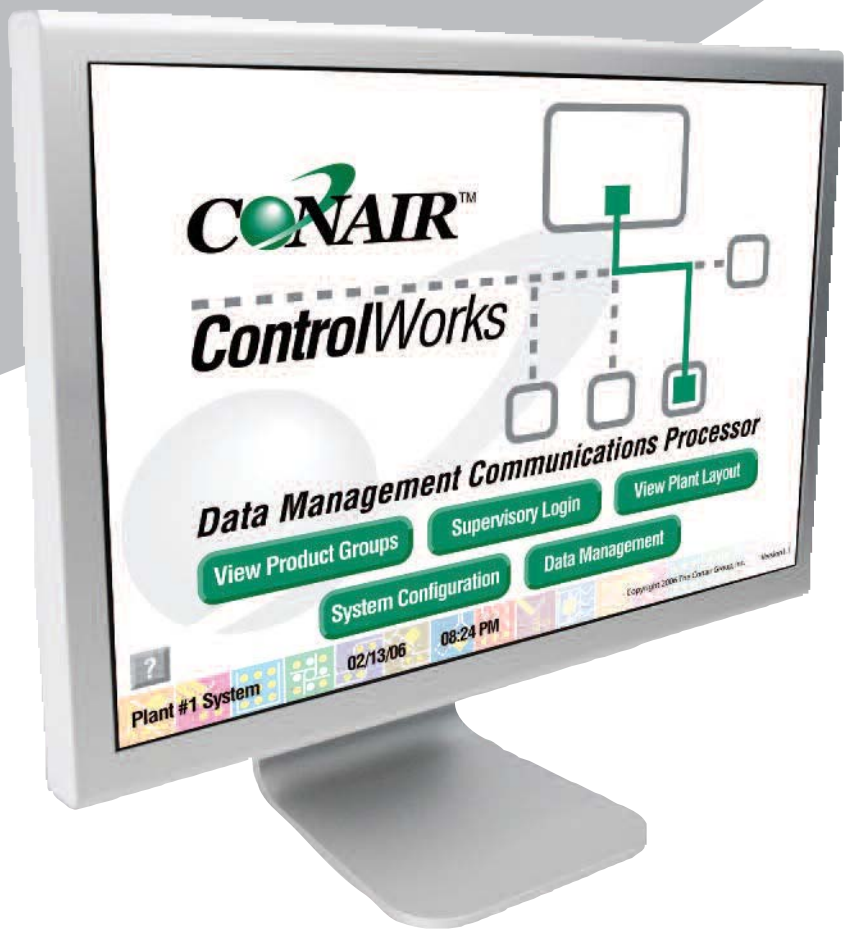
The drying process can be among the most energy-intensive, especially for materials that dry at high temperatures. In PET preform molding, for instance, drying accounts for 25% of total process energy consumption, so there is plenty of opportunity to save and improve your bottom line.

Conair pioneered precision drying some 20 years ago with the introduction of the patented Drying Monitor™. There is still nothing like it and, today, the data it gathers is being used, along with several other Conair technologies, to slash energy waste and provide a higher degree of control over the drying process than ever before possible. The EnergySmart™ Single-Stage (ES-1) drying system now features TouchView™ control and in Optimizer™ Mode regulates air temperature, dew point and air flow. With a near-perfect picture of what's actually happening in the drying hopper, you can to fine-tune air flow, temperature and dew point to cut energy consumption by 25% or more – all while knowing for certain that your material has been dried properly for production of high-quality end product. That's real savings and yet another way Conair puts you on the pathway to profitability.



ControlWorks™

Central System Control



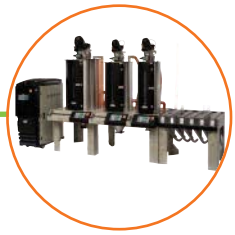
To run a profitable plastics processing operation, you've got to watch the details and maintain tight control. And, with ControlWorks™ from Conair, you can do just that. ControlWorks is the ultimate in plantwide process control, allowing you to monitor the operation of your blenders, loaders, dryers and heat-transfer equipment, and make changes to primary process set points – from a central location within a manufacturing plant, or anywhere in the world using a virtual private network (VPN). In fact, ControlWorks allows you to perform remotely virtually any of the basic operational functions that would normally take place on the plant floor. It's modular and scalable and may be just what you need in today's competitive manufacturing environment.

Web Client Web Client Web Client

ETHERNET SWITCH

ETHERNET SWITCH

DEVICE GATEWAY



Bulk Storage Module

Monitor up to 3 Resin Level Display (RLD) system indicators for:

- High level alarm
- Re-order point alarm
- Low level alarm

-or-

Monitor up to 36 yo-yo or ultrasonic level sensors for silo monitoring.

ResinWorks® Module

Monitor up to 32 drying hoppers per module:

- Enter setpoints and operating parameters
- Display and record data of alarms and actual operating values
- Trend/view temperatures and adjust setback on temperature to conserve energy

Blending Module

Monitor up to 64 blenders per module:

- Set-up blenders, download and enter recipes and operating parameters
- Monitor real-time operational data, log material usage, generate reports of material usage

Dryer Module

Monitor up to 32 dryers per module:

- Enter setpoints and operating parameters
- Display and log data of alarms and actual operating values
- Trend dewpoint vs. energy consumption (optional)

DEVICE GATEWAY

Thermolator® Module

Monitor up to 32 Thermolators per module:

- Enter setpoints and operating parameters for Thermolators (mold temperature control units), portable and central chillers
- Display and record data of actual operating values and alarms

FLX or ILS Loading Module

Monitor up to 3 ILS loading control systems

Loader information (monitor/change):

- Load time
- Material alarms
- Purge time
- Regrind cycles
- Discharge time
- Proofing (ILS)

Central Water Module

Monitor up to 3 central water systems per module:

- Monitor and control all pumps, valves and fans
- Display and record data of actual operating values and alarms

Miscellaneous I/O Module

Monitor any combination of analog, digital, RTD or thermocouple inputs.

Enterprise Network

Device Network

Conair Today

Conair is the leading producer of auxiliary equipment for plastics processing in the world. We make and market over 450 different products, including resin-drying systems, blenders, feeders and material-conveying systems, temperature-control equipment and granulators. Extrusion solutions include gravimetric control systems, film and sheet scrap-reclaim systems and downstream equipment for pipe and profile extrusion. Conair is also a leader in plastics process integration, engineering and installing complete manufacturing systems that help plastics processors manage their valuable raw materials, handle their critical manufactured parts, and improve their process yield.

Material Storage

SILOS

Welded Steel or Aluminum Silos S-1
Spiral Aluminum Silos S-3
Spiral Steel Silos S-5
Bolted Steel or Aluminum Silos S-7

SURGE BINS

Mobile Surge Bin S-9
In-Plant Surge Bin S-11

GAYLORD TILTERS

299 and 120 Series S-13

MATERIAL STORAGE MONITOR

Resin Level Display S-15

ACCESSORIES S-17

Material Storage Quick Reference

MODELS	Height Range ft.	STEEL	ALUMINUM	Wind Load	Usable Volume Range ft³
Welded Silos					
SW 10 ft., 0 in.	18 to 72	•	○	100 mph	
SW 11 ft., 11 in.	18 to 72	•	○	100 mph	
SW 13 ft., 11 in.	18 to 72	•	○	100 mph	
Spiral Aluminum Silos					
SAS 11 ft., 6 in.	24 to 60	NA	•	100 mph	
SAS 14 ft., 8 in.	24 to 60	NA	•	100 mph	
Spiral Steel Silos					
SSS 11 ft., 6 in.	24 to 60	NA	•	100 mph	
Bolted Silos					
SB 12 ft., 3-11/16 in.	24 to 64	•	○	100 mph	
SB 15 ft., 4-5/8 in.	24 to 64	•	○	100 mph	
SB 18 ft., 5-9/16 in.	24 to 64	•	○	100 mph	

1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 11000 12000 13000 14000 15000

MODELS	Volume ft³	CARBON STEEL	STAINLESS STEEL	Usable Capacity, lb @ 35 lb/ft³
Surge Bins				
Mobile MB44-10	10	•	○	
Mobile MB44-20	20	•	○	
Mobile MB44-30	30	•	○	
Mobile MB44-40	40	•	○	
Mobile MB44-50	50	•	○	
In-Plant SB48-17	17	•	○	
In-Plant SB48-47	47	•	○	
In-Plant SB60-64	64	•	○	
In-Plant SB60-94	94	•	○	
In-Plant SB60-125	125	•	○	
In-Plant SB72-134	134	•	○	
In-Plant SB72-163	163	•	○	
In-Plant SB72-192	192	•	○	
In-Plant SB72-222	222	•	○	
In-Plant SB72-251	251	•	○	
In-Plant SB84-285	285	•	○	
In-Plant SB84-342	342	•	○	
In-Plant SB84-400	400	•	○	
In-Plant SB84-457	457	•	○	
In-Plant SB84-514	514	•	○	

500 1000 1500 2000 2500 3000 4000 5000 6000 7000 8000 9000 10000 12000 14000 16000 18000

OTHER
- Gaylord Tilters
- Resin Level Display

ACCESSORIES
- Level Sensors
- Load Cells
- Valves, Magnets, High-Wear Elbows

○ = option
• = feature

WEATHER-TIGHT FACTORY BUILT BULK STORAGE

Conair's welded silos are shipped factory constructed and ready to install in one day and use immediately. Because there are no bolts, seams or gaskets, material hang up points are eliminated.

The inside of the welded steel silo is epoxy coated to keep your material contamination free. The outside is primed and enamel coated to prevent rusting. Welded aluminum silos require no external painting or internal epoxy coating.

The welded silos are guaranteed to be water-tight.

BROAD RANGE OF STORAGE CAPACITIES AVAILABLE

Conair offers welded silos in a variety of storage capacities ranging from 838 to 9,826 cubic feet.

Two cone configurations are available. Cone configuration is determined by the type of material to be stored. Silos formed for pellet storage usually have a 45º cone bottom. For powder and hard-to-flow materials the silo is fitted with a 60º cone.

The Conair sales team is ready to help you select the size, style and features that will best suit your storage needs.

Welded silos are delivered to your plant via a dedicated delivery truck.
A crane is used to erect the silo.

Conair installation crews can set the silo on the customer poured pad, connect all accessories and install the unloading and conveying system to get the plant up and running.

- **No bolts, seams or gaskets**
  Smooth welded finish on the interior of the silo eliminates material hang up points.
- **Quality internal liner**
  Smooth welded finish on the interior of the silo eliminates material hang up points.
- **Customized to fit your needs**
  Options include a safety cage and rest platform for silos over 30 feet, a ladder and a slide gate shut-off which is pre-drilled to accept an optional Conair distribution box.
- **Many standard features**
  Included as standard are a prefabricated roof with manway/vent combination, perimeter guard rail with safety toe board and railing. Also, a vacuum receiver mounting flange, truck-fill nipple, high and low level indicator mounts, mounting flange for the slide gate shut-off and a fully enclosed weather-proof vented silo skirt with a louvered access door is included. If two or more silos are purchased at once, a four foot (span) crossover walkway is provided.

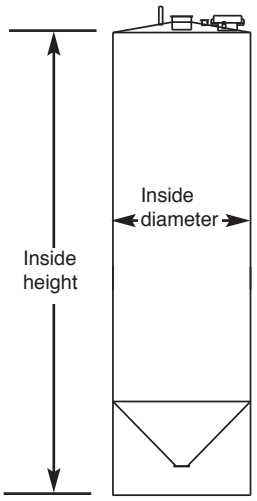
SPECIFICATIONS

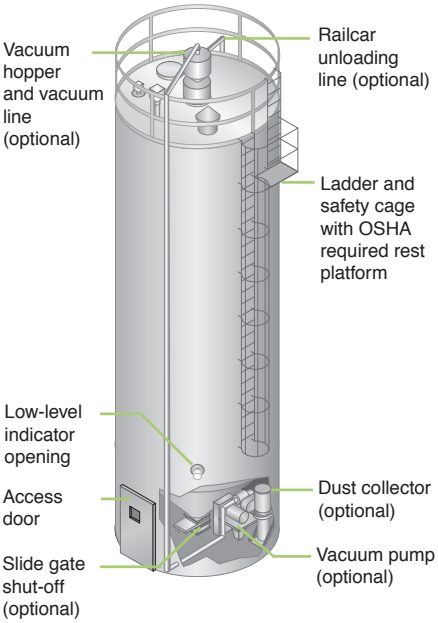
WELDED STEEL OR ALUMINUM SILOS

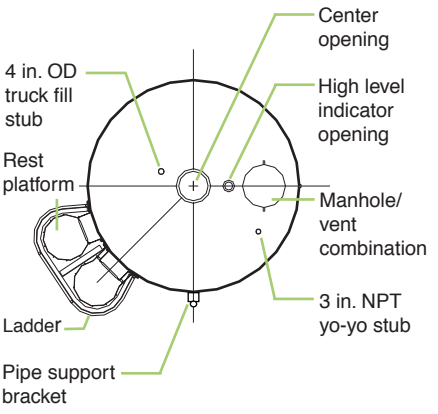
SW MODELS										
Inside diameter	**10 ft, 0 in**									
Silo inside height ft. {m} *	18 {5.5}	24 {7.3}	30 {9.1}	36 {11.0}	42 {12.8}	48 {14.6}	54 {16.5}	60 {18.3}	66 {20.1}	72 {22.0}
Performance characteristics										
Silo capacity 45° cone ft³ † {liters}	838 {23732}	1310 {37099}	1781 {50438}	2252 {63777}	2723 {77115}	3194 {90454}	3665 {103793}	4136 {117132}	4607 {130470}	5079 {143837}
Construction material	ASTM A570 Grade 40 Steel or 5052 - H-32 Aluminum									
Wind load	100 mph									
Snow load	40 lbs/ft²									
Weight lb {kg} ‡										
Shipping (empty)	4783 {2170}	5829 {2644}	6876 {3119}	7922 {3593}	8968 {4068}	10827 {4911}	12475 {5659}	13549 {6146}	15090 {6845}	16515 {7491}
Full to capacity	38303 {17374}	58229 {26412}	78116 {35433}	98002 {44453}	117888 {53473}	138587 {62862}	159075 {72155}	178989 {81188}	199370 {90433}	219675 {99643}

SW MODELS										
Inside diameter	**11 ft, 11 in**									
Silo inside height ft.{m} *	18 {5.5}	24 {7.3}	30 {9.1}	36 {11.0}	42 {12.8}	48 {14.6}	54 {16.5}	60 {18.3}	66 {20.1}	72 {22.0}
Performance characteristics										
Silo capacity 45° cone ft³ † {liters}	1240 {35117}	1909 {54063}	2578 {73009}	3247 {91955}	3916 {11090}	4585 {129847}	5254 {148793}	5833 {165191}	6502 {184137}	7171 {203083}
Construction material	ASTM A570 Grade 40 Steel or 5052 - H-32 Aluminum									
Wind load	100 mph									
Snow load	40 lbs/ft²									
Weight lb {kg} ‡										
Shipping (empty)	6063 {2750}	7310 {3316}	8557 {3881}	10311 {4677}	11558 {5243}	13256 {6013}	15278 {6930}	16525 {7496}	18260 {8283}	20097 {9116}
Full to capacity	55663 {25248}	83670 {37952}	111677 {50656}	140191 {63590}	168198 {76293}	196656 {89202}	225438 {102257}	249845 {113328}	278340 {126253}	306937 {139224}

SW MODELS										
Inside diameter	**13 ft, 11 in**									
Silo inside height ft. {m} *	18 {5.5}	24 {7.3}	30 {9.1}	36 {11.0}	42 {12.8}	48 {14.6}	54 {16.5}	60 {18.3}	66 {20.1}	72 {22.0}
Performance characteristics										
Silo capacity 45° cone ft³ † {liters}	1613 {45680}	2525 {71508}	3438 {97364}	4350 {123192}	5263 {149048}	6176 {174904}	7088 {200732}	8001 {226588}	8913 {252416}	9826 {278272}
Construction material	ASTM A570 Grade 40 Steel or 5052 - H-32 Aluminum									
Wind load	100 mph									
Snow load	40 lbs/ft²									
Weight lb {kg} ‡										
Shipping (empty)	8787 {3986}	10299 {4672}	11755 {5332}	14265 {6470}	15721 {7131}	17178 {7792}	19161 {8691}	21282 {9653}	23925 {10852}	26569 {12051}
Full to capacity	73307 {33251}	111299 {50448}	149275 {67710}	188265 {85395}	226241 {102621}	264218 {119847}	302681 {137294}	341322 {154821}	380445 {172567}	419609 {190331}







SPECIFICATION NOTES:

* For overall height add 44 inches to inside height to account for the guard rail.

† Cones are available in 45° for pellets, except PET and 60° for powdered and PET materials. Reduce silo capacity for 60° cone: 10 feet 0 inches, subtract 47 ft³; 11 feet, 11 inches, subtract 358 ft³; and 13 feet,11 inches subtract 460 ft³.

‡ Weight is based on 40 lb/ft³ materials.

Reference foundation drawing 10 feet welded 501-090 series; 11 feet,11 inches welded 501-024 series; 13 feet,11 inches welded 501-210 series.

Roof live and dead load design 25 lb/ft².

Specifications may change without notice. Check with a Conair representative for the most current information.

WEATHER-TIGHT BULK STORAGE WITH NO MAINTENANCE

Structurally tough. Contamination-free. Conair's aluminum silos are designed to match the rigidity of a steel structure. Unlike a steel structure this silo requires no external painting or internal epoxy coating. In fact, no routine maintenance is needed inside or out.

Aluminum silos keep your expensive material in pristine condition, free from contamination due to rust or flaking. The silo is guaranteed to be water-tight.

ALL-ALUMINUM AND ROLL FORMED

The Conair spiral silo is manufactured, literally, from the top down. A coil of 0.120 gauge sheet aluminum is fed into a circular roll forming machine. The forming machine rotates and joins the edges into an airtight fit which is double crimped under extreme pressure, to form what amounts to a one piece structure.

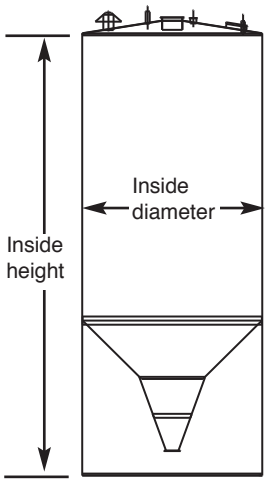
The spiral silo is available in either an 11 foot 6 inch diameter, pre-formed at the factory and shipped ready to erect in one day, or in 14 foot 8 inch formed right at your plant. Storage capacities range from 1,818 to 8,917 cubic feet.

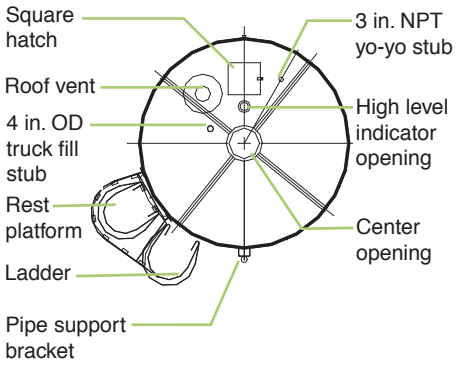
Conair installation crews can set or build the silo on the customer poured pad, connect all accessories and install the unloading and conveying system to get you up and running.

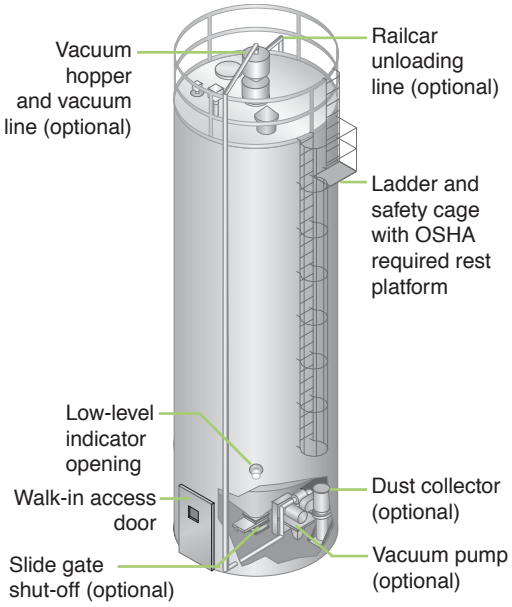
- **Superior quality construction**
  High quality, non-ferrous aluminum silos are a practical solution for contamination-free storing of expensive pelletized or powdered plastic materials.
- **Three cone configurations**
  Cone configuration is determined by material type. Silos formed for pellet storage usually have a 45º cone bottom. For powder and hard-to-flow materials the silo includes a 60º cone. A 45º/70º compound cone is used for PET materials.
- **Customized to fit your needs**
  Options include a safety cage and rest platform for silos over 30 feet, a ladder and a slide gate shut-off which is pre-drilled to accept an optional Conair distribution box.
- **Many standard features**
  Included as standard are: a prefabricated roof with access hatch, roof vent, perimeter guard rail with safety toe board and railing. Also, a vacuum receiver mounting flange, truck-fill nipple, high and low level indicator mounts, mounting flange for the slide gate shut-off and a fully enclosed weather-proof vented silo skirt with a louvered access door is included. If two or more silos are purchased at once, a four foot (span) crossover walkway is provided.

SPECIFICATIONS

SPIRAL ALUMINUM SILOS







SAS MODELS	11 ft, 6 in diameter										
Silo inside height in. {m}*	24 {7.3}	28 {8.5}	30 {9.1}	32 {9.8}	36 {11.0}	40 {12.2}	44 {13.4}	48 {14.6}	52 {15.8}	56 {17.1}	60 {18.3}
Performance characteristics											
Silo capacity 45° cone ft³ {liters}† ‡	1818 {51486}	2234 {63267}	2441 {69129}	2649 {75020}	3065 {86801}	3480 {98554}	3896 {110335}	4311 {122088}	4727 {133869}	5142 {145621}	5558 {157403}
Construction material	5052-H-32 Aluminum										
Wind load §	100 mph										
Snow load	40 lb/ft²										
Weight lb {kg} **											
Shipping (empty)	4066 {1844}	4459 {2023}	4768 {2136}	5076 {2302}	5664 {2569}	6117 {2775}	6569 {2980}	7020 {3184}	7846 {3559}	8341 {3783}	8838 {4009}
Full to capacity	76786 {34830}	93819 {42556}	102408 {46451}	111036 {50365}	128264 {58180}	145316 {65914}	162409 {73667}	179460 {81402}	196926 {89324}	214021 {97078}	231158 {104851}

SAS MODELS	14 ft, 8 in diameter										
Silo inside height in. {m}*	24 {7.3}	28 {8.5}	30 {9.1}	32 {9.8}	36 {11.0}	40 {12.2}	44 {13.4}	48 {14.6}	52 {15.8}	56 {17.1}	60 {18.3}
Performance characteristics											
Silo capacity 45° cone ft³ {liters}† ‡	2835 {80287}	3511 {99432}	3849 {109004}	4187 {118576}	4863 {137720}	5538 {156836}	6214 {175980}	6890 {195125}	7566 {214269}	8242 {233413}	8917 {252529}
Construction material	5052-H-32 Aluminum										
Wind load §	100 mph										
Snow load	40 lbs/ft²										
Weight lb {kg} **											
Shipping (empty)	5443 {2469}	5957 {2702}	6397 {2902}	6836 {3101}	7355 {3336}	7876 {3572}	8395 {3808}	9341 {4237}	9933 {4506}	10532 {4777}	11116 {5042}
Full to capacity	118843 {53906}	146397 {66404}	160357 {72736}	174316 {79068}	201875 {91569}	229396 {104052}	256955 {116553}	284941 {129247}	312573 {141781}	340212 {154317}	367796 {166829}

SPECIFICATION NOTES:

* For overall height add 43 inches to inside height to account for the guardrail.

† Cones are available in 45° for pellets, except PET; 60° for powdered materials; and compound 45°/70° for PET pellets.

‡ Reduce silo capacity for 60° cone. 11 feet, 6 inches, subtract 245 ft³; and 14 feet, 8 inches, subtract 558 ft³. Reduce silo capacity for a 45°/70° compound cone. 11 feet, 6 inches, subtract 360 ft³; and 14 feet, 8 inches subtract 636 ft³.

§ Wind load is 100 mph for Seismic Zones I and 140 mph for Seismic Zone II and III.

** Weight is based on 40 lb/ft³ materials.

Reference foundation drawing 11 feet, 6 inches spiral 501-056 series; 14 feet, 6 inches spiral 501-015 series.

Specifications may change without notice. Check with a Conair representative for the most current information.

CONTINUOUS WELDING FOR EXTREME STRENGTH

Conair's Spiral Steel Silos are an extremely strong tank, covering all zones and are easy to take down and move. A smooth wall interior with continuous inside seam welding avoids material hang-up points. The crimp comprises 20-25% of the steel material of the silo. Conair's spiral steel silos offer two to three times the strength of a welded steel silo for around the same price.

This series can allow for some leeway on an imperfect or irregular pad.

SMOOTH WALL INTERIOR ELIMINATES VOIDS

The Conair spiral silo is manufactured, literally, from the top down. For strength, 11 gauge steel is used. This silo is so strong that piping placement can be done without additional reinforcement. Weigh cells can be added to determine the material volume in the silo. These silos can also have an optional FDA approved interior finish.

The spiral silo is available in an 11 foot 6 inch diameter, pre-formed at the factory and shipped ready to erect in one day. Storage capacities range from 1,818 to 5,558 cubic feet {51.48 to 157.39 cubic meters}.

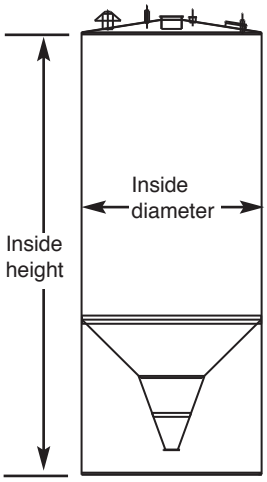
Conair installation crews can set or build the silo on the customer poured pad, connect all accessories and install the unloading and conveying system to get you up and running.

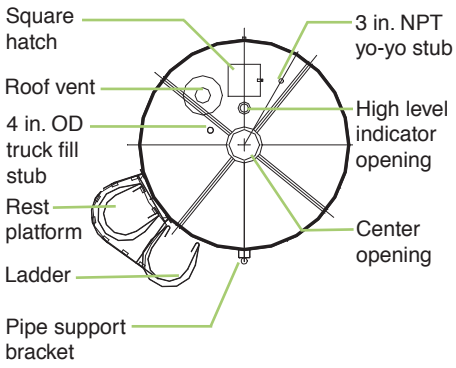
- **Superior quality construction**
  Lasting quality through material strength, rib design, and continuous (smooth wall) inside seam welding.
- **Three cone configurations**
  Cone configuration is determined by material type. Silos formed for pellet storage usually have a 45º cone bottom. For powder and hard-to-flow materials the silo includes a 60º cone. A 45º/70º compound cone is used for PET materials.
- **Customized to fit your needs**
  Options include a safety cage and rest platform for silos over 30 feet, a ladder and a slide gate shut-off which is pre-drilled to accept an optional Conair distribution box.
- **Many standard features**
  Included as standard are: a prefabricated roof with access hatch, roof vent, perimeter guard rail with safety toe board and railing. Also, a vacuum receiver mounting flange, truck-fill nipple, high and low level indicator mounts, mounting flange for the slide gate shut-off and a fully enclosed weather-proof vented silo skirt with a louvered access door is included.

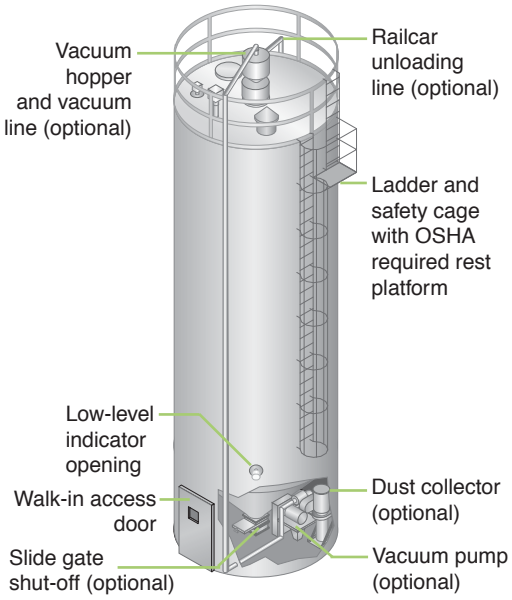
  If two or more silos are purchased at once, a four foot (span) crossover walkway is provided.

SPECIFICATIONS

SPIRAL STEEL SILOS







SSS MODELS	11 ft, 6 in diameter										
Silo inside height in. {m}*	24 {7.3}	28 {8.5}	30 {9.1}	32 {9.8}	36 {11.0}	40 {12.2}	44 {13.4}	48 {14.6}	52 {15.8}	56 {17.1}	60 {18.3}
Performance characteristics											
Silo capacity 45° cone ft³ {liters}† ‡	1818 {51486}	2234 {63267}	2441 {69129}	2649 {75020}	3065 {86801}	3480 {98554}	3896 {110335}	4311 {122088}	4727 {133869}	5142 {145621}	5558 {157403}
Construction material	CS Type B 11 Guage Cold Rolled Steel										
Wind load §	100 mph										
Snow load	40 lb/ft²										
Weight lb {kg} **											
Shipping (empty)	11751 {5330}	12887 {5845}	13780 {6250}	14670 {6654}	16369 {7425}	17678 {8019}	18984 {8611}	20288 {9202}	22675 {10285}	24105 {10934}	25542 {11586}
Full to capacity	84471 {38316}	102247 {46379}	111420 {50540}	120630 {54717}	138969 {63036}	156877 {71159}	174824 {79300}	192728 {87421}	211755 {96051}	229785 {104230}	247862 {112429}

SPECIFICATION NOTES:

* For overall height add 43 inches to inside height to account for the guardrail.

† Cones are available in 45° for pellets, except PET; 60° for powdered materials; and compound 45°/70° for PET pellets.

‡ Reduce silo capacity for 60° cone. 11 feet, 6 inches, subtract 245 ft³ ; and 14 feet, 8 inches, subtract 558 ft³.
Reduce silo capacity for a 45°/70° compound cone. 11 feet, 6 inches, subtract 360 ft³ ; and 14 feet, 8 inches subtract 636 ft³.

§ Wind load is 100 mph for Seismic Zones I and 140 mph for Seismic Zone II and III.

** Weight is based on 40 lb/ft³ materials.

Reference foundation drawing 11 feet, 6 inches spiral 501-056 series.

Specifications may change without notice. Check with a Conair representative for the most current information.

FEATURES/OPTIONS

- Mobile - these silos are so strong, they can be moved from one location to another.
- Modular design ladder for easy assembly.
- Redundant safety features are built into the skirt area: cone support system, pressure ring above cone, stiffeners are added.
- Standard 3-4 mill epoxy interior finish with 3-4 mill urethane exterior finish with top/finish coat of polyurethane.
- Weigh cells can be added to determine volume of material in silo.
- Optional factory installation.
- Optional 20 year polyurethane exterior and optional FDA 6-8 mill epoxy interior finishes available.
- Optional 3 coat finish system for coastal applications - epoxy primer, intermediate, high-solids urethane, and a top/finish coat.

LOW COST **EXPORTABLE BULK STORAGE**

Conair's bolted steel or aluminum silos are shipped unassembled. They can be shipped virtually anywhere in the world and assembled at the customer's plant.

The individual panels of a bolted steel silo are epoxy coated on the inside to keep material contamination free. The outside is primed and enamel coated to prevent rusting. Aluminum panels do not require internal or external painting or coating.

BROAD RANGE OF STORAGE CAPACITIES AVAILABLE

Conair offers bolted silos in a variety of storage capacities ranging from 1,901 to 10,412 cubic feet.

Two cone configurations are available. Configuration is determined by the type of material to be stored. Silos for pellet storage usually have a 45º cone bottom. For powder and hard-to-flow materials the silo includes a 60º cone.

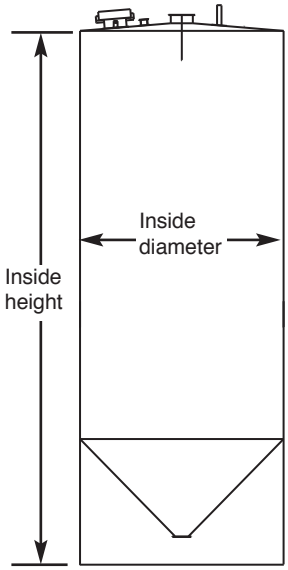
The Conair sales team is ready to help you select the size, style and features that will best suit your storage needs.

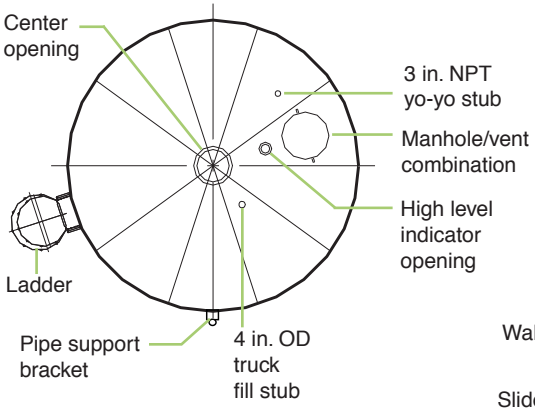
Specially trained installation crews assemble the silo on a customer poured pad and connect all accessories and install the unloading and conveying system to get you up and running.

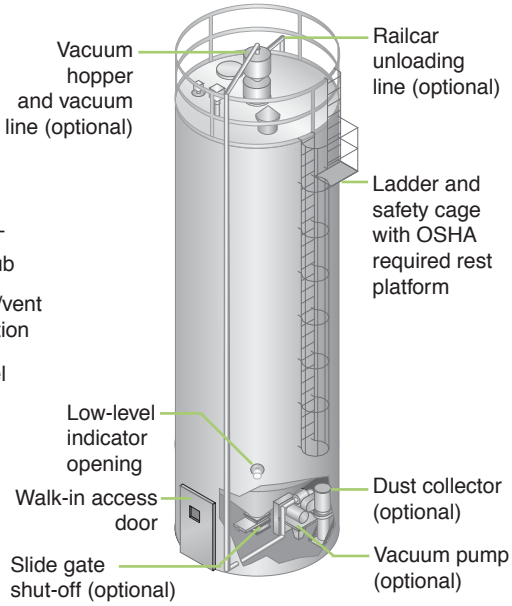
- **Reduced freight costs**
  Because bolted silos are delivered in pieces, they can generally be shipped by commercial carrier.
- **Customized to fit your needs**
  Options include a safety cage and rest platform for silos over 30 feet, a ladder and a slide gate shut-off which is pre-drilled to accept an optional Conair distribution box.
- **Many standard features**
  Included as standard are a prefabricated roof with manhole/vent combination, perimeter guard rail with safety toe board and railing. Also, a vacuum receiver mounting flange, truck-fill nipple, ladder, high and low level indicator mounts, mounting flange for the slide gate shut-off, a fully enclosed weather-proof vented silo skirt, and a louvered access door in the skirt of the silo is included. If two or more silos are purchased at once, a four foot (span) crossover walkway is provided.

SPECIFICATIONS

BOLTED STEEL OR ALUMINUM SILOS







SB MODELS												
Inside diameter	**12 ft, 3 11/16 in**						**15 ft, 4 5/8 in**					
Silo inside height in. {m} *	24 {7.3}	32 {9.8}	40 {12.2}	48 {14.6}	56 {17.1}	64 {20.0}	24 {7.3}	32 {9.8}	40 {12.2}	48 {14.6}	56 {17.1}	64 {20.0}
Performance characteristics												
Silo capacity 45° cone ft³ {liters}†	1901 {53836}	2851 {80740}	3802 {107673}	4752 {134577}	5703 {161509}	6653 {188412}	2923 {82779}	4421 {125203}	5919 {167626}	7416 {210021}	8914 {252444}	10412 {294868}
Construction material	ASTM A570 Grade 40 Steel or 5052 - H-32 Aluminum											
Wind load	100 mph											
Snow load	40 lbs/ft²											
Weight lbs {kg} ‡												
Shipping (empty)	6064 {2750}	7616 {3454}	9168 {4159}	10840 {4917}	13136 {5958}	15352 {6963}	9257 {4199}	10977 {4979}	13757 {6240}	16337 {7410}	18787 {8522}	22477 {10195}
Full to capacity	82104 {37242}	121656 {55182}	161248 {73141}	200920 {91136}	241256 {109432}	281472 {127673}	126177 {57233}	187817 {85192}	250517 {113633}	312977 {141964}	375347 {170254}	438957 {199107}

SB MODELS						
Inside diameter	**18 ft, 5 9/16 in**					
Silo inside height in. {m}*	24 {7.3}	32 {9.8}	40 {12.2}	48 {14.6}	56 {17.1}	64 {20.0}
Performance characteristics						
Silo capacity 45° cone ft³ {liters}†	3657 {103566}	5871 {166267}	8085 {228967}	10299 {291668}	12513 {354368}	14727 {417069}
Construction material	ASTM A570 Grade 40 Steel or 5052 - H-32 Aluminum					
Wind load	100 mph					
Snow load	40 lbs/ft²					
Weight lbs {kg} ‡						
Shipping (empty)	13049 {5919}	16145 {7323}	18473 {8379}	22901 {10387}	26312 {11935}	30536 {13851}
Full to capacity	159329 {72270}	250985 {113845}	341873 {155071}	434861 {197249}	526832 {238967}	619616 {281052}

SPECIFICATION NOTES:

* For overall height add 43 inches to inside height to account for the guard rail.

† Cones are available in 45° for pellets, except PET; 60° for powdered materials and PET materials. Reduce silo capacity for 60° cone. 12 feet, 3 11/16 inches, subtract 289 ft³; and 15 feet, 4 5/8 inches, subtract 592 ft³; and 18 feet, 5 9/16 inches subtract 1,272 ft³.

‡ Weight is based on 40 lb/ft³ materials.

Roof live and dead load design is 25 lb per square foot.

Reference foundation drawings: 12 feet, 3 11/16 inches bolted, 501-207 series; 15 feet, 4 5/8 inches bolted, 501-209 series; and 18 feet, 5 9/16 inches bolted, 501-217 series.

Specifications may change without notice. Check with a Conair representative for the most current information.

Model MB44-10

MOBILE STORAGE; EASY ACCESS

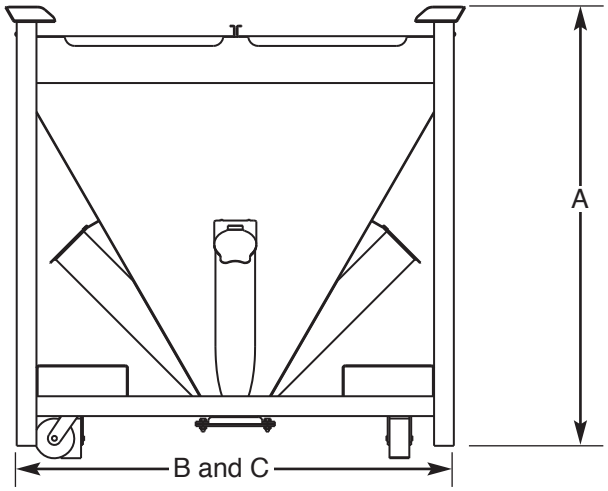
Conair offers a complete line of in-plant mobile surge bins for convenient storage of a variety of materials. Stackable Conair Mobile Surge Bins accommodate your storage needs with a range of bin capacities from 10 ft^3 to 50 ft^3.* For critical applications requiring a contamination-free environment, bins can be constructed in stainless steel with or without lids.

*Usable volume based on a 30° angle of repose.

MOBILE STORAGE FOR BLENDED OR VIRGIN MATERIALS

- **Wide range of capacities**
- **60° hopper cone ensuring material flow for most materials**
- **Stack up to 3 bins for space conservation**
- **Bottom drain for easy material removal**
- **Heavy duty 14 gauge steel construction**
- **Oversized vacuum ports - for use with suction wands up to 3 inch diameter**

MOBILE SURGE BINS



SPECIFICATIONS

Model	Hopper cone angle (standard)	Width/depth inches {cm} B/C	Height inches {cm} A	Capacity lb {kg}	Usable capacity† lb {kg}	Usable volume† ft³ {m³}	Shipping weight lb {kg}
MB44-10	60°	44 {112}	43.375 {110.2}	665 {302}	350 {159}	10 {0.28}	525 {238}
MB44-20	60°	44 {112}	55.375 {140.7}	1085 {492}	700 {318}	20 {0.57}	580 {263}
MB44-30	60°	44 {112}	64.375 {163.5}	1470 {667}	1050 {476}	30 {0.85}	625 {283}
MB44-40	60°	44 {112}	73.5 {186.7}	1820 {826}	1400 {635}	40 {1.1}	670 {304}
MB44-50	60°	44 {112}	82.5 {209.6}	2170 {984}	1750 {794}	50 {1.4}	720 {327}

FEATURES

- Painted carbon steel construction
- Epoxy coated interior
- 4 inch sq. discharge with stainless steel slide gate
- Two-way fork-lift channels for easy stacking
- 60° cone for free and non-free flowing material

OPTIONS

- 4-way vacuum ports
- Castors*
- 12 inch discharge opening with flange
- 1 piece, 2 piece sliding cover
- Stainless steel construction
- Special paint
- Bag opening grate and blade

SPECIFICATION NOTES:

* Adds 1.25 inches {31.8 mm} to height.

† Usable capacity based on a material with a bulk density of 35 lbs/ft³ {561 kg/m³} with a 30° angle of repose.

Specifications may change without notice. Check with a Conair representative for the most current information.

Shown with a 12 inch {305mm} manual slide gate

EASY STORAGE; EASY ACCESS

Conair offers a complete line of in-plant surge bins for convenient storage of a variety of blended or virgin materials. Conair Surge Bins accommodate your storage needs with a range of bin capacities from 17 ft^3 to 514 ft^3*.
For critical applications, bins can be constructed of contamination-free stainless steel. Conair Surge Bin lids are pre-drilled to accept your choice of Conair loading and blending equipment.

EASY ACCESS FOR BLENDED OR VIRGIN MATERIALS

- **Capacities from 17 to 514 ft^3 ***
- **45° or 60° hopper cone**
- **Hinged cover for easy access**
- **Bottom flange for mounting distribution box, take-away augers or slide gate**
- **Heavy duty 14-gauge steel construction**

*Usable volume based on a 30° angle of repose.

IN-PLANT SURGE BINS

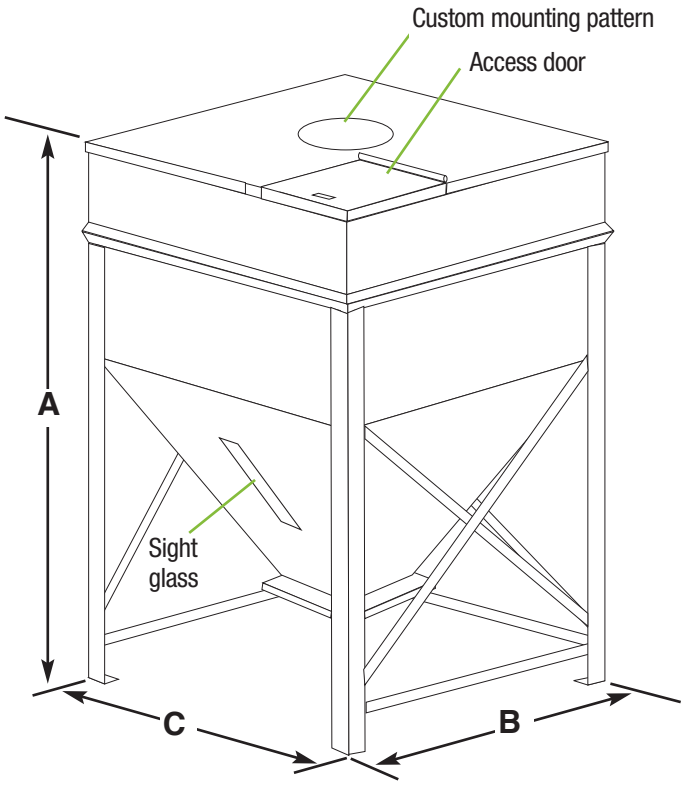
FEATURES

- One strip sight glass
- Painted exterior
- Lid with access door and custom mounting pattern
- 16.25 inch sq. {413 mm} flange bottom with 15 inch sq. {381 mm} bolt pattern (IBO9)
- Epoxy coated interior
- 45° hopper cone
- 1.25 inch {31.75 mm} NPT level sensor openings (plugged)

OPTIONS

- 4 inch {102 mm} drop tube with butterfly valve
- 12 inch {305 mm} manual slide gate
- 60° hopper cone for non free-flowing materials
- Leg extensions* for gaylord discharge
- Stainless steel construction
- Special paint

* Add 5 ft {152.4 cm} to height.



SPECIFICATIONS

Model	Dimensions inches {cm} B & C	Height inches {cm} 45° Cone A	Height inches {cm} 60° Cone (Optional) A	Capacity lb {kg}	Usable capacity lb {kg}†	Usable volume† ft³ {m³}	Shipping weight lbs {kg} 45°	Shipping weight lbs {kg} 60°
SB48-17	48 {122}	53 {135}	61 {155}	1000 {454}	600 {272}	17 {0.48}	670 {304}	750 {340}
SB48-47	48 {122}	75 {191}	83 {211}	2000 {907}	1600 {725}	47 {1.3}	750 {340}	830 {376}
SB60-64	60 {152}	78 {198}	88 {224}	3000 {1361}	2200 {998}	64 {1.8}	835 {379}	925 {420}
SB60-94	60 {152}	92 {234}	102 {259}	4000 {1814}	3300 {1497}	94 {2.6}	1000 {454}	1020 {463}
SB60-125	60 {152}	107 {272}	117 {297}	5000 {2268}	4400 {1996}	125 {3.5}	1040 {472}	1190 {540}
SB72-134	72 {183}	98 {249}	111 {282}	6000 {2722}	4700 {2131}	134 {3.7}	1270 {576}	1280 {581}
SB72-163	72 {183}	108 {274}	121 {307}	7000 {3175}	5700 {2585}	163 {4.6}	1330 {603}	1350 {612}
SB72-192	72 {183}	117 {297}	131 {333}	8000 {3629}	6700 {3039}	192 {5.4}	1830 {830}	1860 {844}
SB72-222	72 {183}	127 {323}	141 {358}	9000 {4082}	7800 {3538}	222 {6.2}	1850 {839}	2070 {939}
SB72-251	72 {183}	137 {348}	151 {384}	10000 {4536}	8800 {3992}	251 {7.1}	2120 {961}	2170 {984}
SB84-285	84 {213}	130 {330}	146 {371}	12000 {5443}	10000 {4536}	285 {8.0}	2220 {1007}	2220 {1007}
SB84-342	84 {213}	144 {366}	160 {406}	14000 {6350}	12000 {5443}	342 {9.6}	3700 {1678}	3800 {1724}
SB84-400	84 {213}	158 {401}	174 {442}	16000 {7257}	14000 {6350}	400 {11.3}	4180 {1896}	4240 {1923}
SB84-457	84 {213}	172 {437}	188 {478}	18000 {8164}	16000 {7257}	457 {12.9}	3880 {1760}	4290 {1945}
SB84-514	84 {213}	186 {472}	202 {513}	20000 {9072}	18000 {8164}	514 {14.5}	4550 {2063}	4620 {2095}

SPECIFICATION NOTES:

† Usable capacity based on a material with a bulk density of 35 lbs/ft³ {561 kg/m³} with a 30° angle of repose. Specifications may change without notice. Check with a Conair representative for the most current information.

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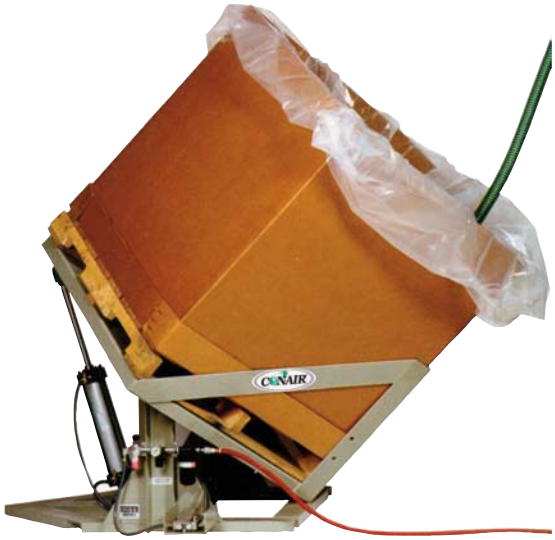


SAFELY DIRECTS MATERIALS TO CONVEYOR FEED TUBES

Conair Tilters provide a safe method of moving free-flowing materials to one corner of a shipping container for complete emptying by a vacuum loader. They are built tough to withstand heavy use on production floors.

The tilters can be used beside your processing machines or in remote central material storage rooms to assure a constant flow of material throughout your plant. Once emptied, simple foot- or hand-operated controls level the container for removal and replacement.

FLOOR LEVEL OR RAISED PLATFORM MODELS

Gaylord tilters are available for holding containers weighing up to 3,000 lb.

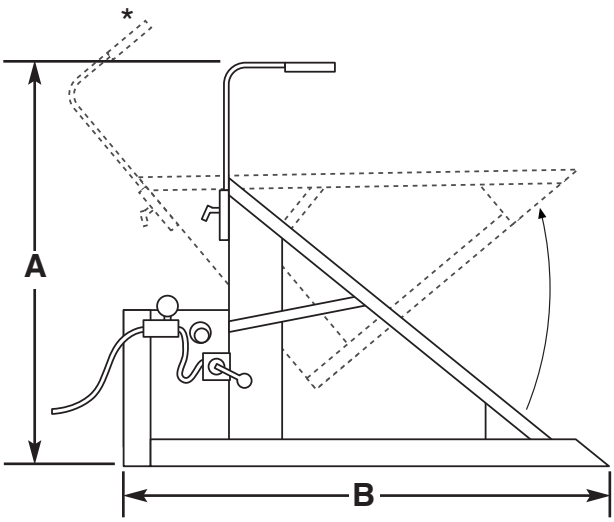
Floor level tilters are either hand or foot operated and can hold containers up to 1500 lb. They can be set for either manual or automatic operation.

It can be easily loaded by a hand truck or pallet mover because the box platform is flat on the floor. A heavy-duty air bag device slowly fills with compressed air to automatically tilt the platform and container as it is emptied. An adjustable conveyor feed tube support is included.

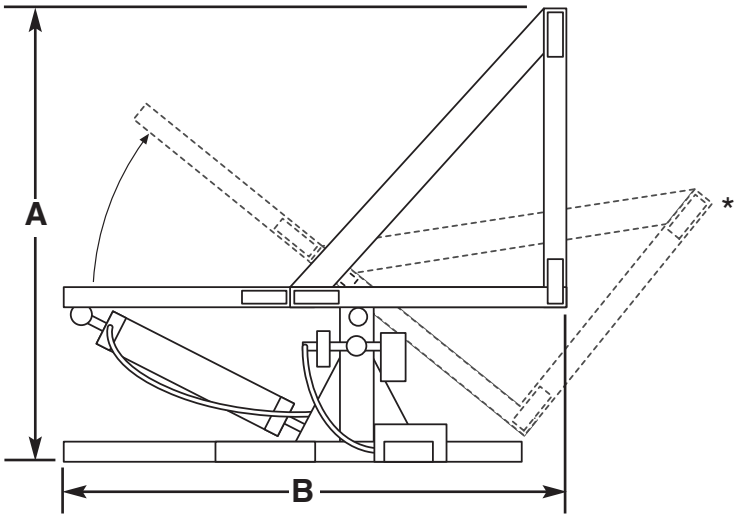
Raised platform tilters are operated by heavy-duty air cylinders. This type of tilter is adjusted so that it will start lifting the container when less than 500 lbs. remain in the box. Then it slowly tips the box to a 45º angle to assure smooth continuous feeding to the vacuum feed tube.

- **Wide capacity range**
  Capacities for 1200 lb, 1500 lb and 3000 lb loads.
- **Prevent material voids**
  Air or electric-operated vibrators are available to prevent material voids.
- **No electricity required**
  Compressed air operated.
- **Automatic or manual operation**
  Tilters can be set for either manual or automatic operation. The tilters will automatically swing up as material is emptied to assure a constant flow of material.

SPECIFICATIONS



Gaylord Floor Level Tilter



Gaylord Raised Platform Tilter

MODELS	299-276-01	299-276-02	120-004	120-005
Performance Characteristics				
Capacity lb {kg}	1500 {680}	1500 {680}	1200 {544}	3000 {1361}
Tilter type	floor level	floor level	raised platform	raised platform
Control type	foot	hand	foot	foot
Dimensions inches {mm}				
A - Height †	36 {914}	36 {914}	46.5 {1181}	74 {1880}
B - Width	52 {1321}	52 {1321}	40 {1016}	50 {1270}
Length	73 {1854}	73 {1854}	40 {1016}	50 {1270}
Weight lb {kg}				
Shipping	375 {170}	375 {170}	540 {245}	1450 {658}
Compressed air requirement				
	40 psi@2 CFM {2.75 bars}		80 psi@2 CFM {5.52 bars}	

SPECIFICATION NOTES

* Allow a minimum of 30 inches on each side of tilter for working area.

† Height is 54 inches from the floor with wand holder fully extended.

Specifications may change without notice. Check with a Conair representative for the most current information.

HOW IT WORKS

Floor Level Tilters

Once these heavy-duty tilters are placed on a level floor and connected to an appropriate compressed air source, a full container is placed in the platform by a lift truck.

An air regulator and air filter are provided to operate the air cylinder which tilts the platform. Once the container is about half empty, air pressure is adjusted to start lifting the platform. From this point on tilting is automatic. As material is emptied, the platform continues to tilt. The larger model 120-005 is designed for extra heavy container tilting. Again, about half the material should be emptied before setting the tilt air pressure. Once the model tilts past the counterbalance point, a cam shuts the air off to the cylinder to maintain safe movement.

Raised Platform Tilters

Once placed so that containers can be loaded and removed from the platform, the air regulator is connected to a compressed air supply and a full container is placed on the platform with a hand truck. When the container is about half empty, the operator opens the air flow, inflating a heavy-duty air bag which tilts the platform. The correct adjustment is made when the tilter begins to lift the container. This becomes the correct setting for all future containers of that weight. The hand or foot control remains on at this point and the platform will continue to tilt automatically as material is removed from the container. The tilter can also be manually operated after the container is about half empty and can be leveled by the control for container changes.

Resin Level Display (RLD)

MATERIAL MONITORING; ONE CENTRAL LOCATION

The Resin Level Display (RLD) monitors material levels for up to 40 silos or surge bins. All material levels are conveniently displayed from one centralized control platform.

Capable of being configured to monitor low, mid or high levels of material within a silo or surge bin, the RLD can be customized to fit your material level monitoring needs. Audible and visual warning indicators will energize to alert you to individual warnings for each monitored silo or surge bin.

INTUITIVE USER INTERFACE, CONFIGURABLE MONITORING

The Resin Level Display (RLD) offers a complete overview of your material storage status with an intuitive Allen Bradley PanelView Micro 300 user interface. The interface provides material level readouts of up to 40 silos or surge bins with graphical representations along with password protected alarm configuration capabilities.

An Allen Bradley Micrologix 1500 programmable logic controller (PLC) is connected to sensors located at key points (low, mid or high depending upon application) on a silo or surge bin to monitor the current level of material.

The RLD can be mounted anywhere within your plant for easy access to view your system's material supply and to keep close watch on low material levels.

Quality, reliable control

High quality, high reliability, time and field-proven Allen-Bradley components are used with the Resin Level Display.

Selectable monitoring configurations

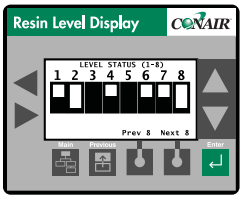
There are three configurations of material level monitoring for the RLD. Chose to monitor up to 40 silos or surge bins that only require low material level sensing, 20 silos or surge bins with low and high level sensing or 12 silos or surge bins with low, mid and high level sensing.

Customizable alarm configuration

Depending on the silo's or surge bin's application, material level alarms can be set to not alarm, alarm once or alarm on a timed basis to indicate an alarm condition for low or high material levels.

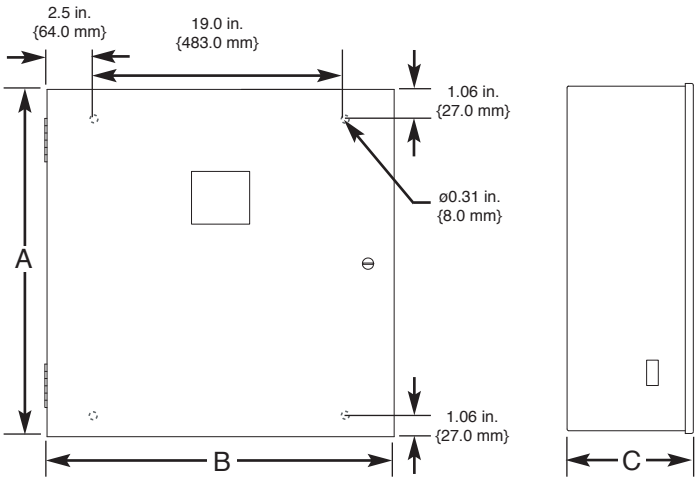
Simple-to-use interface

The RLD display offers intuitive operator usage with visual displays that show current material levels. Each monitored silo or surge bin has its own graphical representation.



RESIN LEVEL DISPLAY

SPECIFICATIONS



MODELS	RLD
Performance characteristics	
Maximum number of vessels*	40, 20,12
Programmable logic controller	Allen Bradley (A/B) Micrologix 1500
Operator interface	A/B Panelview Micro 300 (3.2 inch)
Output voltage to devices	24 VDC
Input voltage to devices	24 VDC
Power/Amps	120 VAC/10 Amps/60 Hz
Dimensions inches {mm}	
Control cabinet	
A - Height	24.0 {609.6}
B - Width	24.0 {609.6}
C - Depth	8.6 {218.4}
Approximate weight lb {kg}	
Installed	60 {27}
Shipping	72 {32}
Alarm noise level	
	103 dbA @ 2 ft.

OPTIONS

- Ethernet communications
- Continuous silo level monitoring (with 4, 8 or 12 available quantities of analog input modules)
- Ethernet communications with continuous silo level monitoring (with 4, 8 or 12 available quantities of analog input modules)
- Remote alarm horn

SPECIFICATION NOTES:

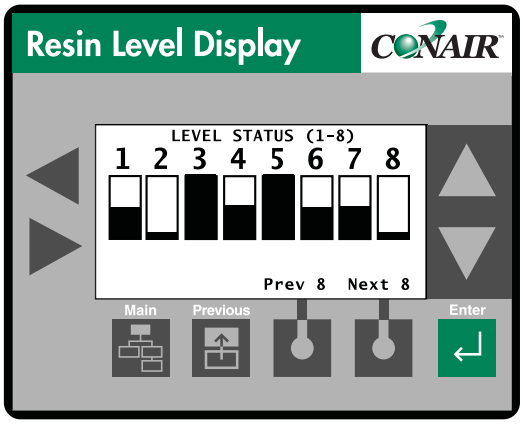
*Dependent upon monitoring level(s) configuration.

Specifications can change without notice. Contact a Conair representative for the most current information.

APPLICATION NOTE:

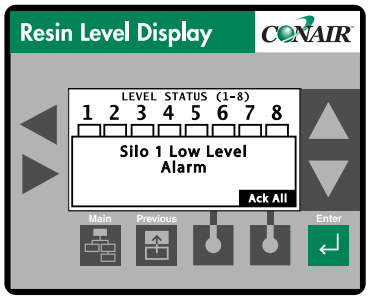
Total distance of the cabling from the RLD to the silo(s) or surge bin(s) should account for reasonable slack using an 18 gauge cable. The number of conductors within the cable is application specific, contact a Conair representative for application recommendations.

FEATURES



- Configurable low and high alarms
- Recurring alarms and alarm times (15 minutes - 4 hours)
- Graphical representations of silo monitoring
- PLC (programmable logic controller) backup and restore
- Up to 12 analog inputs for material monitoring sensors (For example, ultrasonic or yo-yo monitoring systems)
- Audible and visual alarms
- Configurable contacts (normally open and normally closed) used with paddle switch or capacitance level sensors
- Security (Each security level is individually password protected)

RLD WARNING MESSAGES



Alarm Warning Screen

Warning messages with associated audible and visual indicators will be activated for individual silo or surge bin level alarms. Pressing the Acknowledge All softkey will silence only the audible and visual indicators. Only when the alarm condition is satisfied will the alarm be cleared.

ALARM CONFIGURATIONS

Resin Level Display Alarm Configurations

Monitored level of material†	Low Level	Low and High Levels	Low, Mid and High Levels
Maximum of 40 material vessels	●		
Maximum of 20 material vessels		●	
Maximum of 12 material vessels			●

†The maximum number of monitored vessels is dependent upon RLD configuration.

Material Storage Accessory Equipment

Level Sensors

- Capacitance Sensors

Rotary paddle switch

Yo-yo level sensor

Application:

- Monitors the level of material within a silo or surge bin.
- Specific size ranges to fit with your material storage requirements.
- On-demand level sensing.

Continuous Level Sensors

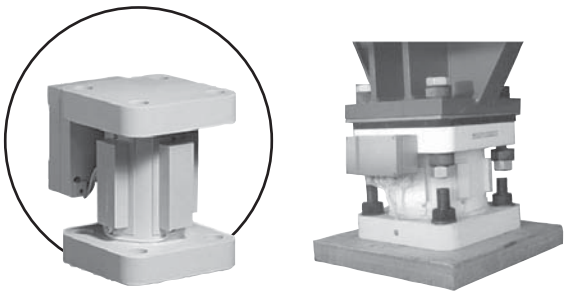
- PhaseTracker

Ultrasonic sensing devices

Application:

- Monitors the current level of material within a silo or surge bin.
- Specific size ranges to fit with your material storage requirements.
- Continuous level sensing.
- Used with various types of conveying material.

Load Cells



Load stand

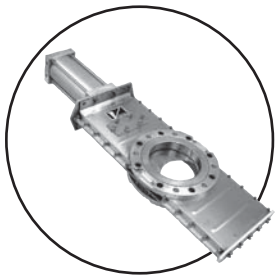
Application:

- Monitors silos or other large material storage equipment by measuring overall mass.
- Integrated mounting within your storage vessel's legs or gussets.
- Specific size ranges to fit with your material storage requirements.

Material Storage Accessory Equipment

Valves

- Pneumatic valves
- Diverter valves



Pneumatic knife gate

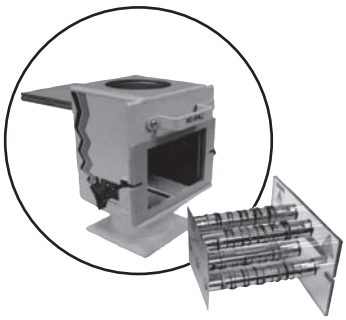
Two-way flex tube diverter

Application:

- For dry bulk solids using: gravity flow, dilute phasing or vacuum conveying.
- Controls the rate, source or shut-off of material flow of non-abrasive to moderately abrasive materials (powders, granulars or pellets).
- Conveying material from multiple sources for use with a single line material feed tube.

Magnets

- Metal-outs



Drawer magnet

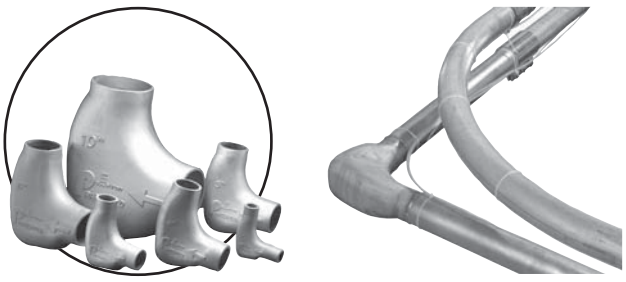
Metal detector

Application:

- Removing metal fines from free-flowing material.
- Preventing equipment damage and material contamination due to ferrous material.
- To create a contamination-free material flow.
- Used for high-flow applications.

Conveying high-wear elbows

- Ceramic-lined elbows
- Nickel-plated elbows
- Stainless Steel elbows



High wear elbows

Application:

- For high throughput and/or highly abrasive material conveying applications.
- Replacing conventional conveying elbows, reducing downtime and loss of material.
- Reduce angel-hair and streamers.

Conveying

SELF-CONTAINED VACUUM LOADERS

TLM Model Tube Loaders. C-1
Access AL Series Loaders C-3
DustBeater DB Model Loaders. C-7
TLA Model Tube Loaders C-11

COMPRESSED AIR MATERIAL LOADERS

CAML-EVB (To Barrel) System C-13
CAML-EVG (To Gaylord) System C-15

CENTRAL VACUUM RECEIVERS

TLR Model Tube Loaders C-17
Access AR Series Receiver. C-19
K Loaders, K2 and K2CR Model. C-23
DuraLoad (DL) Series C-25
FilterLess (FL) Series C-29
Powder Loader C-31

CONVEYING SYSTEM CONTROLS

ELC-M and ELC-16 Models C-33
Model B32. . . . . C-37
Model ILS C-39
Model FLX. C-41
ControlWorks™ C-43

VACUUM PUMPS/DUST COLLECTOR

RG Series Vacuum Pumps C-47
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BULK CONVEYING SYSTEMS

VRU 10, 15 and 25 Vacuum Railcar
Unloading System C-53

MATERIAL DISTRIBUTION

Resin Selection Station C-55
Selector Plates C-57
Access™ JIT Material Hoppers C-59
Bulk Distribution Boxes C-61

MATERIAL LINE VALVES

Common Line Valve. C-65
Ratio Valve. C-67
Purge Valve. C-69
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MATERIAL HOPPERS

Handy Hopper C-75
Miniature Handy Hopper C-77

ACCESSORIES

Audible/Visual Alarm and Alarm Kits C-79

Conveying Quick Reference

MODELS		Throughput Range* lb/hr										Features						
		25	50	100	150	200	300	400	500	600	700	Carbon Steel	Stainless Steel	Hopper Loading	Direct Feed (JIT)	Bin Evacuation	Single Material Loading	Ratio Loading
Self-Contained Loading	**Conveying Method**																	
TLM	Integral Vacuum	—	—	—	—								•	•	•	•	•	•
AL2	Integral Vacuum	—	—	—	—	—							•	•	•	○	•	○
AL5	Integral Vacuum	—	—	—	—	—	—	—	—				•	•	•	○	•	○
DB8	Integral Vacuum	—	—	—	—	—						•	○	•	•	○	•	○
DB12 – 4 brush	Integral Vacuum	—	—	—	—	—	—	—	—			•	○	•	•	○	•	○
TLA	Compressed Air	—	—	—	—	—	—	—	—	—	—		•	•	•		•	•
CAML-EVB	Compressed Air	—	—	—	—	—	—	—	—	—	—	•				•	•	
CAML-EVG	Compressed Air	—	—	—	—	—	—	—	—	—	—	•				•	•	

Vacuum Receivers	Conveying Method	Receiver Volume Range ft³										Features						
		0.14	0.25	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0							
TLR	Central Vacuum	—											•	•	•	•	•	○
AR	Central Vacuum	—	—	—	—								○	•	•		•	○
K Loader	Central Vacuum	—										○/•*	○/•*	○	•	○	•	○
Duraload	Central Vacuum	—	—	—	—	—	—	—	—				○	•	•		•	
Filterless	Central Vacuum	—	—	—	—	—	—	—	—	—	—	•	○	•	•		•	
Powder Loader	Central Vacuum	—	—	—	—							•	○	•			•	

Vacuum System Controls	Maximum No. of Receivers	Maximum No. of Pumps	Ratio Control	Purge Control
ELC-16	16	1	optional	optional
B32	32	8 + backup	optional	optional
FLX	64	20 + 2 backup	optional	optional
ILS	144 (300 with additional network)	14 + backup	optional	optional

RG Pumps	Supported Dust Collector Sizes	CFM Range										Pump Hp					
		25	40	75	100	150	200	250	300	350		3.4	6.2	11.5	5.1	8.45	16.9
RG 1-3	DC-1 Dust Collector	—	—	—								•					
RG 1-6	DC-1 Dust Collector	—	—	—	—								•				
RG 1-11	DC-1 Dust Collector	—	—	—	—	—	—							•			
RG 2-5	DC-1 Dust Collector	—	—	—	—										•		
RG 2-8	DC-1 Dust Collector	—	—	—	—	—										•	
RG 2-16	DC-2 Dust Collector	—	—	—	—	—	—	—	—	—							•

Positive Displacement Pumps	Supported Dust Collector Sizes	CFM Range										Pump Hp					
		25	40	75	100	150	200	250	300	350		3.0	5.0	7.5	10.0	15.0	25.0
PD-3	DC-1/DC-3 Dust Collector	—	—	—								•					
PD-5	DC-1/DC-3 Dust Collector	—	—	—	—								•				
PD-7.5	DC-1/DC-3 Dust Collector	—	—	—	—	—								•			
PD-10	DC-2/DC-3 Dust Collector	—	—	—	—	—	—								•		
PD-15	DC-2/DC-3 Dust Collector	—	—	—	—	—	—	—								•	
PD-25	DC-2/DC-3 Dust Collector	—	—	—	—	—	—	—	—	—							•

Dust Collector	Filter Area sq. ft.
DC1 Dust Collector	43
DC-2 Dust Collector	100
DC-3 Dust Collector	162

○ = option

• = feature

*Model dependant

Accessories

- Material Hoppers . . . . . C-75 – C-78
- Universal Alarm Kits C-79
- Angel Hair Remover C-63
- Drawer and Insert Magnets . . . . . See Storage, Call
- Pellet Collection Trays. . . . . Call

TLM
Hopper Loading
Model with ELC-M
Control

TLM
Direct Feed
Model with ELC-M
Control

SMALL PACKAGE, BIG LOADING PERFORMANCE

The compact TLM model Tube Loader makes it easy to provide trouble-free automatic loading wherever you need it. Without a traditional conical hopper, the exclusive tube loader design means that your materials will always flow easily from the loader with no bridging or interruptions. Although small, the TLM vacuum loader provides material loading performance comparable to much larger units with a 4.5 inch diameter discharge valve and up to 150 lbs/hr of material transfer. You can be sure that material will never become lodged inside the loader, holding up your production.

COMPACT, ECONOMICAL, TROUBLE-FREE LOADING

Available as both a hopper loader or a direct feed "throat loader," the TLM's compact size and ease of use make it a perfect fit for a wide range of loading needs.

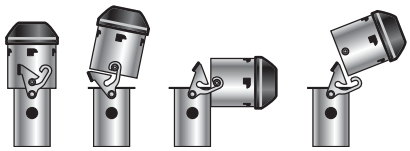
Quick disassembly features allow wide open access to the filter and loader body for fast material changes and filter maintenance.

The 3/8 Hp vacuum motor provides up to 150 lbs/hr conveying at nearly 20 feet. A blowback option extends filter life with an adjustable, independent filter cleaning cycle. Hose and feed tube are included so that your loader is ready to go to work, right out of the box.

A simple control package provides a user-adjustable loading cycle to match your loading cycle to distance and material characteristics.

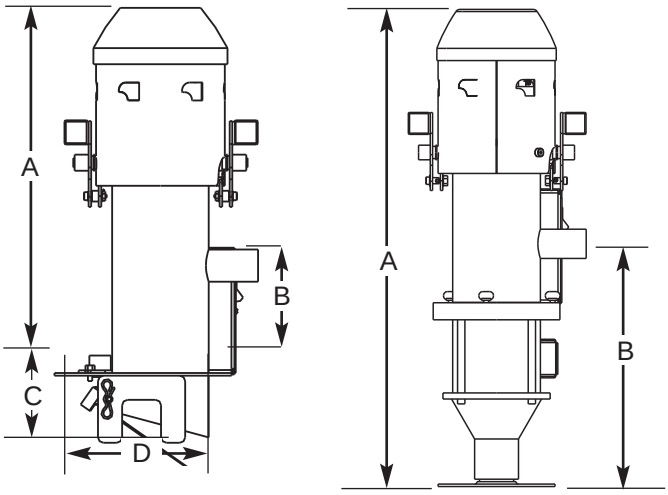
An optional ratio valve allows virgin and regrind material loading, and the digital remote ratio control provides easy, repeatable time settings.

- **Rates up to 150 pounds per hour**
  Keep your machines full with material conveyed from up to 20 feet away.
- **Optional ratio valve**
  Add a ratio valve to conveniently load regrind along with virgin materials, plus get the benefit of a digital ratio control.
- **Optional remote on/off**
  Optional pendant on/off switch saves machine climbing or "plug-pulling" for easy on/off loader control.
- **All stainless construction**
  The TLM is constructed of 100% electro-polished 304 stainless steel.
- **Easy-access hinged motor**
  No tools, swing clips open for easy maintenance.



SPECIFICATIONS

TLM MODEL TUBE LOADER



The compact ratio valve fits directly to the TLM inlet and provides a connection to the ELC-M control for precise virgin/regrind time settings.

Use the hopper loader model to keep drying, blending and machine hoppers full of material. The large tube opening virtually eliminates material bridging.

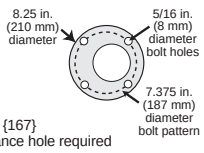
The direct feed model allows full view of material flow and may be mounted directly to machine throats, feeders and drawer magnets. A wide range of capacities are available, with or without an isolator valve for throats that are not vacuum tight.

Loader model	TLM
Vacuum motor	3/8 Hp-2 brush
Maximum injection mold machine size	400 tons
Maximum extruder size inches {mm}	1.5 {38}
Recommended throughput* lbs/hr {kg/hr}	150 {68}
Maximum conveying distance ft {m}	20 {6.1}
Loader diameter inches {mm}	4.5 {368}
Loader volume cu ft {liters}	0.1 {4.0}
Material/Vacuum line size inches {mm} OD	1.5 {38.1}
Available voltages, 50/60 Hz	120/220 VAC
Amps @ 120 VAC	8
Amps @ 220 VAC	4
Compressed air requirements	125 maximum psi, 1.4 CFM, NPT fitting: 1/4 in.
Filter area in^2 {cm^2}	31 {201}
Filter type	Spun-Bond polyester

Hopper Loading Model

Loader model	TLM
Dimensions inches {mm}†	
A - Height above mounting plate	15 {381}
B - Height to center of material inlet	5.5 {140}
C - Depth below mounting plate	5.0 {127}
D- Clearance hole diameter	6-5/8 {167}
Mounting details	Fig. 1
Installed weight lb {kg}	19 {8.6}
Shipping weight lb {kg}	42 {19.1}

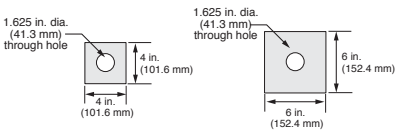
FIG. 1 – HOPPER LOADING



Direct Feed Model

Loader model	TLM				
Viewing chamber model	**1 lb**	**2 lb**	**4 lb**	**15 lb**	**25 lb**
Viewing chamber capacity lb {kg}	1 {0.5}	2 {0.9}	4 {1.81}	15 {6.8}	25 {11.3}
Isolator valve	option	option	standard	standard	standard
Dimensions inches {mm}					
A - Height above mounting plate	24.4{619.8}	29.6 {751.8}	26.8 {680.7}	32.3 {820.4}	44.3 {1125.2}
B - Height to center of material inlet	12.5 {317.5}	17.6 {447.0}	16.8 {426.7}	22.3 {566.4}	34.3 {871.2}
Mounting details	Fig. 3				
Installed weight lb {kg}	20 {9.0}	22 {10.0}	46 {20.9}	48 {21.8}	77 {34.9}
Shipping weight lb {kg}	34 {15.4}	36 {16.3}	74 {33.6}	96 {43.5}	105 {47.6}

FIG. 2 – DIRECT FEED



SPECIFICATION NOTES:

* Throughputs are based on conveying virgin material from close distances. If you convey dusty materials and regrinds, we recommend ordering the optional compressed air blowback feature, and reducing the expected throughput to 75 lb/hr. Conveying at higher throughputs could result in shortened brush and filter life. For higher throughputs, ask about the DustBeater models or consult with a Conair representative about central vacuum loaders.

† The optional isolator valve adds 1.625 inches {41.3 mm} to the height.

Specifications may change without notice. Check with a Conair representative for the most current information.

Access Model AL-2
with ELC-M control

EASIER ACCESS FOR SIMPLIFIED CLEANING

Cleaning and maintaining your loaders is now faster, easier and safer than ever before. That's because the unique angled canister design of the Conair Access Loader (AL) means workers don't need to climb as high or work as hard to service the drop-in filter or wipe out the stainless steel canister.

VALUE-ADDED FEATURES AT NO ADDITIONAL COST

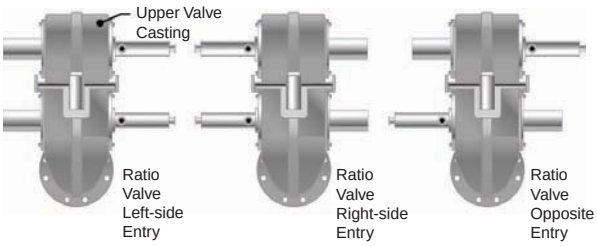
The Access Loader (AL) series delivers all the performance and reliability you expect from Conair, plus added features and benefits at no extra cost. A hinged filter lid opens easily, without tools, tilts back and locks out of the way leaving both hands free for safety and comfort. Filter cleaning blowback is a standard feature.

The powerful vacuum motor is covered by a sound-dampening plastic housing that is both attractive and durable. For more robust loading applications, the AL can be ordered with a long-life, extra-powerful brushless motor.

Units are equipped with the Easy Loading Controls (ELC) featuring bright, clear readouts displaying when the loader is conveying and when it is in demand for material. Additional control functions are available with the addition of the optional ControlMate pendant.

- **The world's most reliable discharge valve**
  Now in cast aluminum, for years of trouble-free performance.
- **Select option packages to suit your needs**
  Popular options are combined for easy selection and integrated into your loader purchase.
- **Full-featured control**
  The Easy Loading Control (ELC) and optional ControlMate pendant govern all aspects of your Access Loader including: load time, material demands, purge, ratio and many other loading parameters.

- **Optional customizable ratio valve**
  The ratio valve's top and bottom material inlets can be conveniently positioned facing forward or backwards for convenient connection to your material lines.



HOW IT WORKS

Loading Control

The ELC-M displays the loader's sequence within its conveying cycle with icons and associated LEDs. The control has precise, reliable electronics for operation, programming and alarms.

A signal from the loader's demand switch indicates to the ELC-M on the loader that it requires material to be conveyed to satisfy its demand. The ELC-M sends a signal to the vacuum motor on the loader to energize and start a loading cycle. The material is then drawn in by the loader's vacuum motor. If the hopper is filled, the demand switch will remain open (Fig. 1) and no further load cycles will be needed. However, if the demand was not satisfied and the demand switch closes (Fig. 2) the loader will continue with loading cycles until the demand is satisfied.

Fig. 1

Fig. 2

CONTROLMATE™ PENDANT (OPTIONAL)

ELC ControlMate™ Pendant

The ControlMate pendant consists of eight LEDs, a three-digit numeric display and three push buttons.

The ControlMate comes with an ethernet cable that supplies power and communications to the pendant from the main ELC control.

- **Interchangeable programming -** One optional pendant can be used to control all ELC controls within your system.The ControlMate pendant can be used with either the ELC-M or ELC-16.
- **Change up to 16 parameters -** Eight standard control parameters are accessible through User Level 1. An additional eight parameters are accessed through User Level 2. These additional parameters activate loading options such as: priority demand, fill sensor logic, demand sensor logic, fill sensor present, load and hold, purge/ Adjustable Purge Valve (APV) installed, ratio installed, blow back installed.
- **Easy-to-read display -** Both the ControlMate pendant and the ELC control use icons and associated LEDs to symbolize various loading parameters.

ControlMate User Level 1 Parameters

- On/Off
- Load Attempts
- Ratio Percentage
- Load Time
- Unload Time
- Ratio Layers
- Purge Time
- Blowback

Control Function

1. **Push the Function button** **until the appropriate LED indicator is illuminated** to change any loading parameter.
2. **Use the (+) or (-) buttons located to the left of the Function button** to change a loading parameter to your requirements.
3. **Once your parameters are changed there is no need for further keys strokes,** all parameters are instantly saved to the ELC control.

ACCESS AL SERIES LOADER

FEATURES

Stainless steel cylindrical, angled body provides easy access to internal drop-in disc filter.

All material contact surfaces are built of pristine stainless steel or aluminum to prevent corrosion.

New ELC-M loading control with intuitive loader display. Enhanced control capabilities are possible with the optional ControlMate pendant.

Blowback solenoid for the removal of dust or particulates that accumulate on the loader's internal disc filter.

Bolt-on replacement inlet/outlets (1.75 in. {44.45 mm} standard) vertical feed tube and flex hose clamps.

Cast aluminum base

Protective stand-offs

Integral discharge pan

OPTIONS

Stainless Steel Hopper (JIT)

Mounts directly to a machine throat with a stainless steel hopper (JIT). Three sizes are available: 10 lb hopper for the AL-2 model loader and 20 and 40 lb hoppers for the AL-5 model. An air tight seal is not required at the base of the Access Loader due to the included isolator valve. A simple grate magnet may also be included in the cast base to catch tramp metal. A remote demand sensor bracket is included with 20 and 40 lb hoppers.

Glass Hopper

Mounts directly to a machine throat with a direct feed glass hopper. Three sizes are available for the AL-2 model loader only. An air tight seal is not required at the base of the Access Loader due to the included isolator valve. Quick-disconnect clamps allow easy loader removal for thorough cleaning. A simple grate magnet is available as an option and may be installed in the cast base to catch tramp metal. A remote demand sensor bracket is included.

Gravity Discharge Valve
The gravity discharge valve uses a non-contact, magnetic reed switch to signal loader demand. Stand-offs provide a rugged guard to prevent discharge valve damage. The large opening eliminates material bridging.

Left-side Material Inlet
Rotates the position of the loader's material inlet 180°.

High-wear Kit
T-1 tool steel deflector plate is added to the inside of the loader's body to reduce wear from highly abrasive materials, such as glass-filled compounds.

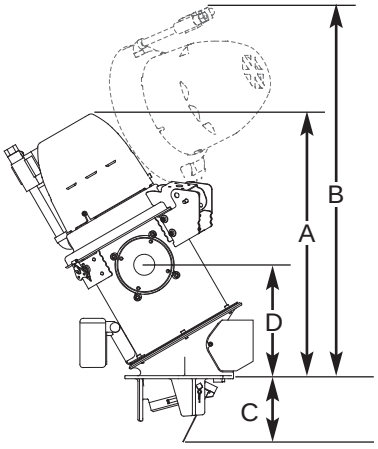
Remote Demand Sensor
To trigger the operation of the loader (demand) from a location other than directly below the loader, a remote demand sensor may be used. The remote demand sensor is useful on oversized drying hoppers to sense material through a sight glass. Extension cables are available.

Volume Fill Sensor
Provides automatic shut-off of the loader's vacuum sequence when the loader is full. A LED will illuminate on the ELC control if the vacuum sequence has not satisfied the loader's demand.

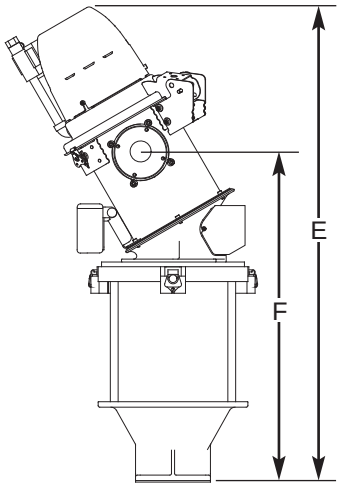
Ratio Valve
A dual inlet, single outlet material valve that is mounted directly to the Access Loader allows the loading of a second material to be layered along with virgin material. Ratio Valve field retrofit kits are available.

SPECIFICATIONS

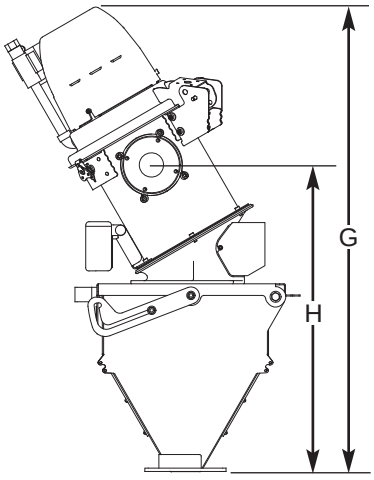
ACCESS AL SERIES LOADER



Standard Model



Direct Feed Model (Glass Hopper)



Direct Feed Model (Stainless Steel Hopper JIT)

MODEL	AL 2	AL 5	AL 5*
Performance characteristics			
Loader volume ft³ {liters}	0.2 {6.0}	0.5 {14.0}	
Loader Body Diameter inches {mm}	8.0 {203.0}	12.0 {304.0}	
Material/vacuum line inches {mm}	1.5 - 2.0 {38 - 51}	1.5 - 2.0 {38 - 51}	
Vacuum Motor	5/8 Hp - 2 Brush	7/8 Hp - 4 Brush	1.3 Hp - Brushless
Nominal throughput† lbs/hr {kg/hr}	200.0 {90.0}	500.0 {227.0}	1000.0 {454.0}
Maximum conveying distance ft {m}	50.0 {15.2}	75.0 {22.9}	120.0 {36.6}
Loader diameter inches {mm}	8.0 {203.0}	12.0 {304.0}	
Discharge type	Gravity flapper or Positive discharge		
Demand sensor	Integrated reed switch / Remote capacitance sensor (optional)		
Dimensions inches {mm}			
A - Height above mounting plate	20.4 {518.2}	23.2 {588.52}	
B - Height above mounting plate with open lid	29.7 {754.4}	34.0 {863.6}	
C - Depth below mounting plate	4.9 {124.5}	8.1 {206.3}	
with positive discharge	10 {254.0}	16.0 {406.0}	
D - Height to center of material inlet	8.8 {223.5}	8.6 {219.5}	
Mounting details	**See FIG. 1**	**See FIG. 2**	
Approximate weight lb {kg}			
Installed	28 {13}	49 {22}	
Shipping	50 {23}	65 {30}	
Compressed air requirements psi recommended	80	80	
Available voltages	110/220 VAC	110/220 VAC	

FIG. 1 – AL 2

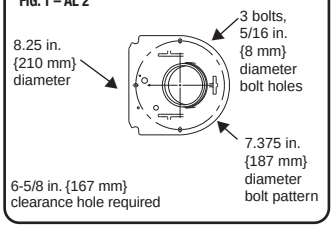
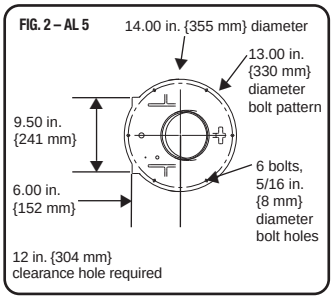


FIG. 2 – AL 5



Direct Feed Model (Glass Hopper)

MODEL	AL 2		
Performance characteristics			
Viewing chamber model	**3 lb**	**11 lb**	**21 lb**
Viewing chamber capacity lb {kg}	3.0 {1.4}	11.0 {4.9}	21.0 {9.5}
Isolator valve	standard	standard	standard
Dimensions inches {mm}			
E - Height above mounting plate	32.4 {822.5}	38.1 {966.7}	49.6 {1260.6}
F - Height to center of material inlet	20.8 {527.1}	26.5 {672.6}	38.0 {965.2}
Mounting details	**See FIG. 3**		
Approximate weight lb {kg}			
Installed	43 {19}	49 {22}	59 {27}
Shipping	65 {30}	71 {32}	82 {37}

Direct Feed Model (Stainless Steel Hopper) JIT

MODEL	AL 2	AL 5	
Performance characteristics			
Viewing bin model	**10 lb**	**20 lb**	**40 lb**
Viewing bin capacity lb {kg}	11.1 {5.1}	24.3 {11.0}	41.5 {18.8}
Isolator valve	standard	standard	standard
Dimensions inches {mm}			
G - Height above mounting plate	34.3 {871.2}	42.1 {1069.3}	45.2 {1148.1}
H - Height to center of material inlet	22.6 {574.0}	27.7 {703.6}	30.8 {782.3}
Mounting details	**See FIG. 3**		
Approximate weight lb {kg}			
Installed	45 {20}	80 {36}	85 {39}
Shipping	67 {30}	96 {44}	101 {46}

SPECIFICATION NOTES:

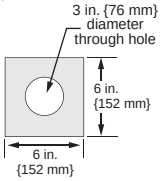
* Available with brushless motor as standard.

† Throughputs beyond the recommended ratings should not be attempted unless you are conveying virgin material from close distances. Higher throughputs could result in shortened brush and/or filter life. For higher throughputs, consult Conair for a quote on central vacuum loaders.

All Access Loaders are shipped with 10 ft {3.048 m} of flex hose and a vertical feed tube.

Specifications can change without notice. Contact your Conair representative for the most current information.

FIG. 3 – DIRECT FEED



DB12 Direct Feed

DB8 Gravity Discharge

RUGGED, RELIABLE, ALL-PURPOSE CONVEYING

Conair's DustBeater vacuum material loaders provide flexibility in meeting the varying demands of conveying pelletized and re-grind materials to a hopper, bin or processing machine.

The DB8 is ideal for lower-volume conveying up to 200 lbs/hr.

The DB12 provides a larger loader body, filter and vacuum motor for higher-volume conveying, up to 1000 lbs/hr.

BRUSHLESS MOTOR OPTION FOR DB12

Conair's DustBeater series, the most reliable loader line, is now even better with the new Easy Loading Control (ELC) and improved options to meet your demanding material transfer needs. The unit provides powerful conveying, is easy to set-up and simple to maintain. The latest generation offers an optional brushless motor for long motor life with no brush maintenance (DB12).

The optional ControlMate pendant allows you to load regrind along with virgin material, purge the conveying line, adjust blowback pulses and load and hold. Built-in security levels allow easy parameter viewing of simple day-to-day settings, yet secure the critical settings.

A choice of loader configuration allows direct loading to machine throats or hopper loading to bins and hoppers.

- **Convey up to 1000 lbs/hr**
  A DB12 equipped with the 1.3 Hp brushless vacuum motor will convey up to 1,000 lbs/hr.
- **Durable, powder-coated steel construction**
  This unit comes standard in carbon steel and is available in optional stainless steel.
- **Choice of discharges**
  Select gravity discharge for hopper loading or direct feed to deliver materials straight to the machine throat.
- **Easy maintenance**
  Plug-in connections, tool-less entry and a drop-in filter make this unit easy to maintain.
- **Full-featured control**
  The Easy Loading Control (ELC) and optional ControlMate pendant govern all aspects of your DustBeater Loader including: load time, material demand, purge, ratio, and many other loading parameters.

HOW IT WORKS

Loading Control

The ELC-M displays a loader's sequence within its conveying cycle with icons and associated LEDs. The control has precise, reliable electronics for operation, programming and alarms.

A signal from the loader's demand switch indicates to the ELC-M on the loader that it requires material to be conveyed to satisfy its demand. The ELC-M sends a signal to the vacuum motor on the loader to energize and start a loading cycle. The material is then drawn in by the loader's vacuum motor. If the hopper is filled, the demand switch will remain open (Fig. 1) and no further load cycles will be needed. However, if the demand was not satisfied and the demand switch closes (Fig. 2) the loader will continue with loading cycles until the demand is satisfied.

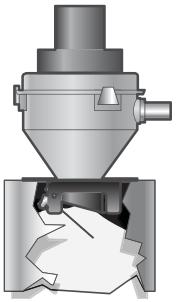


Fig. 1

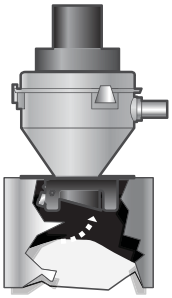
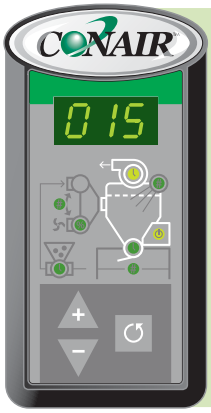


Fig. 2

CONTROLMATE™ PENDANT (OPTIONAL)



ELC ControlMate™ Pendant

The ControlMate pendant consists of eight LEDs, a three-digit numeric display and three push buttons.

The ControlMate comes with an ethernet cable that supplies power and communications to the pendant from the main ELC control.

ControlMate User Level 1 Parameters

- On/Off
- Load Attempts
- Ratio Percentage
- Load Time
- Unload Time
- Ratio Layers
- Purge Time
- Blowback

- **Interchangeable programming -** One optional pendant can be used to control all ELC controls within your system.The ControlMate pendant can be used with either the ELC-M or ELC-16.
- **Change up to 16 parameters -** Eight standard control parameters are accessible through User Level 1. An additional eight parameters are accessed through User Level 2. These additional parameters activate loading options such as: priority demand, fill sensor logic, demand sensor logic, fill sensor present, load and hold, purge/ Adjustable Purge Valve (APV) installed, ratio installed, blow back installed.
- **Easy-to-read display -** Both the ControlMate pendant and the ELC control use icons and associated LEDs to symbolize various loading parameters.

DISCHARGE VALVE CONFIGURATION

The gravity discharge valve uses a non-contact, magnetic reed switch to signal loader demand. Stand-offs provide a rugged guard to prevent discharge damage. The huge opening eliminates material bridging.

A positive discharge air-operated discharge valve is also available.

DIRECT FEED CONFIGURATION

Mount directly to a machine throat with a direct feed glass hopper (3 sizes available). An air-tight seal at the throat is required, or an isolator valve may be included. Quick-disconnect clamps allow easy loader removal for thorough cleaning. A simple grate magnet may also be included in the cast base for catching tramp metal.

FEATURES

TUBING CONNECTIONS

DustBeaters are built for a lifetime of service, so common wear components are designed for easy replacement. Tubing stubs are threaded and may be easily replaced in the event of damage, extreme wear or even for changing line sizes.

EASY LOADING CONTROL (ELC)

Individually mounted Easy Loading Controls (ELC) operate the loader's vacuum pump when it receives a signal from the demand switch to start a conveying cycle.

EASY FILTER CLEAN/CHANGE

The lid may be easily removed from the loader with no tools. The reinforced dacron disc filter simply drops into place. All connections are quick-disconnect for fast maintenance and easy service.

OPTIONS

A Broad Choice of Options Stretch the Value of your DustBeater Purchase

Brushless Motor

No maintenance. Longer life. Higher throughput. These new motors incorporate technology that transforms the incoming power into fast acting magnetic pulses that interact with the motor armature to create rotation faster than ever possible with traditional brush architecture. Provides near-frictionless motor performance, similar to, but far exceeding the performance of traditional three-phase motors. (DB12 only).

Sound Shield

The sound shield option bolts into place easily with no loader modification. This is a very effective option for both the new brushless as well as traditional brush motors.

Volume Fill Sensor

Provides automatic shut-off of the loader's vacuum sequence when the loader is full. An alarm message is displayed on the control if not satisfied during the vacuum sequence.

Ratio Valve

Dual inlet, single outlet material valve allows the loading of a second material (usually regrind) in approximate, layered percentages along with virgin material. May be installed on loader inlet or remotely. See the Ratio Valve specification sheet for more information.

Wear Plates

T-1 tool steel plates, installed inside the loader body, radically reduce hopper wear when conveying highly abrasive materials like glass-filled compounds. Wear plates may be easily replaced, if needed.

Magnets

An airtight, Drawer Magnet may be added below any direct feed DustBeater to trap ferrous metal. Or, a low cost Grate Magnet may be inserted directly into the glass hopper of the direct feed receiver to save head room.

Stainless Steel Material Contact

Provides stainless steel in place of carbon steel. The 304 grade stainless steel is uncoated internally (in material contact areas), but powder coated externally for optimum cosmetic appearance.

Remote Demand Sensor

To trigger the operation of the loader (demand) from a location other than directly below the loader, a remote demand sensor may be used. Useful on oversized drying hoppers to sense through a window (6 foot cable provided) or when off-loading a granulator (30 foot cable provided). Extension cables are also available.

Positive Discharge Valve

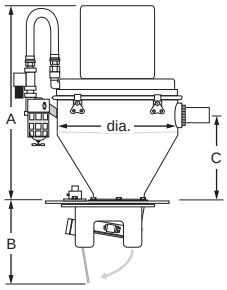
Provides a pneumatically driven discharge valve on the bottom of the loader in the event that gravity will not sufficiently open the standard flapper after loading. Useful for very light materials or when high CFM drying hoppers are being loaded. (DB12 only).

DUSTBEATER DB8 AND DB12 MODELS

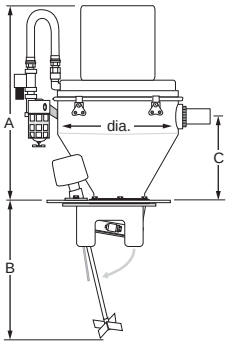
SPECIFICATIONS

HOPPER LOADING

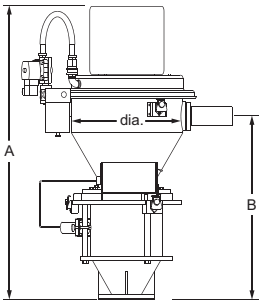
GRAVITY DISCHARGE



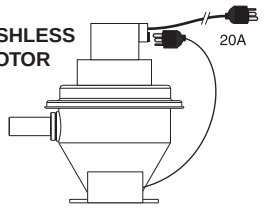
POSITIVE DISCHARGE (DB12 ONLY)



DIRECT FEED



BRUSHLESS MOTOR



The high performance Brushless Motor plugs directly into a 120 volt, 20 amp receptacle. The control may then plug into the motor for convenience, if desired.

Loaders with brush motors operate through the control.

DB Series Self-contained Vacuum Loaders

Loader model	DB8	DB12	DB12*
Vacuum motor	**5/8 Hp-2 brush**	**7/8 Hp-4 brush**	**1.3 Hp brushless**
Maximum injection mold machine size	500 tons	1000 tons	2000 tons
Maximum extruder size inches {mm}	2 {50.8}	3 {76.2}	4 {101.6}
Recommended throughput† lbs/hr {kg/hr}	200 {91}	500 {227}	1000 {454}
Maximum conveying distance ft {m}	50 {15.24}	75 {22.86}	120 {36.58}
Loader diameter inches {mm}	8 {203}	12 {304}	
Loader volume ft³ {liters}	0.14 {4.0}	0.5 {14.2}	
Material/Vacuum line size inches {mm} OD	1.75 {44.45} OD		
Available voltages, 50/60 Hz	120/220 VAC	120/220 VAC	120 VAC
Amps @ 120 VAC	8	14	17
Amps @ 220 VAC	4	7	NA
Compressed air requirements	80 psi {5.52 bar}, 2 ft³/min {0.057 m³/min}, NPT fitting: 3/8 in.		
Filter area in² {cm²}	50 {322.6}	113 {729}	
Filter type	Reinforced polyester disc		

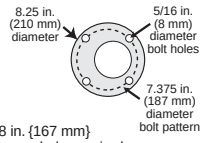
Hopper Loading Configuration

Loader model	DB8	DB12
Dimensions inches {mm}		
A - Height above mounting plate‡	16 {406}	22 {559}
B - Depth below mounting plate	5.5 {140}	9 {229}
with positive discharge	NA	16 {406}
C - Height to center of material inlet	6.2 {157.5}	9.5 {241}
Mounting details	See FIG. 1	See FIG. 2
Installed weight lb {kg}	27 {12}	49 {22}
Shipping weight lb {kg}	50 {23}	65 {29}

Direct Feed Configuration

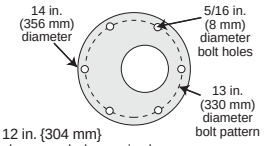
Loader model	DB8			DB12		
Viewing chamber model	**4 lb**	**15 lb**	**25 lb**	**4 lb**	**15 lb**	**25 lb**
Viewing chamber capacity lb {kg}§	4 {1.81}	15 {6.8}	25 {11.3}	4 {1.81}	15 {6.8}	25 {11.3}
with isolator valve‡	3 {1.36}	11 {4.99}	21 {9.53}	3 {1.36}	11 {4.99}	21 {9.53}
Dimensions inches {mm}						
A - Height above mounting plate‡	27.8 {706.1}	33.3 {845.8}	83.8 {2129}	33.8 {858.5}	39.3 {998.2}	89.8 {2281}
B - Height to center of material inlet	18 {457.2}	23.5 {596.9}	74 {1880}	21.3 {541}	26.8 {680.7}	77.3 {1963}
Add for isolator valve	0	0	0	2.25 {57}	2.25 {57}	2.25 {57}
Mounting details	See FIG. 3					
Installed weight lb {kg}	52 {24}	54 {25}	85 {39}	74 {33}	76 {34}	107 {48}
Shipping weight lb {kg}	80 {36}	84 {38}	117 {53}	108 {49}	110 {50}	145 {66}

FIG. 1 – DB8



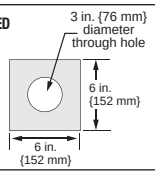
6-5/8 in. {167 mm} clearance hole required

FIG. 2 –DB12



12 in. {304 mm} clearance hole required

FIG. 3 – DIRECT FEED



SPECIFICATION NOTES

* Available with brushless motor as standard.

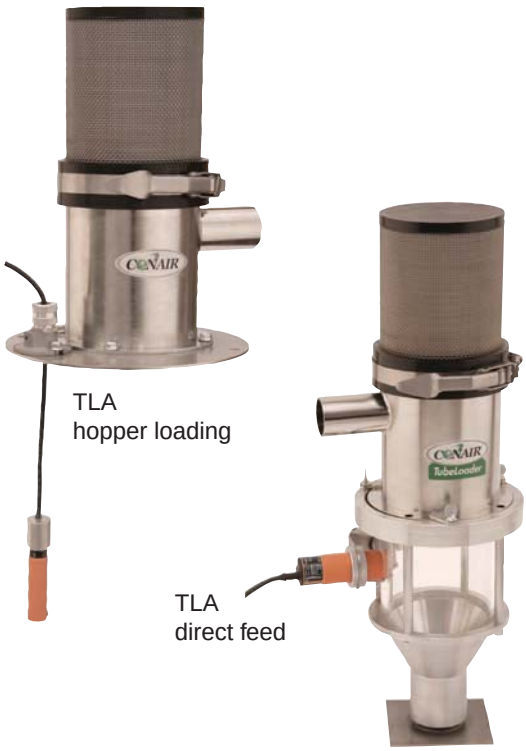
† Throughputs beyond the recommended ratings should not be attempted unless you are conveying virgin material from close distances. Higher throughputs could result in shortened brush and/or filter life. For higher throughputs, consult Conair for a quote on central vacuum loaders.

‡ Add 3 inches {76.2 mm} to height if using sound shield option.

§ At 35 lbs. per ft³. {15.88 kg}

All DustBeaters are shipped with 10 ft. {3.048 m} of flex hose and a vertical feed tube.

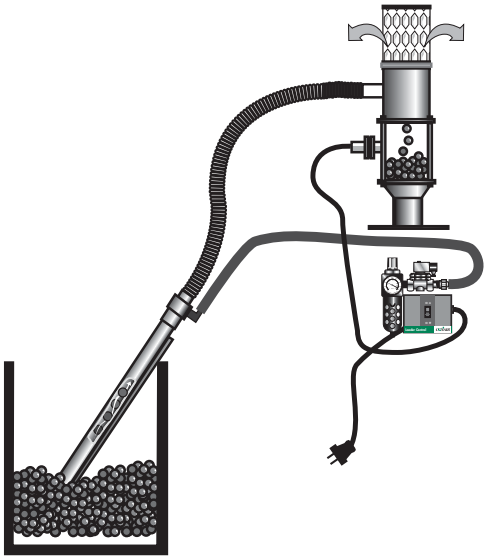
Specifications can change without notice. Contact your Conair representative for the most current information.



SIMPLE, QUIET, COMPRESSED AIR CONVEYING

The compact TLA Tube Loader makes it easy to provide trouble-free loading wherever you need it. Using compressed air, the TLA's highly efficient venturi draws material from drums, bins or gaylords. From there, the material is pushed to the compact Tube Loader body that can be mounted to virtually any vessel or machine throat. Using a unique, low maintenance filter assembly, material is separated from the conveying air stream and deposited directly into a bin or machine throat. The wide-open Tube Loader body keeps material flowing without bridging and without a discharge valve common to other types of loaders. A demand sensor tells the TLA when to load and when it is full. Material flow is easily adjusted for throughput, conveying distance and air conservation with the included air-pressure regulator and gauge.

MODELS FOR MACHINE THROATS, HOPPERS AND BINS

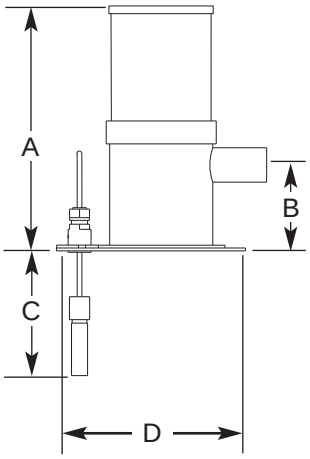


- **Quiet, minimal maintenance**
  The TLA uses clean, quiet compressed air to move material.
- **Simple to install**
  Mount on hopper lid or directly to machine throat. No flappers or obstructions to consider.
- **Up to 700 pounds per hour**
  Fast response compressed air energy will keep your hopper or machine throat full.
- **Stainless steel construction**
  Constructed of rugged, attractive stainless steel, the TLA will compliment your facility while demanding almost no maintenance.
- **Efficient filter media**
  The slick, fine-mesh stainless steel "top hat" filter effectively vents compressed air out of the loader, yet resists the accumulation of material dust, minimizing the need for cleaning.

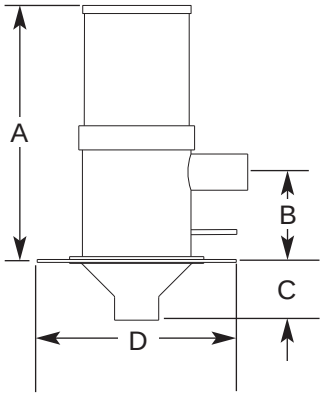
TLA MODEL TUBE LOADER

SPECIFICATIONS

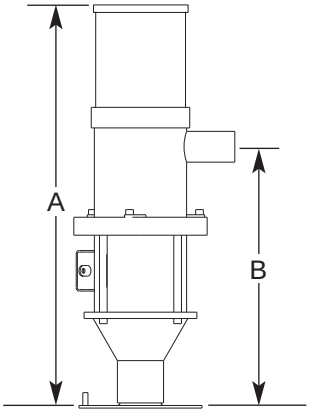
Hopper loading

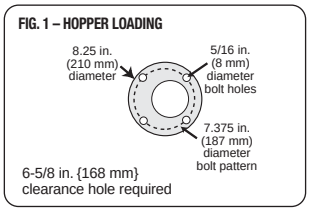


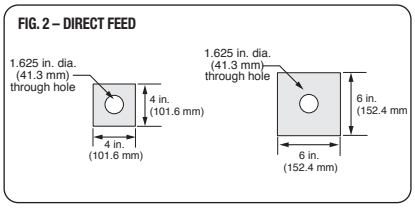
Feeding bin



Direct feed







Loader model	TLA
Maximum injection mold machine size	800 tons
Maximum extruder size inches {mm}	2 {50.8}
Recommended throughput* lbs/hr {kg/hr}	700 {317.5}
Maximum conveying distance ft {m}	20 {6.1}
Loader diameter inches {mm}	4.5 {114.3}
Loader volume ft³ {liters}	0.1 {2.8}
Material line size inches {mm} OD	1.5 {38.1}
Voltage, 50/60 Hz	120 VAC
Amps @ 120 VAC	1.0
Compressed air requirements Consumption @60 psi ft³/min {liters/min}	8.25 {233.6}
NPT fitting	3/8 in.
Filter area in² {cm²}	62.4 {402.6}
Filter type	200 mesh stainless steel

Hopper Loading/Feeding Bin Models

Loader model	TLA	
Dimensions inches {mm}	Hopper Loading	Feeding Bin
A - Height above mounting plate	10.8 {274.3}	10.8 {274.3}
B - Height to center of material inlet	3.75 {95.3}	3.75 {95.3}
C - Depth below mounting plate	3.5 {88.9}	4.5 {114.3}
D - Clearance hole diameter	6-5/8 {168}	6-5/8 {168}
Mounting details	Fig. 1	
Installed weight lb {kg}	6 {3}	8 {4}
Shipping weight lb {kg}	26 {12}	28 {13}

Direct Feed Model (glass hopper)

Loader model	TLA	
Viewing chamber model	1 lb	2 lb
Viewing chamber capacity lb {kg}	1 {0.45}	2 {0.91}
Dimensions inches {mm}		
A - Height above mounting plate	20.3 {515.6}	25.5 {647.7}
B - Height to center of material inlet	13 {330}	18.25 {463.6}
Mounting details	Fig. 2	
Installed weight lb {kg}	10 {5}	12 {5}
Shipping weight lb {kg}	30 {14}	32 {15}

SPECIFICATION NOTES:

* Throughputs are based on conveying typical materials from close distances.

Specifications may change without notice. Check with a Conair representative for the most current information.

TLA CONFIGURATIONS AVAILABLE

The hopper loading version fits directly on top of a machine hopper, or any other type of vessel. It is equipped with a demand sensor that may be height adjusted in the receiving hopper to maintain a specific level.

The feeding bin version is a hopper loading model that includes a "zero-pressure" cone below the loader body to prevent any pressurization of the receiving bin. Flex hose (included) may be installed to the cone to minimize the volume of loaded material in the feeding bin. A Conair exclusive.

The direct feed version is equipped with a choice of a 1 or 2 lb. glass hopper that fits directly on your processing machine throat. The modular design allows easy disassembly for cleaning. The demand sensor may be shot-size adjusted up and down the glass hopper.

Both the hopper loading and direct feed version may be readily equipped for ratio loading of two materials by the simple addition of a "Y" tube on the inlet, a second venturi and pressure regulator.

CAML-EVB shown with optional drum full alarm kit

MULTI-PURPOSE MATERIAL EVACUATION

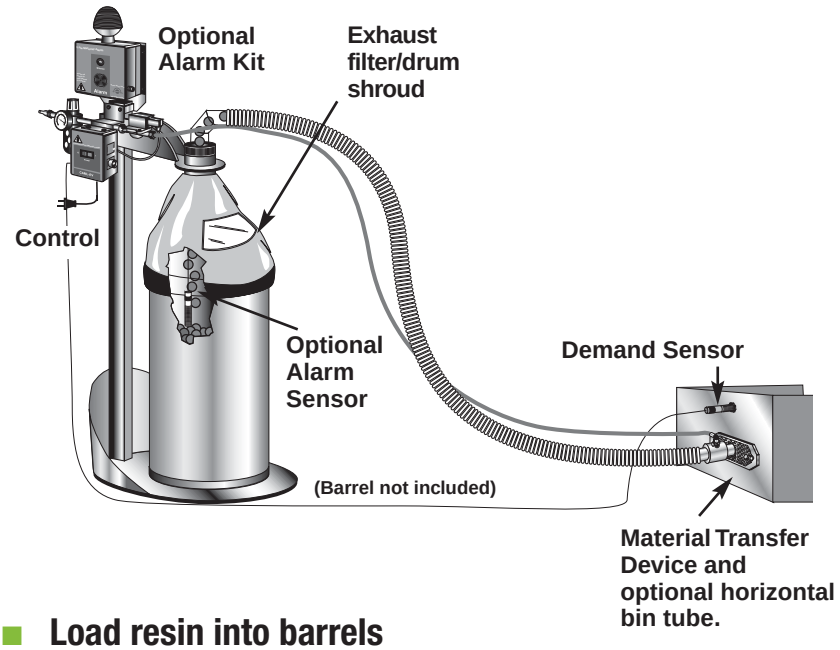
The CAML-EVB is designed to load barrels with material it evacuates from granulator bins, gaylords or storage hoppers. You get the same reduced noise and simple operation provided by other CAML models. A simple on/off control eliminates load and dump-time settings. The CAML-EVB uses a compressed air powered Material Transfer Device (MTD) to move material from the bin to the drum.

MOVE MATERIAL SIMPLY AND QUIETLY

How It Works:
Using a compressed-air powered MTD connected to a pickup device, the CAML-EVB moves material from the material source to a receiving barrel. The CAML-EVB can be configured with a demand sensor in the drum or at the material source. An optional sensor can be installed in the drum to provide a fill alarm. When the CAML-EVB's receptacle is full, simply replace it with another drum or convey from the receiving drum to another destination.

The standard CAML-EVB includes:

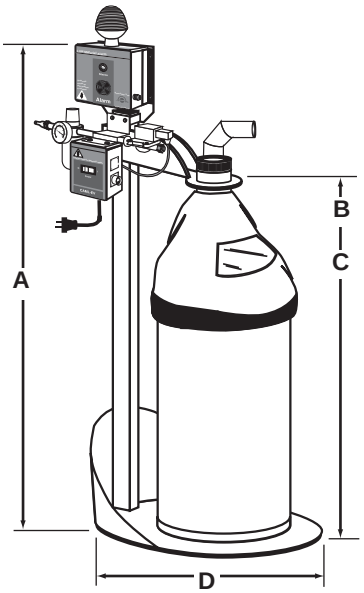
- A proximity-type demand sensor
- Control assembly with solenoid and air filter/regulator
- Barrel stand with adjustable arm
- Exhaust filter/barrel shroud
- MTD (Material Transfer Device)
- 20 feet of conveying hose



- **Load resin into barrels**
- **Evacuate regrind from granulators**
- **Quiet, efficient operation**
- **No tools required to change drums**

CAML-EVB EVACUATION (TO BARREL) SYSTEM

SPECIFICATIONS



MODELS	CAML-EVB
Performance characteristics	
Maximum throughput lb/hr {kg/hr}	700 {318}
Nominal throughput * lb/hr {kg/hr}	500 {227}
Maximum conveying distance ft {m}	20 {6}
Material line size in. {mm}	1.5 {38}
Dimensions inches {mm}	
A - Overall height with alarm option	57 {1448}
B - Maximum height, adjustable arm	46 {1168}
C - Minimum height, adjustable arm	30 {762}
D - Drum stand base diameter	25 {635}
Weight lbs {kg}	
Shipping	130 {59}
Installed	90 {41}
Voltages Total amps	
120V/1 phase/60 hz	1.0
Compressed air requirements	
Typical operating pressure psi {bars}	30 {2.1}
Consumption @ 60 psi ft³/min {liters/min}	8.25 {233.6}
NPT fitting	3/8 in.

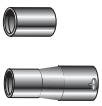
SPECIFICATION NOTES

*Recommended throughput rates are provided to insure optimum performance and life of the product.

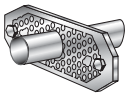
Specifications can change without notice. Contact your Conair representative for the most current information.

OPTIONS

Material Pickup Devices



O-ring Adapters
Connect the Material Transfer Device to material lines with equal or larger outer diameters.

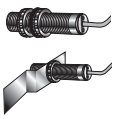


Horizontal Bin Tube
Install the Material Transfer Device on granulator trays, bins or other flat-walled storage containers.

Vertical Feed Tube
Inserts into open material containers. Includes a coupling for the Material Transfer Device.

Granulator Bin Tube Adaptor
Adapts round granulator drawer tubes (up to 2 inch OD) to the material transfer device and provides air inlet for optimal conveying.

Sensor Mounting Options



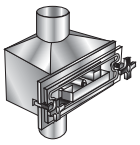
Demand Sensors
Proximity sensor with O-ring mounts through the wall of a hopper or bin. The sensor with an angled bracket allows external mounting against a sight glass on a bin.

Sensor Extension Cable

"Drum Full" Alarm Kit

Includes the audible/visual alarm and a proximity sensor to indicate when the bin or drum is full.

Drawer Magnet



Install between the 90° inlet tube and the drum filter/shroud to catch tramp metal before it can enter the barrel.

Energy Miser

Provides adjustable on and off time periods for conveying. Ideal when full time evacuation is not required.

CAML-EVG shown with the optional retractable cover and one gaylord.

FILL GAYLORDS WITH CLEAN, QUIET COMPRESSED AIR POWER

The CAML-EVG system can readily fill standard gaylord boxes with material from granulators or other sources. Optimized for easy gaylord placement and removal, the EVG is designed for one or two gaylords and comes complete with a movable filling tube, compressed air venturi, control with an overfill alarm and a sturdy frame. When coupled with an optional demand sensor in the granulator drawer, the CAML-EVG responds quickly and keeps your granulator empty by efficiently offloading material to a gaylord.

COMPACT, VERSATILE GAYLORD FILLING STATION

Once assembled, the CAML-EVG provides two "parking spots" for gaylords to be filled by a clean, quiet compressed air system.

The EVG can operate by either an on-demand sensor or as needed by the operator. Controls are readily accessible on the moving fill tube arm, which directs material into each gaylord as needed. An optional gaylord cover system provides simple, easy protection of loaded material with a retractable, strong, poly cover.

- **Keep granulators empty**
  When connected to an optional granulator drawer demand sensor, granulators run free and clear of material back-up.
- **Change gaylords quickly**
  The EVG's frame provides "parking-spots" for two gaylords so one may be moved while the other is filling. If only one is needed, the second spot is ideal for locating a mid-size granulator.
- **Flexible cover option**
  Covers install over gaylords in seconds - no tucking or stretching necessary. The cover retracts just as fast, rolling out of the way for maximum efficiency.
- **Built in overfill alarm**
  The EVG lets you know when the gaylord is full so you can simply swing the filling tube over to the next gaylord and keep the material moving.

CAML-EVG EVACUATION (TO GAYLORD) SYSTEM

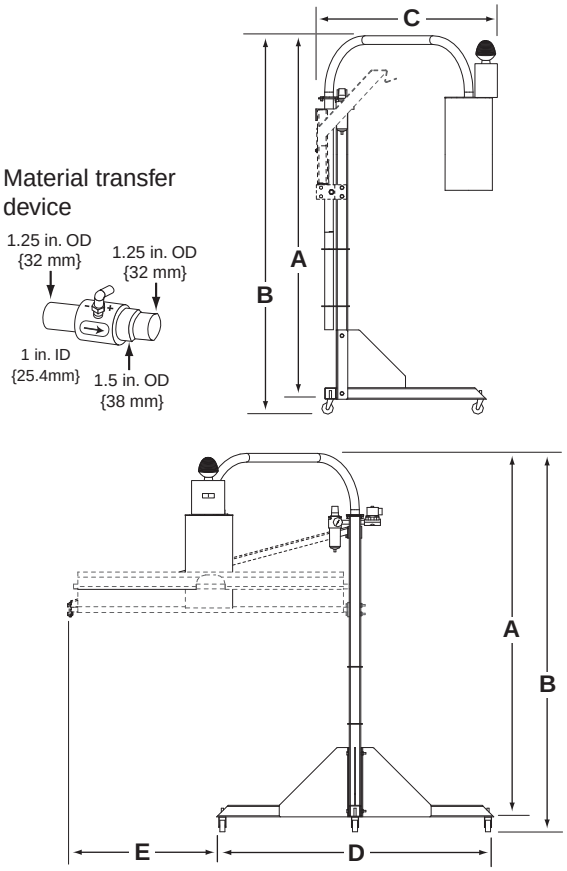
SPECIFICATIONS

MODELS	CAML-EVG
Performance characteristics	
Maximum throughput lb/hr {kg/hr}	700 {318}
Optimum throughput * lb/hr {kg/hr}	500 {227}
Maximum conveying distance ft {m}	20 {6}
Material line size in. {mm}	1.5 {38}
Dimensions inches {mm}	
A - Overall height	65.5 {1664}
B - Height, with optional casters	68.0 {1727}
C - Depth	45.0 {1143}
D - Width	48.0 {1219}
E - Width, add for each retractable cover	27.0 {686}
Weight lb {kg}	
Shipping	185 {84}
Installed	160 {73}
Retractable cover weight, each	35 {16}
Voltages Total amps	
120V/1 phase/60 hz	1.5
Compressed air requirements	
Regulator set pressure psi {bars}	20-120 {1.4-8.3}
Consumption @ 60 psi ft³/min {liters/min}	8.25 {233.6}
Air inlet, NPT fitting	3/8 in.

SPECIFICATION NOTES

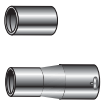
* Throughput is highly dependent upon material size, shape and flow rate. Performance claims are based on typical regrind. Large, small or poor flowing materials should be tested for suitability.

Specifications can change without notice. Contact your Conair representative for the most current information.

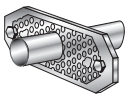


OPTIONS

Material Pickup Devices



O-ring Adapters
Connect the Material Transfer Device to distribution boxes with equal or larger outer diameters. (up to 1.75 inch OD)



Horizontal Bin Tube
Install the Material Transfer Device on bins or other flat-walled storage containers. Provides air inlet for optimum conveying.

Vertical Feed Tube
Inserts into open material containers. Includes a coupling for the Material Transfer Device.

Granulator Bin Tube Adaptor
Adapts round granulator drawer tubes (up to 2 inch OD) to the material transfer device and provides an air inlet for optimal conveying.

Demand Sensor Option

This option automates the conveying operation. Conveying starts when the demand sensor detects material in the bin to be evacuated. Conveying stops when the bin is empty and the conveying time expires. The option includes an extension cable, timer, and a proximity sensor that mounts through the wall of a hopper or bin.

Retractable Gaylord Cover

Install one or two gaylord covers to minimize dust during the conveying operation and to prevent material contamination.

Energy Miser

Provides adjustable on and off time periods for conveying. Ideal when full time evacuation is not required.

TLR
direct feed
with UTB

TLR
hopper loader
with optional ELC-16 control

COMPACT RECEIVERS FOR PELLETS AND REGRIND

The compact TLR model tube loader provides trouble-free material transfer within a central vacuum system. The exclusive, 4.5 inch diameter tube body means that materials will always flow easily from the receiver without bridging. The hinged lid is equipped with a compact vacuum sequencing valve and allows easy, no-tools servicing of the oversized, drop-in, 20 mesh stainless steel filter.

Any TLR may be easily equipped for ratio loading of two materials by the simple addition of a compact ratio valve on the material inlet tube.

MODULAR, ECONOMICAL, ALL-STAINLESS RECEIVERS

The TLR is available in two configurations. The hopper loading version fits directly on top of a bin or drying hopper, or any other type of vessel. Its wide discharge valve incorporates a demand switch allowing the TLR to automatically keep the receiving bin full (also available with a remote demand sensor).

The direct feed version is equipped with a 1 or 2 lb. glass hopper and couples easily to your processing machine throat. If the machine throat is not vacuum-tight an optional isolator valve may be added. The demand sensor may be shot-size adjusted up and down the glass hopper.

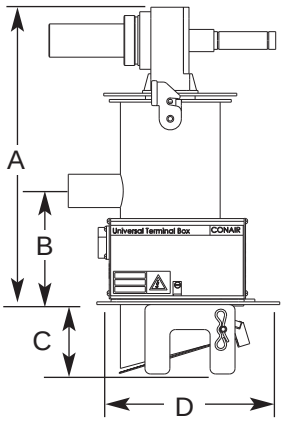
The drop-in screen filter module provides more than 40 square inches of 20 mesh filter area for efficient air/material separation.

- **Modular, easy cleaning**
  All chambers come apart without tools for easy access, material changes and cleaning.
- **Compact, attractive**
  The 4.5 inch diameter receiver sports an electro-polished stainless steel finish that will compliment any facility while requiring almost no maintenance.
- **Versatile use**
  Available in both hopper loading and direct throat feeding versions, the TLR may also be equipped with compact ratio valve.
- **Easy-access hinged lid**
  No-tools, swing clip opens easily for maintenance.

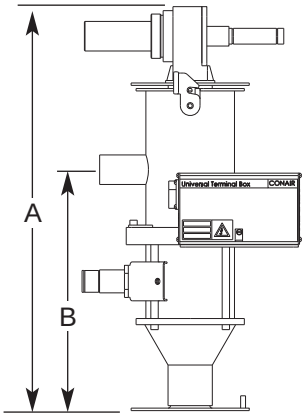
- **Choice of control**
  Select either the universal terminal box (UTB) or the ELC loading control for your receiver. The standard UTB works with B-32, IL-64, or ILS central loading controls. The optional ELC control is a stand-alone loading control based on a receiver integrated CAN open network. *See the Easy Loading Control (ELC) specifications sheet for more information.*

SPECIFICATIONS

Hopper loading



Direct feed



Conair's exclusive Universal Terminal Box (UTB) allows modular, plug-in options, and the TLR may be readily connected to any central or remote vacuum system with a single, electrical connector.

Loader model	TLR
Loader diameter inches {mm}	4.5 {114}
Loader volume ft³ {liters}	0.1 {4.0}
Material line size inches {mm} OD	1.5 {38.1}
Vacuum line size inches {mm} OD	1.5 - 2.0 {38.1 - 50.8}
Available voltages, 50/60 Hz	120/24 VAC/24VDC
Compressed air requirements	90 maximum psi, 1.4 CFM, NPT fitting: 1/4 inch
Filter area in² {cm²}	36.0 {232.3}
Filter type	20 mesh stainless steel

Hopper Loading Model

Loader model	TLR
Dimensions inches {mm}	
A - Height above mounting plate	13.5 {343}
B - Height to center of material inlet	5.0 {127}
C - Depth below mounting plate	4.0 {102}
D- Clearance hole diameter	6-5/8 {168}
Mounting details	Fig. 1
Installed weight lb {kg}	12 {5.4}
Shipping weight lb {kg}	24 {10.9}

Direct Feed Model (glass hopper)

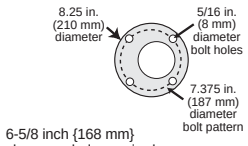
Loader model	TLR	
Viewing chamber model	**1 lb**	**2 lb**
Viewing chamber capacity lb {kg}	1 {0.45}	2 {0.91}
Dimensions inches {mm}*		
A - Height above mounting plate	20.5 {521}	25.75 {654}
B - Height to center of material inlet	12.25 {311}	17.50 {445}
Mounting details	Fig. 2	
Installed weight lb {kg}	15 {6.8}	17 {7.7}
Shipping weight lb {kg}	24 {10.9}	26 {11.8}

SPECIFICATION NOTES:

* The optional isolator valve adds 1.625 inches {41.3 mm} to the height.

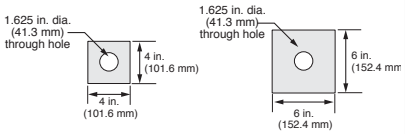
Specifications may change without notice. Check with a Conair representative for the most current information.

FIG. 1 – HOPPER LOADING



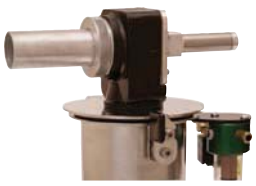
6-5/8 inch {168 mm} clearance hole required

FIG. 2 – DIRECT FEED



The compact ratio (shown) and common line valves mount directly on the TLR or remotely mounted. Both open easily with no tools for complete, easy cleanout.

For direct feed TLR's mounted on machine throats that are not vacuum tight, the isolator valve option assures a good vacuum seal.



The vacuum sequencing valve may be rotated any direction for easy vacuum hose routing.

Access Model AR-5
with optional ELC-16 control

EASIER ACCESS FOR **SIMPLIFIED CLEANING**

Cleaning and maintaining your material receivers is now faster, easier and safer than ever before. That's because the unique angled canister design of the Conair Access Receiver means workers don't need to climb as high or work as hard to service the drop-in filter or wipe out the stainless steel canister.

VALUE-ADDED FEATURES AT NO ADDITIONAL COST

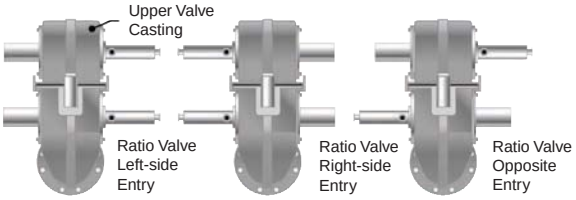
The Access (AR series) Receiver delivers all the performance and reliability you expect from Conair, plus added features and benefits at no extra cost. The unique angled canister is constructed of stainless steel, and the discharge valve is cast aluminum, to ensure corrosion resistance and easy cleaning. The hinged lid opens easily, without tools, tilts back and locks out of the way leaving workers with both hands free for safety, comfort and convenience.

The modular design provides application flexibility, by allowing the material inlet to be positioned in virtually any direction. A vertically oriented ratio valve or a common line valve are available. A pneumatically actuated discharge valve can be added to any model.

Available in three popular sizes, the Access Receivers are ready to provide years of service in new or existing resin transfer systems.

- **World's most reliable discharge valve**
  Now in cast aluminum, for years of trouble-free performance.
- **Option packages to suit your needs**
  Popular options are combined for easy selection and integrated into your receiver purchase.
- **Integrates with existing loading systems**
  Modular design allows your Access Receiver to be outfitted for your specific requirements including voltage, line size and material inlet orientation.
- **Choice of control**
  Select either the universal terminal box (UTB) or the ELC loading control for your receiver. The standard UTB works with B-32, IL-64, FLX or ILS central loading controls. The optional ELC control is a stand-alone loading control based on a receiver integrated CAN open network. *See the Easy Loading Control (ELC) specification sheet for more information.*

- **Optional customizable ratio valve**
  The ratio valve's top and bottom material inlets can be conveniently positioned facing forward or backwards to access your material lines.



CONTROL FEATURES

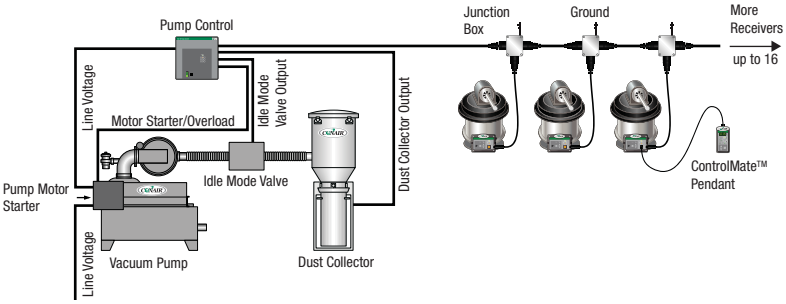
Optional Loading Control

The ELC-16 displays a receiver's sequence within its conveying cycle with icons and associated LEDs. The control has precise, reliable electronics for operation, programming and alarms.

How It Works

A signal from the receiver's demand switch indicates to the individually mounted ELC-16 on the receiver that it requires material to be conveyed to satisfy its demand. The ELC-16 then communicates its need for material to the pump control via a CAN open network. The demand signal from the ELC is then added to the pump control's queue. The vacuum pump control will then permit the receiver to load on a First-In/First-Out (FIFO) basis.

The ELC-16 control is used for a number of receivers (up to 16) on a CAN open network. The ELC-16 control uses First-In/First-Out (FIFO) for receiver demand. The FIFO setting works within your CAN open network and will allow the receiver that demanded material first to receive it first. For example, if there are four (4) receivers in a series that have demands for material, but the third receiver demanded material first, regardless of the receiver's physical location on the CAN open network, it will be provided with material.



OPTIONAL CONTROLMATE™ PENDANT (USED WITH ELC)

ELC ControlMate™ Pendant

The ControlMate pendant consists of eight LEDs, a three-digit numeric display and three push buttons.

The ControlMate comes with an ethernet cable that supplies power and communications to the pendant from the main ELC control.

ControlMate User Level 1 Parameters

- On/Off
- Load Attempts
- Ratio Percentage
- Load Time
- Unload Time
- Ratio Layers
- Purge Time
- Blowback

Control Features

- **Interchangeable programming -** One optional pendant can be used to control all ELC controls within your system.The ControlMate pendant can be used with either the ELC-M or ELC-16.
- **Change up to 16 parameters -** Eight standard control parameters are accessible through User Level 1. An additional eight parameters are accessed through User Level 2. These additional parameters activate loading options such as: priority demand, fill sensor logic, demand sensor logic, fill sensor present, load and hold, purge/ Adjustable Purge Valve (APV) installed, ratio installed, blow back installed.
- **Easy-to-read display -** Both the ControlMate pendant and the ELC control use icons and associated LEDs to symbolize various loading parameters.

Control Function

1. **Push the Function button** **until the appropriate LED indicator is illuminated** to change any loading parameter.
2. **Use the (+) or (-) buttons located to the left of the Function button** to change a loading parameter to your requirements.
3. **Once your parameters are changed there is no need for further keys strokes,** all parameters are instantly saved to the ELC control.

ACCESS AR SERIES RECEIVERS

FEATURES

Stainless steel cylindrical, angled body for easy access to internal drop-in disc filter.

All material contact surfaces are built of pristine stainless steel or aluminum to prevent corrosion.

Choose between standard universal terminal box (UTB) or the optional new Easy Loading Control (ELC).

Optional bolt-on ratio or common line valves can replace the receiver's original material inlet/outlets tube. Valve retro-fit kits are also available.

Bolt-on replacement inlet/outlets (1.75 in. {44.45 mm} standard) vertical feed tube and flex hose clamps.

Cast aluminum base

Protective stand-offs

Integral discharge pan

(Shown with optional ELC-16 controls)

OPTIONS

Stainless Steel Hopper (JIT)

Mounts directly to a machine throat with a stainless steel hopper (JIT). Three sizes are available: 10 lb hopper for the AR-2 model, 20 lb hopper for the AR-5 model and a 40 lb hopper for the AR-5 and AR-10 models. An air tight seal is not required at the base of the Access Receiver due to the included isolator valve. A simple grate magnet may also be included in the cast base to catch tramp metal. Remote demand sensor brackets are included with 20 and 40 lb JIT hoppers.

Glass Hopper

Mounts directly to a machine throat with a direct feed glass hopper. Three sizes are available for the AR-2 model receiver only. An air tight seal is not required at the base of the Access Loader due to the included isolator valve. Quick-disconnect clamps allow easy receiver removal for thorough cleaning. A simple grate magnet is available as an option and may be installed in the cast base to catch tramp metal. Remote demand sensor brackets are included.

Remote Demand Sensor
To trigger the operation of the receiver (demand) from a location other than below the receiver, a remote demand sensor may be used. The remote demand sensor is useful on oversized drying hoppers to sense material through a sight glass. Extension cables are available.

Volume Fill Sensor
Shuts off the receiver's vacuum sequence when the receiver is full. A LED will illuminate on the ELC control if the vacuum sequence has not satisfied the receiver's demand.

Left-side Material Inlet
Rotates the position of the receiver's material inlet 180°.

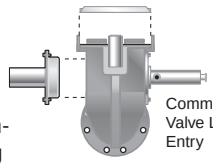
Gravity Discharge Valve
The gravity discharge valve uses a non-contact, magnetic reed switch to signal receiver demand. Stand-offs provide a heavy-duty guard to prevent discharge valve damage. The large opening eliminates material bridging.

High-wear Kit
A T-1 tool steel deflector plate is added to the inside of the receiver's body reducing wear from highly abrasive materials, such as glass-filled compounds.

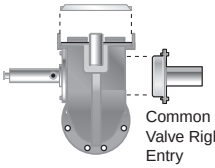
High-temperature Kit
Replaces standard cylinders with high temperature cylinders.

Ratio Valve
A dual inlet, single outlet material valve that is mounted directly to the Access Receiver allows the loading of a second material to be layered along with virgin material. Ratio Valve field retrofit kits are available.

Common Line Valve
Mounted directly to the material inlet, the common line valve isolates the receiver from a common material conveying line in a system. This option features reversible material valve entry and a removable top lid for easy access to the material valve. Field retrofit kits are available.



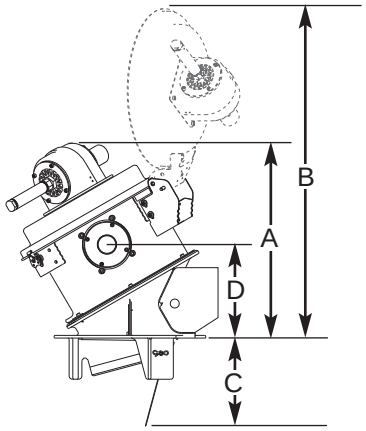
Common Line Valve Left-side Entry



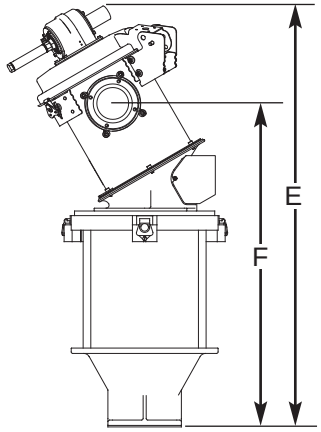
Common Line Valve Right-side Entry

ACCESS AR SERIES RECEIVERS

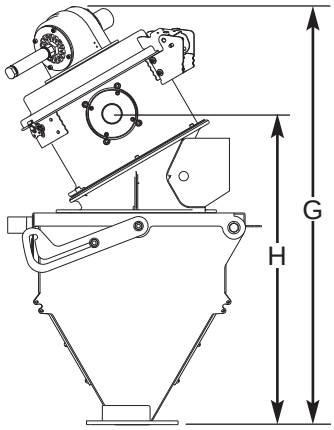
SPECIFICATIONS



Standard Model



Direct Feed Model (Glass Hopper)



Direct Feed Model (Stainless Steel Hopper JIT)

MODEL	AR 2	AR 5	AR 10
Performance characteristics			
Receiver volume ft³ {liters}	0.2 {5.6}	0.5 {14.2}	1.0 {28.3}
Loader body diameter inches {mm}	8.0 {203.0}	12.0 {304.0}	12.0 {304.0}
Material/vacuum line inches {mm}	1.5-3.0 {38.0-51.0}	1.5-3.0 {38.0-51.0}	1.5-3.0 {38.0-51.0}
Filter type	20 mesh stainless steel disc		
Available voltages (outputs)	120 VAC, 24 VAC and 24 VDC		
Compressed air requirement	Intermittent duty: 1ft³/min. @ 80 psi {28.3 liters/min. @ 5.51 bars} NPT fitting: 3/8 in.		
Discharge type	Gravity flapper or Positive discharge		
Demand sensor	Integrated reed switch/Remote capacitive sensor (optional)		
Dimensions inches {mm}			
A - Height above mounting plate	18.2 {461.5}	18.0 {458.2}	23.8 {603.3}
B - Height above mounting plate with open lid	26.2 {655.5}	31.1 {789.9}	36.7 {932.2}
C - Depth below mounting plate	5.1 {130.1}	8.1 {206.3}	8.1 {206.3}
with positive discharge	10.0 {254.0}	16.0 {406.0}	16.0 {406.0}
D - Height to center of material inlet	8.8 {222.8}	8.6 {219.5}	14.3 {364.2}
Mounting details	**See FIG. 1**	**See FIG. 2**	**See FIG. 2**
Approximate weight lb {kg}			
Installed	21 {10}	40 {18}	44 {20}
Shipping	35 {16}	50 {23}	70 {32}

FIG. 1 – AR 2

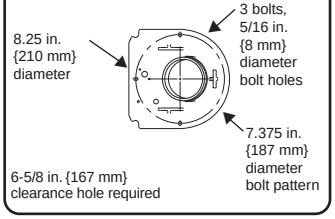
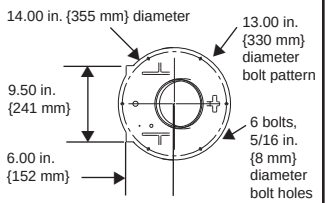


FIG. 2 – AR 5 and AR 10



Direct Feed Model (Glass Hopper)

Model	AR 2		
Performance characteristics			
Viewing chamber model	**3 lb**	**11 lb**	**21 lb**
Viewing chamber capacity lb {kg}	3 {1.4}	11 {4.9}	21 {9.5}
Isolator valve	standard	standard	standard
Dimensions inches {mm}			
E - Height above mounting plate	30.5 {774.7}	36.2 {919.5}	47.8 {1212.9}
F - Height to center of material inlet	20.8 {527.1}	26.4 {671.6}	38.0 {965.2}
Mounting details	**See FIG. 3**		
Approximate weight lb {kg}			
Installed	36 {16}	42 {19}	53 {24}
Shipping	50 {23}	56 {25}	67 {30}

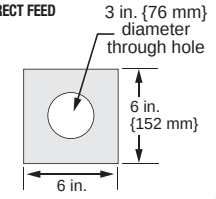
Direct Feed Model (Stainless Steel Hopper) JIT

Model	AR 2	AR 5	AR 5	AR 10
Performance characteristics				
Viewing bin model	**10 lb**	**20 lb**	**40 lb**	
Viewing bin capacity lb {kg}	11.1 {5.1}	24.3 {11.0}	41.5 {18.8}	
Isolator valve	standard	standard	standard	
Dimensions inches {mm}				
G - Height above mounting plate	32.4 {823.9}	37.4 {949.9}	40.6 {1030.2}	46.4 {1178.1}
H - Height to center of material inlet	22.7	27.7	30.8	36.5
Mounting details	**See FIG. 3**			
Approximate weight lb {kg}				
Installed	38 {17}	71 {32}	76 {34}	80 {36}
Shipping	52 {24}	81 {37}	86 {39}	106 {48}

SPECIFICATION NOTES:

Specifications can change without notice. Contact your Conair representative for the most current information.

FIG. 3 – DIRECT FEED



K2 stainless steel

K2 carbon steel

DIRECT FEED RECEIVERS FOR LOW THROUGHPUT

K loaders provide a compact material receiver for direct-to-machine mounting that eliminates an inventory of material over the machine throat.

Only the material needed for one or two shots of processing are transferred, so materials will not regain moisture after drying. There's also less material to drain, so material changes are faster.

TRANSFER ONLY THE MATERIAL YOU NEED

By minimizing your transfer of material to only one or two shots, dried hygroscopic materials don't have time to regain moisture during conveying.

The modular K Loader line with quick disassembly sections greatly simplifies material changes.

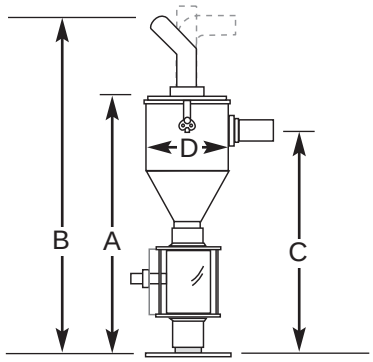
The K2 model is available in both carbon and stainless steel and features push-fit sections for the simplest, fastest disassembly.

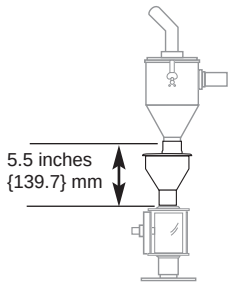
The K2CR is a polished stainless steel model with thumbscrew clamp connectors at each section for maintaining the highest cleanliness standards. The K2CR is popular for traditionally high-end polycarbonate, optical media molding, and other clean room environments.

Select either 8 oz. (small) or 33 oz. (large) viewing chambers for just the right amount of material inventory above the machine throat.

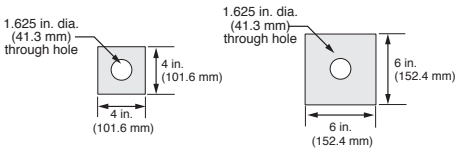
- **Modular components**
  Mix and match components for sight glass size, material and vacuum line size, and other options to suit your needs.
- **Abrasion free material flow**
  Materials flow directly to the machine throat from the top of the loader section, minimizing material breakdown from abrasion.
- **Compatible with your process**
  Compact size fits nearly any small machine throat and options are easily added to assure optimized performance with dried materials, regrinds and a broad range of throughputs.
- **See your material flow**
  A sight glass replaces machine hoppers. Proximity level sensors provided for demand signaling. No moving parts.

SPECIFICATIONS





If using an optional isolator valve with the K2 model add 5.5 inches {139.7 mm} to total height or measurement B in the line drawing above.



MODELS	K2		K2CR	
VIEWING CHAMBER SELECTION	Small (8 oz.)	Large (33 oz.)	Small (8 oz.)	Large (33 oz.)
Performance characteristics				
Receiver volume ft³ {liters}	0.009 {0.25}	0.14 {3.96}	0.009 {0.25}	0.14 {3.96}
Receiver capacity lb {kg}	3.2 {1.5}	4.75 {2.2}	3.2 {1.5}	4.75 {2.2}
Material/vacuum line size OD in {mm}	1.5 - 2 {38.1 - 50.8}			
Dimensions inches {mm}				
A - Height with viewing chamber	19 {482.6}	25 {635.0}	19 {482.6}	25 {635.0}
B - Height to center of material inlet				
with straight inlet	23.5 {596.9}	29.5 {749.3}	23.5 {596.9}	29.5 {749.3}
with 45 inlet	25.5 {647.7}	31.5 {800.1}	25.5 {647.7}	31.5 {800.1}
with 90 inlet	25.5 {647.7}	31.5 {800.1}	25.5 {647.7}	31.5 {800.1}
C - Height to center of vacuum outlet	16.5 {419.1}	22.5 {571.5}	16.5 {419.1}	22.5 {571.5}
D - Hopper diameter	7.5 {190.5}	7.5 {190.5}	7.5 {190.5}	7.5 {190.5}
Weight lb {kg}				
Installed	10.5 {4.8}	14 {6.4}	9 {4.1}	13 {5.9}
Shipping	14 {6.4}	21 {9.5}	12 {5.4}	20 {9.0}
Filter type	20 mesh stainless steel screen cylinder			
Standard construction material*	carbon steel	carbon steel	stainless steel	stainless steel
Compressed Air Requirement†	80-120 psi {5.5-8.3 bars}			

SPECIFICATION NOTES:

* Stainless steel construction is available as an option on the K2 model.
† Compressed air requirement is needed only if the K-Loader is equipped with an optional sequencing valve.

Specifications can change without notice. Check with a Conair representative for the most current information.

FEATURES

Easy disassembly for fast cleanout

Modular, no-tools design provides super-fast cleanout. The K2 model (left) features push-fit components with integrated neoprene seals. The K2CR (right) is equipped with quick release flanged couplings with silicone seals.

Small receiver, yet maximum filter area

Each K Loader model features a no-tools, lift-out stainless steel screen cylinder to maximize filter area and allow fast easy cleaning.

OPTIONS

Isolator valve
for installations where an air-tight vacuum seal is not obtainable at the machine throat.
(K2 only)

Vacuum sequencing valve
allows central vacuum operation and may be mounted remotely or directly to the K Loader.

Drawer and insert magnets
stop tramp metal before it passes to the machine throat. (K2 only)

Model DL-8
Direct Feed
with UTB

Model DL-8
Hopper Loading
with optional ELC-16 control

RELIABLE RECEIVERS FOR **PELLETS AND REGRIND CONVEYING**

Conair DuraLoad vacuum receivers are the industry standard for trouble-free conveying of plastic pellets and regrinds. With more than 60,000 receivers installed worldwide, the DuraLoad answers the needs of processors who cannot afford to worry about the reliability of their material transfer systems. Available in either a hopper loading configuration with a discharge valve or direct feed models with a glass hopper, every DuraLoad may be outfitted to answer the needs of your operation with ratio loading capability, heavy duty wear plates, a choice of control voltages and many other options are also available.

VERSATILE, RUGGED AND RELIABLE RECEIVERS

Hopper loading models are ideal for filling and maintaining the level of material in machine hoppers, drying hoppers or any other vessel. With our reliable discharge valve, you will be assured efficient, vacuum-tight loading and rapid material discharge with no bridging.

Direct Feed models, with their choice of glass reservoir sizes, are designed to feed directly to processing machine throats without the need of interim hoppers. An airtight seal at the machine throat is normally required, but direct feed models can also be fitted with an isolator valve to provide additional application flexibility when needed.

Duraload Receivers are available with a Universal Terminal Box (UTB) or an Easy Loading Control (ELC).

- **Direct feed or hopper loading**
  You choose the material delivery you need. Keep a hopper full or feed directly to the machine throat.
- **Thick wall steel construction**
  Five precision engineered workhorse models are provided as standard with carbon steel. Stainless steel construction is optional.
- **Built-in sequencing valves**
  Provide vacuum control from the vacuum pump without additional wiring or remote valving.
- **Modular components**
  No-tools access filter cleaning, screw-in tube stubs, plug-in electrical components, plus dozens of optional accessories.
- **Choice of control**
  Select either the universal terminal box (UTB) or the new ELC loading control for your receiver. The standard UTB works with B-32, IL-64, FLX, or ILS central loading controls. The optional ELC control is a stand-alone loading control based on a receiver integrated CAN open network. *See the Easy Loading Control (ELC) specification sheet for more information.*

FEATURES

Engineered for Long Life

Trouble-free, Continuous Performance
For many years, Conair has built DuraLoad vacuum receivers with features and functionality required by demanding plastics processing professionals. They are easy to install, a snap to maintain and are backed by Conair's long-standing tradition of application assistance, eternal customer support and off-the-shelf spare parts. From easy, drop-in filter screens, to extra large discharge throats that eliminate material bridging; to heavy-wall spun construction, these conveying components are thoroughly engineered for long life and trouble-free, continuous performance.

EASY LOADING CONTROLS (ELC-16)

DuraLoad receivers can be equipped with Conair's new optional Easy Loading Controls (ELC-16). Individually mounted controls, up to 16, operate within a single CAN open network. Each network offers a First-In/First-Out (FIFO) priority demand. This feature provides material to each receiver in order of its demand. The optional ControlMate pendant further adds to this feature by including the capability to add a higher priority demand tier.

UTB

Each DuraLoad receiver can be equipped with Conair's exclusive Universal Terminal Box, providing the user with an industrial-strength, quick-release electrical plug for connection to the control. In addition, each input and output device for the loader plugs into the UTB making service or the addition of optional equipment quick and easy. An optional on/off switch right on the UTB is also available.

INTEGRATED VACUUM SEQUENCING VALVE

All DuraLoad series loaders incorporate a vacuum sequencing valve module right in the lid, so there are never wires or extra compressed air lines to install. The lid may be easily removed from the loader with no-tools lid clamps and a quick-release air fitting.

DIRECT FEED

All Direct Feed models feature quick disconnect clamps for easy loader release and thorough cleaning. An isolator valve (shown here) may also be provided for non-airtight applications. The isolator valve can also provide demand sensing on 4 and 15 pound glass hopper.

OPTIONS

A Broad Choice of DuraLoad Options Stretch the Value of your DuraLoad Purchase

Volume Fill Sensor

Provides automatic shut-off of the loader's vacuum sequence when the loader is full. Also drives an alarm output on most Conair loading controls if not satisfied during the vacuum sequence.

Material Valves

Ratio Valve

Dual inlet, single outlet material valve allows the loading of a second material (usually regrind) in approximate, layered percentages along with virgin material. May be installed on loader inlet or remotely (ratio signal must be provided from loading control).

See Ratio Valve specification sheet for more information.

Common Line Valve

An isolation valve for the material line, typically used for systems employing a common material line connected to multiple loaders.

See Common Line Valve specification sheet for more information.

High-Performance Valves

Ratio and Line valves are constructed with both high heat and abrasive resistant materials to withstand the rigors of conveying hot and/or highly abrasive materials.

Wear Plates

T-1 tool steel plates, installed inside the loader body, radically reduce hopper wear-through when conveying highly abrasive materials like glass filled compounds. May be easily replaced, if ever needed.

Magnets

An airtight, Drawer Magnet may be added below any direct feed DuraLoad to trap ferrous metal. Or, a low cost Grate Magnet may be inserted directly into the glass hopper of the direct feed receiver to save head room.

High-Heat Vacuum Lid

When the loader is exposed to temperatures exceeding 225 °F, this option outfits components in the lid (vacuum sequencing valve, tubing, etc.) with high heat capability to extend operational life in a heated environment.

Stainless Steel Material Contact

Provides stainless steel in place of carbon steel. The 304 grade stainless steel is uncoated internally (in material contact areas), but powder coated externally for optimum cosmetic appearance.

Remote Demand Sensor

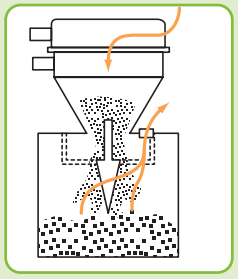
To trigger the operation of the loader (demand) from a location other than directly below the loader, a remote demand sensor may be employed. Useful on oversized drying hoppers to sense through a window (6 foot cable provided) or when off-loading a granulator (30 foot cable provided). Extension cables also available.

Positive Discharge Valve

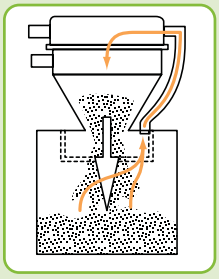
Provides a pneumatically driven discharge valve on the bottom of the loader in the event that gravity will not sufficiently open the standard flapper after loading. Useful for very light materials or when high CFM drying hoppers are being loaded.

Hopper Venting

Used to provide relief of displaced air in the receiving vessel below the loader during material discharge.



Displaced air vented to atmosphere.

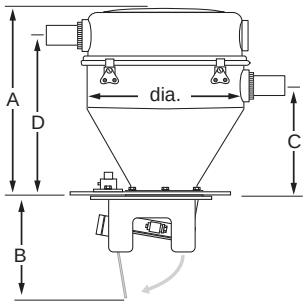


Closed-loop venting to loader lid (recommended for critical drying hopper installations).

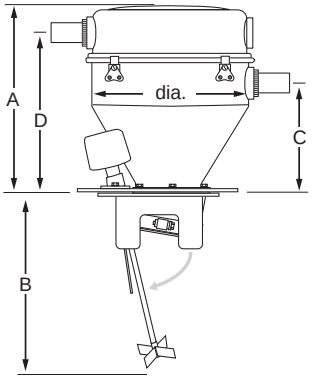
SPECIFICATIONS

HOPPER LOADING

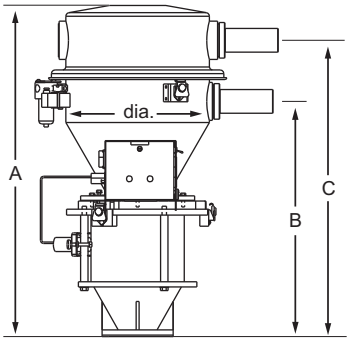
GRAVITY DISCHARGE



POSITIVE DISCHARGE



DIRECT FEED



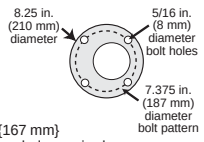
DL Series Vacuum Receivers

Receiver model	DL8	DL12	DL15	DL20	DL25
Receiver diameter inches {mm}	8 {203}	12 {305}	15 {381}	20 {508}	25 {635}
Receiver volume ft³ {liters}	0.14 {4.0}	0.5 {14.2}	1.0 {28.3}	1.8 {51}	3.0 {85.0}
Material/Vacuum line size range inches {mm}*	1.5-2 {38-51}	1.5-2.5 {38-64}	1.5-2.5 {38-64}	2.25-3 {57-76}	2.5-4 {64-102}
Filter type	20 mesh stainless steel disc				
Available voltages (outputs)	120 VAC, 24 VAC and 24 VDC				
Compressed air requirements	Intermittent duty: 1ft³/min. @ 80 psi {28.3 liters/min. @ 5.51 bars} NPT fitting: 3/8 in.				

Hopper Loading Configuration

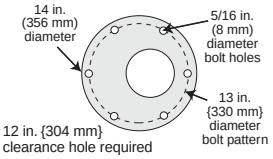
Receiver model	DL8	DL12	DL15	DL20	DL25
Dimensions inches {mm}					
A - Height above mounting plate	12.19 {310}	17.375 {441}	20.8 {528}	26.19 {665}	33.75 {857}
B - Depth below mounting plate	5.5 {140}	8.375 {213}	8.375 {213}	9.5 {241}	9.5 {241}
with positive discharge	NA	16.0 {406}	16.0 {406}	16.0 {406}	16.0 {406}
C - Height to center of material inlet	6.19 {157}	9 .5 {241}	12.34 {313}	15.9 {404}	21.25 {540}
D - Height to center of vacuum outlet	10 {254}	14.4 {366}	17.5 {445}	22.625 {575}	29.19 {741}
Mounting details	Fig. 1	Fig. 2			
Installed weight lb {kg}	22 {10}	41 {19}	49 {22}	69 {31}	99 {45}
Shipping weight lb {kg}	35 {16}	50 {23}	70 {32}	130 {59}	225 {102}

FIG. 1 – DL8



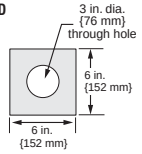
6.6 in. {167 mm}
clearance hole required

FIG. 2 –DL12, DL15, DL20 AND DL25



12 in. {304 mm}
clearance hole required

FIG. 3 – DIRECT FEED



Direct Feed Configuration (glass hopper)

Receiver model	DL8			DL12			DL15		
Viewing chamber model	**4 lb**	**15 lb**	**25 lb**	**4 lb**	**15 lb**	**25 lb**	**4 lb**	**15 lb**	**25 lb**
Viewing chamber capacity lb {kg}†	4 {1.81}	15 {6.8}	25 {11.3}	4 {1.81}	15 {6.8}	25 {11.3}	4 {1.81}	15 {6.8}	25 {11.3}
with isolator valve†	3 {1.36}	11 {4.98}	21 {9.52}	3 {1.36}	11 {4.98}	21 {9.52}	3 {1.36}	11 {4.98}	21 {9.52}
Dimensions inches {mm}									
A - Height above mounting plate	24.0 {609}	29.5 {749}	41.5 {1054}	29.25 {742}	35.0 {889}	47.0 {1193}	32.5 {825}	37.75 {958}	49.75 {1263}
B - Height to center of material inlet	17.75 {450}	23.25 {590}	35.25 {895}	21.25 {539}	27 {685}	39 {990}	23.75 {603}	30.5 {774}	42.5 {1079}
C - Height to center of vacuum outlet	22.75 {577}	27.25 {692}	39.25 {996}	26.5 {673}	32.25 {819}	44.25 {1123}	29.25 {742}	35.0 {880}	47.0 {1193}
Add for isolator valve	0	0	0	2.25 {57}	2.25 {57}	2.25 {57}	2.25 {57}	2.25 {57}	2.25 {57}
Mounting details	Fig. 3								
Installed weight lb {kg}	49 {22}	51 {23}	80 {36}	68 {31}	70 {32}	99 {45}	76 {34}	78 {35}	107 {49}
Shipping weight lb {kg}	77 {35}	79 {36}	108 {49}	96 {44}	98 {44}	127 {58}	104 {47}	106 {48}	135 {61}

SPECIFICATION NOTES:

*Outside diameter

†At 35 lbs. per cu. ft.

Specifications can change without notice. Contact your Conair representative for the most current information.

Model FL-10
direct feed
with UTB

Model FL-20
hopper loading
with optional ELC-16 control

VERSATILE LOADING FOR MID TO LARGE THROUGHPUT

Pellets. Virgin-regrind mixes. Dusty, problem materials. Coarse powders. Conair FilterLess vacuum receivers can handle the job.

The FilterLess vacuum has the ability to convey dusty materials and free-flowing powder larger than 100 microns in diameter. Each Filterless receiver has a patented "filterless insert" that uses continuous reversal of vacuum air to separate incoming material from conveying air without filters or screens. The process provides dramatic air/material separation without relying on filtration.

NO FILTER, NO SCREEN, TWIN-CYCLONE ACTION

Twin cyclone action allows FilterLess receivers to efficiently load materials without filter blinding or abrasion. The tangential material inlet provides smooth material entry, decreasing material fracturing and dust.

Available in both hopper loading and direct feed models, the FilterLess can supply hoppers and surge bins or feed directly to a processing machine throat.

Hopper loaders incorporate the demand level switch in the discharge valve. The positive discharge option provides an air driven discharge valve with a rotary demand switch.

Direct feed configurations include a choice of glass hopper sizes, equipped with a capacitive demand sensor. An isolator valve option may be included when an airtight seal at the base of the loader cannot be assured. The isolator valve may also provide demand sensing.

Fill sensors are provided to terminate the fill cycle and can also provide a no material alarm output.

Choice of discharge

Gravity discharge with integral demand switch; air-driven positive discharge with a rotating level sensor or a direct feed glass hopper with level sensor.

Thick-wall, steel construction

Cyclone receivers are precision-engineered, in carbon steel or stainless steel.

Built-in vacuum sequencing valve

No need for extra wiring or plumbing.

Choice of control

Select either the universal terminal box (UTB) or the new ELC loading control for your receiver. The standard UTB works with B-32, IL-64, FLX or ILS central loading controls. The optional ELC control is a stand-alone loading control based on a receiver integrated CAN open network. *See the Easy Loading Control (ELC) specification sheet for more information.*

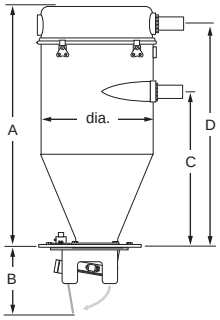
Simple, no-tools clean out

Material changes are fast and easy with quick-release latches on the receiver lid, and the drop-in filterless insert. No filters, no screens.

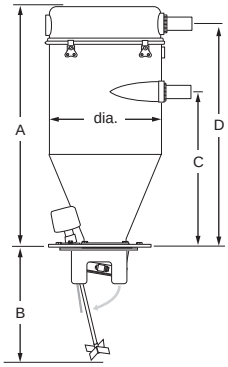
SPECIFICATIONS

HOPPER LOADING

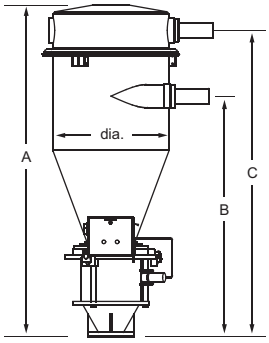
GRAVITY DISCHARGE



POSITIVE DISCHARGE



DIRECT FEED



FL Series Vacuum Receivers

Receiver model	FL10	FL15	FL20	FL24
Receiver diameter inches {mm}	10 {254}	15 {381}	20 {508}	24 {610}
Receiver volume ft³ {liters}	0.28 {7.9}	1 {28.3}	2.3 {65.1}	4 {113.3}
Material/Vacuum line size range inches {mm}*	1.5-2 {38-51}	1.5-2.5 {38-64}	2.25-3 {57-76}	2.5-4 {64-102}
Available voltages (outputs)	120 VAC, 24 VAC and 24 VDC			
Compressed air requirements	Intermittent duty: 1 ft³/min. @ 80 psi {28.3 liters/min. @ 5.51 bars}			NPT fitting: 3/8 in.

FIG. 1 – HOPPER LOADING MODELS

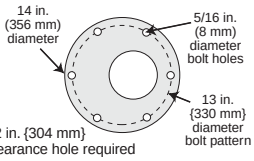
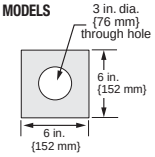


FIG. 2 – DIRECT FEED MODELS



Hopper Loading Configuration

Receiver model	FL10	FL15	FL20	FL24
Dimensions inches {mm}				
A - Height above mounting plate	20.5 {521}	32.75 {832}	45.25 {1150}	57.0 {1450}
B - Depth below mounting plate	8.375 {213}	8.375 {213}	9.5 {241}	9.5 {241}
with positive discharge	16.0 {406}	16.0 {406}	16.0 {406}	16.0 {406}
C - Height to center of material inlet	10.5 {267}	21.25 {540}	28.5 {724}	37.0 {940}
D - Height to center of vacuum outlet	19.25 {489}	30.5 {775}	42.5 {1080}	52.5 {1334}
Mounting details	Fig. 1			
Installed weight lb {kg}	40 {18}	58 {26}	92 {42}	126 {57}
Shipping weight lb {kg}	120 {54}	170 {77}	200 {91}	260 {118}

Direct Feed Configuration (glass hopper)

Receiver model	FL10			FL15		
Viewing chamber model	**4 lb**	**15 lb**	**25 lb**	**4 lb**	**15 lb**	**25 lb**
Viewing chamber capacity lb {kg}†	4 {1.81}	15 {6.8}	25 {11.3}	4 {1.81}	15 {6.8}	25 {11.3}
with isolator valve†	3 {1.36}	11 {4.98}	21 {9.52}	3 {1.36}	11 {4.98}	21 {9.52}
Dimensions inches {mm}						
A - Height above mounting plate	32.3 {820.4}	37.8 {960.1}	49.8 {1265}	44.5 {1130}	50.0 {1270}	62.0 {1575}
B - Height to center of material inlet	20.9 {530.9}	28.3 {718.8}	40.3 {1024}	31.7 {805.2}	39.1 {993.1}	51.1 {1298}
C - Height to center of vacuum outlet	29.7 {754.4}	37.1 {942.3{	49.1 {1247}	40.9 {1038.9}	48.3 {1226.8}	60.3 {1532}
Add for isolator valve	2.25 {57}					
Mounting details	Fig. 2					
Installed weight lb {kg}	40 {18}	55 {25}	113 {51}	58 {26}	85 {39}	143 {65}
Shipping weight lb {kg}	68 {31}	83 {38}	143 {65}	90 {41}	119 {54}	179 {81}

SPECIFICATION NOTES:

*Outside diameter

†At 35 lbs. per cu. ft.

Specifications can change without notice. Contact your Conair representative for the most current information.

Model PL15 with optional ELC-16 control

Model PL15
with UTB and optional vent filter assembly

TROUBLE-FREE CONVEYING OF POWDERED MATERIALS

The PL15 effectively transfers even the toughest filled powders – down to 5 microns in size – without the filter clogging, excessive dust or component failure that can halt operation of a typical receiver.

The specially designed, pleated filter assembly eliminates material carry-over, and allows for an air-to-cloth ratio of 3:1 in a small space. Despite its compact size, the PL15 can satisfy a wide throughput range, making it an excellent choice for extrusion applications.

The PL15 also incorporates many of the same rugged design and performance features that have made Conair's DuraLoad pellet receivers so popular.

COMPACT RECEIVER FOR PVC AND OTHER POWDERS

Equipped with a smooth-wall interior, and a compact filter chamber, the PL15 is easy to maintain. Quick release latches and utility connections allows easy no-tools disassembly.

Even the filter cartridges can be released individually or as a subassembly. Conair's unique, removable filter plate module, means filter changes are faster and cleaner than competitive designs.

An oversized compressed air accumulator and special blowback timer provide programmable, blasts of air through the two filter cartridges at the end of each load cycle to eliminate material packing.

The vacuum sequencing valve, integrated into the quick-disconnect lift off lid, simplifies installation and services.

Powder Loaders are available with a Universal Terminal Box (UTB) or an Easy Loading Control (ELC).

Compact for low-height areas

Although the PL15 provides a full 48 square feet of filter area, the design is shorter than most powder receivers, allowing installation in low headroom areas.

Options to fit your needs

Match the PL15 to your application with a choice of line sizes and discharge valves, an optional wear plate for abrasive materials or optional stainless steel construction.

Choice of control

Select either the universal terminal box (UTB) or the ELC loading control for your receiver. The standard UTB works with B-32, IL-64, FLX or ILS central loading controls. The optional ELC control is a stand-alone loading control based on a receiver integrated CAN open network. *See the Easy Loading Control (ELC) specification sheet for more information.*

Easy material change, cleanout

Disassemble all components quickly. No tools needed for material changes or cleanout. The pull-out filter assembly eliminates the mess associated with "bag-style" powder loaders.

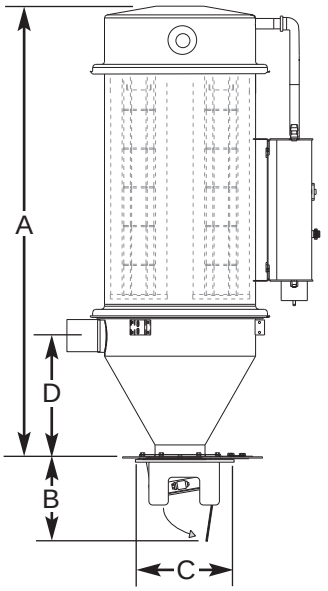
Long filter life, minimal dust

The special easy-release surface of the cartridge filters provide long operating life without packing or degradation. Programmable blowback system minimizes dust and maximizes throughput.

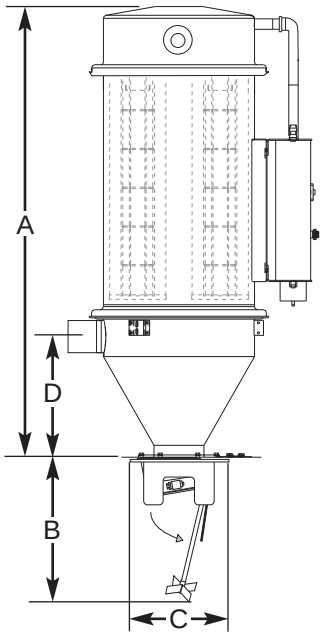
POWDER LOADER (PL15)

SPECIFICATIONS

PL15, GRAVITY DISCHARGE



PL15, POSITIVE DISCHARGE



MODEL	PL15
Performance characteristics	
Receiver volume ft³ {liters}	1.0 {28.3}
Air to cloth ratio cfm:ft²	3:1
Vacuum/material line sizes in {mm}	1.75-2.5 {45-64}
Dimensions inches {mm}	
Hopper diameter	15.0 {381}
A - Height above mounting plate*	45.1875 {1063.6}
B - Depth below mounting plate	8.375 {213}
with positive discharge	16.0 {406}
C - Clearance hole diameter	12.0 {305}
D - Height to center of material inlet	12.1875 {309.6}
Height to center of vacuum outlet	41.875 {1063.6}
Weight lb {kg}	
Installed	130.0 {59.0}
Shipping	225.0 {102.1}
Compressed air requirements (intermittent duty)	
Pressure	60-80 psi {4.1- 5.5 bars}
Consumption	8 ft³/min. @ 80 psi {3.7 liters/sec.@ 6 bars}
NPT Fitting	3/8 inch
Filter	
Filter type	two pleated polyester cartridges
Total filter area	48 ft² {4.5 m²}

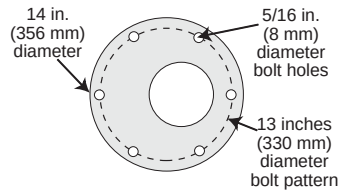
HOW IT WORKS

When the PL15 needs material, an integrated demand switch signals the start of the conveying cycle. The sequencing valve built into the PL15 lid opens the receiver to the vacuum air flow.

Loading Begins: Material is drawn by vacuum into the receiver and is directed downward into the cone of the receiver by a specially designed filter guard. Pleated filter media in the upper portion of the PL15 separates the material from the conveying air. Once the user-adjustable load time has expired, and the receiver section is close to full, the integral sequencing valve switches back to the closed position. Since the PL15 is closed to vacuum, other loaders on the same vacuum line can now operate.

Unloading Begins: The PL15 discharge opens, and gravity allows the material to flow out of the receiver. A dual-release, blowback system directs accumulated, high-power blasts of compressed air through the cartridge filters, pulsing the filters and blowing off collected material, dust and fines to encourage total material evacuation from the receiver. The blowback is programmed to provide optimum cycles for maximum cleaning, yet minimal dusting into the receiving vessel. Once the unload timer expires, the system either starts again, or waits for another demand signal. The material flow path may be reinforced by an optional wear plate if the material being conveyed is abrasive.

STANDARD MOUNTING PLATE



MATERIAL/VACUUM LINE SIZES

Outer diameter in inches {mm}:

1.75	{44.5}
2.0	{50.8}
2.25	{57.2}
2.5	{63.5}

ELECTRICAL

The PL15 may be equipped to operate with 24VAC, 24 VDC or 120 VAC outputs.

APPLICATION NOTE:

The PL-15 is not intended for materials such as pure carbon black, titanium oxide or any other difficult to handle material that requires an air-to-cloth ratio of less than 3:1.

All vacuum conveying systems using this product must be designed by Conair.

SPECIFICATION NOTE:

* Height above the mounting plate will increase to 52.9 inches {1343.7 mm} and overall width will be 21.5 inches {546.1 mm} if the optional filter vent assembly has been added.

Specifications can change without notice. Contact a Conair representative for the most current information.

ELC-16 Control

VERSATILE CONTROLS FOR VACUUM CONVEYING

The Easy Loading Control (ELC) from Conair offers a simple-to-use interface for your conveying system.

With the ELC, loading parameter setup can be accomplished with a few simple steps. Available with two application specific models, the ELC is capable of handling all your conveying needs.

SIMPLE-TO-USE PENDANT FOR CONVEYING CONTROL

The ELC is available as two models; the ELC-M and the ELC-16. The ELC-M is used for stand-alone hopper loader applications. The ELC-16 uses a CAN open network that allows up to 16 controls with receivers on one network cable, operated by a pump controller.

The ELC's optional ControlMate pendant uses the same type of intuitive interface as the ELC control, but allows the capability to change a total of 16 preset parameters to fine-tune your conveying needs. The ControlMate pendant can be used interchangeably with either the ELC-M or ELC-16 controls.

The ELC will ship mounted and connected to your loader or receiver when purchased from Conair. Installation of your loader or receiver with the ELC is as simple as bolting it to your material vessel and connecting your power and/or communication cables.

Easy-to-read display

Both the ELC control module and optional ControlMate pendant have clearly visible display panels. Loading sequence symbols and LED indicators display exactly where your loader or receiver is in the conveying process.

First-In/First-Out demand loading

The ELC-16 control module comes standard with First-In/First-Out (FIFO) demand. Unlike earlier loading controls, the ELC-16 does not load receivers based on traditional demand loops. Instead, the receivers are loaded based on the order of demand for material.

Configure for priority receiver demand

Use the optional ControlMate pendant to activate priority demand for your ELC-16 control. This setting creates a second priority demand First-In/First-Out demand loop, that takes priority over the standard First-In/First-Out demand loop.

Interchangeable ControlMate pendant

The addition of the optional ControlMate pendant allows the capability to alter up to 16 loading parameters for even more functionality. All loading changes are saved within the standard ELC module.

CONTROL MODELS

ELC-16 control - A trunk cable supplies power and communications to up to 16 controls mounted on receivers from a central pump control via a CAN open network.

All ELC-16 controls are equipped with easy connections to the cables and junction boxes that make up the CAN open network.

ELC-M control - Used with a self-contained vacuum motor loader. The ELC-M is provided as standard with a three pronged power cable for easy installation.

OPTIONAL CONTROLMATE PENDANT

ELC ControlMate™ Pendant

The ControlMate pendant consists of eight LEDs, a three-digit numeric display and three push buttons.

The ControlMate comes with a 10 ft. {3 m} long shielded ethernet cable that supplies power and communications to the pendant from the main ELC control.

ControlMate™ User Level 1 Parameters

- On/Off
- Load Attempts
- Ratio Percentage
- Load Time
- Unload Time
- Ratio Layers
- Purge Time
- Blowback

Control Features

- **Interchangeable programming -** One optional pendant can be used to control all ELC controls within your system.The ControlMate pendant can be used with either the ELC-M or ELC-16.
- **Change up to 16 parameters -** Eight standard control parameters are accessible through User Level 1. An additional eight parameters are accessed through User Level 2. These additional parameters activate loading options such as: priority demand, fill sensor logic, demand sensor logic, fill sensor present, load and hold, purge/ Adjustable Purge Valve (APV) installed, ratio installed, blow back installed.
- **Easy-to-read display -** Both the ControlMate pendant and the ELC control use icons and associated LEDs to symbolize various loading parameters.

Control Function

1. **Push the Function button ↺ until the appropriate LED indicator is illuminated** to change any loading parameter.
2. **Use the (+) or (-) buttons located to the left of the Function button** to change a loading parameter to your requirements.
3. **Once your parameters are changed there is no need for further keys strokes,** all parameters are instantly saved to the ELC control.

HOW IT WORKS

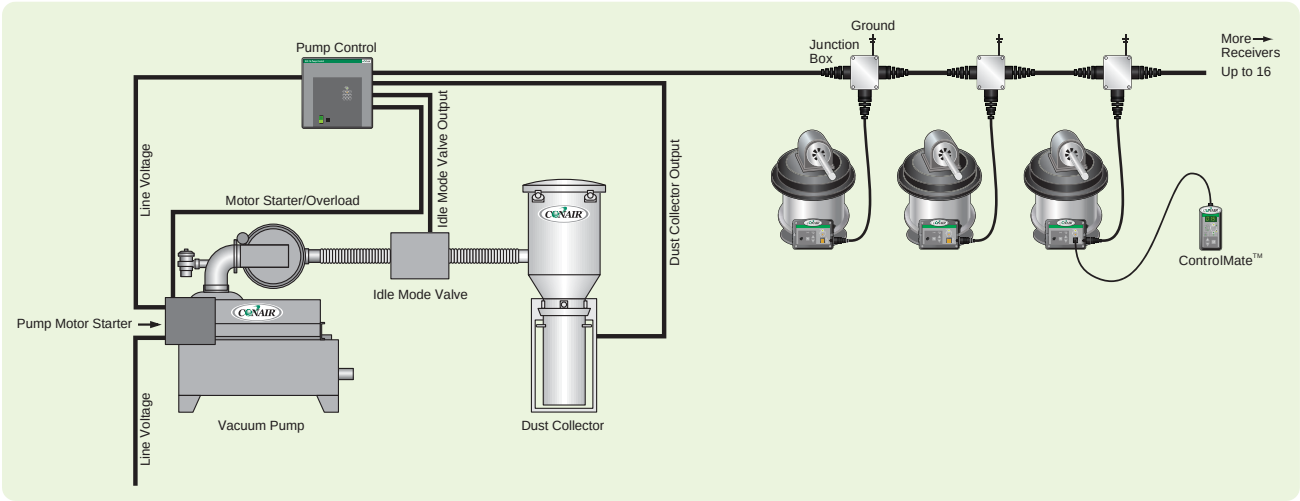
ELC-M Control

A signal from the loader's demand switch indicates to the ELC-M on the loader that it requires material to be conveyed to satisfy its demand. The ELC-M sends a signal to the vacuum motor on the loader to energize and start a loading cycle. The material is then drawn in by the loader's vacuum motor. If the hopper is filled, the demand switch will remain open (Fig. 1) and no further load cycles are needed. However, if the demand was not satisfied and the demand switch closes (Fig. 2) the loader will continue with loading cycles until the demand is satisfied.

Fig. 1

Fig. 2

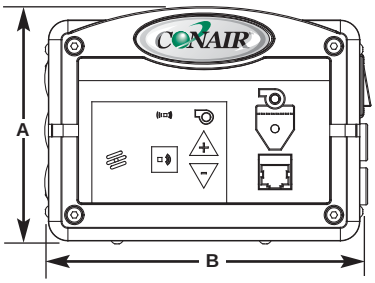
ELC-16 Control

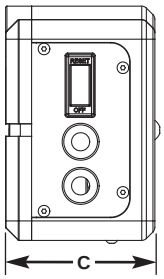


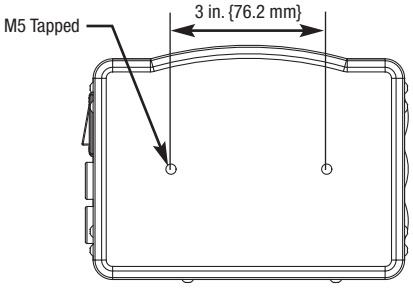
A signal from the receiver's demand switch indicates to the individually mounted ELC-16 on the receiver that it requires material to be conveyed to satisfy its demand. The ELC-16 then communicates its need for material to the pump control via a CAN open network. The demand signal from the ELC is then added to the pump control's queue. The vacuum pump control will then permit the receiver to load on a First-In/First-Out (FIFO) basis.

The ELC-16 control is used for a number of receivers (up to 16) on a CAN open network. The ELC-16 control uses First-In/First-Out (FIFO) for receiver demand. The FIFO setting works within your CAN open network and will allow the receiver that demanded material first to receive it first. For example, if there are four (4) receivers in a series that have demands for material, but the third receiver demanded material first, regardless of the receiver's physical location on the CAN open network, it will be provided with material.

SPECIFICATIONS







MODELS	ELC-M	ELC-16
Supply voltage		
	115VAC 50Hz, 230VAC 50/60Hz	24VDC (from pump control)
Pump control voltage full load amps		
230VAC/60Hz	NA	0.64
400VAC/50Hz	NA	0.37
460VAC/60Hz	NA	0.32
Control dimensions inches {mm}		
A - Height	4.5 {114.4}	4.5 {114.4}
B - Width	6.0 {152.4}	6.0 {152.4}
C - Depth	2.9 {73.0}	2.9 {73.0}
Control weight lb {kg}		
Installed	7.6 {3.4}	7.6 {3.4}
Shipping	9.1 {4.1}	9.1 {3.4}

CALCULATING ELC-16 SYSTEM CABLE LENGTH:

Total the distance from the vacuum pump power supply to the last loading station. Account for reasonable slack at each loading station for connections, cable routing, etc.

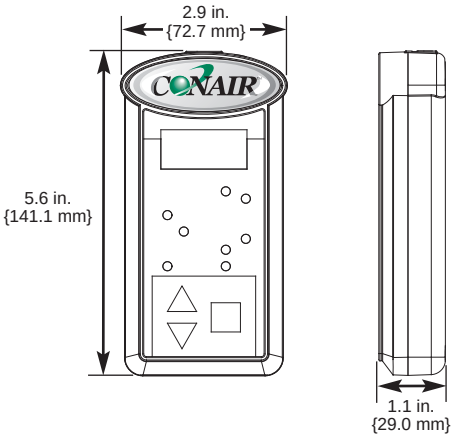
Junction boxes must be provided to connect between the system trunk cable and each ELC-16 control.

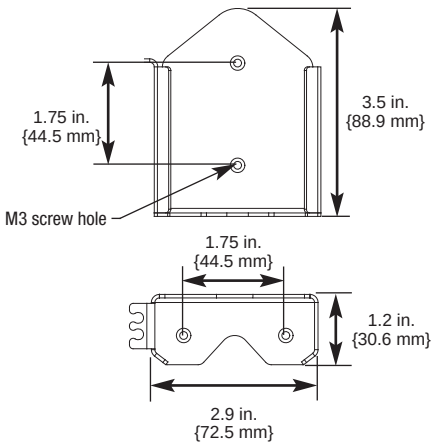
SPECIFICATION NOTES:

The ELC-16 system trunk cable is two, 4-conductor shielded twisted cables.

Specifications can change without notice. Check with a Conair representative for the most current information.

Optional ControlMate™ Pendant and Cradle



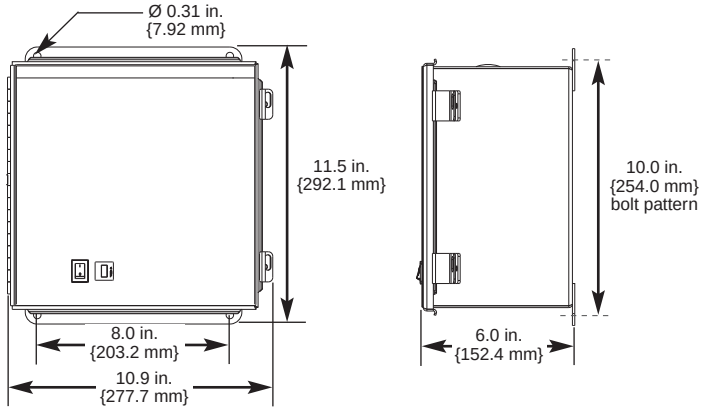


ControlMate™ Pendant Cradle

The ControlMate pendant is provided with a surface mountable docking cradle for quick and easy retrieval. The cradle can be mounted to any vertical or horizontal surface by using M3 flat-head mounting screws.

A cable clip on the control cradle keeps the ControlMate's communication cable up and out of the way for neat installation. It can also be used for a permanent communication cable location when the ControlMate is being used elsewhere.

Pump Control (ELC-16 only)



ELC-16 Pump Control

The ELC-16 pump control provides power and communications to all the ELC-16 controls within the CAN open network via a 4-conductor trunk cable. The pump control also provides the "start" signal to the vacuum pump used in the conveying process in the ELC-16 system. Cord grips are provided to allow interconnection with the ELC-16 system's trunk cable, dust collector and idle mode valve connections.

The pump control enclosure is equipped with wall mounting accommodations and can be mounted to a flat surface using the supplied mounting holes. The pump control should be located so access to its switches and viewing of its lights are not obstructed.

Model B32

SIMPLE, EFFECTIVE CONTROL

The B32 control system combines field-proven, industrial-grade programmable logic control components with easy, user-friendly operation. Designed from the ground up to provide features not commonly found on control systems in this price range, the B32 answers the needs of processors who desire a centrally located, flexible control package at a reasonable price.

A compact MicroLogix 1500 PLC allows the B32 to readily accept system options and may be easily upgraded in the field. The ample enclosure allows installers plenty of elbow room for connections and changes.

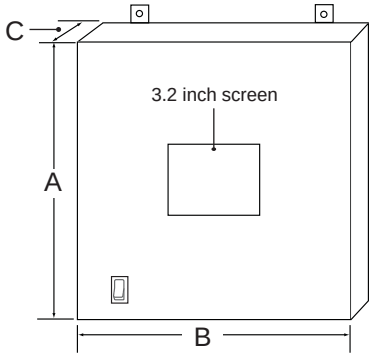
OPERATE UP TO 32 LOADERS AND 8 PUMPS

A 3.2 inch, Allen Bradley PanelView Micro 300 operator interface is supplemented with a graphic overlay that clearly outlines all typical operator functions, with no need to refer to the manual. Set-up and system configuration changes can be made quick and easy. Virgin loading with time-fill operation are provided as standard.

Volume fill operation (fill sensor) may be readily added as an option. Additional outputs may be added for ratio loading, material line purging or air operated discharge valve operation. These options can be selected on a 'mix and match', per-loader basis.

- **Quality, reliable control**
  High quality, high reliability, time and field proven Allen-Bradley/Rockwell automation components are used exclusively in the B32.
- **No need for training**
  The graphic overlay spells out control functions. Operators are up-to-speed instantly, without training and without hesitation.
- **Fully featured**
  The B32 can operate up to 32 loaders with 8 simultaneously operating systems (8 pumps).
- **Start small, and build**
  The B32 may be purchased in 8 or 16 loader versions and upgraded to 32 loaders, without removal from service.
- **Back-up pump feature included**
  All models include the ability to operate an additional back-up pump for all system pumps. This facilitates pump maintenance and assures no downtime operation.

SPECIFICATIONS



B32 Control

MODEL	B32
Performance characteristics	
Maximum number of vacuum receivers	32
Maximum number of vacuum pumps	8 (plus back-up)
Programmable logic controller	Allen Bradley (A/B) Micrologix 1500
Operator interface (standard)	A/B Panelview Micro 300 (3.2 inch)
Operator interface (optional)	A/B Panelview 550 (5.5 inch)
Output voltage to receivers/valves	24 VDC
Input voltage to receivers	24 VDC
Output voltage to pumps	24 VDC
Power/Amps	120 VAC/15 Amps/60 Hz
Dimensions inches {mm}	
Control cabinet	
A - Height	30.0 {762}
B - Width	24.0 {609}
C - Depth	12.5 {317.5}
Weight lb {kg}	
Installed	60 {27}
Shipping	72 {32}

APPLICATION NOTES:

10 conductor, shielded cable (Conair #205-033-10) should be used to connect all receivers to the B32 control. Conair receivers come equipped with quick-disconnect cables that connect the B32 with each loader. User-supplied junction boxes must be provided for each receiver to join the receiver cable and the system wiring.

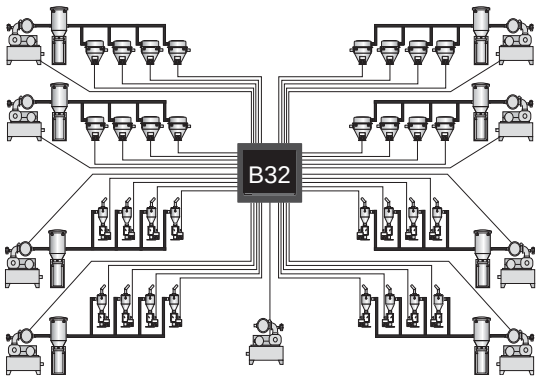
CALCULATING SYSTEM WIRING LENGTH:

Total the distances from each receiver to the B32. Be sure to account for reasonable slack at each receiver for connections, cable routing, etc.

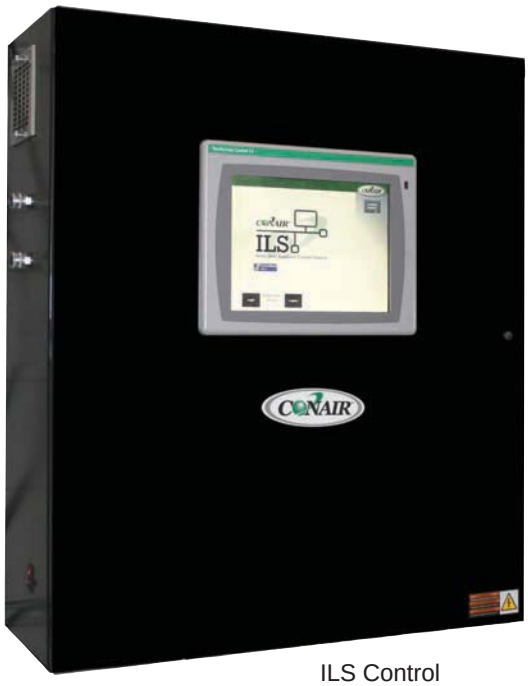
Connecting Vacuum Receivers to the B32

Output voltages to all loaders and pumps are 24 VDC, for wiring that is simple, safe and compliant with accepted industrial electrical codes. Wiring connections at each loader in the system are easily accommodated by Conair's unique Universal Terminal Box (UTB) which utilizes a single, industrial-strength plug for all electrical connections between the control system and each loader. Modular connectors are provided for each input and output device.

Control Features: The 3.2 inch {81.28 mm} screen (left) is supported with a helpful overlay that instructs how to make common control changes.



The B32 can control up to 32 loaders and 8 vacuum pumps. A back-up pump may be easily programmed to take the place of any of the 8 active pumps at the touch of a button.



ILS Control
shown with optional
15 inch interface

RELIABLE, EFFICIENT AND FLEXIBLE CONTROL

Use the fully-featured Intelligent Loading System (ILS) to control and monitor parameters on more than 300 loaders, up to 14 pumps (plus back-up) and to monitor peripheral equipment. This powerful control platform allows use of multiple operator panels, operating simultaneously, allowing production personnel to control and monitor the operation of equipment from one or several locations around the plant.

The ILS is offered in three I/O configurations: Central, Distributed and Remote. The configurations can be used in conjunction with each other so that a processor's immediate requirements can be met while still providing the foundation for future expansion.

MEETING PROCESSOR'S NEEDS TODAY AND TOMORROW

The dependable Conair ILS system is extremely flexible, expandable and user-friendly.

At the heart of the system lies the well-established Rockwell/A-B Logix family of PLC's. All communications between PLC's, operator interface panels and the ArmorBlock modules is achieved via Ethernet.

ILS touch-screen control panels are available in 10 inch and 15 inch sizes for easy viewing and control. Up to 3 remote operator interfaces, functionally identical to the main panel, can be placed wherever you need them most. You'll never be more than a few steps away from monitoring and controlling your entire material handling system.

Central, Distributed or Remote I/O controls.

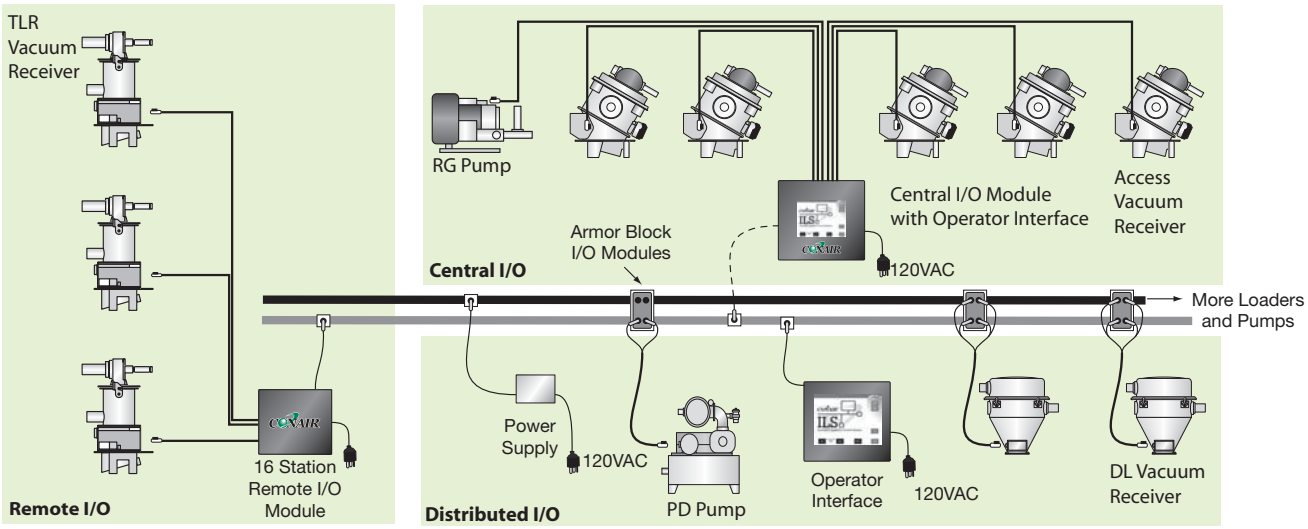
You decide which control architectures to use. Mix and match them to suit your unique production requirements.

Central I/O is the traditional way to control material handling systems. All the control logic is built into a central control panel, with discrete wiring to each loader and pump. This arrangement works best for a dedicated plant or production cell that is unlikely to grow or change much over time. It can be configured to handle up to 48 loading stations, with up to 14 pumps, yet is expandable, integrating other control modules and equipment monitoring.

Distributed I/O controls offer the most flexibility. All the logic lies in I/O control blocks near each loader or pump and they communicate with the central processor and remote operator panels via flat-cable communication media. If you need to add or move a loader, simply clamp another I/O control block onto the cable. Hardware costs are a little more than a central system, but this configuration is easily expanded or modified as your business grows and changes. The system supports up to two networks which each control 96 semi-distributed and 48 fully-distributed loading stations, as well as 5 pumps with 1 back-up.

Remote I/O combines both distributed and central control technology. When combined with either a Central I/O or Distributed I/O system, Remote I/O enclosures give you some of the flexibility of distributed systems and some of the hardware savings of central. Up to six remote I/O enclosures (which function like central I/O controllers) can be connected to the flat-cable network like distributed I/O control blocks. Then each one can control up to 16 loaders, for a total of up to 96 stations.

SPECIFICATIONS



First and foremost, the ILS System is a loading system control with all the features and capabilities you'd expect from Conair.

- Support for 30 to 144 Loaders*
- Support for up to 14 pumps† + 1 backup†
- Ratio loading
- Positive discharge
- Purge
- Fill sensing
- Proofing
- Reverse Convey (Regrind Recovery)
- Multi-Source/Multi-Destination
- Field configurable and expandable using operator station; no special software required
- Support for up to 4 operator stations running concurrently via Ethernet
- 10-inch color graphic touch screen standard; optional upgrade to 15-inch
- Four levels of password protection
- Dial-in LAN modern
- Full alarm package with 250 entry log diagnostic screens
- Backup/Restore feature

Model	**ILS**			
Performance Characteristics				
Maximum number of standard devices*	144			
Maximum number of pumps†	14 + 1 backup			
Controller	Allen Bradley CompactLogix			
Operator interface	10 inch {254 mm} Allen Bradley Versaview 15 inch {381 mm} Allen Bradley Versaview (optional) Up to 4 operator interfaces, simultaneously			
Communications	Ethernet, DeviceNet			
Output voltage to devices	24 VDC or 24 VAC			
Input voltage from devices	24 VDC			
Controls	**Central**	**Distributed**		**Remote**
	Central I/O module	Power Supply	Operator Interface	Remote I/O module
Dimensions inches {mm}				
A - Height	42 {1067}	20 {508}	24 {610}	30 {762}
B - Width	36 {914}	20 {508}	24 {610}	24 {610}
C - Depth	12 {305}	9 {229}	10 {254}	8 {203}
Weight lb {kg}				
Installed	120 {54}	30 {14}	50 {23}	75 {34}
Shipping	160 {73}	75 {34}	80 {36}	105 {48}
Voltage				
	120 VAC/15A/60Hz	120 VAC/15A/60Hz		120 VAC/15A/60Hz

SPECIFICATION NOTES:

* Including 1 network. An additional network is available which controls an additional 144 standard devices.

† Available on main ILS box. Additional pump control is available with networks.

Specifications can change without notice. Contact your Conair representative for the most current information.

Model FLX-128

FLEXIBLE EXPANDABLE CONTROL POWER FOR CONVEYING

Start small and grow, or bring all conveying needs into a common system. The FLX flexible control system utilizes a combination of centralized I/O and expansion modules, interconnected via industrial Ethernet to provide control of up to 128 receivers, 40 pumps (plus 2 back-up pumps) and 256 source valves. A full color touch screen with descriptive picture icons assures that even with little or no training, any user will be comfortable monitoring or making changes on up to 40 independently operating vacuum systems.

MODULAR I/O FOR EXPANDABLE RESIN CONVEYING

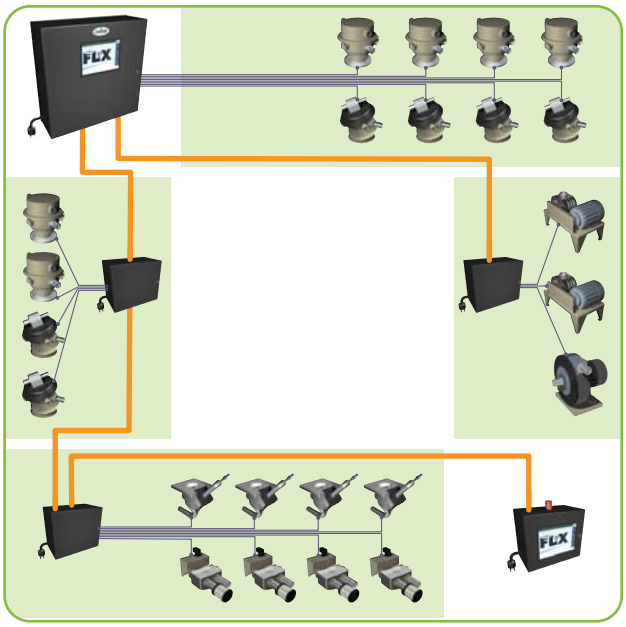
Conveying components are commonly spread across plants; on processing machines, on mezzanines, in pump rooms, on multi-component blenders and source valves, grouped at material supply hoppers. In these common arrangements, the FLX conveying control is right at home, providing input/output (I/O) capability in modular panels, interconnected via Ethernet. Connections to individual conveying components are minimized since I/O modules can be placed where they are needed and connected back to the main FLX control via Ethernet.

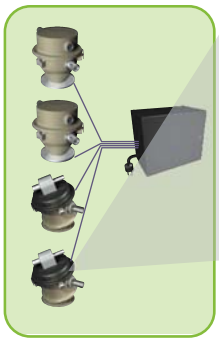
The FLX system utilizes programmable logic controllers (PLC's) in modular panels, along with touch screen panel(s), equipped with colorful icons to assure that all authorized personnel can operate the system. Shared conveying components, like back-up pumps and material purge valves operate seamlessly with multiple vacuum systems, all controlled by the FLX.

- **Economical and expandable**
  Buy only the control capacity you need today, and then expand with additional modules as your business grows. The FLX is the right choice for small systems all the way up to 128 receivers and 40 pumps.
- **Minimize wiring with modular components**
  Groups of receivers, pumps and valves can be easily added with a simple Ethernet connection to modular expansion panels.
- **Color touch screen**
  The 8-inch full color touch screen control provides easy navigation via internationally understood icons. Add up to five additional touch screens, wherever you need them.
- **Remote access via web pages**
  Ethernet connection allows you to connect and view the system from any PC, anytime, anywhere.
- **Tap into ControlWorks**
  Link all of your auxiliaries, and even processing equipment, via the monitoring, control and trending capabilities of Conair's exclusive ControlWorks network.

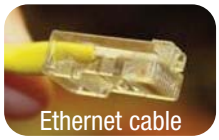
MODEL FLX-128

HOW IT WORKS

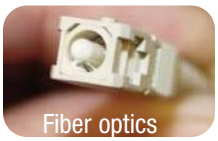




- Input and output signals can be connected via a Conair UTB (Universal Terminal Box) for an easy plug-in loader connection.



- Ethernet makes the long runs. Via CAT 5 copper wire or fiber optics, the Ethernet network connects all of the FLX expansion panels. Receivers, pump and valves then wire into these localized panels.



- Once I/O panels are interconnected to the main FLX control panel, the FLX instantly recognizes them and makes all connected conveying components available for use. The FLX automatically provides pump management for independently operating systems that call upon shared source valves at the same time.
- Each expansion panel is networked back to the main control and provides the input/output capabilities required for that group of conveying components.

FEATURES

- First-In/ First-Out (FIFO) priority loading
- Multi-source, multi-destination conveying
- Unloading (reverse regrind) system capability
- Ratio loading, positive discharge and fill sensor operation
- Purge and pocket valve operation
- Broad choice of expansion panels for system growth
- Up to six Human Machine Interface (HMI) panels
- Multiple levels of password protection
- Set-up Wizard, I/O test mode, help screens
- Preventive maintenance tracking
- CAT 5 or fiber optic network wiring
- Industrial Ethernet communications

OPTIONS

- Add simple expansion panels for groups of receivers, pumps, source valves or a combination of receivers and valves.

- Control where you need it. Up to six full color operator interface panels can be located wherever is best for you. Each panel controls the entire conveying network.

- Remote alarm and/or Remote HMI with alarm.

CONTROL FEATURES

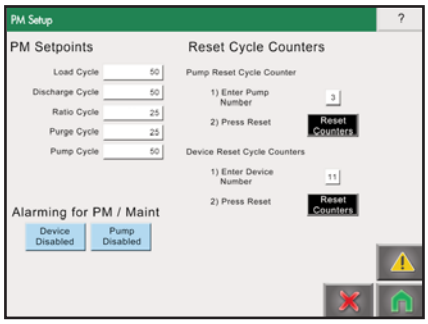
The FLX conveying control system is not only powerful and flexible, but is also the most convenient loading system control to operate.

- Colorful icons mimic the system components they represent and change to show operating status with minimal need for words.
- Help screens provide multi-lingual support for every page and every control activity.
- Shop floor personnel immediately understand and find the touch screen FLX very easy to use.

OPERATING SYSTEM

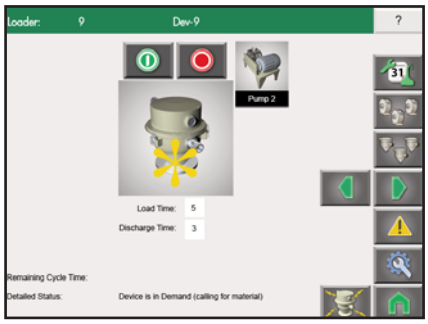
- An entire group of receivers can be viewed at once and each function is exhibited so you know exactly what's happening in your operation. Shown are loading, dumping and demand activities.

PREVENTATIVE MAINTENANCE



- The FLX automatically keeps track of equipment run times to help you plan periodic maintenance. Back-up pumps may be easily selected with the press of an icon on the touch screen.

DETAILED SCREENS



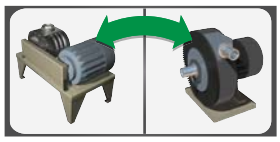
- From selecting equipment interconnections to adjusting load times, monitoring and managing resin movement throughout your factory has never been easier.

Central vacuum unloading: Each FLX-128 has the ability to not only load hoppers and machines, but also unload vessels that need to be kept evacuated, like granulator bins. A level sensor in the bin can trigger unloading from multiple bins to a common receiver, or dedicated receivers.

Multi-source: The multi-source button allows a single receiver to pull material from multiple sources to a common destination.

Valve sharing: The FLX's sophisticated pump management capability, often referred to as valve sharing or pump stacking means the FLX will automatically organize multiple demands on common components like purge valves, streamlining operation and eliminating redundant equipment needs.

System restoration: Both the PLC program and user settings are preserved on memory cards for safekeeping.

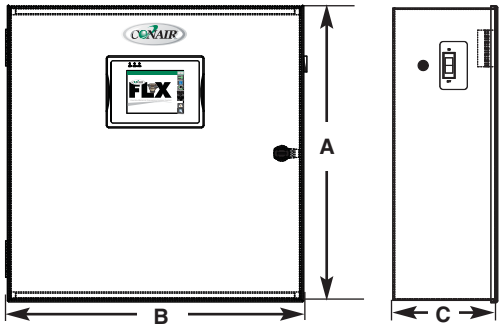


Make it clear: The FLX-128 not only displays icons that aid in understanding system operation, but specific icons can be selected for the actual equipment in use, with minimal need for words.

MODEL FLX-128

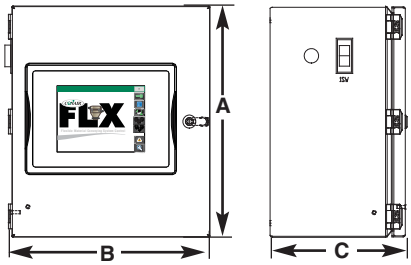
SPECIFICATIONS

Main control panel and Remote I/O



Front view Side view

Remote HMI and Expansion Panels



Front view Side view

MODEL	FLX-128					
Performance characteristics						
Maximum number of vacuum receivers	up to 128					
Maximum number of vacuum pumps	up to 40 (plus 2 back-up)					
Programmable logic controller:						
Main control panel	Wago 750-880					
Remote I/O	Wago 750-871					
Operator interface	Red Lion (8 inch standard, 15 inch optional)					
Output voltage to receivers/valves	24 VDC (24/120 VAC optional)					
Input voltage to receivers	24 VDC					
Output voltage to pumps	24 VDC (24/120 VAC optional)					
Power/Amps	120 VAC/16 Amps/60 Hz					
Input/Output capabilities						
	Main control panel (available with or w/o HMI)*	**Remote I/O** (available with or w/o HMI)*	**Receiver expansion panel**	**Pump expansion panel**	**Source valve expansion panel**	**Receiver/valve combo expansion panel**
Receivers	Up to 32	Up to 32	Up to 8†	-	-	Up to 8
Pumps	Up to 10, (plus 1 back-up)	Up to 10, (plus 1 back-up)	-	Up to 4	-	-
Valves	Up to 64	Up to 64	-	-	Up to 16	Up to 16
Dimensions inches {mm}						
	Main control panel	**Main control w/ optional voltage**	**Remote I/O w/ HMI**	**Remote I/O w/HMI w/ optional voltage**	**Remote HMI**	**Expansion panels**
A - Height	24 {609}	36 {914}	24 {609}	36 {914}	14 {355}	14 {355}
B - Width	24 {609}	30 {762}	24 {609}	30 {762}	12 {304}	12 {304}
C - Depth	8 {203}	8 {203}	8 {203}	8 {203}	8 {203}	8 {203}
Weight lb {kg}						
Installed	60 {27}	48 {21}	60 {27}	60 {27}	29 {13}	22 {10}
Shipping	72 {32}	60 {27}	72 {32}	72 {32}	36 {16}	35 {15}

Maximum number of expansion panels (per panel type) ‡	
Main control panel	1 panel maximum (32 loaders and 64 valves each - with or without HMI)*
Remote I/O panel	1 panel maximum (32 loaders and 64 valves each - with or without HMI)*
Receiver expansion panel	8 panels maximum (8 loaders each, or 16 loaders each with no options)
Pump expansion panel	5 panels maximum (4 pumps each)
Source valve expanison panel	8 panels maximum (16 valves each)
Receiver/valve combo expansion panel	8 panels maximum (8 loaders and 16 valves each)

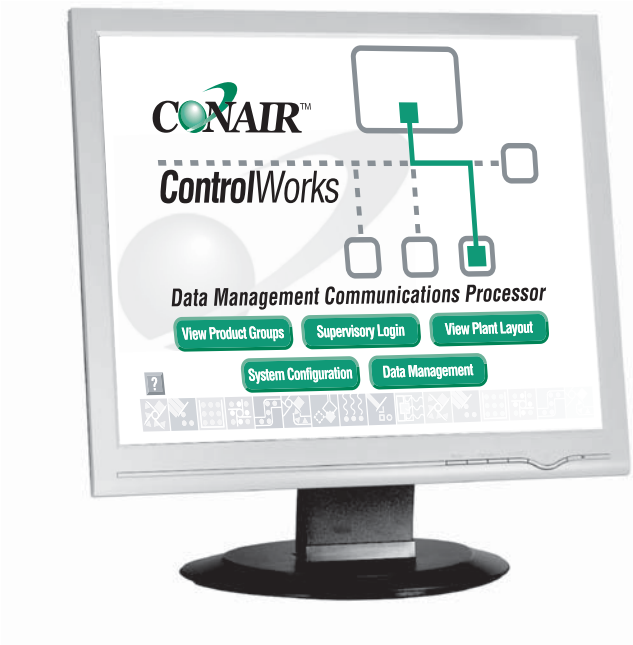
SPECIFICATION NOTES

* Maximum of six HMI total.

† Total number of receivers on the receiver expansion panel can be 8 with options (fill sensor) and alarms, or 16 with no options.

‡ Selected I/O expansion panels cannot exceed the total FLX capacity of 128 receivers, 40 pumps and 256 source valves.

Specifications may change without notice. Check with a Conair representative for the most current information.



POWERFUL MANAGEMENT OF YOUR AUXILIARIES

Manage your plant with easy-to-navigate and intuitive data screens that simplify the management of your auxiliary system. With the ControlWorks system you will be able to change equipment setpoints, diagnose alarms and check machine status all from one centralized location.

ControlWorks automatically saves all data and generates progress reports so you'll know the most current status of your system. ControlWorks can even be configured to alert key personnel when there is an alarm condition.

SUPERIOR PLANT-WIDE EFFICIENCY; INCREASED PROFIT

ControlWorks improves the efficiency of your operation by allowing you the capability to monitor your entire plant from one central location.

This web-based application allows multiple individuals to logon and monitor the system. Monitoring of your system can occur from the central PC hub and from remote access panels strategically located throughout your plant.

Remote access is also available to view your system through any web-enabled PC directly connected to your company's network or outside your company's network with your virtual private network (VPN) client so that you are constantly connected.

Customize your ControlWorks system to fit your needs. Additional modules can be added when needed. Completely new modules including blending, drying, conveying, central water, ResinWorks®, and silos) can be added to expand your current system.

View your entire system at a glance

With the ControlWorks system you can view all of your connected processing equipment. The system conveniently provides you with process analysis, remote machine diagnostics including alarm conditions, detailed reporting and data management.

Easily add versatility to your system

Product module expansion packages are an easy and affordable way to increase your system's productivity. Simply add more devices to existing software modules or add a completely new module to expand your plant-wide capabilities.

Download or instantly recall blender recipes

Instantly recall any entered recipe for your process at a push of a button. ControlWorks' central blender recipe management system eliminates the need to manually enter your blender recipe information and supplies you with material usage reports.

Simple remote access

With the addition of remote access web panels located on your plant floor, you will never be out of contact with your system's process. Remote off-site access is used to view your system from a web-enabled PC using a customer supplied VPN client to keep you connected around-the-clock. The ControlWorks system can also send emails of system alarms to key personnel based on their severity.

FEATURES

CONTROLWORKS™ CENTRAL SYSTEM CONTROL

Web Client Web Client Web Client

ETHERNET SWITCH

ETHERNET SWITCH

DEVICE GATEWAY

Bulk Storage Module

Monitor up to 3 Resin Level Display (RLD) system indicators for:

- High level alarm
- Re-order point alarm
- Low level alarm

-or-

Monitor up to 36 yo-yo or ultrasonic level sensors for silo monitoring.

ResinWorks® Module

Monitor up to 32 drying hoppers per module:

- Enter setpoints and operating parameters
- Display and record data of alarms and actual operating values
- Trend/view temperatures and adjust setback on temperature to conserve energy

Blending Module

Monitor up to 64 blenders per module:

- Set-up blenders, download and enter recipes and operating parameters
- Monitor real-time operational data, log material usage, generate reports of material usage

Dryer Module

Monitor up to 32 dryers per module:

- Enter setpoints and operating parameters
- Display and log data of alarms and actual operating values
- Trend dewpoint vs. energy consumption (optional)

DEVICE GATEWAY

Thermolator® Module

Monitor up to 32 Thermolators per module:

- Enter setpoints and operating parameters for Thermolators (mold temperature control units), portable and central chillers
- Display and record data of actual operating values and alarms

FLX or ILS Loading Module

Monitor up to 3 loading control systems

Loader information (monitor/change):

- Load time
- Purge time
- Discharge time
- Material alarms
- Regrind cycles
- Proofing (ILS)

Central Water Module

Monitor up to 3 central water systems per module:

- Monitor and control all pumps, valves and fans
- Display and record data of actual operating values and alarms

Enterprise Network

Device Network

Miscellaneous I/O Module

Monitor any combination of analog, digital, RTD or thermocouple inputs.

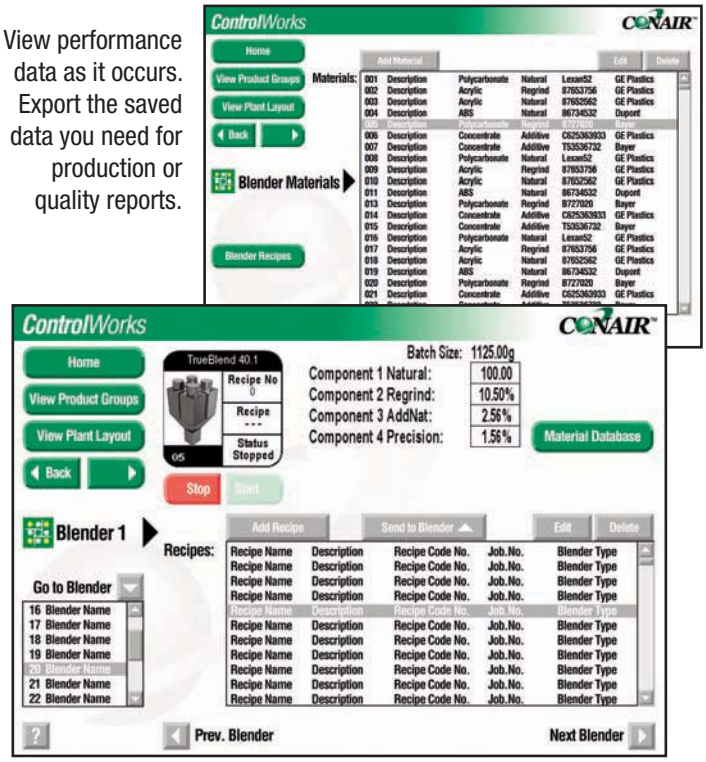
APPLICATION NOTES:

Contact a Conair representative to determine your specific ControlWorks configuration.

CONTROLWORKS™ CENTRAL SYSTEM CONTROL

FEATURES

View performance data as it occurs. Export the saved data you need for production or quality reports.



DATA COLLECTION AND REPORTING

With ControlWorks, you can view performance data, store blender recipes, retrieve information and diagnostics, including alarm and process data trending as they occur. You can also configure ControlWorks to email key personnel to report an alarm based on its severity.

Generate on-demand or scheduled reports in Microsoft® Excel format. ControlWorks automatically logs all reportable data and stores it in Postgre SQL or customer-provided Oracle database.

LOCAL OR REMOTE ACCESS

ControlWorks communicates with your system by Ethernet networking software. A plant supervisor using a PC with Internet capabilities and their virtual private network (VPN) can access ControlWorks from any location. Service technicians can also access your system through your VPN client to help diagnose problems from a remote location.

CONFIGURE TO SUIT YOUR PROCESS

ControlWorks allows you to continually update your application to remain in step with ever-changing system requirements, keeping your system's technology on the cutting edge.

The ControlWorks workstation is a standard web-enabled PC desktop computer. The computer comes equipped with a keyboard, mouse, dual hard drives (to ensure data integrity), DVD/CD reader/writer drive, two Ethernet network cards, Microsoft® Windows XP Professional operating system; Microsoft® Excel and ControlWorks supervisory control and data acquisition software.

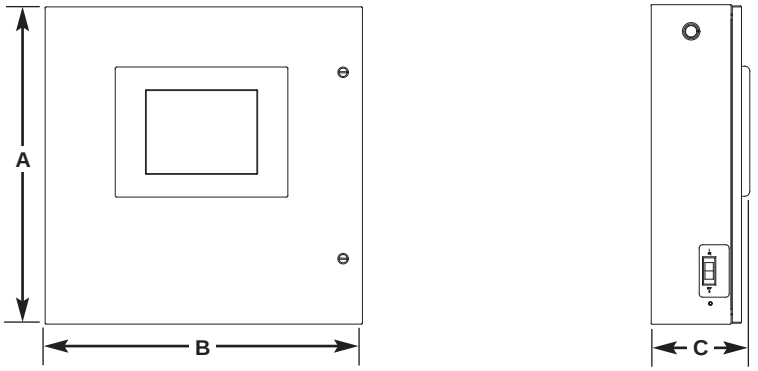
SYSTEM BACKUP

Conair has provided a fail-safe to your ControlWorks application by saving an image of your initial setup on the ControlWorks computer's secondary hard drive. This image can be used as a restore point and is accessible via the included Norton Ghost software. An optional Raid Controller, which writes to both hard drives simultaneously, is also available.

CONTROLWORKS™ CENTRAL SYSTEM CONTROL

SPECIFICATIONS

ControlWorks™ Hardware/Software Specifications*	
Computer	Minimum 2.0 GHz Dual CoreProcessor PC with two (2) hard drives with 160 GB disk space each, 1GB RAM Monitor not included.
Operating system	Microsoft® Windows XP Professional
Additional Software	System Recovery, Adobe Acrobat Reader, anti-virus software, cd burning software, Microsoft® Excel
Input Devices	Keyboard, Mouse
Interface	
Ethernet connection (Quantity 2)	10/100 mbps Base-T NIC



ControlWorks™ Web Panel Specifications (Optional)	
Web Panel	Dynics/Ann Arbor Technologies 15-inch touch screen web panel with a 1.44 MHz Intel Celeron M Processor, 512 MB RAM
Operating System	Microsoft® Windows XP Embedded
Interface	
Ethernet connection	10/100 mbps Base-T NIC
Dimensions inches {mm}	
A - Height	24 {610}
B - Width	24 {610}
C - Depth	7 {185}

SPECIFICATION NOTES:

*PC monitor not included.

Specifications may change without notice. Check with a Conair representative for the most current information.

OPTIONS

RAID SCSI Storage Controller

- Used to write to both hard drives simultaneously.

Model RG2-5

LOW-NOISE, VACUUM CONVEYING POWER

For moderate distance conveying applications, nothing beats the simplicity of a regenerative vacuum pump from Conair. Replacing larger, more complex positive displacement pump/motor units, RG series pumps utilize a one piece fan/motor unit to produce reliable vacuum power for loading systems up to 450 feet and 7000 lbs/hr!

The simple, compact design allows the pump to be installed in nearly any indoor location, it can even be wall-mounted. Because the operating sound level is very low, concerns over noise pollution and proximity to personnel are minimal.

SINGLE AND DUAL STAGE REGENERATIVE PUMPS

Each pump is equipped with its own magnetic starter, ready to be connected to any loading control system. A vacuum pressure gauge and mechanical vacuum relief valve are also included.*

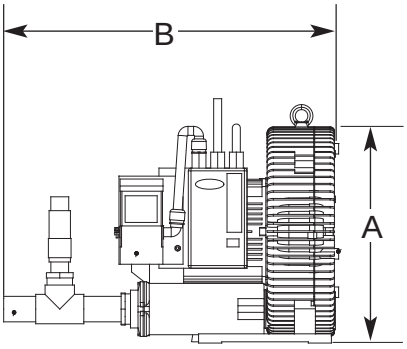
If short, frequent loading cycles are anticipated, the pump may be equipped with an optional idle mode valve that allows the pump to continue to run between loading cycles, eliminating nuisance start/stop cycles that can reduce pump life.

- **Requires no maintenance**
  The pumps are permanently lubricated to reduce downtime.
- **Quiet operation**
  Requires no soundproofing.
- **Reliable components**
  RG Series Pumps include a vacuum relief valve, vacuum gauge, magnetic starter and overload protection.
- **Optional idle mode valve and timer**
  This option eliminates frequent starting and stopping of the pump motor.
- **Optional filter canister**
  The filter canister provides simplified dust collection for virgin material systems.

* Every vacuum conveying application should be assessed by Conair engineers to apply the appropriate equipment.

SPECIFICATIONS

RG SERIES VACUUM PUMPS



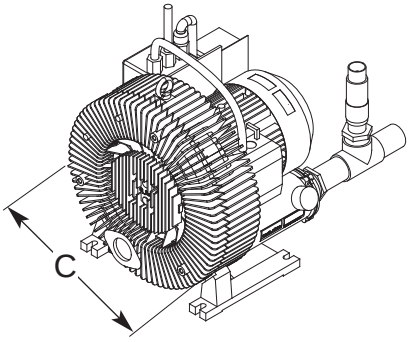
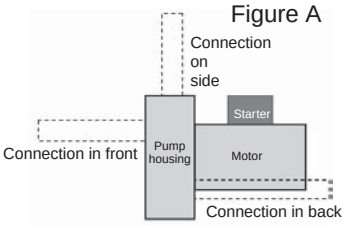


Figure A



Inlet/Outlet orientation (top view)

MODEL	RG1-3		RG1-6		RG1-11		RG2-5		RG2-8		RG2-16	
Single Stage or Dual Stage	**Single**		**Single**		**Single**		**Dual**		**Dual**		**Dual**	
Performance Characteristics												
	60 Hz	50Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz
Motor Hp*	3.4	N/A	6.2	5.4	11.5	10.1	5.1	4.4	8.45	7.4	16.9	14.8
Equivalent kW	{2.6}	N/A	{4.6}	{4.0}	{8.6}	{7.5}	{3.8}	3.3	{6.3}	{5.5}	{12.6}	{11.0}
Line size inches	1.5	N/A	2.0	1.5	2.5	2.0	1.5	1.5	2.0	1.5	2.5	2.0
Airflow at material pickup ft³/min	55	N/A	76	43	135	76	41	60	74	41	138	74
Airflow at pump inlet ft³/min	70	N/A	101	57	191	107	67	79	122	69	226	131
Pump pressure inches Hg Vac. †	-6.2	N/A	-7.4	-7.4	-8.8	-8.4	-11.7	-7.3	-11.7	-12.2	-11.7	-12.9
Sound level (dba)	70	N/A	72	69	74	70	71	67	76	73	78	74
Inlet orientation (see Fig. A)	Back		Back		Back		Front		Back		Back	
Outlet orientation (see Fig. A)	Back		Back		Back		Back		Side		Back	
Dimensions inches {mm}												
A - Height	14 {355.6}		16 {406.4}		21 {533.4}		25 {635.0}		17 {431.8}		23 {584.2}	
B - Width	22 {558.8}		24 {609.6}		31 {787.4}		36 {914.4}		27 {685.8}		32 {812.8}	
C - Depth	15 {381.0}		18 {457.2}		21 {533.4}		18 {457.2}		28 {711.2}		28 {711.2}	
Weight lb {kg}												
Shipping	60 {27}		103 {47}		302 {137}		116 {53}		164 {74}		472 {214}	
Installed	55 {25}		93 {42}		282 {128}		106 {48}		154 {70}		452 {205}	
Voltage Full load amps (FLA)												
230V (220-275)/3 phase/60 Hz	10.3	N/A	16.4	N/A	30	N/A	14.2	N/A	23	N/A	50.2	N/A
460V (380-480)/3 phase/60 Hz	6	N/A	9.5	N/A	17.3	N/A	8.2	N/A	13.3	N/A	29	N/A
400V (345-415)/3 phase/50 Hz	N/A	N/A	N/A	9.5	N/A	16.7	N/A	7.5	N/A	13.3	N/A	28
575V/3 phase/60 Hz	4.5	N/A	7.6	N/A	13.6	N/A	5.4	N/A	10.4	N/A	20.4	N/A
Motor Type	TEFC											

SPECIFICATION NOTE:

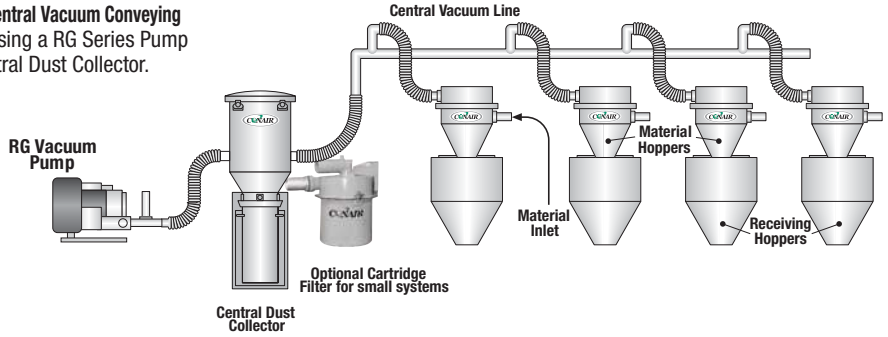
* Hp rating is based on the kW rating of the blower. Not comparable to positive Hp ratings.

† Hg Vac. : Mercury Vacuum

N/A: Not Available.

Specifications can change without notice. Contact your Conair representative for the most current information.

Typical Central Vacuum Conveying System using a RG Series Pump and Central Dust Collector.



Model PD3 Pump

CONSISTENT, RELIABLE, TIME-TESTED CONVEYING

Positive Displacement Vacuum Pumps are designed for long distance, high-volume material conveying.*

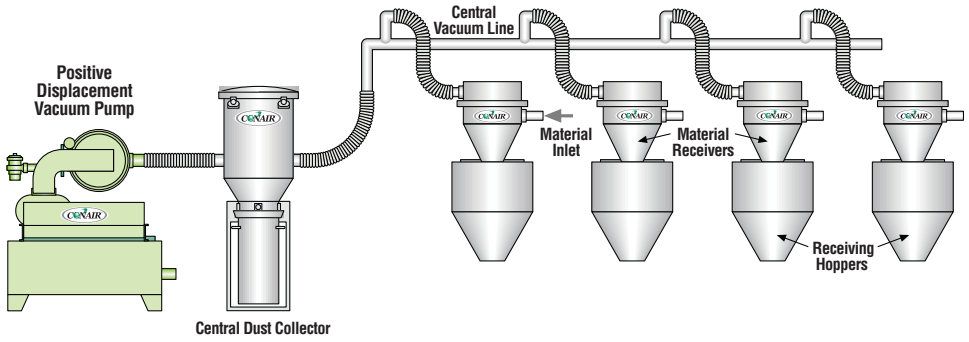
Each model employs a powerful, rotating lobe-type blower, protected by a vacuum relief valve (factory-set to 12" Hg) and belt driven by a three-phase motor with magnetic starter and overload protection. An integral pump protection filter is included. All components are mounted on a rugged frame that houses an integral exhaust muffler. An optional sound enclosure may be added to reduce noise.

HIGH-PERFORMANCE VACUUM CONVEYING POWER

Six models are provided for a complete range of vacuum power for your resin conveying application. When coupled with our extensive line of vacuum receivers, dust collectors and control systems, Conair's positive displacement pumps will provide you with the longest, low-maintenance vacuum conveying performance in the industry.

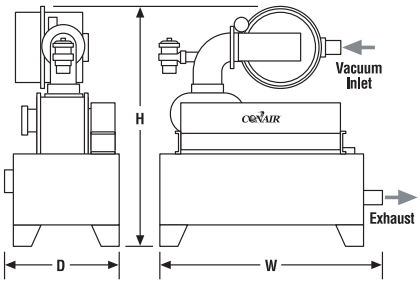
* Every vacuum conveying application should be assessed by Conair engineers to apply the appropriate equipment.

- **Rotating lobe vacuum blower**
  The most powerful vacuum source available.
- **Pump protection filter included**
  14 square foot filter protects the pump against damage from resin dust.
- **Easy maintenance**
  All service components are within easy reach.
- **Ready to install**
  Includes vibration pads, vacuum gauge, vacuum relief valve and magnetic starter.
- **Powerful and reliable**
  Expect years of service with minimal attention.



SPECIFICATIONS

POSITIVE DISPLACEMENT PUMPS



* Energy-saving, high efficiency motors are also available.

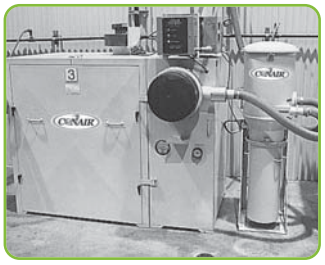
MODEL	PD3	PD5	PD7.5	PD10	PD15	PD25
Motor Type*	TEFC	TEFC	TEFC	TEFC	TEFC	TEFC
PERFORMANCE						
Horsepower	3	5	7.5	10	15	25
Standard CFM at Material Pickup Point @ 10" Hg	52.6	76.6	121.2	154.5	201.1	346.2
Average Sound Level (dbA) @ 8", 10" and 12" Hg	86	86.3	86	85.8	88.8	93
DIMENSIONS inches and millimeters {mm}						
Standard Inlet Size (OD)	1.5 {38}	1.75 {44}	2.25 {57}	2.5 {64}	3.0 {76}	4.0 {102}
Exhaust Line Size (OD)	2.5 {64}	2.5 {64}	2.5 {64}	4.0 {102}	4.0 {102}	4.0 {102}
Height (H)	37 {940}	37 {940}	41 {1041}	51 {1295}	51 {1295}	52 {1321}
Width (W)	35 {889}	35 {889}	35 {889}	39.5 {1003}	39.5 {1003}	39.5 {1003}
Depth (D)	27 {686}	27 {686}	27 {686}	33 {838}	33 {838}	34 {864}
Installed Weight / lb {kg}	325 {147}	325 {147}	370 {168}	625 {283}	640 {290}	960 {435}
VOLTAGE / Amps						
240	7.6	12	18.8	28	39	59
480	3.8	6	9.4	14	19.5	29.5
575	2.9	4.8	7.5	10.7	16	27

OPTIONAL SOUND ENCLOSURES

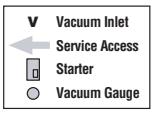
Positive Displacement Pumps provide the strongest vacuum power available, but when operated for long periods at high performance levels, noise should be abated if the pump is located near personnel. Sound Enclosures are available for all pump models and provide maximum noise control with minimal space and easy access to pump maintenance areas.

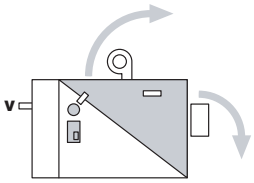
Super Quiet Sound Enclosures include externally mounted protection filter, vacuum gauge and filter gauge; 8 ft exhaust stack (for noise); and easy access, tool-free front door.

5 HP Pumps in Sound Enclosures

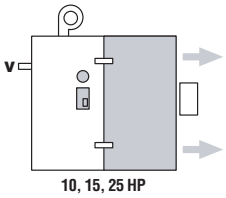


Super Quiet Sound Enclosure (with Dust Collector)

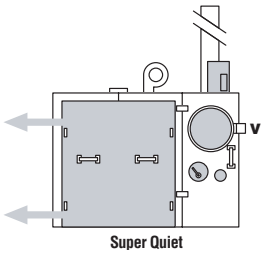




3, 5, 7.5 HP



10, 15, 25 HP



Super Quiet

SPECIFICATIONS FOR PUMPS WITH SOUND ENCLOSURES

Specifications not listed below are the same as those listed above. All Sound Enclosures include a cooling fan 115 VAC @ 2 amps.

MODEL	PD3	PD5	PD7.5	PD10	PD15	PD25	SUPER (ANY MODEL)
PERFORMANCE							
Average Sound Level (dbA) @ 8", 10" and 12" Hg	61.9	69.8	76.2	79.3	86.0	90.0	Under 60 dbA
Enclosure Construction	Painted Steel			Natural Aluminum			Painted Steel
Allowance Space for Service Access / in	48 (Opposite Vacuum Inlet)			36 (Opposite Vacuum Inlet)			36 (Front, Next to Filter)
DIMENSIONS inches and millimeters {mm}							
Height (H)	49 {1245}			64 {1626}			96 {2438}
Width (W)	54 {1372}			55 {1397}			70 {1778}
Depth (D)	32 {813}			36 {914}			50 {1270}

SPECIFICATION NOTE:

Specifications can change without notice. Contact your Conair representative for the most current information.

Model DC3

Model DC2

DUST-FREE VACUUM SYSTEM FILTRATION

Conair Dust Collectors keep your plant free of air-born dust and fines and prevent dust from fouling the vacuum pump.

A central vacuum dust collector allows dust filtration to take place at the floor level. An air-tight collection container makes the removal of fines quick and easy.

Automatic filter cleaning is standard, lengthening the time between service requirements. DC1 and DC2 models use an integrated "popper valve" to remove dust from the filter, while the DC3 has a sophisticated sequential blowback system.

EASY, NO TOOLS EMPTYING AND SERVICING

The integrated dust canister releases easily for periodic emptying. A single hand knob opens the lid for quick access to the filter cartridge.

Each model comes equipped with a free standing floor frame. On models DC1 and DC2, the stand may be removed for wall-mounting. An auto-dump option is available to automatically remove collected dust or to allow open dumping into other containers.

The DC1 and DC2 are sized to provide the right amount of filter area for the pump CFM and line size of the conveying system.

The largest dust collector, the DC3, provides three filters with an automatic sequential blowback system for maximum filter life.

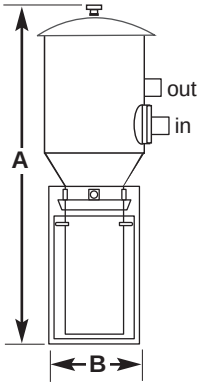
- **Automatic filter cleaning**
  The cartridge filter releases entrained dust with each cycle.
- **Tangential air/dust inlet**
  Preliminary air/dust separation takes place right at the dust collector inlet. The tangential inlet causes the air to spiral upon entry, spinning the dust free from the air.
- **Flexible application**
  Easy, screw-in line adapters in a wide range of sizes mean that each unit works with a variety of pumps and line sizes.
- **Simple maintenance**

Remove the dust collection canister without tools for easy dumping.

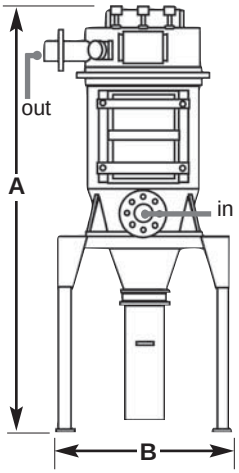
No-tools filter removal provides simplified filter maintenance.

DC1, DC2 AND DC3 MODELS

SPECIFICATIONS



Model DC1 and DC2



Model DC3

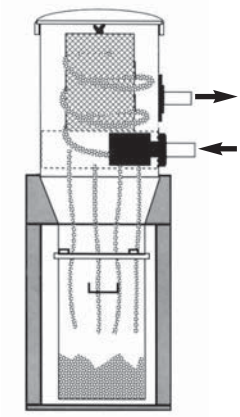
MODELS	DC1	DC2	DC3
Performance Characteristics			
Pump size range Hp {kW} *	3-7.5 {2.2-5.6}	10-25 {7.5-18.7}	3-25 {2.2-18.7}
Vacuum line size OD in {mm}	1.5-2.5 {38.1-63.5}	2.25-4.0 {57.2-101.6}	1.5-4.0 {38.1-101.6}
Filter area ft² {M²}	42.8 {4.0}	100.3 {9.3}	162.0 {15.0}
Maximum collection capacity ft³ {liters}	1.1 {31.1}	2.1{59.4}	1.1 {31.1}
Recommended dust collection ft³ {liters}	0.75 {21.2}	1.0 {28.3}	0.75 {21.2}
Dimensions inches {cm}			
A - Height	58.0 {147.3}	67.0 {170.1}	92.5 {235.0}
B - Width	15.0 {38.1}	19.0 {48.3}	36.5 {92.7}
Depth	20.0 {50.8}	19.0 {48.3}	36.5 {92.7}
Weight lb {kg}			
Installed	110 {50}	150 {68}	545 {247}
Shipping	140 {64}	280 {127}	695 {315}
Voltage total amps			
120V/1 phase/60Hz	1.0	1.0	5.0
Compressed air requirement			
	80-120 psi {5.5-8.3 bars}		

SPECIFICATION NOTES:

* Model DC1 works with Conair pump models PSS3, PSS6, PD3, PD5, PD7.5. Model DC2 works with PSS11, PD10, PD15, PD25. DC3 works with all sizes.

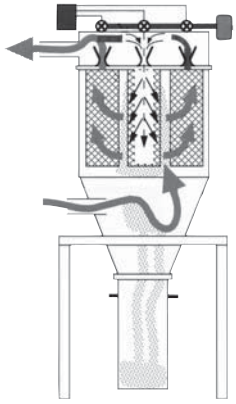
Specifications can change without notice. Check with a Conair representative for the most current information.

HOW IT WORKS



DC1 and DC2

Dust-laden vacuum air enters the collector, where the spinning air stream separates most of the dust. The oversized filter traps the remaining dust and collects the excess in the integrated canister. The "popper" valve closes at the end of the conveying sequence, rapidly changing the air pressure. This shocks the filter clean and allows fines to drop into the collection canister.



DC3 Super Dust Collector

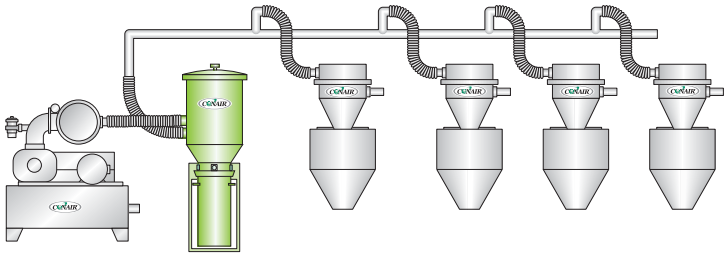
Three filter cartridges collect the dust. A purging cycle uses accumulated compressed air to blast each cartridge clean from the inside out. This continuous adjustable sequence drops fines into the collection canister. The DC3 provides maximum filter life between manual cleanings.

OPTIONS

Auto-Dump Option

automatically ejects the collected fines and dust at the conclusion of each vacuum cycle. The dust collector can be placed over an open drum or gaylord to receive fines. An elevated frame is recommended, or the DC1 and DC2 Dust Collector bodies may be wall mounted.

APPLICATIONS



Typical Installation

Screens in the vacuum receivers permit some fines to be passed back towards the pump. These fines are trapped in the central dust collector and collected in the integral air-tight canister. Typically, the collector is located near the vacuum pump.

VRU 10, 15 AND 25 VACUUM RAILCAR UNLOADING SYSTEMS

Model VRU

RAILCAR UNLOADING THAT IS SIMPLE AND SELF-CLEANING

Simple to operate and easy to maintain, the system requires minimal attention and features an easy-to-use control. The self-cleaning feature eliminates typical maintenance while the ground level dust collector and silo-mounted stainless steel receiver provide easy access for filter changes. The VRU is a reliable, low cost and simple solution for your railcar unloading requirements.

HIGHLY RELIABLE, LOW COST, SIMPLE TO OPERATE

Its reliability is based on simplicity. The VRU uses a vacuum pump to convey material to a silo-mounted receiver. A timed valve on the pump then reverses the air flow to "power unload" the receiver and backwash all filters in the system without stopping the pump. Operation is completely automatic, highly efficient and fast.

A lower cost alternative to combination vacuum/pressure units, the single pump/dust collector design of the VRU can direct material to as many as 12 silos by just adding receivers, allowing your system to grow with your material conveying needs.

If you need proven, long-life performance for unloading bulk material from distances up to 500 ft without the investment in a vacuum/pressure unit, put one of Conair's VRU systems to work for you.

- **Reliable, efficient operation**
  Loads, power unloads and cleans filters automatically with each cycle.
- **Low cost, versatile**
  Allows system to grow with your needs.
- **Simple to operate; easy to maintain**
  Requires minimal attention and maintenance.

SYSTEM COMPONENTS INCLUDE:

- Stainless steel bulk receiver with 7 ft^3 capacity
- Vacuum pump assembly with air reversal valve
- Dust collector
- System control: Standard model monitors up to 4 silos; optional model up to 12 silos
- Railcar unloading tube kit
- 10 and 20 ft flex hoses with quick couplers; available in stainless steel as an option
- Railcar hatch filter

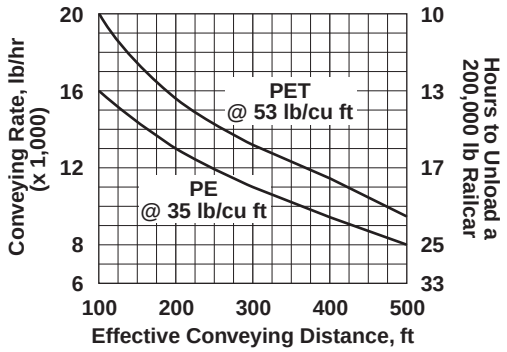
VRU 10, 15 AND 25 VACUUM RAILCAR UNLOADING SYSTEMS

SPECIFICATIONS

DIMENSIONS inches and millimeter {mm} **(ALL MODELS)**				
	CONTROL	RECEIVER	PUMP	DUST COLLECTOR
Height	25 {635}	45 {1143}	52 {1321}	67{1702}
Width	25 {635}	28 {711}	37 {940}	23 {584}
Depth	8 {203}	28 {711}	62 {1575}	19 {483}
Weight / lb {kg}	100 {45}	145 {66}	720 {327}	180 {82}

MODEL	VRU 10	VRU 15	VRU25
Motor Hp	10	15	25
VOLTAGE / Amps*			
240	30	40	60
480	15	20	30
Power is connected to the main control enclosure. Cable must be provided to connect the pump motor to the control.			
COMPRESSED AIR REQUIREMENT			
1/4 in NPT to Air Reversal Valve on Vacuum Pump	60 psi @ 1 CFM		

TYPICAL CONVEYING RATE/ DISTANCE PERFORMANCE FOR VRU 25



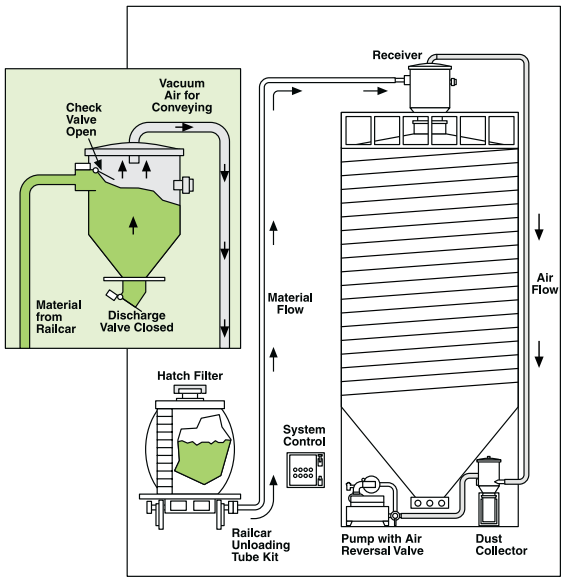
Conair offers a complete line of bulk conveying systems for rates up to 50,000 lb/hr and distances up to 1,000 ft. Conair's engineers will evaluate your requirements and offer the system solution that best fits your needs.

MODEL	VRU 10	VRU 15	VRU 25
THROUGHPUT RATES FOR VRU SYSTEMS			
THROUGHPUT WITH PE (35 lb/ft³)*			
at 100 ft.	7000	11000	16000
a 500 ft.	3000	5000	8000
THROUGHPUT WITH PET (53 lb/ft³)*			
at 100 ft	9000	14000	20000
at 500 ft	4000	6000	9500
MATERIAL/AIR LINE SIZE			
	2.5 IN. OD	3 IN. OD	4 IN. OD

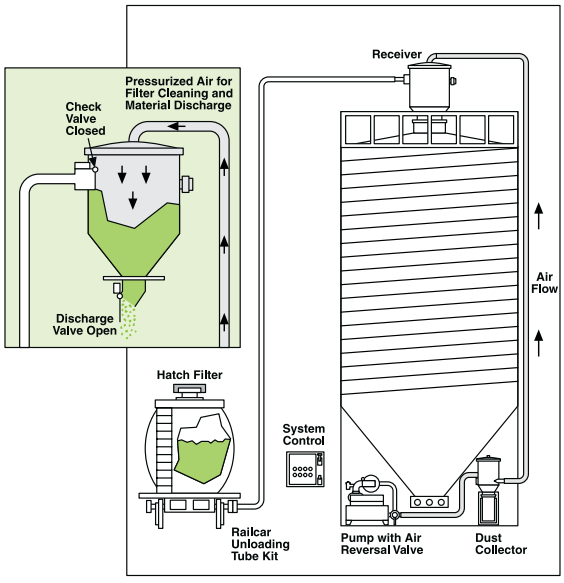
* In pounds per hour, rates are approximate. Contact a Conair Representative for guaranteed rates for your application.

HOW IT WORKS

VACUUM CYCLE TO LOAD MATERIAL



PRESSURE CYCLE TO POWER UNLOAD AND CLEAN FILTER



Resin Selection Station (RSS)

EXPANDABLE MANIFOLD SYSTEM FOR MULTIPLE LINES

Conair table top fantails are ideally suited for central drying and distribution systems that require conveying multiple materials to multiple destinations.

The table top station can be placed anywhere between the material sources and destinations. The modular design provides a variety of configurations for flexibility and expansion.

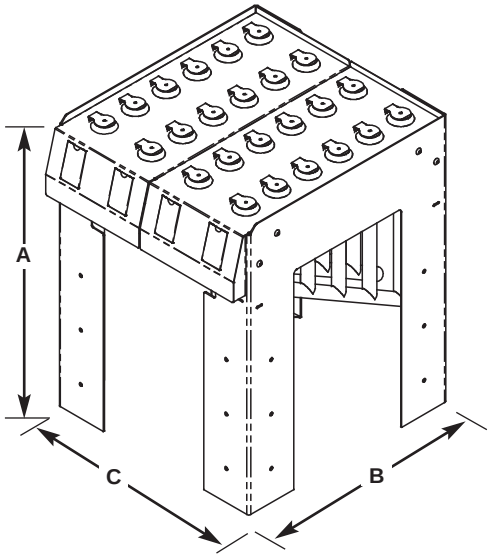
Push-fit connectors make changing materials fast and easy. Simply purge the line to assure it is clean and primed for the next conveying cycle, then move the connector to the desired material source line.

CONVEY MULTIPLE SOURCES TO MULTIPLE DESTINATIONS

Push-fit connector design allows easy insertion of the material lines into the Resin Selection Station. Quick release lids allow for fast, simple removal.

- **Expandable to fit your needs**
  Modular components provide convenient expansion and a variety of configurations. You can choose the best combination of line sizes, manifolds and connectors to suit your application.
- **Easy to use**
  Simply move your material line hose from one connector to another to change material destinations.
- **Durable construction**
  Rugged construction ensures long life. Material contact points are non-ferrous to prevent contamination and require minimal maintenance.
- **Ergonomic design**
  Convenient tabletop design gives you easy access to every connection and promotes complete material line purging.

SPECIFICATIONS



FANTAIL MODELS	RSS150	RSS175	RSS200	RSS225	RSS250	RSS300	RSS400
Performance characteristics							
Line size inches {mm}	1.5 {38.1}	1.75 {44.5}	2.0 {50.8}	2.25 {57.2}	2.5 {63.5}	3.0 {76.2}	4.0 {101.6}
Weight lb {kg}*							
Installed	170 {77}	170 {77}	230 {104}	230 {104}	230 {104}	320 {145}	320 {145}
Shipping	240 {109}	240 {109}	300 {136}	300 {136}	300 {136}	390 {177}	390 {177}

MOUNTING OPTIONS	Small Frame	Medium Frame	Large Frame
Maximum number of fantails			
2, 3, 4, 5 or 6 positions per fantail	up to 2	up to 4	up to 6
Dimensions inches {cm}			
A - Height	42.12 {107.0}	42.12 {107.0}	42.12 {107.0}
B - Depth	35.87 {91.1}	35.87 {91.1}	35.87 {91.1}
C - Width	16.37 {41.58}	32.37 {82.2}	48.62 {123.5}

SPECIFICATION NOTES:

* Weights are based on using the maximum number of selector plates and connectors.

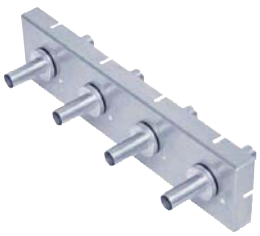
These tables define standard configurations only.

Specifications can change without notice. Contact a Conair representative for the most current information.

CONNECTOR

Push-fit Tube Connectors

Tubes are stainless steel to prevent material contamination. Attach flexible hose to the tube ends using hose clamps.



Selector plate with plain tube connectors

Wall/suspension mount

EXPANDABLE MANIFOLD SYSTEM FOR MULTIPLE LINES

Conair selector plates are ideally suited for central drying and distribution systems that require conveying multiple materials to multiple destinations.

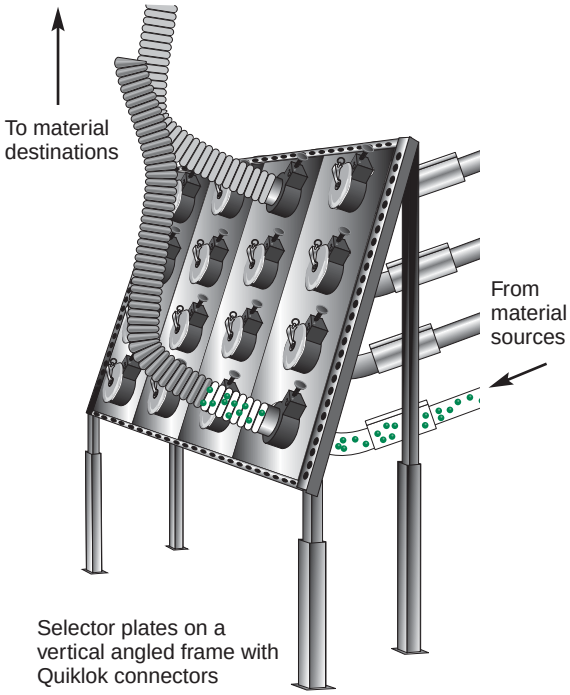
Wall mount, table top and vertical frame designs can be placed anywhere between the material sources and destinations. Modular design provides a variety of configurations for flexibility and expansion.

Quick-disconnect style connectors makes changing materials fast and easy. Simply purge the line to assure it is clean and primed for the next conveying cycle, then move the connector to the desired material source line.

Table top selector plates with Quiklok connectors

Selector plate with Quick connectors

CONVEY MULTIPLE SOURCES TO MULTIPLE DESTINATIONS



Selector plates on a vertical angled frame with Quiklok connectors

- **Flexible design**
  Mounts in a wall or on a floor stand. Modular plates and connectors allow you to choose the best combination of line sizes, manifolds and connectors to suit your application.
- **Easy to use**
  Simply move your material line hose from one connector to another to change material destinations.
- **Durable construction**
  Rugged construction ensures long life. Material contact points are stainless steel or aluminum to prevent contamination and provide minimum maintenance.
- **Accurate**
  Optional electronic proofing available to assure material is being conveyed correctly.

SPECIFICATIONS

SINGLE SELECTOR PLATE
for Wall/Suspension Mount

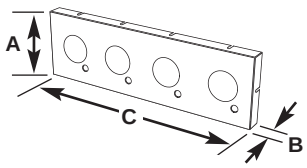
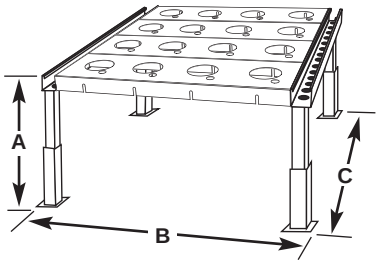
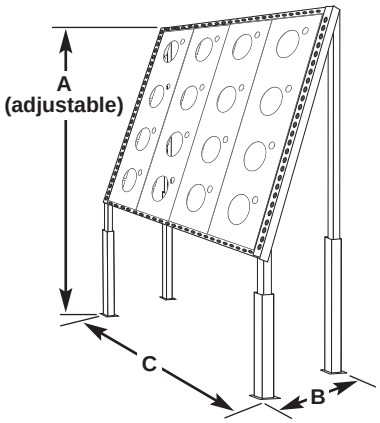


TABLE TOP FRAME
with four selector plates



ANGLED FRAME
with four selector plates



SELECTOR PLATE MODELS	SP 150	SP 175	SP 200	SP 225	SP 250
Performance characteristics					
Line size inches {mm}	1.5 {38.1}	1.75 {44.5}	2.0 {50.8}	2.25 {57.2}	2.5 {63.5}
Dimensions inches {cm}					
A - Height of a single plate	7.0 {17.8}	7.0 {17.8}	7.0 {17.8}	7.0 {17.8}	7.0 {17.8}
B - Depth of a single plate	1.75 {4.45}	1.75 {4.45}	1.75 {4.45}	1.75 {4.45}	1.75 {4.45}
C - Width of a single plate	28.0 {71.1}	28.0 {71.1}	28.0 {71.1}	28.0 {71.1}	28.0 {71.1}
Weight lb {kg}					
Shipping*	200 {91}	275 {125}	350 {159}	475 {215}	600 {272}

MOUNTING OPTIONS	Wall Mount	Table Top	Angled Frame	Vertical Frame
Number of Selector Plates	1 or more	1 to 8	1 to 8	1 to 8
Dimensions inches {cm}				
A - Height				
Single plate	7 {17.8}	32 {81.3}	-	-
Four plates	28 {71.1}	32 {81.3}	adjustable 56 to 76 {142 to 193}	
Six plates	42 {106.7}	32 {81.3}	adjustable 56 to 76 {142 to 193}	
Eight plates	56 {142.2}	32 {81.3}	adjustable 56 to 76 {142 to 193}	
B - Depth	1.75 {4.45}	31.5 {80.0}	24 {61.0}	32 {81.3}
C - Width	Single Plate	4 plates wide	6 plates wide	8 plates wide
Single plate	28 {71.1}	7 {17.8}	-	31.5 {80.0}
Four plates	28 {71.1}	28 {71.1}	31.5 {80.0}	31.5 {80.0}
Six plates	28 {71.1}	42 {106.7}	45.5 {115.6}	31.5 {80.0}
Eight plates	28 {71.1}	56 {142.2}	59.5 {151.1}	31.5 {80.0}

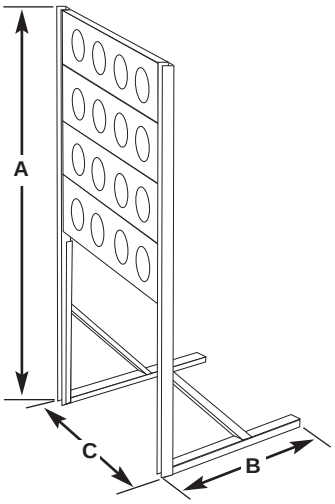
SPECIFICATION NOTES:

* Weights are based on using the maximum number of selector plates and connectors.

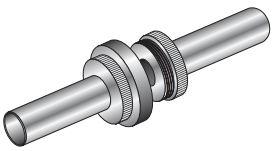
These tables define standard configurations only.

Specifications can change without notice. Contact a Conair representative for the most current information.

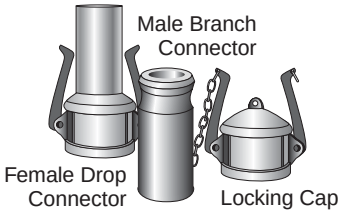
VERTICAL FRAME
with four selector plates



CONNECTOR OPTIONS



Plain Tube Connectors
Tubes are stainless steel to prevent material contamination. Attach flexible hose to the tube ends using hose clamps.



Quick Connectors
Aluminum connectors and caps lock manually to seal. Flexible hose attaches to the tube end of the drop connector.

Model JIT 40

Model JIT 10

Model JIT 20

FINALLY... SAFETY AND CONVENIENCE BUILT INTO A MATERIAL HOPPER

These rugged stainless steel hoppers are ideal for throat mount applications where a material reservoir is required. Material handlers appreciate the convenience of the hinged lid design, which allows efficient hopper cleanout without removal of the loader or receiver. The lid even locks in place when it's in the open position so both hands can be used to clean the hopper. Safety and convenience in one design!

HINGED LID FOR FAST, EASY CLEANOUT

The Access JIT Material Hoppers are available in 10, 20, and 40 lb models for various throughput requirements. The maintenance-free stainless steel reservoir will provide years of service.

You can depend on the convenient features of these hoppers to make your material processing more efficient. A hopper discharge drain port (JIT20 and JIT40 only) promotes ease and efficiency of cleanout and is designed so that flexible conveying hose can be attached for spill free material changeovers. Dual sight glasses allow you to check your material level at a glance.

When combined with the Access loaders or receivers, the Access JIT material hoppers offer the most efficient cleanout possible.

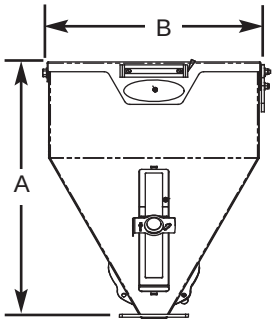
An optional remote demand sensor may be installed at the sight glass, which allows the operator to vary the material level in the hopper (JIT20 and JIT40 only).

- **Simple, fast clean out**
  With the lid safely hinged out of the way there is wide open access to the interior of the material hopper for wiping the unit clean. The material drainport is designed so that flexible conveying hose can be attached for spill free material changeovers.
- **See material flow**
  Dual sight glasses with a provision for an adjustable level sensor allow quick material level verification.
- **Hinged loader mount**
  No tools are needed to quickly hinge the hopper lid safely out of the way. Eliminates the need to remove the loader/receiver during cleanout.

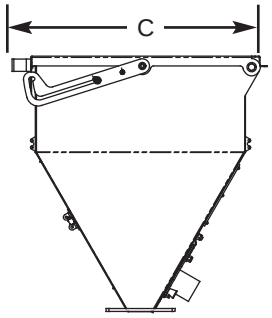
ACCESS™ JIT10, JIT20 AND JIT40S

SPECIFICATIONS

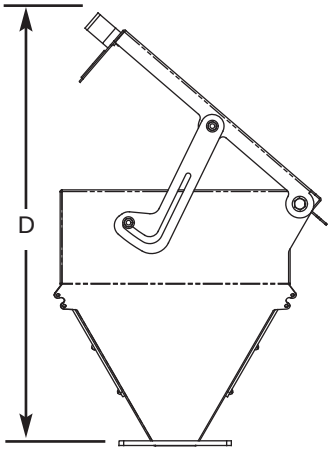
Front view



Side view



Side view (lid open)

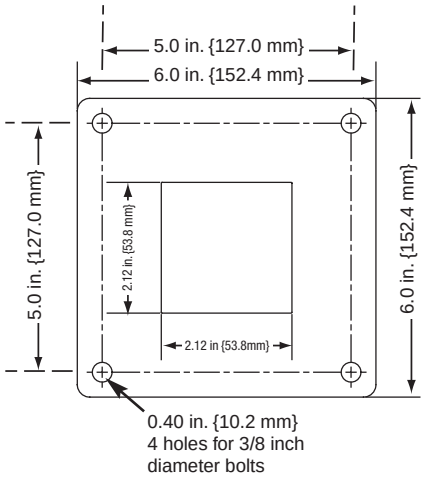


MODELS	JIT10	JIT20	JIT40
Performance characteristics			
Capacity at 35 lb/ft³ {16 kg/ft³}	11.1 {5.1}	24.3 {11.0}	41.52 {18.8}
Capacity in ft³ {liter}	0.32 {9.1}	0.69 {19.5}	1.19 {33.7}
Construction	stainless steel		
Dimensions inches {mm}			
A - Overall height (lid closed)	13.81 {350.8}	19.0 {482.6}	22.13 {562.0}
B - Width (at top plate)	13.25 {552.4}	19.25 {552.4}	19.25 {892.3}
C - Depth (at top plate - includes handle)	16.63 {422.3}	22.63 {574.7}	22.63 {285.8}
D - Overall height (lid opened)	23.13 {587.4}	32.0 {812.8}	35.13 {552.4}
Weight lb {kg}			
Installed	17 {8}	31 {14}	36 {16}
Shipping	20 {9}	45 {20}	50 {23}
Loader interface			
Conair loader compatibility (model)	AL2, AR2, DL8 or DB8	AL5, AR5, DL12 or DB12	AL5, AR5, AR10, DL12, DL15 or DB12

SPECIFICATION NOTES

Specifications may change without notice consult with a Conair representative for the most current information.

Mounting interface



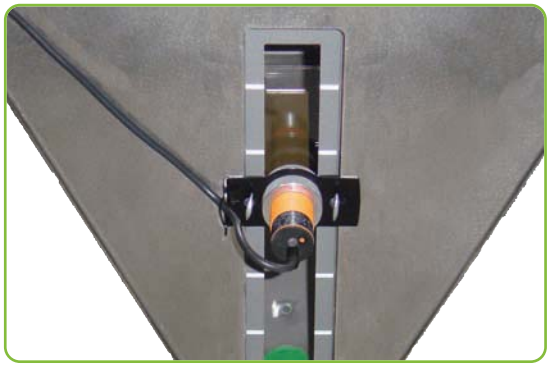
Drainport (models JIT20 and JIT40 only)

Processing position

Draining position

Use the integrated drainport for easy cleanout with no spills. Simply attach flex hose to the mounting stub and evacuate the material.

Remote demand sensor (models JIT20 and JIT40 only)

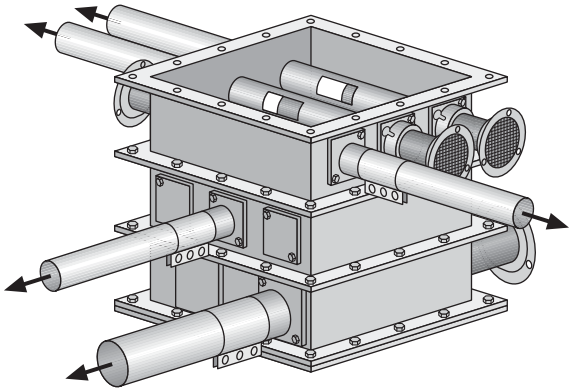


The optional bracket and capacitive type remote demand sensor permits simple material level adjustments.

MODULAR CONSTRUCTION FOR EASY EXPANSION

Because Conair's Bulk Distribution Boxes are modular, material outlets may be added as your needs grow. And, any module may be directed towards your material destination to assure the easiest possible line routing. The box modules are the industry standard 16-inch square bolt pattern and allow for a wide variety of line sizes, draining and easy cleanout options.

TROUBLE-FREE MATERIAL FLOW TO MULTIPLE DESTINATIONS



Distribution Box modular layers may be independently specified and oriented in any direction.

- **Aluminum and stainless steel construction***
  For years of trouble-free performance.
- **Easy air-to-material ratio adjustment**
  To prevent material from surging, starving or jamming.
- **May be hard piped**
  No need for flex hose.
- **Modular, expandable**
  Additional outlets may be added when needed.

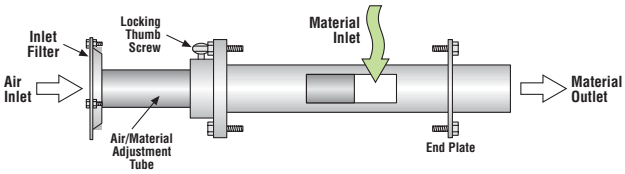
*All stainless construction optional.

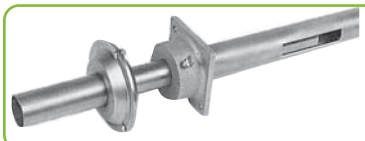
FEATURES/OPTIONS

Smooth Material Flow

Conair Distribution Boxes assure smooth material flow with hand adjustable slip tubes that ratio the amount of material to be conveyed in proportion to the inlet air used for vacuum conveying. This way, material jamming, slugging or starving is minimized. The sliding air inlet tube is fitted with a filter screen to prevent unwanted debris from entering the conveying system, or material from leaving the distribution box.

TYPICAL DISTRIBUTION BOX FEED TUBE



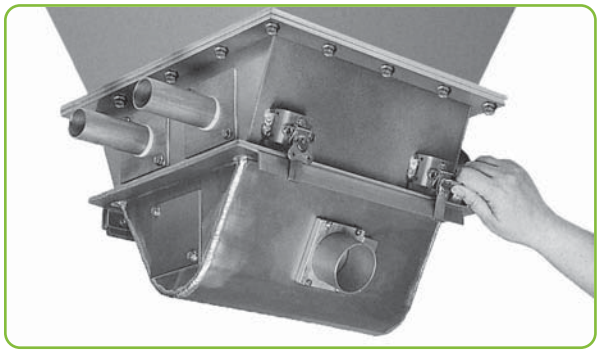


For dry air conveying systems, the air inlet is fitted with an optional tubing adapter that may be plumbed to the dry air source.

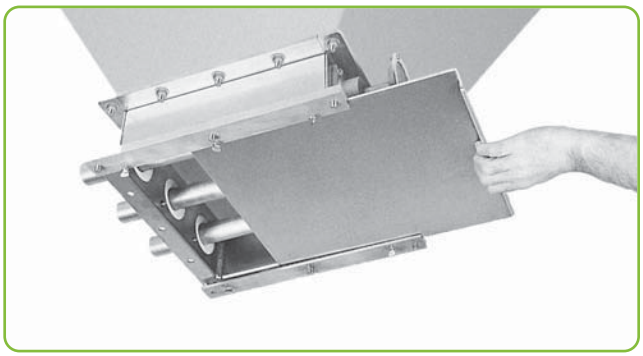
OPTIONAL CARTRIDGE FILTER

Quick cleanout

Add any of these options directly to the base of your material vessel or below any Distribution Box Modules.



The SB Module (shown here) is perfect for frequent material change overs. Equipped with up to three material outlets plus a drain port (with slide gate), the hinged bottom may be hand released after draining and the round bottom wiped clean. For close clearance installations, where there is not enough room for the swing down chamber, the single outlet **RB Module** (not shown), also with a round bottom, may be bolted in place.



This **Slide Bottom Plate** allows full access to the underside of your bin and the inside of the Distribution Box for fast, easy cleaning and inspection (not recommended for partial draining of the bin).

Easy drain

The **Transition with Valve** is designed for manual filling of gaylords or barrels and assures full draining with no dead spots and easy on/off flow control.

This **Slide Bottom with Valve** allows you to drain material then slide the bottom open for thorough cleanout and inspection. The valve plate is also available in a non-slide version.

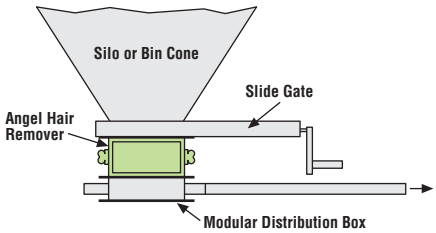
ACCESSORIES

Angel Hair Remover

Trap material clogs before they clog your conveying system

"Angel hair," "streamers" or "skins," created by high-velocity conveying of soft material, can clog your conveying system by blocking distribution box tubes or creating material bridges in hoppers. Conair's Angel Hair Remover provides a stainless steel screen in the material flow path to filter out the clogging material and allow it to be easily removed from the system. Usually fitted at the base of a silo or storage bin, the Angel Hair Remover should be installed below a Conair Slide Gate (see below) and above your main Distribution Box. The unit fits the same 16" square bolt pattern as Conair's entire line of Distribution Box components and requires only 8.5 inches of height.

The easy-to-clean **Angel Hair Remover, #101-625-01.**

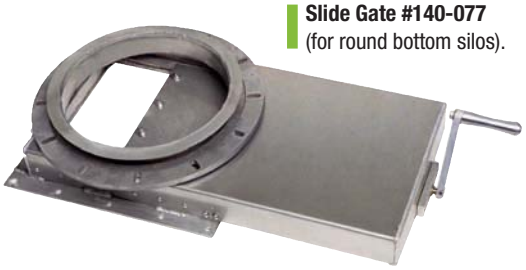


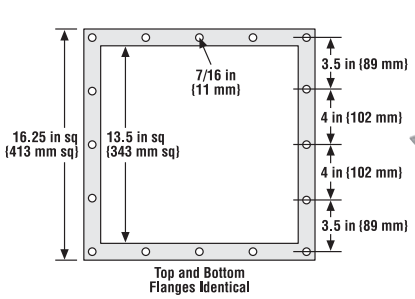
Slide Gate

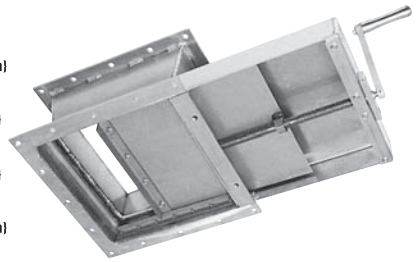
To stop the flow of material from a bulk storage vessel, Conair's Slide Gate provides a heavy-duty hand crank that allows the stainless steel knife gate to cut through a solid column of material and stop material flow for service, cleaning or equipment changes. The rugged housing requires only 7-1/2" {191 mm} below your silo and is constructed of aluminum, with an all stainless steel mechanism. Available in both round and square top flanges to fit both popular vessel outlet flanges, the bottom flange is the industry standard 16" square bolt pattern to allow fitting any of Conair's extensive line of Bulk Distribution Box products.

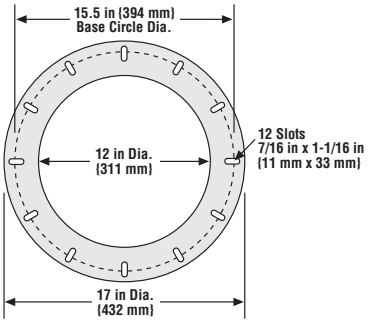
Slide Gate #140-124
(for square bottom bins).

Slide Gate #140-077
(for round bottom silos).





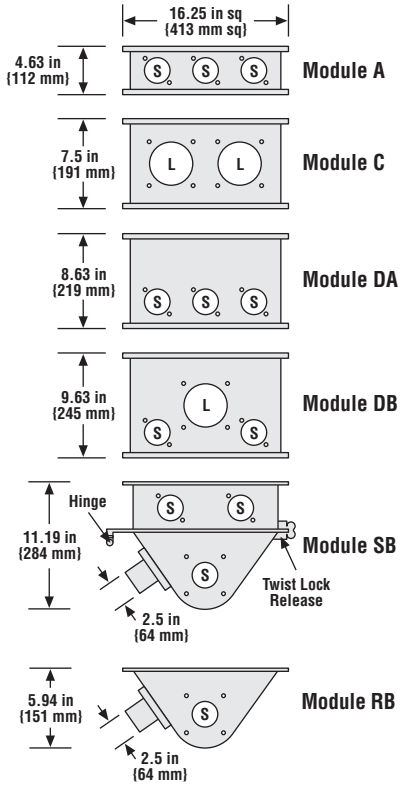




SPECIFICATIONS

APPLICATION NOTE

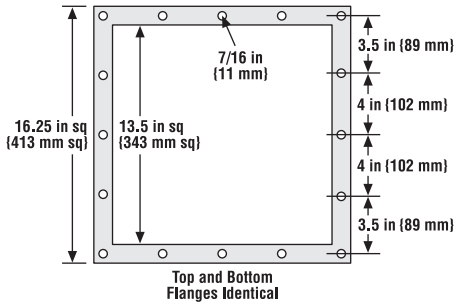
When using a multi-outlet distribution box directly below a vessel with a material outlet diameter under 8 inches, use box modules DA or DB to assure adequate material flow to the outside tube positions.



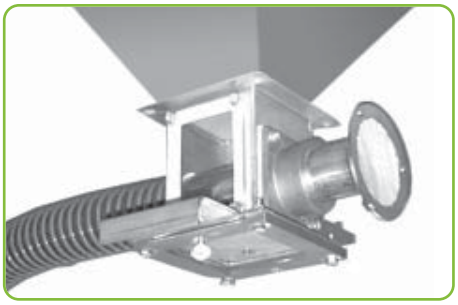
FEED TUBE KIT (OD)	FITS IN PORT SIZE
1.5 in {38 mm}	S
1.75 in {45 mm}	S
2 in {51 mm}	S
2.25 in {57 mm}	S
2.5 in {64 mm}	S
3 in {76 mm}	L
4 in {102 mm}	L

S = Small Port Size
L = Large Port Size

MOUNTING FLANGE DIMENSIONS



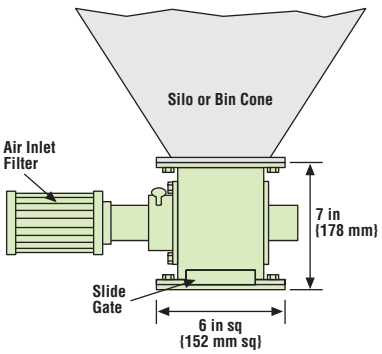
OTHER MODELS

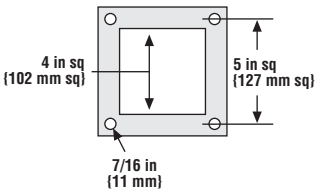


Single outlet distribution box

For compact material conveying systems requiring only a single material outlet, Conair's Single Tube Boxes are ideal. Built entirely out of stainless steel, these boxes fit easily onto small bin outlets with a 5" x 5" square bolt pattern. Each model includes a quick drain/easy clean slide gate in the bottom, plus an air inlet screen filter and a sight glass. Air-to-material adjustments are made in the same precise fashion as Conair's line of larger Bulk Distribution Boxes.

MATERIAL OUTLET (OD)	BOX PART NUMBER
1.5 in {38 mm}	101-631-01
1.75 in {45 mm}	101-631-02
2 in {51 mm}	101-631-03
2.25 in {57 mm}	101-631-04





Model CV-1

ISOLATE RECEIVERS IN COMMON MATERIAL LINE SYSTEMS

Externally mounted line valves effectively stop the flow of material to vacuum receivers for trouble-free operation of common or single material line conveying systems.

At rest, the inlet is closed, allowing the valve to isolate the receiver from the common material line of central systems. When the vacuum sequence valve opens, the line valve allows material to fill the receiver.

POSITIVE SHUT-OFF AND SMOOTH FLOW

Unlike competitive internal flappers that rely upon the system's vacuum to close, Conair Line Valves utilize a reliable compressed air piston to shut off material flow. And mounted external to the loader, line valves can never fall off, and can never contaminate or jam the receiver's flow of material.

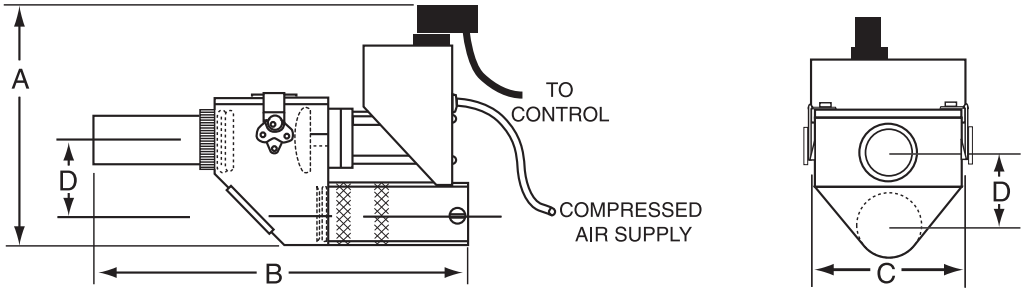
The valve operates in unison with the loader's vacuum sequencing valve to effectively start and stop material flow.

Standard valves have an aluminum inlet and outlet for use with materials up to 225° F {107° C}.

An optional high performance version is also available. It is optimized for use with high temperature materials, those exceeding 225° F {107° C}, and for highly abrasive material including glass-filled resins and sharp regrind.

- **Modular design**
  Screw-in components allow common wear parts to be easily replaced and line sizes to be changed without the need of purchasing another valve on models CV1 and CV2.
- **Smooth aluminum body**
  A non-corrosive, smooth path for material flow.
- **Easy to clean**
  Removable with no tools, the lid provides wide open access.
- **High performance option**
  The optional high performance valve is optimized for use with high temperature and/or highly abrasive materials.

SPECIFICATIONS



MODELS	CV-1	CV-2	CV-3	CV-4
Performance characteristics				
Line size diameter inches {mm}	1.5 - 2	2.25 - 2.5	3	4
Type of inlet/outlet connection	screw-in	screw-in	welded	welded
Body type aluminum	cast	cast	fabricated	fabricated
Dimensions inches {mm}				
A - Overall height	9.0 {229}	9.75 {248}	11.0 {279}	12.0 {305}
B - Length	12.5 {318}	13.0 {330}	13.875 {352}	13.875 {352}
C - Width	4.5 {114}	5.5 {140}	7.0 {178}	7.0 {178}
D - Inlet/outlet offset height	2.75 {70}	2.75 {70}	3.438 {87}	3.875 {98}
Weight lb {kg}				
Installed	7 {3}	9 {4}	11 {5}	11 {5}
Shipping	9 {4}	11 {5}	13 {6}	14 {6}
Voltage Total amps				
120V/1 phase/60 Hz	0.25	0.25	0.25	0.25
24V/1 phase/50 or 60 Hz	1.0	1.0	1.0	1.0
Compressed air requirement				
Air consumption 0.2 ft^3/min.	@ 80 psi {0.09 liters/sec @ 5.5 bars}			
Hose requirement	1/4 in. hose fitting			

SPECIFICATION NOTES:

Check with a Conair representative for the most current information.

OPTIONS

High Performance

The high performance line valve has a stainless steel inlet and outlet, includes a high temperature Viton seal in the pneumatic cylinder and a specially plated and heat-treated valve body, lid and plunger for maximum wear-resistance.

The high performance valve is optimized for use with high temperature materials, those exceeding 225° F {107° C}, and for highly abrasive materials including glass-filled resins and sharp regrind.

Vacuum Valve Operation

Although specifically designed to handle the flow of material, common line valves may also be used for controlling air flow, to shut off the flow of vacuum air to receivers, or operate in response to vacuum control systems for pumps.

Ratio Valve

EFFICIENTLY COMBINE TWO MATERIALS WHILE LOADING

Externally mounted ratio valves connect readily to Conair vacuum receivers and loaders equipped with ratio-capable controls.

The dual inlets alternately open and close in response to a timed control signal, providing a mix of virgin and regrind materials during each vacuum loading cycle.

At rest, the regrind side is open and the virgin inlet is closed, allowing the valve to isolate the receiver from the common material line of central systems.

AUTOMATICALLY LOAD REGRIND AS IT IS GENERATED

The Conair ratio valve may be readily used as a dual inlet to single outlet valve for a variety of material conveying applications.

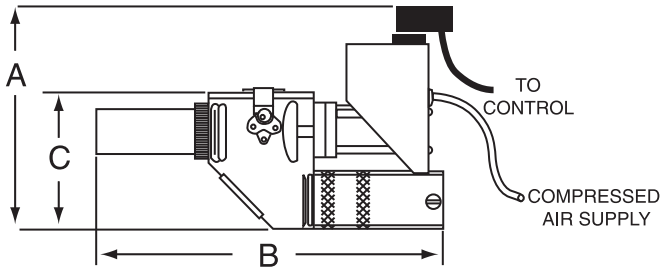
Standard model ratio valves have aluminum inlets and outlets and can be used with materials up to 225° F {107° C}.

An optional high performance version of the ratio valve is available. It is optimized for use with high temperature materials, those exceeding 225° F {107° C}, and for highly abrasive materials including glass filled resins and sharp regrind.

- **Modular design**
  Screw-in components allow common wear parts to be easily replaced and line sizes to be changed without the need of purchasing another valve.
- **Smooth aluminum body**
  A non-corrosive, smooth path for material flow.
- **Easy to clean**
  Removable with no tools, the lid provides wide open access.
- **High performance option**
  Optimized for use with high temperature and/or highly abrasive materials.

RATIO VALVE

SPECIFICATIONS



MODELS	RV-1	RV-2	RV-3	RV-4
Performance characteristics				
Line size diameter inches {mm}	1.5 - 2	2.25 - 2.5	3	4
Type of inlet/outlet connection	screw-in	screw-in	welded	welded
Body type aluminum	cast	cast	fabricated	fabricated
Dimensions inches {mm}				
A - Overall height	9.5 {241}	10.5 {267}	13.0 {330}	13.0 {330}
B - Width	12.5 {318}	12.5 {318}	13.25 {337}	13.25 {337}
C - Height to top of lid	4.75 {121}	7.0 {179}	8.0 {203}	8.0 {203}
Weight lb {kg}				
Installed	10 {5}	13 {6}	17 {8}	17 {8}
Shipping	14 {6}	17 {8}	21 {10}	21 {10}
Voltage Total amps				
120V/1 phase/60 Hz	0.25	0.25	0.25	0.25
24V/1 phase/50 or 60 Hz	1.0	1.0	1.0	1.0
Compressed air requirement				
Air consumption	0.2 ft³/min. @ 80 psi { 0.09 liters/sec @ 5.5 bars}			
Hose requirement	1/4 in. hose fitting			

APPLICATION NOTES:

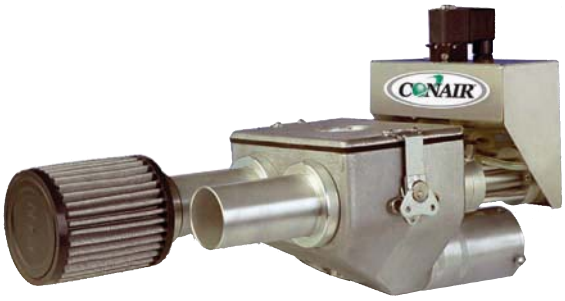
Ratio valves alternate between virgin and regrind materials based on time. No provisions are made for confirmation of material flow, conveying rate or compensation for variations in bulk density. Ratio valves are ideally suited for applications where 100% of gener ated regrind may be safely reintroduced to the process.

SPECIFICATION NOTES:

Check with a Conair representative for the most current information.

OPTIONS

- Dual solenoid - This special ratio valve option allows both material inlets tobe normally closed for dual common material line operation.
- High performance - The high performance ratio valve has stainless steel inlets and outlets, includes high temperature Viton seals in the pneumatic cylinders, specially plated and heat-treated valve body, lid and plungers for maximum wear resistance.
- Ratio valve as a material selector - A simple A/B toggle switch selects which material inlet is open, for easy selection between two material lines. (120V/1phase/60 @ 2 amps.)
- Add ratio loading capability - Any 120 volt single inlet loader may be converted to ratio operation with this control. The control uses the vacuum loading signal to create timed virgin and regrind signals.



Purge Valve

EVACUATE VACUUM CONVEYING LINES

Conair Purge Valves provide an effective means of purging conveying lines of residue material between conveying sizes and material changes.

Each valve is equipped with a single outlet and dual inlets: one for material and one for air. When activated, the valve halts material flow, and then floods the conveying line with air to evacuate material.

AUTOMATICALLY FLOODS CONVEYING LINE WITH AIR

The purge valve is programmed to remain open for a specific amount of time during the vacuum conveying cycle to allow material to flow.

While vacuum is still present, the material valve closes and the air valve opens, flooding the conveying line with air. The purging vacuum air moves any material in the line through to the destination, usually a vacuum receiver.

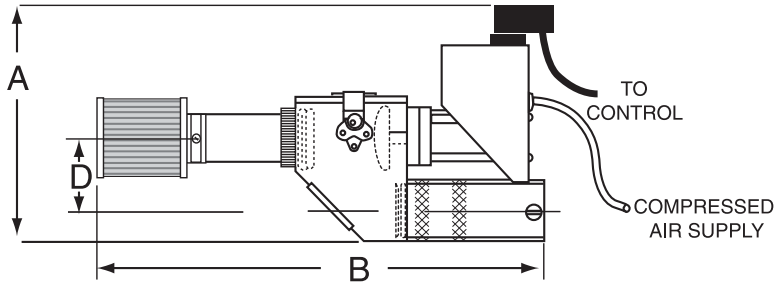
Equipped with an air inlet filter, the purge valve may be installed on most distribution box outlets to purge the line of material.

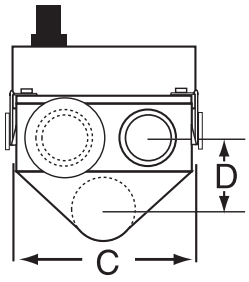
For dry air conveying systems, the air inlet filter may be easily substituted with a direct connection to the dry air source.

Most Conair controls provide the required signal to operate the valve's purging function. Both inlet and the outlet are popular OD line sizes.

- **Modular design**
  Screw-in components allow common wear parts to be easily replaced and line sizes to be changed without the need of purchasing another valve on models PV1 and PV2.
- **Smooth aluminum body**
  A non-corrosive, smooth path for material and air flow.
- **Easy to clean**
  Removable with no tools, the lid provides wide open access.
- **High performance option**
  Optimized for use with high temperature and/or highly abrasive materials.

SPECIFICATIONS





MODELS	PV-1	PV-2	PV-3	PV-4
Performance characteristics				
Line size diameter inches {mm}	1.5 - 2	2.25 - 2.5	3	4
Type of inlet/outlet connection	screw-in	screw-in	welded	welded
Body type aluminum	cast	cast	fabricated	fabricated
Dimensions inches {mm}				
A - Overall height	9.5 {241.3}	10.5 {266.7}	13.0 {330.2}	13.0 {330.2}
B - Length*	13.0 {330.2}	13.0 {330.2}	16.75 {425.4}	16.75 {425.4}
C - Width	7.5 {190.5}	8.25 {210.0}	12.0 {304.8}	12.0 {304.8}
D - Inlet/outlet offset height	2.5 {63.5}	3.0 {76.2}	4.0 {101.6}	4.0 {101.6}
Weight lb {kg}				
Installed	10 {5}	13 {6}	17 {8}	17 {8}
Shipping	14 {6}	17 {8}	21 {10}	21{10}
Voltage Total amps				
120V/1 phase/60 Hz	0.25	0.25	0.25	0.25
24V/1 phase/50 or 60 Hz	1.0	1.0	1.0	1.0
Compressed air requirement				
Air consumption	0.2 ft³/min. @ 80 psi {0.09 liters/sec @ 5.5 bars}			
Hose requirement	1/4 in. hose fitting			

SPECIFICATION NOTES:

* Length dimension may vary by up to three inches depending on the length of the filter. Filter lengths change based on line size. The length also varies slightly depending on the positioning of the clamped on filter.

Check with a Conair representative for the most current information.

OPTIONS

High Performance

The high performance line valve has a stainless steel inlet and outlet, includes a high temperature Viton seal in the pneumatic cylinder and a specially plated and heat-treated valve body, lid and plunger for maximum wear-resistance.

The high performance valve is optimized for use with high temperature materials, those exceeding 225° F {107° C}, and for highly abrasive materials including glass-filled resins and sharp regrind.

Model APV

CONTROL MATERIAL FLOW AND PURGE LINES

The Adjustable Purge Valve (APV) controls material flow from a hopper or surge bin, and is ideal for use with central drying and conveying systems.

The adjustable valve releases material into the conveying lines as needed, and then purges the material lines to prevent material cross-contamination and/or moisture regain.

The APV can be used in either dry or ambient air conveying applications.

AUTOMATICALLY PURGES CONVEYING LINE WITH AIR

The Adjustable Purge Valve will remain open for a specified amount of time (set by the user in the central loading control) during the vacuum conveying cycle to allow material to flow through the valve.

While vacuum is still present, the material valve closes and the material flow stops. The flow of air continues through the valve and material line, fully purging the valve and material line.

The valve conveniently bolts to the bottom of the material hopper discharge. Unlike alternative models, a separate distribution box is not required.

The APV can be used with Conair's B32, IL64, ILS, FLX and ELC loading controls when used to convey from a single source to a single destination. However, when conveying from multiple sources to multiple destinations, the IL64 and ILS must be used.

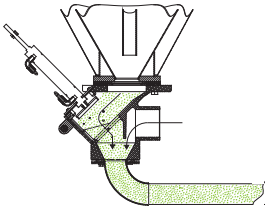
- **Design ensures complete purging**
  This valve design ensures positive material shut off and successfully evacuates all material from the valve during purging.
- **Flexible installation**
  Equipped with a 360° swiveling material outlet which allows quick placement of equipment during installation.
- **Modular components; easy maintenance**
  Bolt-on components allow common wear parts to be easily maintained without the need for removing the entire valve.
- **Smooth, aluminum body**
  A non-corrosive, aluminum body provides a smooth path for material and air to flow. All other valve components are made of stainless steel.
- **Easy and safe to clean**
  Removable with no tools, the cleanout door provides wide open access.
- **Dual-pump systems; one material source**
  Purge material conveying lines that are served by separate vacuum pumps with the Dual Outlet Adjustable Purge Valve.

ADJUSTABLE PURGE VALVE

HOW IT WORKS

Material Conveying

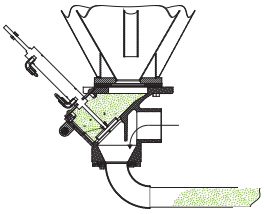
When a signal from the loading system is received, the solenoid valve on the APV will engage the dispensing valve. The dispensing valve will open to a pre-determined level and allow the hopper material to flow down to the lower portion of the APV, which is under high velocity air from the dryer's vacuum system. The high velocity air will then transport the hopper material to its destination. This is the load time.



The opening of the valve during loading cycle.

Purging

After a period of time, (the loading time is set by the user at the central loading control) the dispensing valve will close causing the material flow to stop. The loading system will continue to flow through the valve, clean the valve and completely convey the hopper material to its destination. This is referred to as purge time.



The closing of the valve during the purging cycle.

APPLICATION

Single Outlet APV

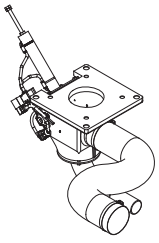
Dual Outlet APV

Both the single and dual outlet Adjustable Purge Valve (APV) convey and completely purge material lines resulting in contamination-free processing. Use the single outlet APV when only one (1) vacuum pump is used. In applications where two (2) vacuum pumps are required to convey material from a single material source, the dual outlet APV is ideal. A "Y" diverter casting in addition to two (2) APVs comprises the dual outlet assembly.

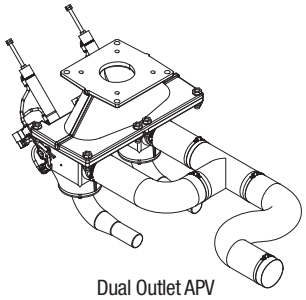
ACCESSORIES

DRY AIR CONVEYING KIT

The dry air conveying kit provides low dewpoint air to the air inlet of the APV and is recommended for applications where dried material is being conveyed and moisture regain is a concern. **(Shown here is the Dual Outlet APV with the dry air conveying kit attached.)**



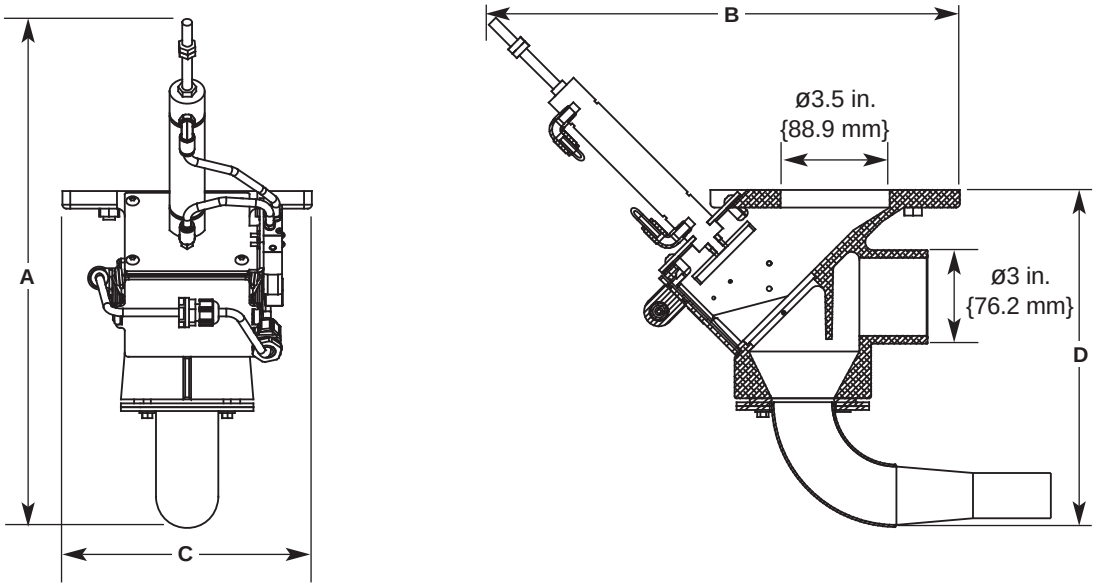
Single Outlet APV with Dry Air Kit



Dual Outlet APV with Dry Air Kit

ADJUSTABLE PURGE VALVE

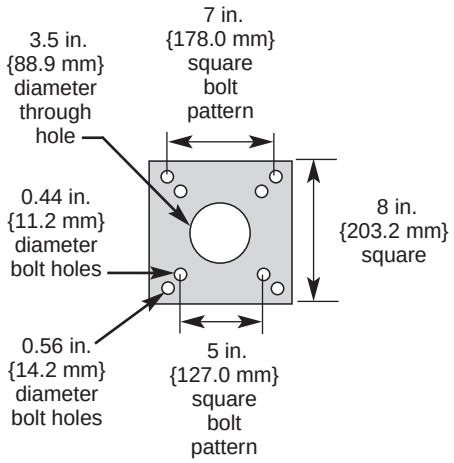
SPECIFICATIONS



MODELS	APV	
Performance characteristics* inches {mm}		
Material inlet size diameter	3.5 {88.9}	
Purge air inlet	3.0 {76.2}	
Type of inlet/outlet connection	bolt-on	
Body type aluminum	cast	
Dimensions inches {mm}		
A - Overall height†	16.3 {414.0}	
B - Depth	15.1 {383.5}	
C - Width	8.0 {203.2}	
D - Height under the hopper‡	Discharge line OD	Height under the hopper
	1.5 {38.1}	10.8 {274.3}
	1.75 {44.5}	10.8 {274.3}
	2.0 {50.8}	10.8 {274.3}
	2.25 {57.2}	10.9 { 277.6}
	2.5 {63.5}	11.8 {299.7}
	3.0 {76.2}	12.1 {306.0}
Weight lb {kg}		
Installed	12.0 {5.4}	
Shipping	22.0 {9.9}	
Electrical compatibility		
Available voltage	24 VAC, 24 VDC, 120 VAC	
Compressed air requirement		
0.1 ft³/min {3 l/min} @ minimum of 60 psi {4.1 bar} maximum of 100 psi {6.9 bar}; 1/4 NPT male fitting.		

MOUNTING INTERFACE

IB02 for 5 x 5 inch bolt pattern
IB03 for 7 x 7 inch bolt pattern



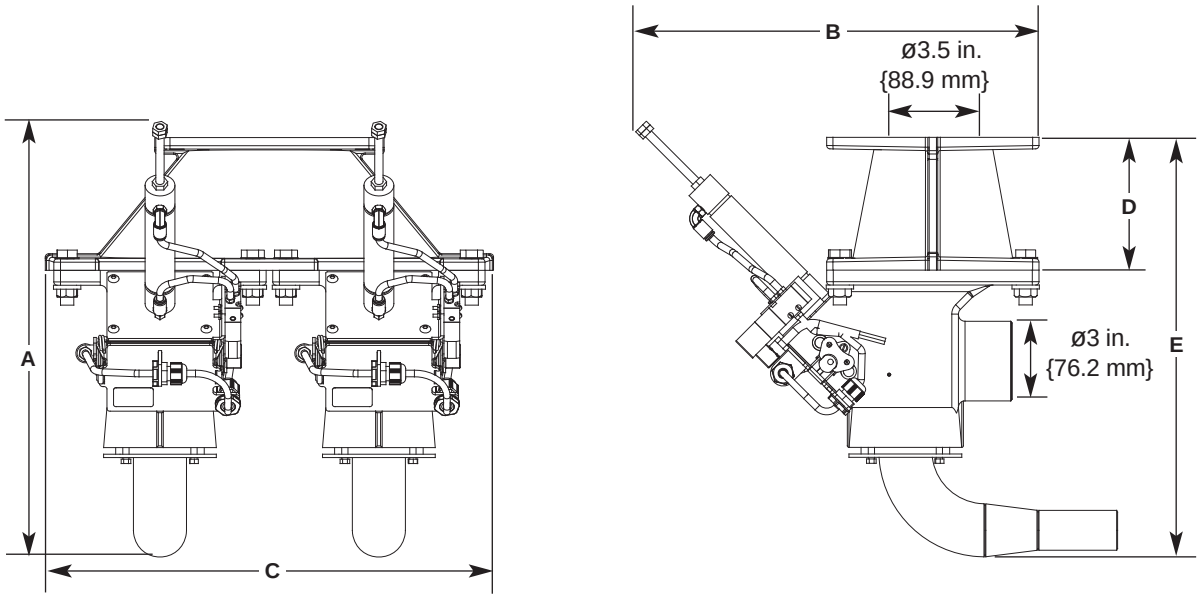
SPECIFICATION NOTES

* Throughputs will depend upon pump size, material line size and conveying distances.
† Overall height will vary slightly due to line size.
‡ The height under the hopper may vary by up to 1.5 inches {38.1 mm} depending on the material tube size. Material tube sizes change based on line size and on the amount of material being conveyed.

Specifications may change without notice. Check with a Conair representative for the most current information.

ADJUSTABLE PURGE VALVE

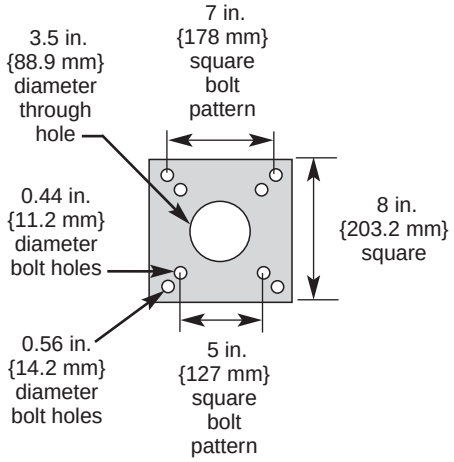
SPECIFICATIONS



MODELS	Dual Outlet APV	
Performance characteristics* inches {mm}		
Material inlet size diameter	3.5 {88.9}	
Purge air inlet	3.0 {76.2}	
Type of inlet/outlet connection	bolt-on	
Body type aluminum	cast	
Dimensions inches {mm}		
A - Overall height†	16.3 {414.0}	
B - Depth	15.1 {383.5}	
C - Width	16.9 {429.3}	
D - Adapter plate height	5.0 {127.0}	
E - Height under the hopper‡	Discharge line OD	Height under the hopper
	1.5 {38.1}	15.8 {401.3}
	1.75 {44.5}	15.8 {401.3}
	2.0 {50.8}	15.8 {401.3}
	2.25 {57.2}	15.9 {403.9}
	2.5 {63.5}	16.8 {426.7}
	3.0 {76.2}	17.1 {434.3}
Weight lb {kg}		
Installed	45.0 {20.5}	
Shipping	55.0 {24.9}	
Electrical compatibility		
Available voltage	24 VAC, 24 VDC, 120 VAC	
Compressed air requirement		
0.2 ft³/min {5.6 l/min} @ minimum of 60 psi {4.1 bar} maximum of 100 psi {6.9 bar}; two (2) 1/4 NPT male fittings.		

ADAPTER PLATE MOUNTING INTERFACE

IB02 for 5 x 5 inch bolt pattern
IB03 for 7 x 7 inch bolt pattern



SPECIFICATION NOTES

* Throughputs will depend upon pump size, material line size and conveying distances.
† Overall height will vary slightly due to line size.
‡ The height under the hopper may vary by up to 1.5 inches {38.1 mm} depending on the material tube size. Material tube sizes change based on line size and on the amount of material being conveyed.

Specifications may change without notice. Check with a Conair representative for the most current information.

1.5 cu. ft.
Handy Hopper

3.0 cu. ft.
Handy Hopper

SEE-THROUGH HOPPER WITH DISPOSABLE MATERIAL CONE

The Conair Handy Hopper is a convenient, time-saving replacement for your machine hopper.

The Handy Hopper's clear vinyl or polycarbonate cone allows you to monitor material flow right at the machine throat. The integral slide gate and see-through cone can be removed easily with no tools.

Handy Hoppers are available in two capacities: 1.5 ft^3 and 3.0 ft^3. Either model can be ordered with a rigid, interchangeable polycarbonate cone. The 1.5 ft^3 model also can be ordered with disposable vinyl hopper cones.

CONFIRM MATERIAL FLOW AT THE MACHINE THROAT

With the Handy Hopper, you can see what's going into the process at the machine throat.

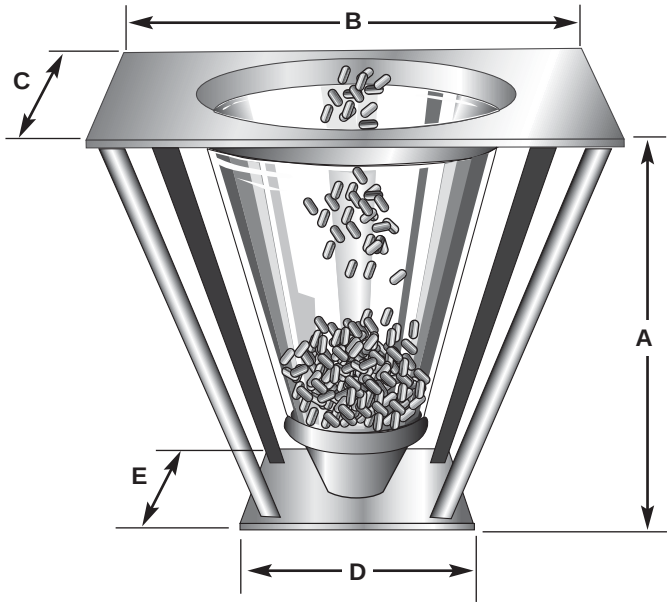
You can easily check blends or virgin/regrind mixes and quickly spot problems, such as material bridging, that can starve the processing machine of material.

Quickly change materials or fix flow problems by simply closing the hopper slide gate and removing the entire cone/gate assembly. Access is easy. No tools required.

The Handy Hopper's rugged steel frame will support the weight of a blender or loader. A number of mounting adapter interfaces are available.

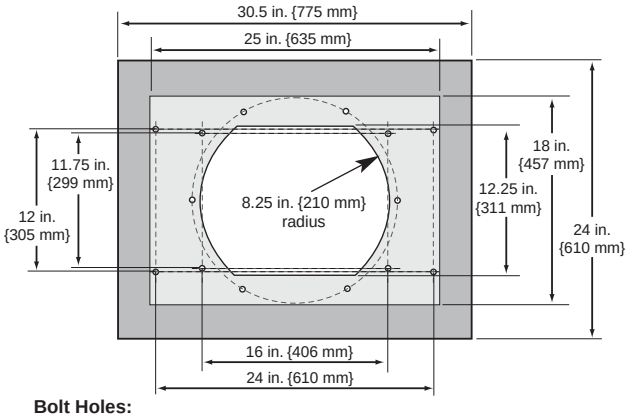
- **Inexpensive, replaceable cone**
  The 1.5 ft^3 Handy Hopper comes with 5 replaceable vinyl cones or a polycarbonate cone. The 3.0 ft^3 hopper comes with a rigid, interchangeable polycarbonate cone.
- **Supports blender or loader**
  The durable steel frame is rugged enough to support a blender or loader at the processing machine throat.
- **Fast, easy material changes**
  Save time on material changes with the Handy Hopper's no-tools design, which allows you to remove the entire viewing cone and slide gate in minutes.
- **Optional grate magnet**
  The optional grate magnet with slide gate traps metal particles in the material before they can enter the processing machine.

SPECIFICATIONS



Base Plate mounts to machine throat

TOP INTERFACE IT15



Bolt Holes:
Six 5/16 in. {8 mm} holes equally spaced on a 17.75 in. {451 mm} circle

Eight 1/4-20 NC holes in rectangular patterns

Depicts top plate of 1.5 ft³ Handy Hopper

Depicts top plate of 3 ft³ Handy Hopper

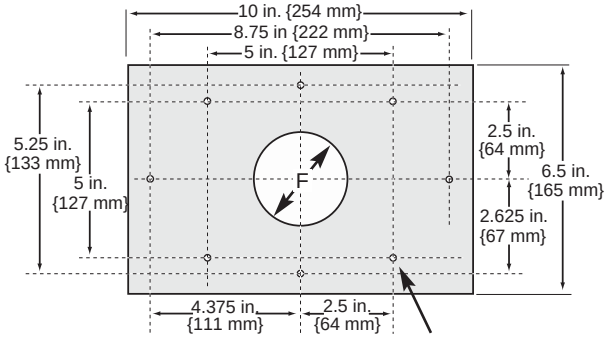
MODEL PART NUMBERS	140-032	140-123-01	140-085-01
Performance characteristics			
Capacity ft³ {liters}	1.5	1.5	3.0
Cone material	8 mil vinyl	polycarbonate	polycarbonate
Maximum temperature F° {C°}	100 {38}	270 {132}	270 {132}
Dimensions inches {mm}			
A - Overall height	22.75 {578}	22.75 {578}	22.75 {578}
B - Top plate width	25 {635}	25 {635}	30.5 {775}
C - Top plate depth	18 {457}	18 {457}	24 {610}
D - Bottom plate width	10 {254}	10 {254}	10 {254}
E - Bottom plate depth	6.5 {165}	6.5 {165}	6.5 {165}
F - Center hole diameter	2.5 {635}	2.5 {635}	3.25 {826}
Weight lb {kg}			
Shipping	40 {18.14}	40 {18.14}	85 {38.56}

SPECIFICATION NOTES:

The Handy Hopper is not recommended for powdered or granular materials.

Specifications may change without notice. Consult a Conair representative for the most current information.

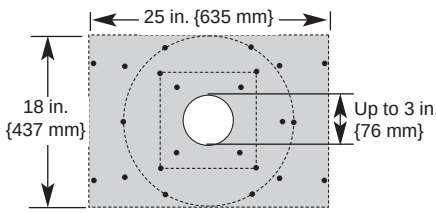
BASE PLATE



Two Bolt Hole Patterns:
5 x 5 in. *and* 5.25 x 8.75 in.
{127 x 127 mm *and* 133 x 222 mm}

Bolt Holes:
Eight 13/32 in. {10 mm} diameter with 82° countersink

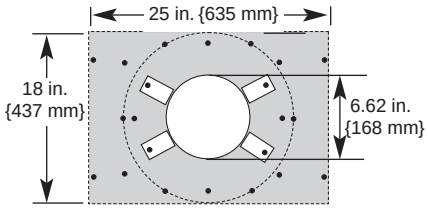
TOP INTERFACE ADAPTER KITS



IBO4 / IT15
(for TB45 and TB100)

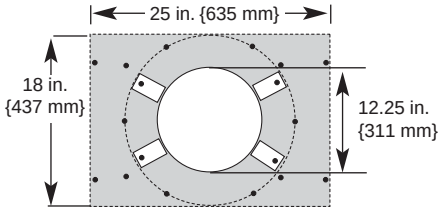
1.5 ft³ #613-241-01
3.0 ft³ #613-241-02

Two Bolt Hole Patterns:
5 x 5 in. *and* 8 x 8 in.
{127 x 127 mm *and* 203 x 203 mm}



IBO6 / IT15
(for 8 in. gravity discharge loader)

Add adapter plate #101-349-01 to plates for 12 to 20 in. loaders



IBO7/ IT15
(for 12 to 20 in. gravity discharge loader)

1.5 ft³ #102-533-01
3.0 ft³ #B3955-01

Miniature Handy Hopper

SEE-THROUGH HOPPER WITH REMOVEABLE CONE

Material changes are fast, clean and simple with this removable polycarbonate hopper on your processing machine. No tools are needed to quickly hinge the hopper lid out of the way and pull the miniature, see-through hopper cone from the compact frame. A dribble-proof slide gate automatically engages as the hopper is removed, allowing remaining material to be returned to the gaylord, bag or barrel. The mini handy hopper is also an ideal supply hopper above additive feeder throats.

CONFIRM MATERIAL FLOW AT THE MACHINE THROAT

Constructed of rugged, clear polycarbonate, the Miniature Handy Hopper provides about a 0.3 cubic feet of material that may be supplied via an automatic loader or hand-filling. The lid closes firmly on the top of the material cone and allows a wide range of loading devices to be installed, then is easily hinged out of the way for hopper access. With the lid safely and automatically locked in the open position, the clear cone may be easily removed using the dual lifting handles.

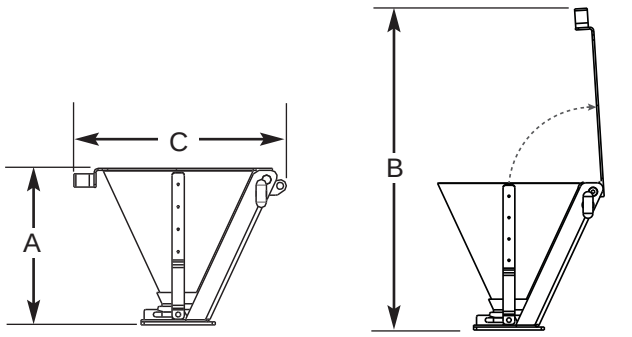
A level sensing device may be installed in the frame of the hopper to provide a low-material warning or trigger the loader for a controlled material level. A grate magnet may be supplied for the material cone, to catch tramp metal before it can reach the processing machine throat.

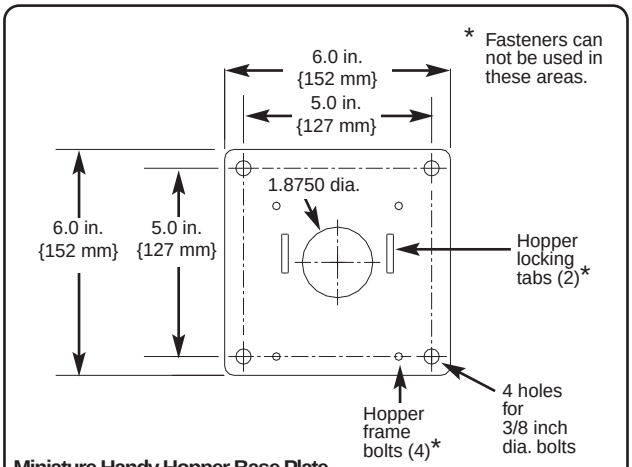
The 6 X 6 inch mounting plate accommodates a wide range of custom drilled bolt patterns to match your machine dimensions. Spare cones may be provided as replacements to further enhance quick material changes.

- **Fast, clean material changes**
  The miniature hopper cone and leftover material may be easily removed from the machine with no tools.
- **See material flow**
  The clear polycarbonate hopper allows you to confirm material flow, avoiding costly interruptions and downtime. A sensor may be provided to determine or confirm material level.
- **Hinged loader mount**
  The rugged lid accommodates an automatic loader which may be hinged and safety-locked out of the way. The lid is pre-drilled and tapped to accept Conair loader models AR2, AL2, TLM, DL8, and DB8.

MINIATURE HANDY HOPPER

SPECIFICATIONS





Miniature Handy Hopper Base Plate

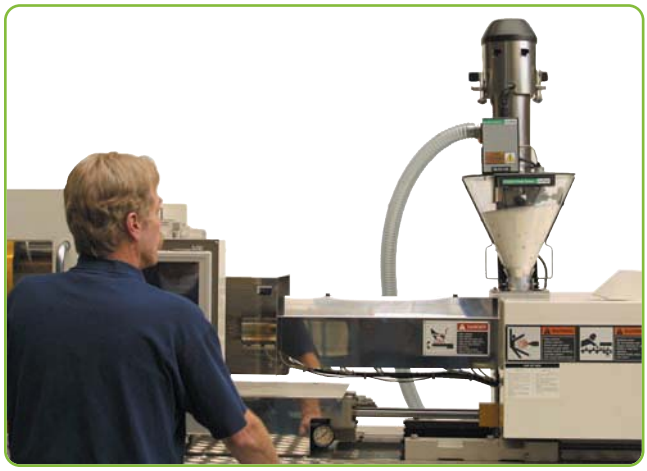
Performance characteristics	
Model part number	100 590 02
Capacity in lb {kg}@35 lb ft³	10. 5 {4.76}
Capacity in ft³ {liters}	0.30 {8.5}
Cone construction	Polycarbonate, with aluminum and stainless steel
Maximum material temperature	260° F {127° C}
Maximum loader weight lb {kg}	80 {36}
Maximum loader height inches {mm}	22 {559}
Dimensions inches {mm}	
A - Overall height (lid closed)	12.75 {323.9}
B - Overall height (lid opened)	27.3125 {693.7}
C - Width (at top plate)	14.5 {368.3}
Depth (at top plate)	17.375 {441.3}
Center hole diameter	1.75 {44.5}
Weight lb {kg}	
Installed weight	15 {7}
Shipping weight	18 {8}

SPECIFICATION NOTE:

Specifications may change without notice. Check with a Conair representative for the most current information.

OPTIONS:

Grate Magnet	Part number 294 008
Top Hole Cover	Part number 105 525 38



Compact and visual

The Miniature Handy Hopper's base plate can be easily drilled for nearly any machine throat. The hinged lid provides a sturdy mounting surface for an automatic loader or the lid may be opened for hand-filling. Operators can easily verify material flow.

Easy dump and clean

The clear, rugged, polycarbonate hopper may be easily removed with no spilling or draining, allowing the remaining material to be returned to storage.

Universal Alarm Box

SMALL, LOUD BRIGHT AND AFFORDABLE ALARM BOX

In noisy manufacturing environments, immediately see and hear where your process problem is before you lose production and quality. The Conair alarm box signals with a loud, clear buzzer and a flashing stobe light notifying you of a problem.

The many uses include alerting workers of problems with dryers, blenders, loading, material flow, and material levels. Connect directly to existing alarm signals, or use where no alarm signals presently exist.

CATCH PROCESS PROBLEMS BEFORE LOSING PRODUCTION

The universal alarm box provides an audible and visual notification of a problem. Safety is built in: the strobe light remains on, even after the buzzer is acknowledged, until the alarm signal stops.

The alarm is small enough to readily mount anywhere it is needed and can even be positioned up to 150 feet from the equipment it is monitoring.

Identification labels let you know immediately which machine is in distress, eliminating the time-consuming search for the problem.

Customize your system by choosing the alarm box only, the alarm box with rotating paddle switch, or the alarm box with proximity sensor.

- **Wide range of applications**
  Be notified of high or low levels in bins and hoppers, material flow problems, loading system problems, or blender and dryer faults.
- **Customize with an alarm kit**
  Add rotating level switches or proximity sensors and alarms to any bin, granulator or hopper with Conair's alarm kit. We offer kits that signal high or low material levels.
- **Catch hidden problems**
  With the alarm box connected to a sensor or other alarm output, know immediately when there is a problem inside a dryer, blender, bin or loader.
- **Custom labeling**
  Choose from one of the prelabeled stickers, or write your own label to quickly and easily identify the alarm.

SPECIFICATIONS

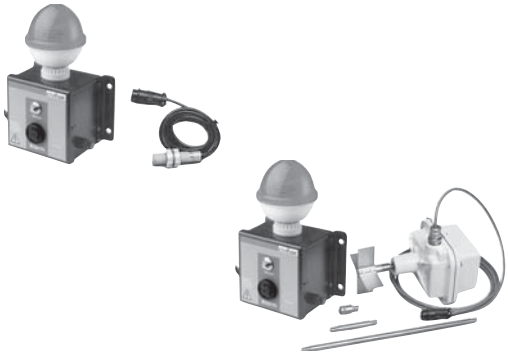
Universal Alarm Boxes

This audible/visual alarm with strobe, horn and silence button can be used with any 24VAC or 115VAC alarm output. The box is equipped with a bare wire input cable or green phoenix plug (that mates with Conair loader terminal boxes.)

MODELS	107-510-01	107-510-02	107-510-07	107-510-08	107-510-10	107-510-11
Performance characteristics						
Cable length ft {m}	15 {4.6}	15 {4.6}	15 {4.6}	15 {4.6}	15 {4.6}	15 {4.6}
Electrical requirements						
Alarm input voltage	115 VAC	24 VAC	115 VAC	24 VAC	115 VAC*/24 VDC	24 VDC
Total amps	0.5	0.5	0.5	0.5	0.5	0.5
Cable end	bare wires	bare wires	green phoenix connector		bare wires	phoenix
Dimensions inches {mm}						
Height	9 {229}					
Width	5 {127}					
Depth	4 {102}					
Shipping weight lb {kg}	10 {4.5}					

Universal Alarm Kits

Try one of our Universal Alarm Kits when you don't have an alarm output but need a material level alarm.
Kits can be configured with a small, light duty or large, heavy duty rotary level switch, or with a proximity sensor. For a high material level alarm, for example granulator bins, the alarm is wired normally open (NO). For a low material level alarm (hoppers, surge bins), the alarm is wired normally closed (NC). All kits require 115 VAC @ 2 amps. A cord set with a plug is provided.



MODELS	107-510-03-01	107-510-03-02	107-510-04-01	107-510-04-02	107-510-04-03	107-510-04-04
Performance characteristics						
Sensor type	small rotary level sensor (NO or NC)	large rotary level sensor (NO or NC)	NC proximity 18 mm	NO proximity 18 mm	NC proximity 30 mm sensor	NO proximity 30 mm sensor
Cable length ft {m}	10 {3}	10 {3}	6 {1.829}	6 {1.829}	6 {1.829}	6 {1.829}
Sensor installation	0.75 inch NPT nipple	1.25 inch NPT nipple	18 mm plastic nuts (2)	18 mm plastic nuts (2)	18 mm alum. nuts (2)	30 mm alum. nuts (2)
Electrical requirements						
Alarm input voltage	115 VAC	115 VAC	115 VAC	115 VAC	115 VAC	115 VAC
Total amps	2.0	2.0	2.0	2.0	2.0	2.0
Dimensions inches {mm}						
Height	9 {229}					
Width	5 {127}					
Depth	4 {102}					
Shipping weight lb {kg}	10 {4.5}					

SPECIFICATION NOTES:

* Model 107-510-10 includes a standard 115 VAC plug and can operate on 115VAC or 24VDC.

Specifications may change without notice, consult with a Conair representative for the most current information.

Model FD-15 Filter Drawer
on a DL-15 Receiver

SCREEN ACCESS MADE EASY

When only routine maintenance is required to monitor the condition or clean a vacuum receiver's screen filter, nothing is faster than the easy clean Filter Drawer.

This add-on module fits between the lid and body of Conair DuraLoad Receivers and provides easy screen filter access, without the need for lid removal. Tool-free twist clamps hold the drawer in place and once released, allow the drawer to slide out, exposing the screen disc, nested in the drawer cradle. Once checked, cleaned or replaced the screen may be easily slid back into position above the loader body and clamped vacuum tight.

EASY, VACUUM RECEIVER SCREEN SERVICE

- **Make screen access easier**
  The easy clean Filter Drawer is highly recommended for processors that do not require frequent material changes, but need an easy method for checking their filter screen. Also, for locations where lid clearance is marginal and / or where abrasive material conveying requires frequent screen attention.
- **Easy, add-on module**
  The filter drawer is easily installed between the receiver body and lid with its own twist clamps. It may be installed and removed quickly with no tools.
- **Low profile**
  The Filter Drawer adds only 3.5 inches {89 mm} to the installed height of the receiver and is offered for popular Conair DuraLoad diameters.

SPECIFICATIONS

MODELS	FD-12	FD-15	FD-20	FD-25
Dimensions inches {mm}				
Nominal diameter	12 {304}	15 {381}	20 {508}	25 {635}
DuraLoad models	DL-12	DL-15	DL-20	DL-25

SPECIFICATION NOTES

All standard models are constructed of powder coated carbon steel and are suitable for materials up to 250°F {121°C}.

Specifications may change without notice. Check with a Conair representative for the most current information.

OPTIONS

- High temperature models (-HT) for materials up to 350°F {171°C}.
- Stainless steel construction (-SS).

Model MG2 shown with optional slide gate

ASSURE **METAL FREE** PROCESSING

There is no substitute for the elimination of tramp metal from your process stream. Damaged screws, molds or dies, plugged gates and clogged filter packs stop productivity and often lead to costly process equipment downtime and expensive repairs. A drawer magnet provides the single best investment your process can make in protection against metal contamination and the damage it can cause. Drawer magnets provide a filter of magnetic power to draw ferrous metals out of the material stream, collect them and allow them to be safely removed from the process stream.

The Conair MG series of drawer magnets are capable of separating ferrous metals too small to be visible, for the utmost in protection.

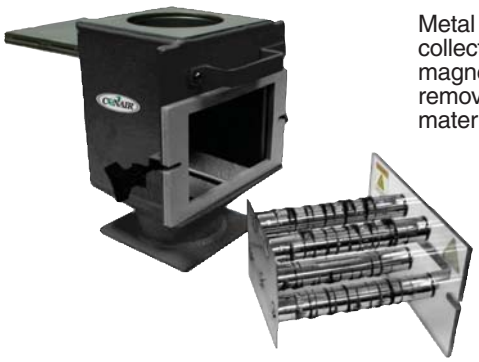
RELIABLE TRAMP METAL FILTRATION

Drawer magnets provide a safeguard against the entry of ferrous metal into the process. Staggered rows of powerful, neodymium rare earth cartridge magnets provide a smooth, yet asymmetrical path for resin flow, assuring that material passes in close proximity to one of the powerful magnets. The magnets attract and then hold the tramp metal securely until it is removed from the magnet surface by the operator.

The robust magnet housing is constructed of 11 gauge {3.18 mm} welded stainless steel to safely support material handling equipment above it. The flat, top surface may be custom drilled to suit. A bottom flange is provided for match drilling to the processing machine throat. Options include low-profile models, to minimize stack-up height and material shut off gates to allow cleaning without draining material.

The magnetic cartridges are mounted in a rugged, removable, clear face plate for easy access and cleaning. Options include self-cleaning models equipped with stainless steel sleeves around the magnet, allowing the magnet cartridge to be withdrawn from the sleeve, and collected metal to easily fall away.

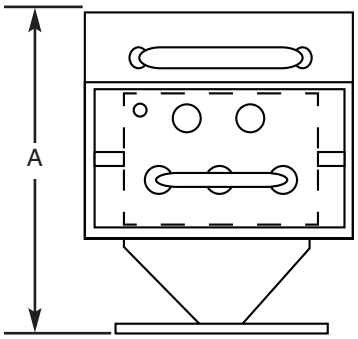
- **Superior contaminant capture**
  Neodymium, rare earth, temperature compensated magnets never lose their power; even when installed over hot, processing machine throats.
- **Stack-up strength**
  Up to 10,000 pounds {4536 kg} of symmetrical load may be safely installed above the rugged stainless steel housing.
- **Easy cleaning**
  Large, high-torque hand knobs on swing bolts release the clear face plate of the magnet drawer for easy cleaning.



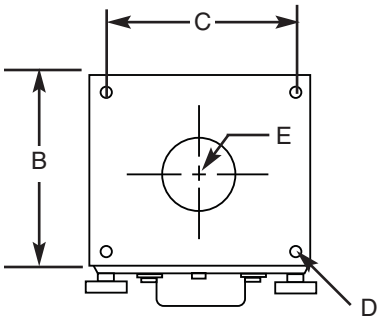
Metal particles and fines are collected on the powerful magnetic cartridges for safe removal from the process material stream.

SPECIFICATIONS

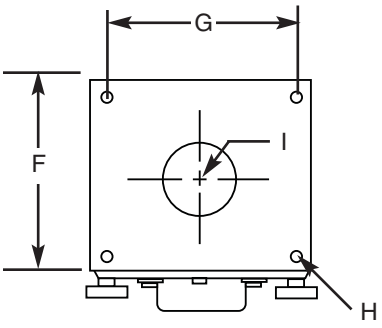
Front view



Top view



Bottom view



MODELS	MG1	MG2	MG3	MG4
Dimensions inches {mm}				
A - Standard housing height	10.5 {267}	10.625 {270}	5.0 {127.0}	6.0 {152.4}
Standard housing with slide gate height*	10.5 {267}	10.625 {270}	10.875 {276}	12.875 {327}
Low Profile housing height	N/A	5.682 {144}	10.875 {276}	12.875 {327}
Low Profile housing with slide gate height*	N/A	7.25 {184}	5.312 {135}	6.187 {157}
B - Top mounting plate size (sq.)	4 {102}	6 {152}	8 {203}	10 {254}
C - Top mounting plate bolt pattern (sq.)	3 {76}	5 {127}	7 {178}	8 {203}
D - Top mounting bolt thread size	3/8-16	3/8-16	1/2-13	1/2-13
E - Top material hole diameter	2 {51}	3 {76}	4 {102}	6 {152}
F - Bottom mounting plate size (sq.)	4 {102}	6 {152}	8 {203}	10 {254}
G - Bottom mounting plate bolt pattern (sq.)	3 {76}	5 {127}	7 {178}	8 {203}
H - Bottom mounting bolt hole size	7/16 {11}	7/16 {11}	9/16 {14}	9/16 {14}
I - Bottom material hole diameter	1.875 {48}	2.875 {73}	4.875 {124}	5.875 {149}

SPECIFICATION NOTES:

* Slide gate is optional.

Top mounting bolt holes are threaded. Bottom mounting plate is provided with clearance holes for bolts.

Stainless steel housing is equipped with cast steel top and bottom mounting flanges.

Specifications may change without notice. Consult with a Conair representative for the most current information.

OPTIONS

To match your processing needs, Conair offers many options to streamline control of your process flow.

- Self-cleaning magnets
- Material shut-off gate above magnet drawer
- Vacuum tight magnet drawer for direct feed loaders
- High temperature gaskets
- Purge spout
- Drain port
- Liquid colorant dispensing port

ADVANCED METAL DETECTION SOLUTIONS

Conair can provide a wide range of integrated metal detection solutions for both ferrous and non-ferrous metals. Systems can include fully integrated loading and storage plus reject elimination. Contact a Conair representative for more information.

- Pneumatic conveying line magnets
- High volume (silo mounted) magnets
- Grate magnets
- Conveyor magnets
- Machine mounted all metal separators

Drying

CAROUSEL PLUS DRYERS

MDCW Models 15, 25, 50, 75 and 100 ..... D-1
W Models 15, 25, 50, 75 and 100 ..... D-5
MDCW Models 150 and 200 ..... D-9
W Models 150, 200, 300 and 400 ..... D-13
W Models 600 – 5000 ..... D-17

ENERGYSMART DRYING SYSTEM

EnergySmart with TouchView W Models 600-5000 ..... D-21

DRYING MONITOR

DM-II Model. D-25

HOPPER TEMPERATURE CONTROLLERS

HTC Models 30H-270H. D-27

GAS PROCESS AIR HEATER

GasTrac CGT Models 150, 250, 350 500 and 700 ..... D-29

HOT AIR DRYERS

HAD Models 600-5000 ..... D-31

DRYING HOPPERS

CH Series Insulated Hopper D-33

CENTRAL DRYING SYSTEM

ResinWorks® D-37

COMPRESS AIR DRYER

SlimLine D-41

CRYSTALLIZER

CR Series Crystallizers. D-45

Drying Quick Reference

MODELS

Mobile Drying & Conveying	Temperature Range °F	Dew Point	60 Hz	Nominal Throughput Range lb/hr	50 Hz
MDCW15	150 to 375	-40°F	13 - 25		11 - 23
MDCW25	150 to 375	-40°F	22 - 45		18 - 37
MDCW50	150 to 375	-40°F	65 - 90		42 - 75
MDCW75	150 to 375	-40°F	67 - 135		56 - 116
MDCW100	150 to 375	-40°F	90 - 185		75 - 154
MDCW 150	150 to 375	-40°F	135 - 250		112 - 208
MDCW 200	150 to 375	-40°F	185 - 335		152 - 278

Electric Dehumidifying Dryers					
W15	150 to 375	-40° F	13 - 28		11 - 23
W25	150 to 375	-40° F	22 - 45		18 - 37
W50	150 to 375	-40° F	50 - 90		37 - 75
W75	150 to 375	-40° F	67 - 140		56 - 116
W100	150 to 375	-40° F	90 - 185		75 - 154
W150	150 to 375	-40° F	135 - 250		112 - 208
W200	150 to 375	-40° F	185 - 335		154 - 278
W300	150 to 375	-40° F	250 - 450		208 - 374
W400	150 to 375	-40° F	345 - 620		286 - 515
W600	150 to 375	-40° F	350 - 725		290 - 600
W800	150 to 375	-40° F	475 - 1000		395 - 830
W1000	150 to 375	-40° F	600 - 1200		500 - 1000
W1600	150 to 375	-40° F	975 - 2000		800 - 1660
W2400	150 to 375	-40° F	1500 - 3000		1245 - 2490
W3200	150 to 375	-40° F	2000 - 4000		1660 - 3230
W5000	150 to 375	-40° F	3000 - 6250		2490 - 5180

Compressed Air Dryers			
SL 2.5	100 to 350	0 to -40° F*	0.4 to 2.5
SL 5	100 to 350	0 to -40° F*	0.8 to 3.3
SL 15	100 to 350	0 to -40° F*	5.0 to 1.5
SL 25	100 to 350	0 to -40° F*	8.3 to 16.6
SL 50	100 to 350	0 to -40° F*	16.0 to 50.0

*with optional membrane

Hot Air Dryer (HAD)			
HAD600	150 to 250	Ambient	up to 600
HAD800	150 to 250	Ambient	up to 800
HAD1000	150 to 250	Ambient	up to 1000
HAD1600	150 to 250	Ambient	up to 1600
HAD2400	150 to 250	Ambient	up to 2400
HAD3200	150 to 250	Ambient	up to 3200
HAD5000	150 to 250	Ambient	up to 5000

Hopper Temperature Controller (HTC)	W600	W800	W1000	W1600	W2400	W3200	W5000
HTC-30							
HTC-60							
HTC-90							
HTC-120							
HTC-180							
HTC-270							

The Hopper Temperature Controller supplies the process heat to the hopper. This table shows the HTC's matched with an appropriately sized Central Dryer.

GasTrac Process Air Heater							
CGT 150							
CGT 250							
CGT 350							
CGT 500							
CGT 700							

The GasTrac converts electric dryers to gas fuels. This table shows GasTrac's matched with an appropriately sized Central Dryer.

Drying Hoppers	Capacity Range, lb @ 35 lb/ft³																
	100	200	300	400	500	600	700	800	900	1000	2000	3000	5000	7000	9500	12000	17000
CH10 through CH24 models (max 630)																	
CH33 through CH44 models (735-2030)																	
CH54 through CH74 models (2450-17045)																	
CH100																(15,750 through 31,500)	

Model MDCW-25

THE NEXT GENERATION IN MOBILE CART DRYERS

Mobile Drying and Conveying systems eliminate the need for machine-mounted hoppers by placing all components on a safe, convenient cart.

Set-up, batch drying, clean-out and maintenance can all take place without tying up valuable process machine time, or climbing on the machine.

The MDCW system integrates an efficient Carousel Plus Dryer with a conveying blower, dust collector and direct-feed vacuum receiver to convey with dry air to the throat of a processing machine. The new self-loading option adds an integral hopper loader which allows the MDC to load itself. If you don't need dry-air conveying, order a non-dry air conveying MDCW with a dryer and hopper, and add a self-contained vacuum loader.

PROVEN PERFORMANCE FOR LOW THROUGHPUTS

These Carousel Plus MDCW models are small enough to be used beside the machine.

MDCW units feature true closed-loop drying and conveying technology to eliminate moisture that can cause defects in parts. You can dry at temperatures up to 375°F {191°C} and at throughput rates of 10 to more than 100 pounds per hour.

The Carousel Plus Dryers use molecular sieve desiccant that is bonded into a fiberglass substrate and formed into a continuously rotating wheel. The result is rock steady drying temperatures and dew point levels, critical for processing moisture and temperature sensitive material.

The thermo-formed, impact resistant ABS cover adds to the good looks and space-saving design of the Carousel Plus Dryers.

Closed-loop drying/conveying

Each unit provides drying temperatures up to 375°F {191°C}, automatic desiccant regeneration and dewpoints of -40°F {-40°C}.

No-downtime material changes

With a spare MDCW system, material changes are fast. Roll one unit to the processing machine, while another heats and pre-dries material for the next run.

Maximum uptime, maximum reliability

With significantly reduced part count, easy access and less wear, you can expect many years of trouble-free operation. The weight of the desiccant assembly has been reduced by 70%, the part count reduced by 90%, there are no more indexing bed plates, no more cumbersome 4-way valves and no more messy desiccant beads. Shift-after-shift this dryer will deliver the performance you need to stay up and running.

Precise, adjustable dewpoint control

An industry first! The new dewpoint control option built into the microprocessor control system allows you to select a particular dewpoint value, which the control locks onto. The control then adjusts various dryer functions to precisely hold the dewpoint selected, virtually eliminating any chance of overdrying expensive material.

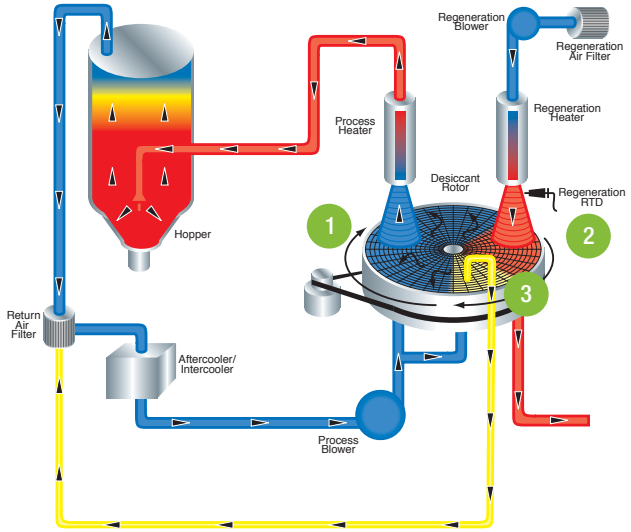
HOW IT WORKS

The core of the Carousel Plus Dryer is the Munters® unique fluted desiccant rotor, which contains molecular sieve desiccant. The molecular sieve has been grown into the rotor's porous fiberglass substrate, preventing the possibility of desiccant break down and dusting over time.

The desiccant rotor revolves slowly at the rate of 12 revolutions per hour passing through three cycles with each revolution.

THE BENEFITS

- The high airflow across the surface area of the rotor produces a resin-drying low dewpoint within five minutes of start-up and offers multi-year media life with virtually no maintenance.
- The continuously revolving rotor provides rock steady temperature and dewpoint control.
- The rotor technology minimizes energy consumption by reducing the structural mass, less structural mass to heat means less energy wasted.



1. First, the dry air is dehumidified in the adsorption cycle, capturing and removing moisture from the drying air stream.
2. Next, the desiccant passes into the high temperature regeneration cycle where the adsorbed moisture is heated and purged out of the desiccant to the atmosphere.
3. The desiccant is then advanced to the post-regeneration cooling cycle and cooled with closed loop dry air. All Carousel Plus Dryers feature this unique closed loop cooling technology to eliminate moisture that can cause defects in parts.

FEATURE DESCRIPTIONS

- **Audible and visual alarm** - A combination of a blinking red alarm light and a horn alert the operator to any shut down alarm.
- **Temperature setback** - Automatically reduces the drying temperature to a lower standby mode when the machine throughput is reduced or stopped. Processors using resins prone to degradation due to over-drying could greatly benefit from the temperature setback feature.
- **Dewpoint monitor** - Allows the operator to monitor the performance of the dryer by providing a digital dewpoint readout of the drying air.
- **Dewpoint control** - Allows the dryer to lock onto and track an operator-selected dewpoint level. This feature helps prevent overdrying of moisture sensitive materials such as Nylon. Location and season changes can drastically change the atmospheric dewpoint of the air used for drying. Dewpoint control is used to increase or decrease the regeneration temperature from 350°F {177°C} as needed depending on atmospheric conditions. This type of control saves energy costs and increases end-product quality. The Carousel Plus is the first dryer in the plastics industry to provide precise dewpoint control.
- **Communications** - Allows the dryer to be networked to industrial control systems. When a dryer is connected to a network the controller on the network may read actual temperatures, change setpoints, read dryer status, and process and display this information at a central location. DeviceNet, SPI, Modbus and Ethernet communications are available.

MDCW MODELS 15, 25, 50, 75 AND 100

WHICH PACKAGE IS RIGHT FOR YOU?

	MDCW Dry Air Conveying				MDCW Non-Dry Air Conveying ‡	
STANDARD PACKAGES*	MX	MY	MZ	HY†	MA	MC
DC-1 control	●	●	●		●	●
DC-2 control				●		
Audible and visual alarms		●	●	●		●
Temperature setback			●	●		●
Dewpoint monitor		●	●	●		●
Dewpoint control		●	●	●		●
Communications				●		
Self-loading hopper				●		

FEATURE NOTES:

* Other options are available upon request. Please check with a Conair sales representative.

‡ Excludes all conveying features.

†Drying Monitor, DM-II option to HY Packages

Saves you time and money, and from the aggravation of dealing with improperly dried material.

The DM-II automatically monitors the temperature profile inside your drying hopper within a pre-set temperature band to protect you from overdrying or under drying your material. A warning alarm shown on the control display and light tower alerts you to improper drying conditions. This advanced notice provides time to diagnose and correct otherwise undetected problems that can lead to defects in products manufactured from hygroscopic material.

This valuable option can help you uncover common drying problems that may exist, including: a failed or out-of-place process RTD; improperly sized hoppers or dryers; drying or loading equipment failures; reduced airflow caused by dirty filters; kinked hoses and other obstructions, throughput change, loss of power or overheated material.

The DM-II does not alert you to the specific drying problem, however, the DC2 control will identify most dryer related faults. **Available on models MDCW50 and above.**

Choose the control you need...DC-1 or DC-2

DC-1 CONTROL FEATURES

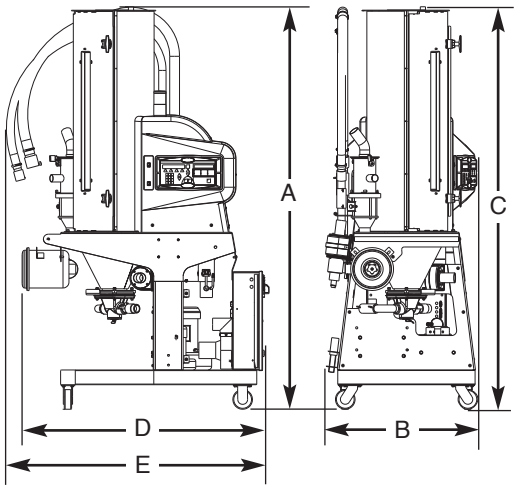
- Six character, seven segment LED display for high visibility of setpoint and actual operating parameters
- Full access to setup parameters and alarms through error codes
- Autostart count down timer
- Operator password protection
- English/Metric units
- Solid-state heater contactors with isolation protection
- Return air temperature display

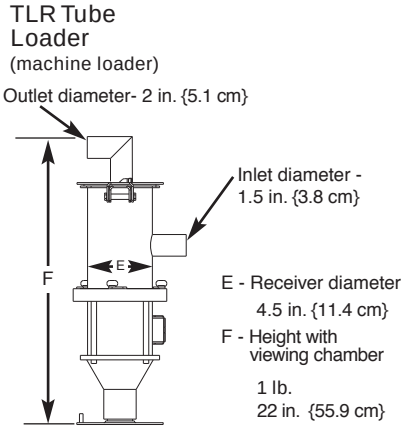
DC-2 CONTROL FEATURES

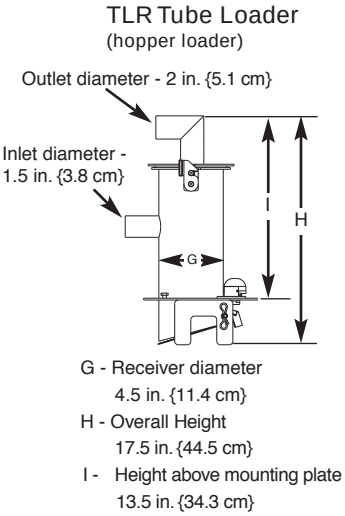
- LCD (2 X 20 character) alpha-numeric display with access to set-up parameters, full diagnostics, alarm/event log and numerous options
- Eight character, fourteen segment LED display for high visibility of selected parameter status
- Keypad for easy operator access
- Real time clock
- Temperature setback
- Operator password protection
- Date format selection
- English/Metric units
- Return air temperature display
- Solid-state heater contactors with isolation protection

MDCW MODELS 15, 25, 50, 75 AND 100

SPECIFICATIONS

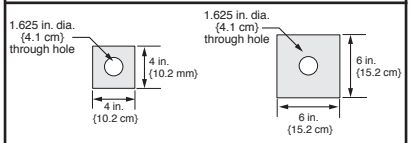






MODELS	MDCW15	MDCW25	MDCW50	MDCW75	MDCW100
Standard hopper models	RWH14-2	RWH14-3	RWH18-6	RWH24-9	RWH24-12
Optional hopper models	NA	RWH14-4	NA	RWH24-12	RWH24-18
Performance characteristics (with full hopper)					
Drying temperature	All models 150 - 375°F {66 - 191°C} with options				
Dewpoint	All models -40°F {-40°C}				
Standard conveying distance	8 ft {2.44 m} vertical; 6 ft {1.83 m} horizontal				
Long distance conveying option	15 ft {4.57 m} vertical; 50 ft {15.24 m} horizontal				
Dimensions inches {cm}					
A - Height top of conveying pipe	81.9 {208.0}	81.9 {208.0}	90.3 {229.4}	90.3 {229.4}	90.3 {229.4}
B - Overall width	30.8 {78.2}	30.8 {78.2}	43.2 {109.7}	43.2 {109.7}	43.2 {109.7}
C - Height to top of hopper (standard)	60.9 {154.7}	74.2 {188.5}	91.1 {231.4}	85.5 {217.2}	93.5 {237.5}
C - Height to top of hopper (optional)	NA	81.9 {208.0}	NA	93.5 {237.5}	117.4 {298.2}
D - Depth	45.9 {116.6}	45.9 {116.6}	59.0 {149.9}	59.0 {149.9}	59.0 {149.9}
E - Overall depth	53.5 {139.9}	53.5 {139.9}	60.8 {154.4}	60.8 {154.4}	60.8 {154.4}
Outlet/inlet tube size OD inches {cm}	2.5 {6.35}				
Approximate weight lbs {kg}					
Standard dryer installed	500 {227}	550 {250}	600 {272}	675 {306}	750 {340}
Voltage - Total amps {Standard/long conveying distance}					
208 V/3 phase/60 Hz	16.9/20.9	16.9/20.9	21.9/25.9	22.8/26.8	NA
230 V/3 phase/60 Hz	15.3/18.9	15.3/18.9	19.8/23.4	20.6/24.2	24.9/30.5
400 V/3 phase/50 Hz*	8.5/9.6	8.5/9.6	11/12.1	11.5/12.6	15.1/16.2
460 V/3 phase/60 Hz	7.7/9.5	7.7/9.5	9.9/11.7	10.3/12.1	13.4/15.2
575 V/3 phase/60 Hz	6.0/7.8	6.0/7.8	7.8/9.4	8.2/9.8	10.7/12.5
Total kilowatts† kw {std./long}	4.1/5.0	4.1/5.0	5.3/6.2	6.1/7.0	6.4/7.3
Water requirements {for aftercooler or optional precooler}‡					
Recommended temperature§	45° - 85°F {7.2° - 29.4°C}				
Water flow gal./min. {liters/min.}	1 {4.6}		2 {9.1}		
Water connections NPT	3/4 inch NPT				

LOADER BASE PLATES



APPLICATION NOTES:

All dryers are supplied with an aftercooler as standard. The aftercooler reduces the temperature of the return air from the drying hopper, improving the efficiency of the desiccant. The aftercooler must be connected with the proper water flow rate and temperature to attain the rated throughput.

When to use additional filtration

The standard return air cartridge filter is sized for the airflow of each dryer model and is suited for most applications. You should consider adding an optional dust collector and/or volatile trap if:

- The material contains excessive fines. An additional dust collector or cyclone will extend time between filter cleaning.
- The material produces volatiles during drying which condense into a waxy or oily residue. A volatile trap will help to protect the desiccant.

SPECIFICATION NOTES:

* Dryers running at 50 Hz will have 17% less airflow, and a 17% reduction in material throughput.

† Total kW listed at a process setpoint of 250°F and a regeneration temperature of 350°F.

‡ When drying below 150°F {66°C} a precooler is required.

§ Temperatures above or below the recommended levels may affect dryer performance. Tower, chiller, or municipal water sources can be used.

Specifications may change without notice. Consult a Conair representative for the most current information.

Model W25

THE NEXT GENERATION IN POLYMER DRYERS

Conair's Carousel Dryers just got better. Dubbed the Carousel Plus - everything about this dryer is improved to help you stay profitable in a dramatically more competitive world market. The product improvements are an extension of the legacy of the original, workhorse Carousel desiccant dryers.

Purchase this dryer and you will find that you have more control over drying dewpoint and temperature than ever before, in a package that is simpler, smaller, lighter, more energy efficient, easier to use and maintain than any other dryer on the market today.

FLOOR UNIT ON STURDY STEEL CASTERS

These small-sized dryers are small enough to be used beside the machine, yet powerful enough for central drying (models 50-100).

The Carousel Plus Dryers use molecular sieve desiccant that is bonded into a fiberglass substrate and formed into a continuously rotating wheel. The result is rock steady drying temperatures and dewpoint levels, critical for processing moisture and temperature sensitive material.

These units are capable of delivering nominal throughput rates ranging from 10 to more than 100 lb/hour.

The thermo-formed, impact resistant ABS cover adds to the good looks and space-saving design of the Carousel Plus Dryers. Models 15-200 are also available in Mobile Drying and Conveying (MDCW) configurations.

- **Reduced energy costs**
  The desiccant wheel assembly heats and cools more easily than previous drying technology saving you up to 35% on your energy bill. Fewer parts, lighter structural mass, less to heat, therefore less wasted energy.
- **Maximum uptime, maximum reliability**
  With significantly reduced part count, easy access and less wear you can expect many years of trouble-free operation. The weight of the desiccant assembly has been reduced by 70%, the part count reduced by 90%, there are no more indexing bed plates, no more cumbersome 4-way valves and no more messy desiccant beads. Shift-after-shift this dryer will deliver the performance you need to stay up and running.
- **Precise, adjustable dewpoint control**
  An industry first! The dewpoint control option built into the microprocessor control system allows you to select a particular dewpoint value, which the control locks onto. The control then adjusts various dryer functions to precisely hold the dewpoint selected, virtually eliminating any chance of overdrying expensive material.

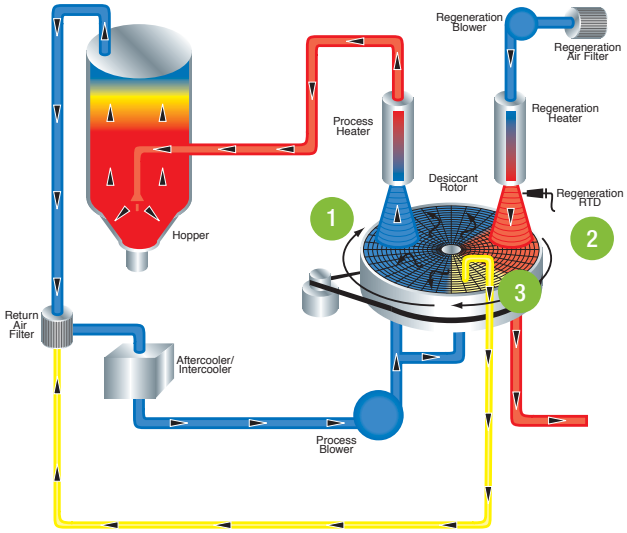
HOW IT WORKS

The core of the Carousel Plus Dryer is the Munters® unique fluted desiccant rotor, which contains molecular sieve desiccant. The molecular sieve has been grown into the rotor's porous fiberglass substrate, preventing the possibility of desiccant break down and dusting over time.

The desiccant rotor revolves slowly at the rate of 12 revolutions per hour passing through three cycles with each revolution.

The benefits

- The high airflow across the surface area of the rotor produces a resin-drying low dewpoint within five minutes of start-up and offers multi-year media life with virtually no maintenance.
- The continuously revolving rotor provides rock steady temperature and dewpoint control.
- The rotor technology minimizes energy consumption by reducing the structural mass, less structural mass to heat means less energy wasted.



1. First, the dry air is dehumidified in the adsorption cycle, capturing and removing moisture from the drying air stream.
2. Next, the desiccant passes into the high temperature regeneration cycle where the adsorbed moisture is heated and purged out of the desiccant to the atmosphere.
3. The desiccant is then advanced to the post-regeneration cooling cycle and cooled with closed loop dry air. All Carousel Plus Dryers feature this unique closed loop cooling technology to eliminate moisture that can cause defects in parts.

FEATURE DESCRIPTIONS

- **Audible and visual alarm** - A combination of a blinking red alarm light and a horn alert the operator to any shut down alarm.
- **Temperature setback** - Automatically reduces the drying temperature to a lower standby mode when the machine throughput is reduced or stopped. Processors using resins prone to degradation due to over-drying could greatly benefit from the temperature setback feature.
- **Dewpoint monitor** - Allows the operator to monitor the performance of the dryer by providing a digital dewpoint readout of the drying air.
- **Dewpoint control** - Allows the dryer to lock onto and track an operator-selected dewpoint level. This feature helps prevent overdrying of moisture sensitive materials such as Nylon. Location and season changes can drastically change the atmospheric dewpoint of the air used for drying. Dewpoint control is used to increase or decrease the regeneration temperature from 350°F {177°C} as needed depending on atmospheric conditions. This type of control saves energy costs and increases end-product quality. The Carousel Plus is the first dryer in the plastics industry to provide precise dewpoint control.
- **Communications** - Allows the dryer to be networked to industrial control systems. When a dryer is connected to a network the controller on the network may read actual temperatures, change setpoints, read dryer status, and process and display this information at a central location. DeviceNet, SPI, Modbus and Ethernet communications are available.

WHICH PACKAGE IS RIGHT FOR YOU?

STANDARD PACKAGES*	MX	MY	MZ	HY†
DC-1 control	●	●	●	
DC-2 control				●
Audible and visual alarms		●	●	●
Temperature setback			●	●
Dewpoint monitor		●	●	●
Dewpoint control		●	●	●
Communications				●

*Other options are available upon request. Please check with a Conair sales representative.

†Drying Monitor, DM-II option to HY Packages -

Saves you time and money, and from the aggravation of dealing with improperly dried material.

The DM-II automatically monitors the temperature profile inside your drying hopper within a pre-set temperature band to protect you from overdrying or under drying your material. A warning alarm shown on the control display and light tower alerts you to improper drying conditions. This advanced notice provides time to diagnose and correct otherwise undetected problems that can lead to defects in products manufactured from hygroscopic material.

This valuable option can help you uncover common drying problems that may exist, including: a failed or out-of-place process RTD; improperly sized hoppers or dryers; drying or loading equipment failures; reduced airflow caused by dirty filters; kinked hoses and other obstructions, throughput change, loss of power or overheated material.

The DM-II does not alert you to the specific drying problem, however, the DC2 control will identify most dryer related faults.

Choose the control you need...DC-1 or DC-2

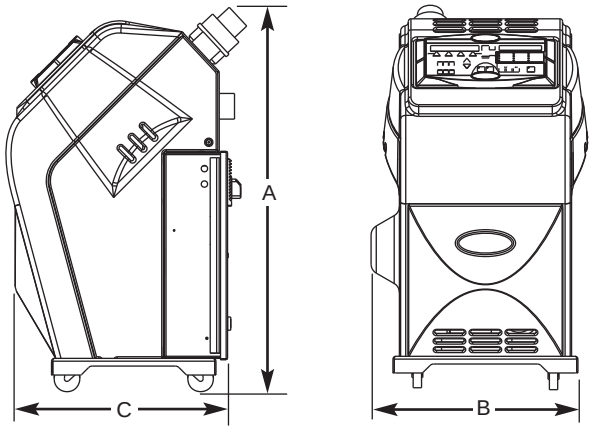
DC-1 CONTROL FEATURES

- Six character, seven segment LED display for high visibility of setpoint and actual operating parameters
- Full access to setup parameters and alarms through error codes
- Autostart count down timer
- Operator password protection
- English/Metric units
- Solid-state heater contactors with isolation protection
- Return air temperature display

DC-2 CONTROL FEATURES

- LCD (2 X 20 character) alpha-numeric display with access to set-up parameters, full diagnostics, alarm/event log and numerous options
- Eight character, fourteen segment LED display for high visibility of selected parameter status
- Keypad for easy operator access
- Real time clock
- Temperature setback
- Operator password protection
- Date format selection
- English/Metric units
- Return air temperature display
- Solid-state heater contactors with isolation protection

SPECIFICATIONS



MODEL	W15	W25	W50	W75	W100
Performance characteristics (with full hopper)					
Drying temperature	All models 150° - 375°F {66° - 191°C} with options				
Dewpoint	All models -40°F {-40°C}				
Dimensions inches {cm}					
A - Height	36.0 {91.5}		43.5 {110.5}		
B - Overall width	18.0 {45.7}		29.0 {73.7}		
C - Depth	21.0 {53.3}		28.5 {72.4}		
Outlet/inlet tube size OD	2.5 {63.5}				
Approximate weight lbs {kg}					
Standard dryer installed	180 {82}	180 {82}	220 {91}	220 {91}	220 {91}
Voltage - Total amps					
208 V/3 phase/60 Hz	14.7	14.7	19.7	20.6	NA
230 V/3 phase/60 Hz	13.3	13.3	17.8	18.6	24.9
400 V/3 phase/50 Hz*	7.7	7.7	10.2	10.7	14.3
460 V/3 phase/60 Hz	6.7	6.7	8.9	9.3	12.4
575 V/3 phase/60 Hz	5.3	5.3	7.1	7.5	10.0
Total kilowatts† kW {BTU/min}	2.1 {120}	2.1 {120}	3.3 {188}	4.1 {233}	4.4 {250}
Water requirements {for aftercooler or optional precooler}‡					
Recommended temperature§	45° - 85°F (7.2° - 29.4°C)				
Water flow gal./min. {liters/min.}	1 {4.6}		2 {9.1}		
Water connections NPT	3/8 inch NPT				

SPECIFICATION NOTES:

* Dryers running at 50 Hz will have 17% less airflow, and a 17% reduction in material throughput.

† Total kW listed at a process setpoint of 250°F {121°C} and a regeneration temperature of 350°F {177°C}.

‡ When drying below 150°F {66°C} a precooler is required.

§ Temperatures above or below the recommended levels may affect dryer performance. Tower, chiller or municipal water sources can be used.

Specifications may change without notice. Consult a Conair representative for the most current information.

APPLICATION NOTES:

All dryers are supplied with an aftercooler as standard. The aftercooler reduces the temperature of the return air from the drying hopper, improving the efficiency of the desiccant. The aftercooler must be connected with the proper water flow rate and temperature to attain the rated throughput.

When to use central models

Central dryers do not have process heaters. These models should be used when drying multiple materials that require different drying temperatures. Central models dehumidify the process air, which is then heated to the correct setpoint by a Hopper Temperature Controller (HTC) or a "pre-heater" mounted on the hopper.

When to use additional filtration

The standard return air cartridge filter is sized for the airflow of each dryer model and is suited for most applications. You should consider adding an optional dust collector and/or volatile trap if:

- The material contains excessive fines. An additional dust collector or cyclone will extend time between filter cleaning.
- The material produces volatiles during drying which condense into a waxy or oily residue. A volatile trap will help to protect the desiccant.

MDCW 150 AND 200 CAROUSEL PLUS MODELS

MDCW150

THE NEXT GENERATION IN MOBILE DRYERS

Mobile Drying and Conveying systems eliminate the need for machine-mounted hoppers by placing all components on a safe, convenient cart.

Set-up, batch drying, clean-out and maintenance can all take place without tying up valuable process machine time, or climbing on the machine.

The MDCW system integrates an efficient Carousel Plus Dryer with a conveying blower, dust collector and direct-feed vacuum receiver to convey with dry air to the throat of a processing machine. The new self-loading option adds an integral hopper loader which allows the MDCW to load itself. If you don't need dry-air conveying, order a non-dry air conveying MDCW with a dryer and hopper, and add a self-contained vacuum loader.

PROVEN PERFORMANCE FOR LOW THROUGHPUT

These Carousel Plus MDCW models are small enough to be used beside the machine.

MDCW units feature true closed-loop drying and conveying technology to eliminate moisture that can cause defects in parts. You can dry at temperatures up to 375°F {191°C} and at throughput rates of 150 to more than 200 pounds per hour.

The Carousel Plus Dryers use molecular sieve desiccant that is bonded into a fiberglass substrate and formed into a continuously rotating wheel. The result is rock steady drying temperatures and dewpoint levels, critical for processing moisture and temperature sensitive material.

The thermo-formed, impact resistant ABS cover adds to the good looks and space-saving design of the Carousel Plus Dryers.

Closed-loop drying/conveying

Each unit provides drying temperatures up to 375°F {191°C}, automatic desiccant regeneration and dewpoints of -40°F {-40°C}.

No-downtime material changes

With a spare MDC system, material changes are fast. Roll one unit to the processing machine, while another heats and pre-dries material for the next run.

Maximum uptime, maximum reliability

With significantly reduced part count, easy access and less wear, you can expect many years of trouble-free operation. The weight of the desiccant assembly has been reduced by 70%, the part count reduced by 90%, there are no more indexing bed plates, no more cumbersome 4-way valves and no more messy desiccant beads. Shift-after-shift this dryer will deliver the performance you need to stay up and running.

Precise, adjustable dewpoint control

An industry first! The new dewpoint control option built into the microprocessor control system allows you to select a particular dewpoint value, which the control locks onto. The control then adjusts various dryer functions to precisely hold the dewpoint selected, virtually eliminating any chance of overdrying expensive material.

MDCW 150 AND 200 CAROUSEL PLUS MODELS

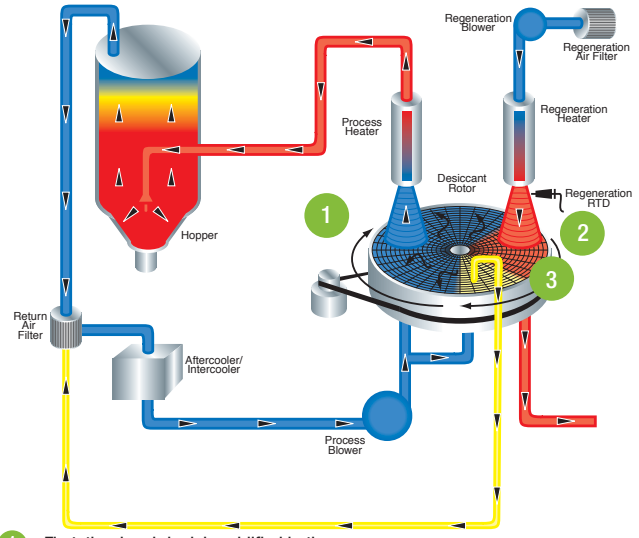
HOW IT WORKS

The core of the Carousel Plus Dryer is the Munters® unique fluted desiccant rotor, which contains molecular sieve desiccant. The molecular sieve has been grown into the rotor's porous fiberglass substrate, preventing the possibility of desiccant break down and dusting over time.

The desiccant rotor revolves slowly at the rate of 12 revolutions per hour passing through three cycles with each revolution.

The benefits

- The high airflow across the surface area of the rotor produces a resin-drying low dewpoint within five minutes of start-up and offers multi-year media life with virtually no maintenance.
- The continuously revolving rotor provides rock steady temperature and dewpoint control.
- The rotor technology minimizes energy consumption by reducing the structural mass, less structural mass to heat means less energy wasted.



1. First, the dry air is dehumidified in the adsorption cycle, capturing and removing moisture from the drying air stream.
2. Next, the desiccant passes into the high temperature regeneration cycle where the adsorbed moisture is heated and purged out of the desiccant to the atmosphere.
3. The desiccant is then advanced to the post regeneration cooling cycle and cooled with closed loop dry air. All Carousel Plus Dryers feature this unique closed loop cooling technology to eliminate moisture that can cause defects in parts.

FEATURE DESCRIPTIONS

- **Audible and visual alarm** - A combination of a blinking red alarm light and a horn alert the operator to any shut down alarm.
- **Temperature setback** - Automatically reduces the drying temperature to a lower standby mode when the machine throughput is reduced or stopped. Processors using resins prone to degradation due to over-drying could greatly benefit from the temperature setback feature.
- **Dewpoint monitor** - Allows the operator to monitor the performance of the dryer by providing a digital dewpoint readout of the drying air.
- **Dewpoint control** - Allows the dryer to lock onto and track an operator-selected dewpoint level. This feature helps prevent overdrying of moisture sensitive materials such as Nylon. Location and season changes can drastically change the atmospheric dewpoint of the air used for drying. Dewpoint control is used to increase or decrease the regeneration temperature from 350°F {177°C} as needed depending on atmospheric conditions. This type of control saves energy costs and increases end-product quality. The Carousel Plus is the first dryer in the plastics industry to provide precise dewpoint control.
- **Communications** - Allows the dryer to be networked to industrial control systems. When a dryer is connected to a network the controller on the network may read actual temperatures, change setpoints, read dryer status, and process and display this information at a central location. DeviceNet, SPI, Modbus and Ethernet communications are available.

MDCW 150 AND 200 CAROUSEL PLUS MODELS

WHICH PACKAGE IS RIGHT FOR YOU?

	MDCW Dry Air Conveying			MDCW Non-Dry Air Conveying ‡	
STANDARD PACKAGES*	MX	MZ	HY†	MA	MC
DC-1 control	●	●		●	●
DC-2 control			●		
Audible and visual alarms		●	●		●
Temperature setback		●	●		●
Dewpoint monitor		●	●		●
Dewpoint control		●	●		●
Communications			●		
Self-loading hopper			●		

FEATURE NOTES:

* Other options are available upon request. Please check with a Conair sales representative.

‡ Excludes all conveying features.

Specifications may change without notice consult with a Conair representative for the most current information.

† Drying Monitor, DM-II option to HY Packages -

Saves you time and money, and from the aggravation of dealing with improperly dried material.

The DM-II automatically monitors the temperature profile inside your drying hopper within a pre-set temperature band to protect you from overdrying or under drying your material. A warning alarm shown on the control display and light tower alerts you to improper drying conditions. This advanced notice provides time to diagnose and correct otherwise undetected problems that can lead to defects in products manufactured from hygroscopic material.

This valuable option can help you uncover common drying problems that may exist, including: a failed or out-of-place process RTD; improperly sized hoppers or dryers; drying or loading equipment failures; reduced airflow caused by dirty filters; kinked hoses and other obstructions, throughput change, loss of power or overheated material.

The DM-II does not alert you to the specific drying problem, however, the DC2 control will identify most dryer related faults. **Available on models MDCW50 and above.**

Choose the control you need...DC-1 or DC-2

DC-1 CONTROL FEATURES

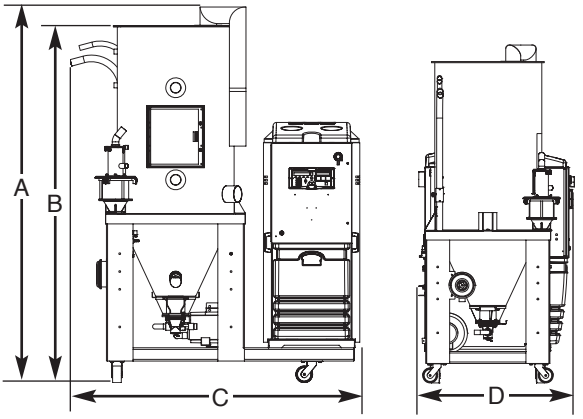
- Six character, seven segment LED display for high visibility of setpoint and actual operating parameters
- Full access to setup parameters and alarms through error codes
- Autostart count down timer
- Operator password protection
- English/Metric units
- Solid-state heater contactors with isolation protection
- Return air temperature display

DC-2 CONTROL FEATURES

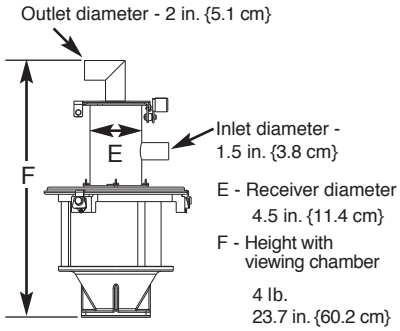
- LCD (2 X 20 character) alpha-numeric display with access to set-up parameters, full diagnostics, alarm/event log and numerous options
- Eight character, fourteen segment LED display for high visibility of selected parameter status
- Keypad for easy operator access
- Real time clock
- Temperature setback
- Operator password protection
- Date format selection
- English/Metric units
- Return air temperature display
- Solid-state heater contactors with isolation protection

MDCW 150 AND 200 CAROUSEL PLUS MODELS

SPECIFICATIONS

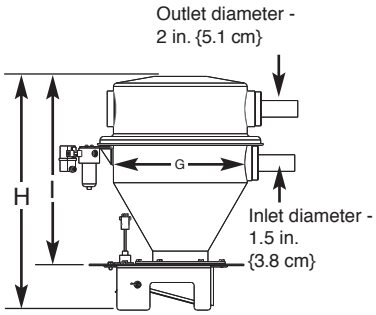


TLR Tube Loader
(machine loader)



E - Receiver diameter
4.5 in. {11.4 cm}
F - Height with viewing chamber
4 lb.
23.7 in. {60.2 cm}

Duraload - DL12
(hopper loader)



G - Receiver diameter
12.0 in. {30.5 cm}
H - Height
29.3 in. {74.4 cm}
I - Height above mounting plate
17.4 in. {44.2 cm}

MODEL	MDCW150	MDCW200
Standard hopper size	CH33-21	CH39-35
Optional hopper size	CH33-28	CH39-42
Performance characteristics (with full hopper)		
Drying temperature	All models 150° - 375°F {66° - 191°C} with options	
Dewpoint	All models -40°F {-40°C}	
Standard conveying dist. ft {m}	8 {2.44} vertical; 6 {1.83} horizontal	
Long distance option ft {m}	15 {4.57} vertical; 50 {15.24} horizontal	
Dimensions inches {cm}		
A - Height to top of hopper (standard)	113.3 {287.8}	124.9 {316.7}
B - Height to top of hopper (optional)	127.4 {323.6}	135.0 {317.3}
C - Overall width	87.2 {221.5}	102.0 {259.1}
D - Depth	52.0 {132.1}	55.0 {139.7}
Outlet/inlet tube size OD	5.0 {12.7}	5.0 {12.7}
Approximate weight lbs {kg}		
Standard dryer installed	750 {340.2}	750 {340.2}
Voltage - Total amps {std./long}		
230 V/3 phase/60 Hz	49.1/52.7	63.4/67.0
400 V/3 phase/50 Hz*	26.6/27.7	34.8/35.9
460 V/3 phase/60 Hz	24.6/26.4	31.7/33.5
575 V/3 phase/60 Hz	19.3/20.9	25.4/27.0
Total kilowatts† kW {Std./Long}		
	7.5/8.6	9.4/10.5
Water requirements {for aftercooler or optional precooler}‡		
Recommended temperature§	45° - 85°F (7.2° - 29.4°C)	
Water flow gal./min. {liters/min.}	3 {13.6}	
Water connections NPT	3/4 inch NPT	

APPLICATION NOTES:

All dryers are supplied with an aftercooler as standard. The aftercooler reduces the temperature of the return air from the drying hopper, improving the efficiency of the desiccant. The aftercooler must be connected with the proper water flow rate and temperature to attain the rated throughput.

When to use additional filtration: The standard return air cartridge filter is sized for the airflow of each dryer model and is suited for most applications. You should consider adding an optional dust collector and/or volatile trap if:

- The material contains excessive fines. An additional dust collector or cyclone will extend time between filter cleaning.
- The material produces volatiles during drying which condense into a waxy or oily residue. A volatile trap will help to protect the desiccant.

SPECIFICATION NOTES:

* Dryers running at 50 Hz will have 17% less airflow, and a 17% reduction in material throughput.

† Total kW listed at a process setpoint of 250°F {121°C} and a regeneration temperature of 350°F {177°C}.

‡ When drying below 150°F {66°C} a precooler is required.

§ Temperatures above or below the recommended levels may affect dryer performance. Tower, chiller or municipal water sources can be used.

Specifications may change without notice. Consult a Conair representative for the most current information.

Model W300
(with optional TouchView™ control)

THE NEXT GENERATION IN POLYMER DRYERS

Conair's Carousel Dryers just keep getting better. This already superior dryer line has now been improved to help you achieve higher profit margins with increased productivity and product quality. All Carousel Plus Dryers sizes W150 and larger are now available with the new eight inch high-resolution TouchView™ control with bright, crisp graphics including trending screens.

Purchase this dryer and you will find that you have more control over drying dew point and temperature than ever before, in a package that is simpler, smaller, lighter, more energy efficient and easier to use and maintain than any other dryer on the market today.

MEDIUM CAPACITY CENTRAL OR MACHINE-SIDE DRYING

These medium-sized dryers are small enough to be used beside the machine, yet powerful enough for central drying.

The Carousel Plus Dryers use molecular sieve desiccant that is bonded into a fiberglass substrate and formed into a continuously rotating wheel. The result is rock steady drying temperatures and dew point levels, critical for processing moisture and temperature sensitive material.

These units are capable of delivering nominal throughput rates ranging from 150 to more than 400 lb/hour.

The thermo-formed, impact resistant ABS filter cover adds to the good looks and space-saving design of the Carousel Plus Dryers.

Models W150 and 200 also are available as Mobile Drying and Conveying units.

Optional easy-to-use, full-color touch screen

Intuitive screen navigation will allow you to easily view critical drying parameters such as dew point and temperature. With the optional TouchView™ control, operation and alarm diagnostics are very user friendly, and trending is available. This control is web-enabled too, so you can connect wirelessly with your tablet or smartphone.

Reduced energy costs

The desiccant wheel assembly heats and cools more easily than previous drying technology saving you up to 35% on your energy bill. Fewer parts, lighter structural mass, less to heat, therefore less wasted energy.

Maximum uptime, maximum reliability

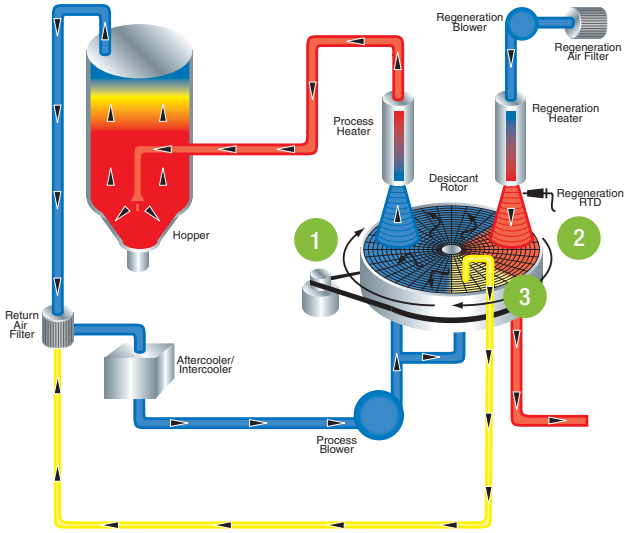
With significantly reduced part count, easy access and less wear you can expect many years of trouble-free operation. The weight of the desiccant assembly has been reduced by 70%, the part count reduced by 90%, there are no more indexing bed plates, no more cumbersome 4-way valves and no more messy desiccant beads. Shift-after-shift this dryer will deliver the performance you need to stay up and running.

Precise, adjustable dew point control

An industry first! The dew point control option built into the microprocessor control system allows you to select a particular dew point value, which the control locks onto. The control then adjusts various dryer functions to precisely hold the dew point selected, virtually eliminating any chance of overdrying expensive material.

HOW IT WORKS

The core of the Carousel Plus Dryer is the Munters® unique fluted desiccant rotor, which contains molecular sieve desiccant. The molecular sieve has been grown into the rotor's porous fiberglass substrate, preventing the possibility of desiccant break down and dusting over time.



The benefits

- The high airflow across the surface area of the rotor produces a resin-drying low dew point within five minutes of start-up and offers multi-year media life with virtually no maintenance.
- The continuously revolving rotor provides rock steady temperature and dew point control.
- The rotor technology minimizes energy consumption by reducing the structural mass, less structural mass to heat means less energy wasted.

1. First, the dry air is dehumidified in the adsorption cycle, capturing and removing moisture from the drying air stream.
2. Next, the desiccant passes into the high temperature regeneration cycle where the adsorbed moisture is heated and purged out of the desiccant to the atmosphere.
3. The desiccant is then advanced to the post-regeneration cooling cycle and cooled with closed loop dry air. All Carousel Plus Dryers feature this unique closed loop cooling technology to eliminate moisture that can cause defects in parts.

WHICH PACKAGE IS RIGHT FOR YOU?

STANDARD PACKAGES	MX	MZ	HY	TV
FEATURES				
DC-1 control	●	●		
DC-2 control			●	
DC-T control				●
Audible and visual alarms		●	●	●
Temperature setback		●	●	●
Dew point monitor		●	●	●
Dew point control		●	●	●
Trending screens				●
OPTIONS				
Communications			●	●
Precooler	●	●	●	●
Volatile trap	●	●	●	●
Filter check	●	●	●	●
Heat current monitor			●	
Drying monitor			●	●

FEATURE DESCRIPTIONS

- **Audible and visual alarm** - A combination of a blinking red alarm light and a horn alert the operator to any shut down alarm.
- **Temperature setback** - Automatically reduces the drying temperature to a lower standby mode when the machine throughput is reduced or stopped. Processors using resins prone to degradation due to over-drying could greatly benefit from the temperature setback feature.
- **Dew point monitor** - Allows the operator to monitor the performance of the dryer by providing a digital dew point readout of the drying air.
- **Dew point control** - Allows the dryer to lock onto and track an operator-selected dew point level. This feature helps prevent overdrying of moisture sensitive materials such as Nylon. Location and season changes can drastically change the atmospheric dew point of the air used for drying. Dew point control is used to increase or decrease the regeneration temperature from 350˚F {177˚C} as needed depending on atmospheric conditions. This type of control saves energy costs and increases end-product quality. The Carousel Plus is the first dryer in the plastics industry to provide precise dew point control!

OPTIONS

- **Drying monitor** - Automatically monitors the temperature profile inside your drying hopper within a pre-set temperature band to protect you from over drying or under drying your material.
- **Communications** - Allows the dryer to be networked to industrial control systems. When a dryer is connected to a network the controller on the network may read actual temperatures, change setpoints, read dryer status, and process and display this information at a central location. DeviceNet, SPI, Modbus and Ethernet communications are available.

CONTROLS

Choose the control you need...DC-1, DC-2 or TouchView™

DC-1 CONTROL FEATURES

- Six character, seven segment LED display for high visibility of set point and actual operating parameters
- Full access to setup parameters and alarms through error codes
- Autostart count down timer
- Operator password protection
- English/Metric units
- Solid-state heater contactors with isolation protection
- Return air temperature display

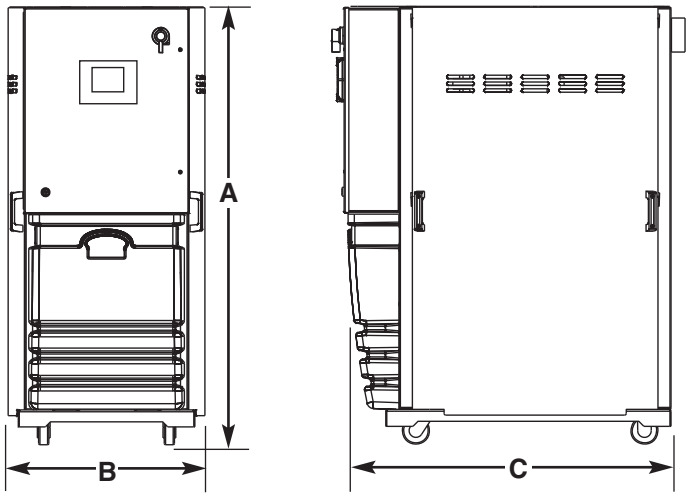
DC-2 CONTROL FEATURES

- LCD (2 X 20 character) alpha-numeric display with access to setup parameters, full diagnostics, alarm/event log and numerous options
- Eight character, fourteen segment LED display for high visibility of selected parameter status
- Keypad for easy operator access
- Real time clock
- Temperature setback
- Operator password protection
- Date format selection
- English/Metric units
- Return air temperature display
- Solid-state heater contactors with isolation protection

DC-T CONTROL FEATURES

- 8-inch color touch screen
- Web-enabled
- Password protected (multiple level)
- English/Metric units
- Trending - air temperature and dew point
- Return air temperature display
- Real-time clock - time of day
- Date format selection
- Auto start
- Temperature setback
- Solid-state heater contactors with isolation protection
- Multiple hopper control

SPECIFICATIONS



MODEL	W150	W200	W300	W400
Performance characteristics (with full hopper)				
Drying temperature†	All models 100° - 375°F {38° - 191°C} with options			
Dew point	All models -40°F {-40°C}			
Dimensions inches {cm}				
A - Height	64.3 {163.3}			
B - Overall width	29 {73.7}			
C - Depth	51.5 {130.8}			
Outlet/inlet tube size OD	2.5 {63.5}	5.0 {127.0}	5.0 {127.0}	5.0 {127.0}
Weight lbs {kg}				
Standard dryer installed	600 {272}	660 {300}	710 {322}	760 {345}
Voltage - Full load amps Standard/Central drying				
230 V/3 phase/60 Hz	47.1 / 16.7	57.6 / 19.9	67.7 / 30.0	N/A
400 V/3 phase/50 Hz*	23.4 / 8.9	32.1 / 10.4	37.9 / 16.2	64.5 / 21.1
460 V/3 phase/60 Hz	21.0 / 8.4	28.9 / 10.0	34.0 / 15.1	56.3 / 18.6
575 V/3 phase/60 Hz	16.8 / 6.7	23.7 / 8.6	27.3 / 12.2	43.2 / 13.0
Water requirements	{for aftercooler or optional precooler}†			
Recommended temperature‡	45° - 85°F			
Water flow gal./min. {liters/min.}	3 {11.4}			
Water connections NPT	3/4 inch NPT			

SPECIFICATION NOTES:

* Dryers running at 50 Hz will have 17% less airflow, and a 17% reduction in material throughput.

† When drying below 150°F {66°C} a precooler is required.

‡ Temperatures above or below the recommended levels may affect dryer performance. Tower, chiller or municipal water sources can be used.

Specifications may change without notice. Consult a Conair representative for the most current information.

APPLICATION NOTES:

All dryers are supplied with an aftercooler as standard. The aftercooler reduces the temperature of the return air from the drying hopper, improving the efficiency of the desiccant. The aftercooler must be connected with the proper water flow rate and temperature to attain the rated throughput.

When to use central models

Central dryers do not have process heaters. These models should be used when drying multiple materials that require different drying temperatures. Central models dehumidify the process air, which is then heated to the correct setpoint by a Heater Pack mounted on the hopper and controlled from the dryer.

When to use additional filtration

The standard return air cartridge filter is sized for the airflow of each dryer model and is suited for most applications. You should consider adding an optional dust collector and/or volatile trap if:

- The material contains excessive fines. An additional dust collector or cyclone will extend time between filter cleaning.
- The material produces volatiles during drying which condense into a waxy or oily residue. A volatile trap will help to protect the desiccant.

Model W2000
(shown with optional DC-T control)

WIDE RANGE OF CONTROLS; INTUITIVE DRYING

The new DC-T control measures 8 inches diagonally and features bright, crisp high-resolution graphics. Individual screens show you how your process is running and ways to improve it. Plus, you can now control and monitor process heat from the dryer!

With three new models in this range, processors can more closely match dryer capacity to process throughput. Purchase this dryer and you will find that you have more control over drying dew point and temperature than ever before, in a package that is simpler, smaller, lighter, more energy efficient, easier to use and maintain than any other dryer on the market today.

LARGE CAPACITY CENTRAL OR MACHINE-SIDE DRYING

The Carousel Plus Dryer Series is now offered with TouchView™ Technology featuring full-color touch screen controls. DC-T dryer controls display critical process settings and actual data on an 8-inch touch-screen graphical layout. You see, at a glance, everything going on in your drying system and can make adjustments with a touch of your fingertip for more efficient drying, better product quality and more profit on your bottom line. Warning messages are now easy to read with the elimination of cumbersome alarm codes. Password security prevents unauthorized drying parameter changes. With DC-T, your control is web-enabled, so you can connect wirelessly with your tablet or smartphone.

This series of dryers are capable of delivering nominal throughput rates ranging from 600 to more than 5,000 lb/hour {272 to 2,268 kg/hr}.

- **Now available, optional full-color touch screen**
  Intuitive screen navigation will allow you to easily view critical drying parameters such as dew point and temperature.

- **Reduced energy costs**
  The desiccant wheel assembly heats and cools more easily than previous drying technology, saving you up to 35% on your energy bill. Fewer parts, lighter structural mass, less to heat, therefore less wasted energy.
- **Maximum uptime, maximum reliability**
  With significantly reduced part count, easy access and less wear you can expect many years of trouble-free operation. The weight of the desiccant assembly has been reduced by 70%, the part count reduced by 90%, there are no more indexing bed plates, no more cumbersome 4-way valves and no more messy desiccant beads.
- **Precise, adjustable dew point control**
  An industry first! The dew point control option built into the microprocessor control system allows you to select a particular dew point value, which the control locks onto. The control then adjusts various dryer functions to precisely hold the dew point selected, virtually eliminating any chance of over drying expensive material.

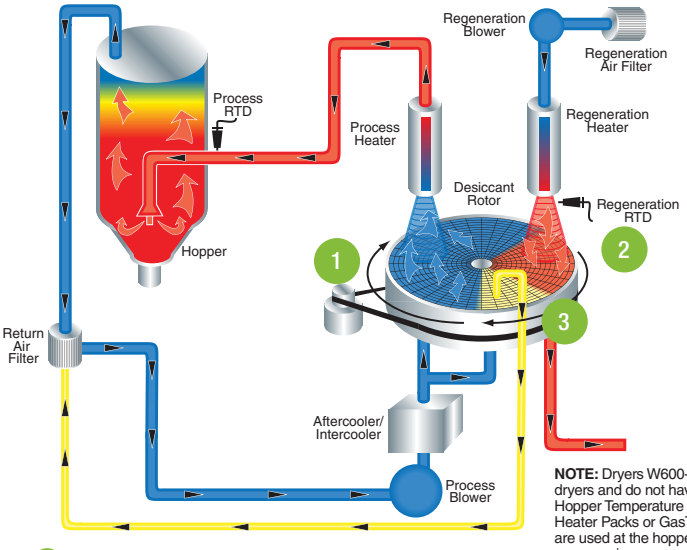
HOW IT WORKS/ BENEFITS

The core of the Carousel Plus Dryer is the Munters® unique fluted desiccant rotor, which contains molecular sieve desiccant. The molecular sieve has been grown into the rotor's porous fiberglass substrate, preventing the possibility of desiccant break down and dusting over time.

The desiccant rotor revolves slowly, passing through three cycles with each revolution.

The benefits

- The high airflow across the surface area of the rotor produces a resin-drying low dew point within five minutes of start-up and offers multi-year media life with virtually no maintenance.
- The continuously revolving rotor provides rock steady temperature and dew point control.
- The rotor technology minimizes energy consumption by reducing the structural mass, less structural mass to heat means less energy wasted.



NOTE: Dryers W600-W5000 are central dryers and do not have process heaters. Hopper Temperature Controllers (HTC), Heater Packs or GasTrac Dryers (CGT) are used at the hopper for heating the process air.

1. The dry air is dehumidified in the adsorption cycle, capturing and removing moisture from the process air stream.
2. The desiccant passes into the high temperature regeneration cycle where the adsorbed moisture is heated and purged out of the desiccant to the atmosphere.
3. The desiccant is then advanced to the post regeneration cooling cycle and cooled with closed loop dry air. All Carousel Plus Dryers feature this unique closed loop cooling technology to eliminate moisture that can cause defects in parts.

WHICH PACKAGE IS RIGHT FOR YOU?

FEATURE DESCRIPTIONS

- **Audible and visual alarm** - A combination of a blinking red alarm light and a horn alert the operator to any shut down alarm.
- **Temperature setback** - Automatically reduces the drying temperature to a lower standby mode when the machine throughput is reduced or stopped.
- **Dew point monitor** - Allows the operator to monitor the performance of the dryer by providing a digital dew point readout of the drying air.
- **Dew point control** - Allows the dryer to lock onto and track an operator-selected dew point level. This feature helps prevent over drying of moisture sensitive materials such as Nylon. The Carousel Plus is the first dryer in the plastics industry to provide precise dew point control.
- **Precooler** - To achieve and maintain very low drying temperatures, a precooler can be supplied to assure the supply air to the hopper is not heated by the heat of the dryer's blower, residual heat from regeneration, etc.
- **Volatile trap** - Extend the operational life of filters and even your desiccant when dehumidifying materials that give off volatiles during the drying process. The volatile trap option provides a serviceable collection filter for volatiles on the return line of the system.
- **Filter check** - Keeps the drying system's air flow optimized by monitoring the filter condition through automatic differential pressure measurements on each side of the filter. An alarm indicates when it's time for cleaning.

STANDARD PACKAGES	MX	MZ	HY	TV
FEATURES				
DC-1 control	●	●		
DC-2 control			●	
DC-T control				●
Audible and visual alarms		●	●	●
Temperature setback				●
Dew point monitor		●	●	●
Dew point control		●	●	●
Trending screens				●
Audible and visual alarms				●
OPTIONS				
Communications			●	●
Precooler	●	●	●	●
Volatile trap	●	●	●	●
Filter check	●	●	●	●
Heat current monitor			●	
Drying monitor			●	●

- **Drying monitor** - Automatically monitors the temperature profile inside the drying hopper(s) within a pre-set temperature band to protect you from over drying or under drying your material.
- **Communications** - Allows the dryer to be networked to industrial control systems. When a dryer is connected to a network, the controller on the network may read actual temperatures, change set points, read dryer status, and process and display this information at a central location.

CONTROLS

Choose the control you need...DC-1, DC-2 or DC-T

DC-1 CONTROL FEATURES

- Six character, seven segment LED display for high visibility of setpoint and actual operating parameters
- Full access to setup parameters and alarms through error codes
- Autostart count down timer
- Operator password protection
- English/Metric units
- Solid-state heater contactors with isolation protection
- Return air temperature display

DC-2 CONTROL FEATURES

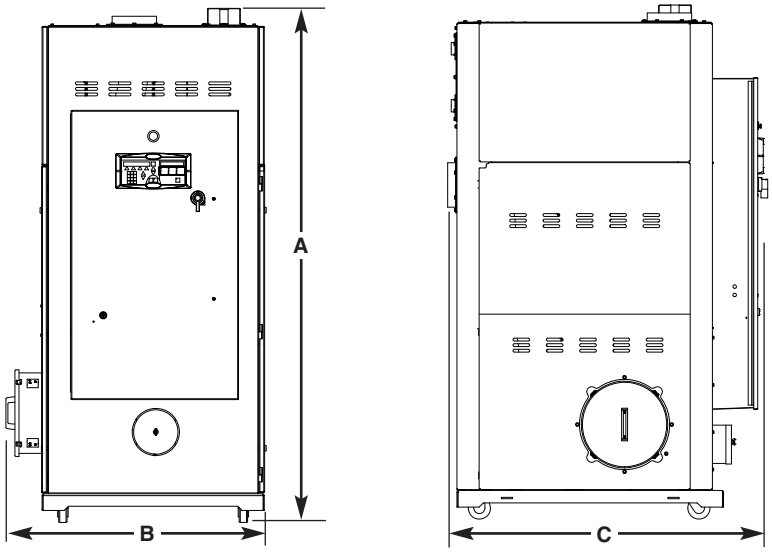
- LCD (2 X 20 character) alpha-numeric display with access to setup parameters, full diagnostics, alarm/event log and numerous options
- Eight character, fourteen segment LED display for high visibility of selected parameter status
- Keypad for easy operator access
- Real time clock
- Temperature setback
- Operator password protection
- Date format selection
- English/Metric units
- Return air temperature display
- Solid-state heater contactors with isolation protection

DC-T CONTROL FEATURES

- 8-inch color touch screen
- Web-enabled
- Trending - air temperature and dew point
- Password protected (multiple level)
- English/Metric units
- Return air temperature display
- Real-time clock - time of day
- Date format selection
- Auto start
- Temperature setback
- Solid-state heater contactors with isolation protection
- Multiple hopper control

SPECIFICATIONS

W MODELS, 600 - 5000



APPLICATION NOTES:

All dryers are supplied with an aftercooler/intercooler as standard. The aftercooler/intercooler reduces the temperature of the return air from the drying hopper, improving the efficiency of the desiccant. The aftercooler/intercooler must be connected with the proper water flow rate and temperature to attain the rated throughput.

When to use central models

Models W600 - W5000 of Carousel Plus dryers are all configured as central dryers. Central dryers do not have process heaters. These models should be used when drying multiple materials that require different drying temperatures. Central models dehumidify the process air, which is then heated to the correct set point by a Heater Pack, Hopper Temperature Controller (HTC) or GasTrac Dryer (CGT).

When to use additional filtration

The standard return air cartridge filter is sized for the airflow of each dryer model and is suited for most applications. You should consider adding an optional dust collector and/or volatile trap if:

- The material contains excessive fines. An additional dust collector or cyclone will extend time between filter cleaning.
- The material produces volatiles during drying which condense into a waxy or oily residue. A volatile trap will help to protect the desiccant.

MODELS	W600*	W800*	W1000*	W1300*	W1600*	W2000*	W2400*	W3200*	W4000*	W5000*
Performance characteristics (with full hopper)										
Drying temperature	All models 100° - 375°F {38° - 191°C} with options									
Dew point	All models -40°F {-40°C}									
Dimensions inches {cm}										
A - Height	93.8 {238.3}			92.2 {234.2}				98.3 {249.7}		
B - Width	49.3 {125.2}			53.9 {136.9}				58.2 {147.8}		
C - Depth	72.4 {183.9}			106.6 {270.8}				123.6 {313.9}		
Outlet/inlet hose diameter	8.0 {20.3}			12.0 {30.5}				12.0 {30.5}		
Approximate weight lbs {kg}										
Installed	1300 {590}	1300 {590}	1400 {636}	1600 {726}				2000 {907}		
Shipping	1495 {678}	1495 {678}	1515 {687}	2620 {1188}				3385 {1535}		
Voltage - Standard/Central full load amps†										
400 V/3 phase/50 Hz‡	89.2 / 34.3	115.9 / 33.5	116.6 / 34.2	152.7 / 42.9	159.4 / 49.6	213.7 / 76.4	248.7 / 84.0	282.7 / 90.5	371.3 / 96.8	371.9 / 97.4
460 V/3 phase/60 Hz	77.6 / 29.8	100.9 / 29.2	101.5 / 29.8	133.4 / 37.8	138.6 / 43.0	186.4 / 66.9	216.5 / 73.1	247.3 / 80.0	323.0 / 84.0	323.7 / 84.7
575 V/3 phase/60 Hz	62.1 / 23.9	80.7 / 23.4	81.1 / 23.8	106.6 / 30.2	110.8 / 34.4	149.1 /53.6	173.0 / 58.4	197.7 / 64.0	258.1 / 67.1	258.7 / 67.7
380 V/3 phase/60 Hz	93.9 / 36.1	121.9 / 35.2	122.7 / 36.0	160.7 / 45.2	167.8 / 52.2	224.6 / 80.1	261.7 / 88.3	297.6 / 95.3	390.9 / 101.9	391.5 / 102.5
Water requirements {for aftercooler/intercooler or optional precooler}§										
Recommended temperature**	45° - 85°F {7° - 29°C}			45° - 85°F {7° - 29°C}				45° - 85°F {7° - 29°C}		
Water flow gal./min. {liters/min.}	6 - 25 {22.7 - 94.6}††			12 - 40 {45.4 - 151.4}††				15 - 50 {56.8 - 189.3}††		
Water connections NPT	1 1/2 inch NPT			1 1/2 inch NPT				1 1/2 inch NPT		

SPECIFICATION NOTES:

* Dryers W600-W5000 that are central dryers do not have process heaters. Heater Packs, Hopper Temperature Controllers (HTC's), or GasTrac Dryers (CGT's) are used at the hopper for heating the process air. See the Hopper Temperature Controller (HTC) and GasTrac Dryer (CGT) specification sheets for further technical information. Even though Heater Packs are remote from the dryer, they are controlled by the dryer.

† The first full load amps number listed includes current to operate the dryer and the heat supply controlled by the dryer. The second full load amps number is current required for the dryer only, when operated as a central dryer with heaters (more than one) controlled and powered remotely.

‡ Dryers running at 50 Hz will have 17% less airflow, and a 17% reduction in material throughput.

§ When drying below 150°F {66°C} a precooler is required.

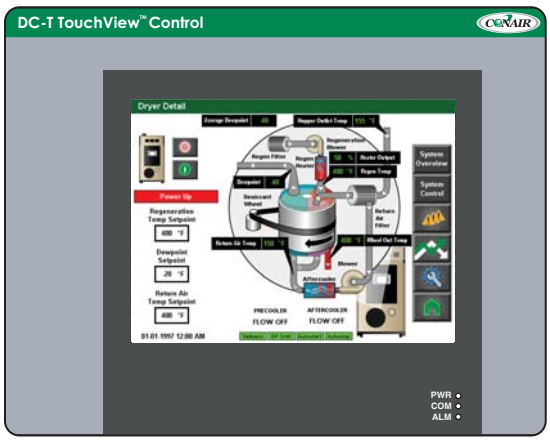
** Temperatures above or below the recommended levels may affect dryer performance. Tower, chiller or municipal water sources can be used.

†† Higher chilling water temperatures will require a greater flow rate.

Specifications may change without notice. Consult a Conair sales representative for the most current information.

INSTALLATION NOTE:

Wiring between process air heater, Heater Pack, and dryer where control for this heater is located is not included. Maximum wire length between dryer and heat source is 100 feet {30 meters}. Consult Conair or a qualified electrician to determine gauge of wire required for distance. Maximum physical distance between dryer and hopper is 20 feet {6 meters}.



ECONOMICAL **TOUCHVIEW** DRYING CONTROL POWER

Selecting the DC-T option for your new drying system puts the power of graphics, easy operation and expanded data at your fingertips. This economical control choice provides the most comprehensive list of drying control capabilities and ease of use on the market today. Easily understood, full color graphics and simplified navigation mean minimal training and maximum understanding of everything that is going on in your single or multiple hopper drying system.

This 8-inch touchview control is now available for all Conair W-Series Carousel Plus Dryers from the W150 size through the largest in the series, the W5000.

DRYER CONTROL, TRENDING, AND HOPPER MONITORING

The DC-T option on your new dehumidifying dryer opens the door to expanded, foolproof operation of your drying system and thorough tracking of all drying parameters. Your resin preconditioning system will be equipped with an expanded, easily accessed array of critical drying parameters to monitor, control and record for advanced data tracking.

The graphical, touch screen interface provides common drying controls like resin drying and regeneration temperature control, but goes deeper to provide extensive temperature and dew point monitoring and control. See your drying operation live and/or retrieve operation data from the past seven days with the DC-T's built in trending capability.

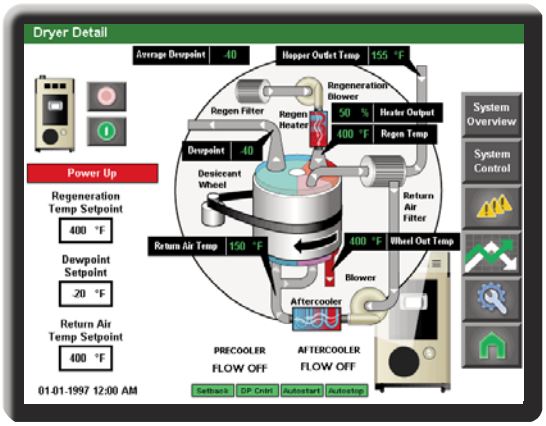
The DC-T also provides a gateway for the control of multi-hopper systems when the dryer is used in a central drying application. Up to 15 hoppers equipped with their own Conair temperature controls may be linked to the DC-T for monitoring and duplicate control capability. Plus the DC-T comes equipped with Conair's patented Drying Monitor software called DM3-e, so up to 15 hoppers may be precisely monitored and trended to predict drying problems, speed start-ups, confirm drying performance, save energy and process verification.

- **Easy to operate**
  The 8-inch full-color touch screen allows for simple, intuitive screen navigation and visually displays critical drying parameters (such as dewpoint and temperature) as well as alarm descriptions, detailed trending graphs and current system status.
- **Precise, adjustable dewpoint control**
  An industry first! The dew point control option built into the DC-T control allows you to select a particular dew point value, which the control locks onto. The control then adjusts various dryer functions to precisely hold the dew point selected, virtually eliminating any chance of over drying expensive material.
- **All drying settings made from one control**
  Better than the competition, the DC-T enables Conair customers to control their hopper's heat source from the dryer. No more separate controls at each hopper. Now all settings can be made, viewed, and controlled from the dryer.
- **View and control from anywhere**
  The DC-T enables your dryer to be linked to the web, so that the screens can be viewed or controlled from a desktop computer in a supervisor's office, a laptop computer, a tablet or smartphone anywhere in the world. This feature also allows for file transfer over the web, so you can use the built-in ftp to save your trending data for future reference.

FEATURES

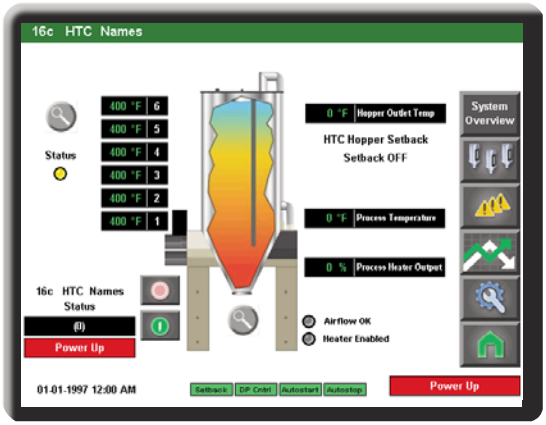
The DC-T allows for single point control of your entire drying system. It's web-enabled too, so you can check it from anywhere.

COMPLETE DRYER CONTROL AND MONITORING



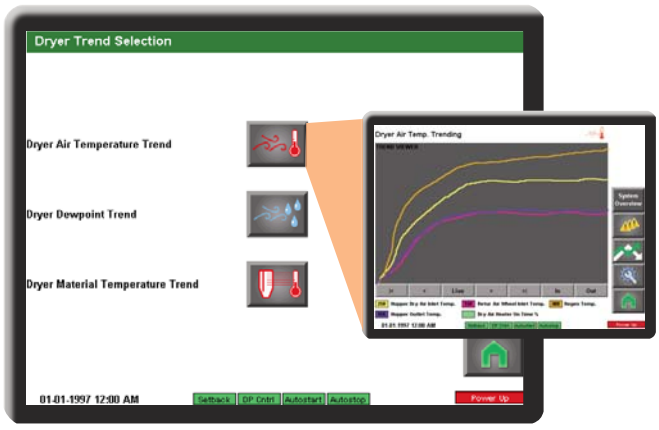
- The DC-T allows for easy monitoring of the dryer process, setpoints and current settings. The DC-T control has been designed to be user-friendly, highly informative, and a very useful tool as part of your drying system.

YOUR DRYING HOPPER IN DETAIL



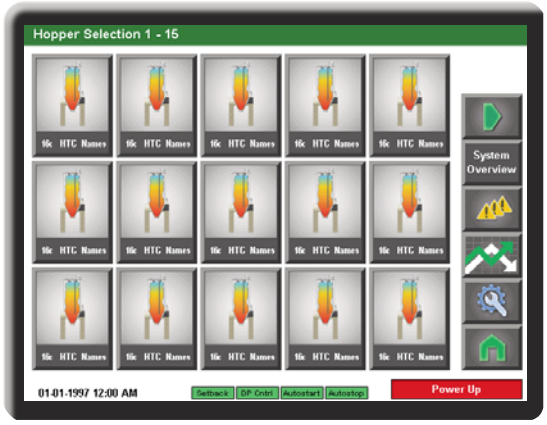
- With the DM3-e feature, each hopper being monitored and controlled by DC-T will display its critical drying temperature profile for examination and trending, and most importantly, assuring proper drying is taking place.

TRENDING



- With the ability to trend air temperature, material temperature (with DM3-e option enabled), and dewpoint, the DC-T gives you the advantage when drying your material.

HOPPERS AT A GLANCE



- Access to your hoppers, (one or multiple) is just a click or two away from any screen on the DC-T. You can quickly see what is happening in each hopper, identify any issues before they become problems, and change setpoints easily when material changeovers occur.

THE DC-T ALSO ALLOWS YOU TO:

- Customize hopper names so that you can easily identify the hoppers in your system.
- Assign different user security levels to different users to limit changes that can be made.
- Utilize autostart and autostop benefits in coordination with the built-in time of day clock.
- Enable and disable temperature setback.
- Select the date format you desire.
- Utilize Conair's built-in (embedded in the DC-T software) DM3-e Drying Monitor (option).
- Establish unique alarm setpoints.
- See at the bottom of the screen what options (i.e. autostart, setback, etc.) are currently enabled.

DETAILED ALARM DESCRIPTIONS

- An alarm banner at the top of the screen helps you identify problems and make corrections as necessary.

Model W1000
Shown with Allen-Bradley
six inch touch screen color display

INTUITIVE TOUCHSCREEN; PRECISE DRYING

The EnergySmart® Dryer with TouchView™ Technology combines traditional drying with an intuitive full-color, touch screen control that allows you to easily navigate and adjust all dryer system settings. This new, powerful control is designed for variable throughputs of 400 to 5,000 lbs/hr {181 to 2,268 kg/hr}.

All EnergySmart Dryers feature newly developed Optimizer™ Mode technology that automatically adjusts the dryer's blower to match your processing machine. This ensures that you make high-quality, consistent product while dramatically reducing your energy cost.

Optional loading, trending and recipe control screens further expand the capabilities of your EnergySmart Dryer System.

TAKE CHARGE OF YOUR PROCESS AND ENERGY USAGE

The EnergySmart® Dryer with TouchView™ Technology allows you to fine-tune your system settings to achieve consistent drying results. System overview screens and profile temperature readouts display the current status of your process for simple and easy adjustment.

Molecular sieve desiccant that is bonded to a fiberglass substrate and formed into a continuously rotating wheel is the heart of the EnergySmart Dryer. Every desiccant wheel provides consistent drying temperatures and dew points levels that are critical to your drying process.

EnergySmart® Dryer options include: an insulated hopper, a gas or an electric heater, dust collector(s), positive displacement pump(s), receiver(s), a cyclone and a patented DM-II drying monitor package.

- **Easy-to-use, full-color touch screen**
  You'll have more visibility and control of your drying system than ever before. View and control critical drying parameters such as airflow, dew point and temperature with intuitive screen navigation.
- **Real-time viewing of your process**
  View the drying temperatures, air flow, dew points and differential pressure of your process provided by sensors located throughout your drying system. Each sensor's profile is stored to the dryer control's memory for historical trending and fine-tuning of the dryer.
- **Slash energy waste; reduce energy bill**
  New technology! The Optimizer™ mode works with the dryer's variable frequency drive (VFD) to automatically adjust the dryer's blower output to the processing machine. This feature reduces the blower output, minimizing the total amount of energy needed to dry at variable throughputs.
- **Early warning-constant monitoring**
  The TouchView™ Technology control constantly monitors temperature and air flow. Any external changes that could effect your process are immediately.
- **Two year top-to-bottom warranty**
  A full two-year warranty from top-to-bottom and a three-year warranty for the desiccant wheel ensures long life. You can expect high performance and reliable operation from your Conair equipment.

FEATURES/OPTIONS

Features

- Variable frequency drive (VFD) - The VFD allows for automatic adjustment of the airflow to the de-humidifying drying circuit of the EnergySmart® Dryer.
- Optimizer™ mode - Automatically controls the material temperature profile of the drying material based on environmental changes that may occur during processing.
- Dew point monitor - Allows the user to monitor the performance of the dryer by providing a digital dew point read-out of the supply and return air.
- DM-II drying monitor - Automatically monitors the temperature profile inside the drying hopper. Working with the Optimizer™ mode, the DM-II drying monitor helps maintain the drying system's performance.
- Dew point control - Allows the dryer to lock onto and track an operator-selected dew point level. This feature helps prevent over dying of moisture sensitive materials such as Nylon.

Options

- Trending screens - View and record live data on the operation of the system.
- Recipe screens - View, save and upload application specific recipes for drying materials.
- Loading screens - View, configure and activate secondary loading controls.
- Communications -The dryer can be networked to industrial control systems. TCPIP and PROFINET communications are available, depending on the control type. (Allen-Bradley or Siemens)
- Audible and visual alarm - A combination of a blinking red alarm light and a horn alerts you to any shut down alarm condition.

HOW IT WORKS - WHEEL DRYER TECHNOLOGY

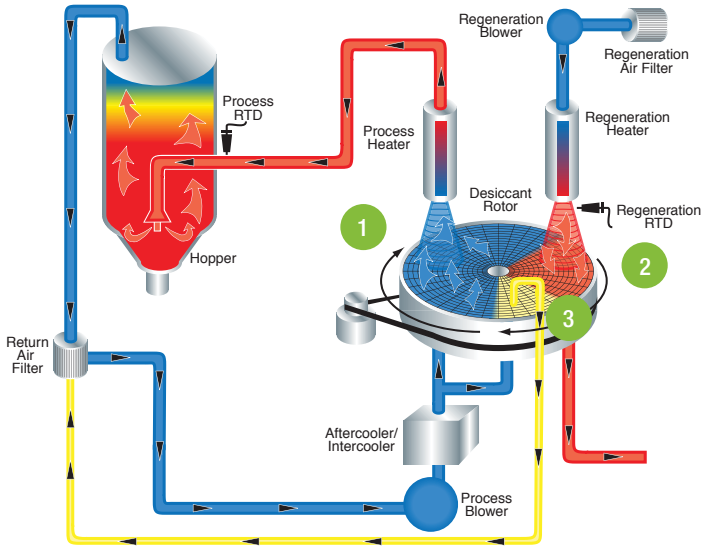
The core of the EnergySmart® Dryer is the Munters® unique fluted desiccant rotor, which contains molecular sieve desiccant. The molecular sieve has been grown into the rotor's porous fiberglass substrate, preventing the possibility of desiccant break down and dusting over time.

The desiccant rotor revolves slowly, passing through three cycles with each revolution.

1. First, the dry air is dehumidified in the adsorption cycle, capturing and removing moisture from the drying air stream.

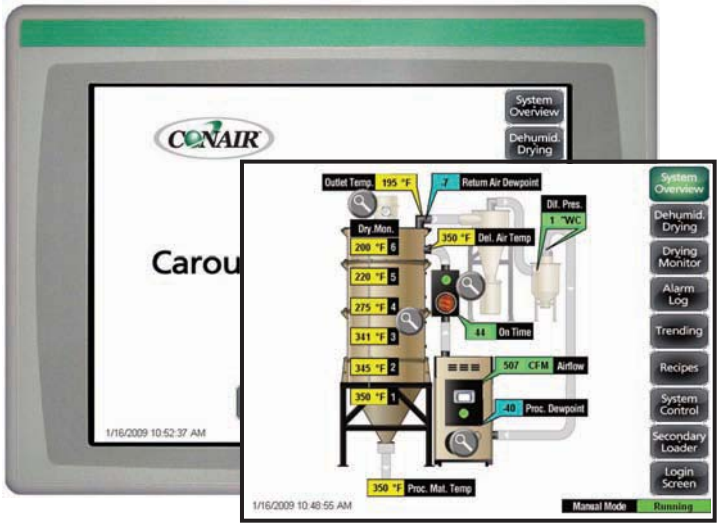
2. Next, the desiccant passes into the high temperature regeneration cycle where the adsorbed moisture is heated and purged out of the desiccant to the atmosphere.

3. The desiccant is then advanced to the post regeneration cooling cycle and cooled with closed loop dry air. All EnergySmart® Dryers feature this unique closed loop cooling technology to eliminate moisture that can cause defects in parts.



NOTE: Dryers W600-W5000 are central dryers and do not have process heaters. Hopper Temperature Controllers (HTC's) or GasTrac Dryers (CGT's) are used at the hopper for heating the process air. See the Hopper Temperature Controller (HTC) or GasTrac Dryer (CGT) specification sheets for further technical information.

CONTROL FEATURES



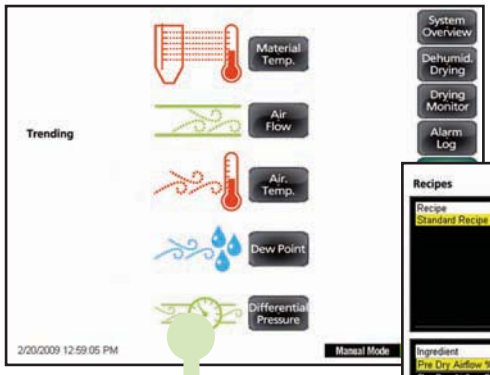
TouchView™ Technology

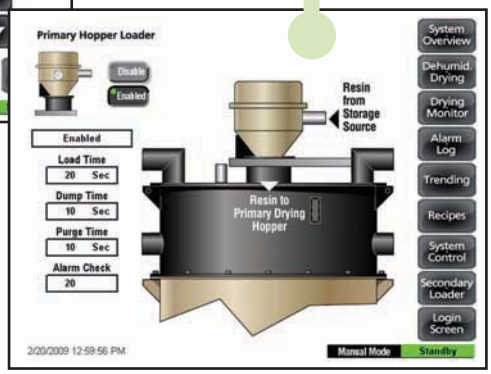
The touch screen control eliminates confusing alarm codes and hard-to-navigate parameters and replaces them with full-color, easy-to-read graphics and status indicators.

Each screen of the control displays all parameters and allows each to be individually altered for maximum control over your process. Drying and dew point monitors track your process and provide early warnings to indicate a problem before it is too late.

The Variable Frequency Drive (VFD) and Optimizer™ mode streamline your process to maximize energy savings and increase profits.

OPTIONAL CONTROL FEATURES





Hopper Loader Control
Control up to two optional receivers with the addition of the hopper loader control feature. Load time, pump time, purge time and alarm checks can all be altered from the loader screens, eliminating secondary loading controls and allowing all software to be contained inside one electrical enclosure. Large user-friendly icons and text make setting loader functions simple and easy.The second loader control screen can operate a loader at the throat of a processing machine or to fill an auxiliary hopper.

Trending Screens
Optional trending readout screens are available to view your drying status from one central location. Easy-to-read screens graph material temperature, air flow, air temperature, dew point and differential pressure making the monitoring of your drying system super simple.

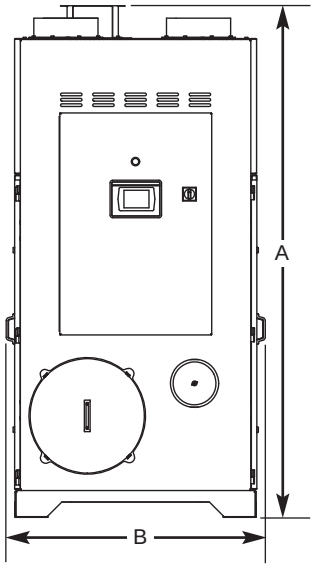
Color-coded lines on each graph are dedicated to sensors located throughout the system. Keys located below the graph indicate what sensor is providing the information.

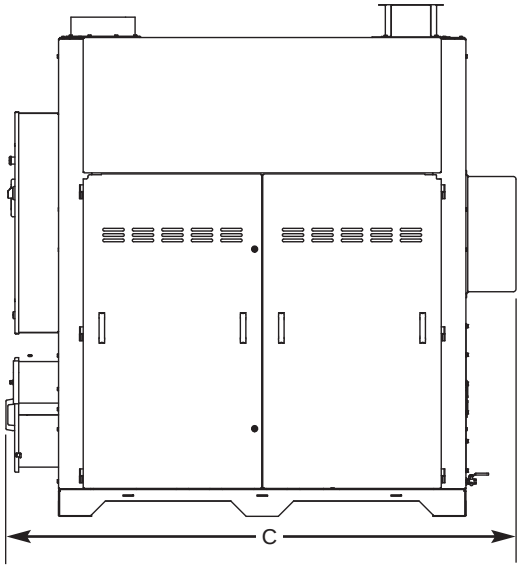
Recipe Management
Save current dryer settings for a specific material with the optional recipe management screen. Saved recipes can be instantly recalled when you are processing the same type of material.

Up to 99 dryer recipes can be stored to the dryer's control. Recipes that are used with the dryer's Optimizer™ mode can be saved and later reused for worry-free and efficient material drying. Improve the identification of each recipe by individually saving it with a name that is unique to the type of material that your are processing.

SPECIFICATIONS

W MODELS, 600 - 5000





Choose between two control platforms

Allen-Bradley control

Siemens control

MODELS	W600*	W800*	W1000*	W1600*	W2400*	W3200*	W5000*
Performance characteristics (with full hopper)							
Drying temperature	All models 100° - 375°F {38° - 191°C} with options						
Dew point	All models -40°F {-40°C}						
Dimensions inches {cm}							
A - Height	92.6 {235.2}			95.4 {242.3}		102.8 {261.1}	
B - Width	43.3 {109.9}			48.4 {122.9}		48.9 {124.2}	
C - Depth	63.5 {161.3}			95.1 {241.6}		124.6 {316.5}	
Outlet/inlet hose diameter	8.0 {20.3}			12.0 {30.5}		12.0 {30.5}	
Approximate weight lbs {kg}							
Installed	1325 {601}	1325 {601}	1425 {646}	1660 {753}	1660 {753}	2100 {953}	2100 {953}
Shipping	1520 {689}	1540 {699}	1540 {699}	2160 {980}	2680 {1216}	3485 {1581}	3485 {1581}
Voltage - full load amps†							
400 V/3 phase/50 Hz††	37.6	37.6	37.6	65.5	66.1	125.1	131.2
460 V/3 phase/60 Hz	32.3	32.3	32.3	56.8	57.3	108.7	114.0
575 V/3 phase/60 Hz	25.9	25.9	25.9	45.5	45.9	87.0	91.3
Total kilowatts‡ kW {BTU/min}	26.0 {1480}	26.0 {1480}	26.0 {1480}	45.3 {2578}	45.7 {2601}	86.5 {4924}	90.8 {5168}
Water requirements {for aftercooler/intercooler or optional precooler}§							
Recommended temperature**	45° - 85°F {7° - 29°C}						
Water flow gal./min. {liters/min.}	6 - 25 {22.7 - 94.6}		12 - 40 {45.4 - 151.4}			15 - 50 {56.8 - 189.3}	
Water connections NPT	1 1/2 inch NPT						

SPECIFICATION NOTES:

* Dryers W600-W5000 are central dryers and do not have process heaters. Hopper Temperature Controllers (HTC's) or Gastrac Dryers (CGT's) are used at the hopper for heating the process air. See the Hopper Temperature Controller (HTC) or Gastrac Dryer (CGT) specification sheets for further technical information.

† Full load amps listed apply to dryer only, see the Hopper Temperature Control (HTC) or GasTrac (CGT) specification sheets for additional power requirements.

†† Dryers running at 50 Hz will have 17% less airflow, and a 17% reduction in material throughput.

‡ Total kW listed at a regeneration temperature of 350°F {177°C}. The total kW listed reflects the kW of the dryer only. It does not include any external heat source, for example the Hopper Temperature Controller (HTC) or Gastrac Dryer (CGT).

§ When drying below 150°F {66°C} a precooler is required.

** Temperatures above or below the recommended levels may affect dryer performance. Tower, chiller or municipal water sources can be used.

Specifications may change without notice. Consult a Conair representative for the most current information.

APPLICATION NOTES:

All dryers are supplied with an aftercooler/intercooler as standard. The aftercooler/intercooler reduces the temperature of the return air from the drying hopper, improving the efficiency of the desiccant. The aftercooler/intercooler must be connected with the proper water flow rate and temperature to attain the rated throughput.

When to use central models
Models W600 - W5000 EnergySmart Dryers are all configured as central dryers. Central dryers do not have process heaters. These models should be used when drying multiple materials that require different drying temperatures. Central models dehumidify the process air, which is then heated to the correct set point by a Hopper Temperature Controller (HTC) or GasTrac Dryer (CGT).

When to use additional filtration
The standard return air cartridge filter is sized for the airflow of each dryer model and is suited for most applications. You should consider adding an optional dust collector and/or volatile trap if:

- The material contains excessive fines. An additional dust collector or cyclone will extend time between filter cleaning.
- The material produces volatiles during drying which condense into a waxy or oily residue. A volatile trap will help to protect the desiccant.

DM-II Model

ASSURE PROPER DRYING FOR **DEFECT-FREE PRODUCT**

The DM-II Drying Monitor option can save you time and money, and from the aggravation of dealing with improperly dried material. The DM-II automatically monitors the temperature profile inside your drying hopper within a pre-set temperature band to protect you from overdrying or underdrying your material. A warning alarm shown on the control display and light tower alerts you to improper drying conditions. This advanced notice provides time to diagnose and correct otherwise undetected problems that can lead to defects in products. In addition, the DM-II may be used to tune the dryer process temperature to minimize energy consumption.

NO GUESSWORK; MONITOR YOUR PROCESS

This valuable option can help you uncover common drying problems that may exist, including: a failed or out-of-place process RTD; improperly sized hoppers or dryers; drying or loading equipment failures; reduced airflow caused by dirty filters; kinked hoses and other obstructions; a throughput change; loss of power or overheated material.*

The DM-II is available as an option to the HY packages on Carousel Plus Dryer models W50 and MDCW50 and above. The drying monitor can be fitted to 39 different sized CH, RW or ESH series hoppers. The dryer must have a DC-2 control and be dedicated to a single drying hopper. A field retrofittable upgrade is available for existing DC-1 controllers.

* The DM-II does not alert you to the specific drying problem, however, the DC-2 control will identify most dryer related faults.

Easy to use

The DM-II can be used in automatic mode with just a few simple parameters set by the operator or can be tuned to individual material requirements by adjusting the inputs on several more screens on the DC-2 control.

Alerts you to possible drying problems

Any temperature swing above or below the setpoints triggers a related alarm.

Integrated into the DC-2 and TouchView™ controls

DM-II capabilities are built into both the TouchView™ and DC-2 dryer controllers. No stand alone panel, or board interface to contend with.

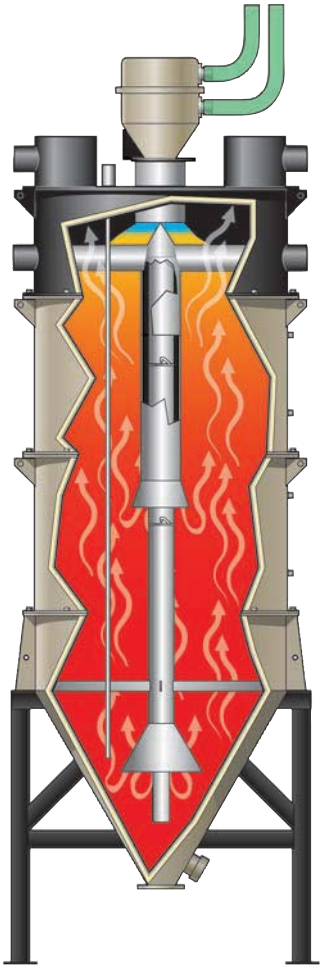
Automated monitoring

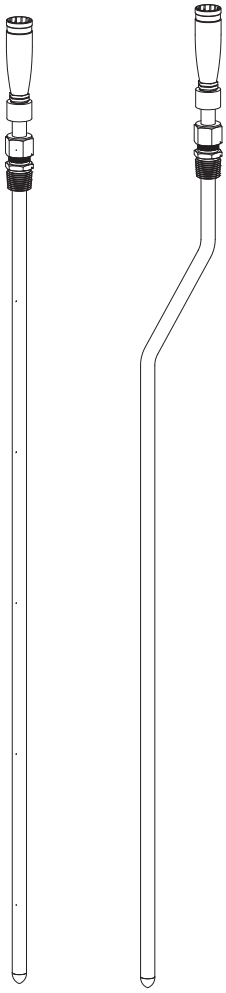
The DM-II monitors the temperature profile of the material in the hopper using six Resistance Temperature Device (RTD) sensors. These RTD sensors are located at evenly space positions on a probe that has been installed in the drying hopper. Monitoring the six sensors creates an accurate hopper temperature profile. If the temperature moves beyond the high or low setpoints, the DM-II alerts the operator with a passive alarm displayed on the control display and a light tower that lights green during proper operation, amber to indicate possible trouble or red to alert you that the dryer has stopped due to an alarm condition.

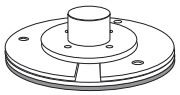
Trending graphs

When used in conjunction with a ControlWorks or EnergySmart system, the hopper temperature profile is stored to memory.

SPECIFICATIONS







Probe Mounting Adapter Kit

(Includes half coupling, two mounting plates, screws and gasket)

NOTE: The mounting adapter kit will only be included if the DM-II was ordered as a retrofit kit. Otherwise, the adapter plate will already be in place on the hopper.

Angled Probe

Allows the DM-II to be used on hoppers that have insufficient clearance for correctly mounting the probe around loading devices.

Communication Options

Information produced by the DM-II may be retrieved from the DC-2 control using anyone of the following dryer communication options:

- Modbus RTU EIA/RS-232
- Modbus RTU EIA/RS-485
- Modbus RTU Ethernet
- DeviceNet

The DM-II package includes:

- Drying monitoring probe
- Connecting cable
- Pre-wired dryer panel
- Light tower

NOTE: If your dryer does not have a DC-2 or TouchView control, you will need to purchase a control upgrade.

Model DM3-i

ASSURE PROPER DRYING; DEFECT-FREE PRODUCT & ENERGY SAVINGS

Conair extends the legacy of the patented Drying Monitor with the introduction of the DM3-i. Drying performance analysis occurs inside the drying hopper providing you with early detection of poor drying conditions and allowing you to correct potential issues before you have processed improperly dried material. With the DM3-i you will have control of polymer drying, make defect-free parts, save energy and increase your profitability.

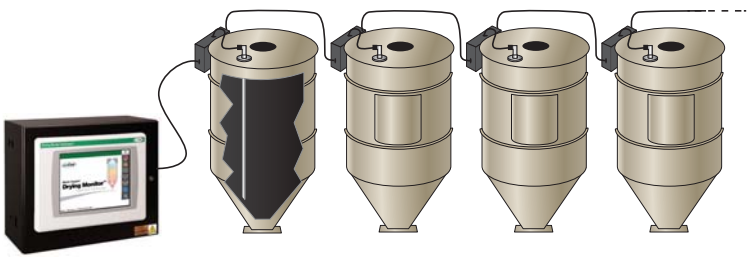
Now available as an independent touch panel, the DM3-i model can monitor up to 30 hoppers – even non-Conair hoppers. The DM3 is also available as a dryer option, embedded into the dryer control. Contact Conair for more information on the DM3-e.

MONITOR DRYING FROM WITHIN THE HOPPER

The Drying Monitor consists of a unique, six-zone, stainless steel temperature probe installed in the drying hopper that senses the specific temperature profile required for proper drying of your particular material. Interpretation of that temperature profile from the DM3-i monitor leads directly to predicting under or over-dried material, inadequate air flow, clogged filters, heater failure, excess throughput, unresponsive loading, over-capacity drying and many other conditions that are likely to produce scrap and waste time, energy and material. In addition, DM3-i provides information for hopper temperature trending, energy reduction and other data logging all in one display. It's web-enabled too, so you can get that information on the go.

The DM3-i temperature profiles are your visual assurance and recorded proof that your resins have been held at supplier's required drying temperatures for the required drying time. Trend data for all monitored hoppers is retrievable for up to seven days and may be exported directly to a spreadsheet of actual resin residence times and temperatures.

- **Don't waste time, energy or material**
  The DM3 monitors the temperature profile inside the drying hopper.
- **Early warnings, early detection of problems**
  Any out-of-spec temperature zone reading that may lead to incorrectly dried material is shown for immediate correction.
- **Fits any brand hopper**
  Any size hopper, of any brand may be easily fitted with a Drying Monitor Probe to report on the state of your drying process, at any time.

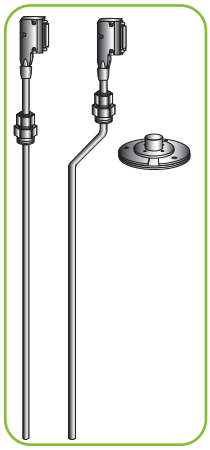


The model DM3-i can monitor up to 30 hoppers for proper drying performance.

MODEL DM3-i, DRYING MONITOR

FEATURES

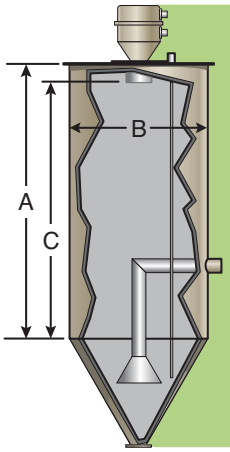
Equip your drying hoppers with Drying Monitor temperature probes



Hopper Probes

Unobtrusive, smooth, one piece, stainless steel Drying Monitor Probes are sized for each drying hopper so they can relay precise readings of six crucial temperature zones, in the drying hopper to the DM3-i TouchView Panel.

Hopper probes may be supplied straight, or angled to accommodate loading equipment. The exclusive adaptor plate allows for secure installation of the probe down from the top or up from the inside of the hopper.

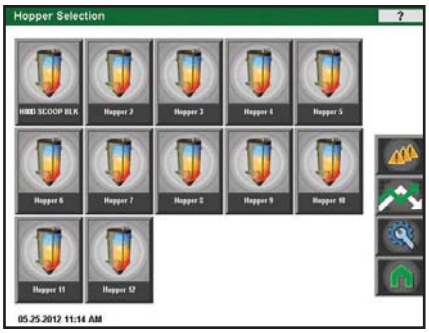


Required measurements for Drying Monitor Probe

For easy fitting of the Drying Monitor Probe into Conair hoppers, simply provide the model number and serial number of the hopper. Other hoppers can be fitted by measuring the critical dimensions as shown below and then supplying the measurements and engineering drawing to Conair.

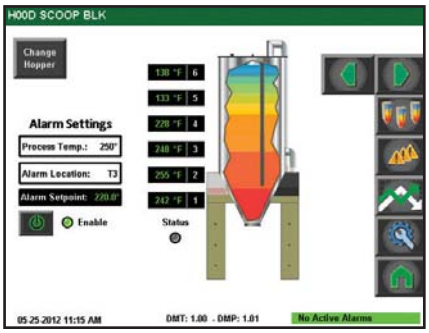
A = Straight section height
B = Hopper inside diameter
C = Straight section from loader discharge

HOPPERS AT A GLANCE



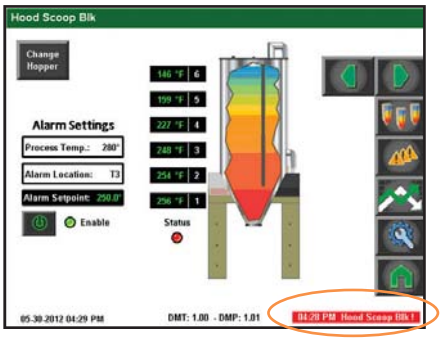
- Up to 30 hoppers are displayed and easily accessed for review or changing settings on the graphical touch screen interface panel.

YOUR DRYING HOPPER IN DETAIL



- Each hopper being monitored by DM3-i will display its critical drying temperature profile for examination and trending, and most importantly, assuring proper drying is taking place.

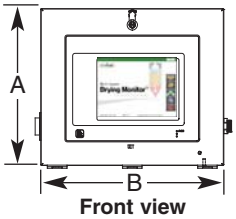
ADVANCED WARNING



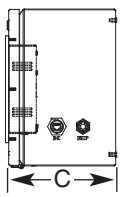
- When temperatures are not what they should be, Drying Monitor will be first to let you know with a flashing alarm banner and listing the alarm by date and time in the alarm log.

SPECIFICATIONS

Monitor panel

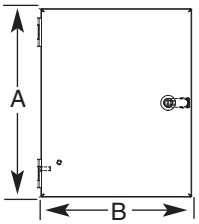


Front view

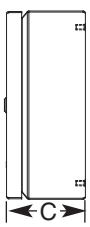


Side view

Probe junction box



Front view



Side view

MODEL	DM3-i	
Control box type	**DM3-i monitor panel**	**DM3-i probe junction box**
Dimensions inches {mm}		
A- Height	13.0 {330}	10.0 {254}
B- Width	14.0 {355}	8.0 {203}
C- Depth	8.0 {203}	4.0 {101}
Weight lb {kg}		
Installed	29 {13}	29 {13}
Shipping	36 {16}	36 {16}
Voltage 100 - 250 VAC 50/60 Hz		
Amps @115 volts	3 Amps	N/A
Amps @220 volts	1.5 Amps	N/A

SPECIFICATION NOTES

Specifications may change without notice. Check with a Conair representative for the most current information.

The DM3 is also available as a dryer option, embedded into the dryer control. Contact Conair for more information on the DM3-e.

DRYING ANALYSIS EMBEDDED IN YOUR DRYING CONTROL

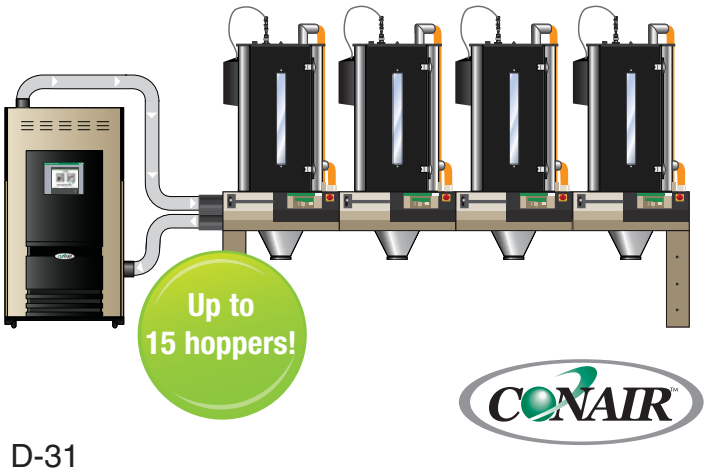
Conair extends the legacy of the patented Drying Monitor with the introduction of the DM3-e; the latest generation of proven technology for analyzing drying performance from inside the drying hopper. Available as an embedded dryer control option the model DM3-e can save you time and money, by early detection of poor drying parameters allowing you to correct potential issues before you have processed improperly dried material. The DM3-e model can monitor up to 15 hoppers. DM3 is also available as an independent touch panel display, for monitoring up to 30 hoppers. Contact Conair for more information on the DM3-i.

MONITOR YOUR PROCESS WITHIN THE HOPPER

The Drying Monitor consists of a unique, 6-zone, stainless steel temperature probe installed in the drying hopper that senses the specific temperature profile required for proper drying. Interpretation of that temperature profile by the DM3 monitor leads directly to predicting under or over dried material, inadequate air flow, clogged filters, heater failure, excess throughput for that hopper size, unresponsive loading, over capacity drying and many other conditions that are likely to produce scrap and waste time, energy and material. In addition, DM3-e provides valuable information for hopper temperature trending, energy reduction and other data logging, all within the dryer's touch screen display. It's web-enabled, so you can get that information on the go.

The DM3-e temperature profiles are your visual assurance and recorded proof that your resins have been held at supplier's required drying temperatures for the required drying time. Trend data for the monitored hopper(s) is retrievable for up to seven days and may be exported directly to a spreadsheet of actual resin residence times and temperatures.

- **Don't waste time, energy or material**
  The DM3-e monitors critical drying parameters inside the drying hopper.
- **Early warnings, early detection of problems**
  Any out-of-spec temperature zone reading that may lead to incorrectly dried material is shown for immediate correction.
- **One hopper, or multiple hoppers**
  DM3-e adds Drying Monitor capability to Conair TouchView controlled dryers to report on the state of your drying process, at any time. The DM3-e can also monitor up to 15 hoppers and probes when the dryer provides dry air for a ResinWorks system.



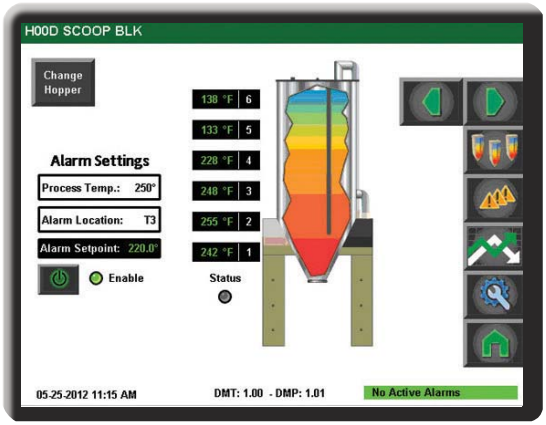
FEATURES

DM3-e is the perfect tool for learning what works and correcting what doesn't for perfect, repeatable drying performance.

CHOOSE SINGLE OR MULTI-HOPPER

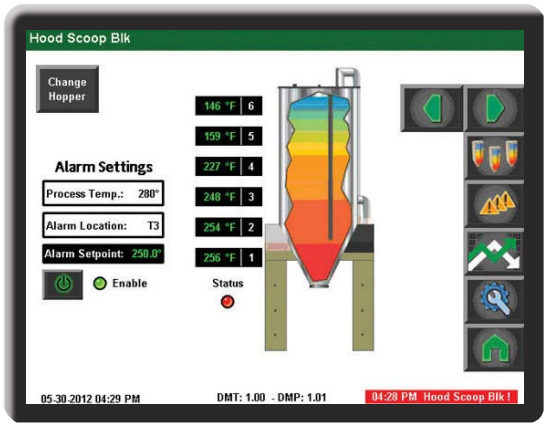
- DM3-e can be used with a dryer connected to a single hopper, or a dryer providing a centralized source of dry air for up to 15 hoppers, integrated into a ResinWorks system as selected on this set-up screen.

YOUR DRYING HOPPER IN DETAIL



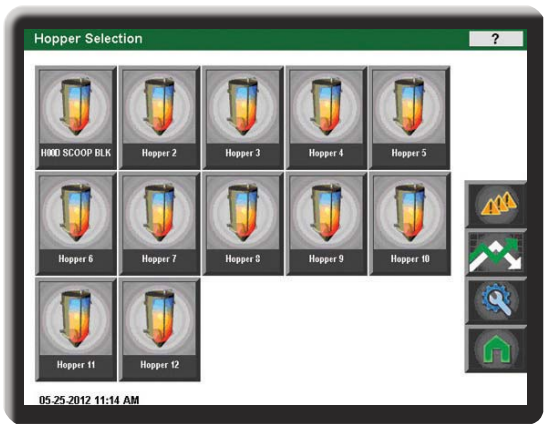
- Each hopper being monitored by DM3-e will display its critical drying temperature profile for examination and trending, and most importantly, assuring proper drying is taking place.

ADVANCED WARNING



- When temperatures are not what they should be, Drying Monitor will be first to let you know with a flashing alarm banner and listing the alarm by date and time in the alarm log.

HOPPERS AT A GLANCE

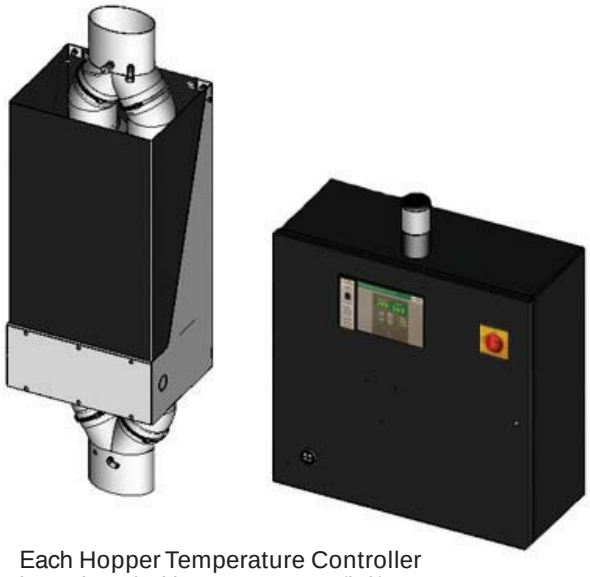


- Up to 15 hoppers are displayed and easily accessed for review or changing settings on the graphical touch screen interface panel.

SPECIFICATIONS

The DM3-e can be supplied as an option to Conair dryers equipped with the DC-T touch screen control option.

Hopper probe(s) are selected based on the specific size and model of hopper(s) used in the drying system. Conair hoppers readily accept hopper probes and are fitted with rugged couplings for securing the probe.



Each Hopper Temperature Controller is equipped with a Heater Box (left) that connects directly to the drying hopper and a precision DC temperature controller (right).

PRECISE CENTRAL DRYING CONTROL

Heat Boosters supply economical drying heat to individual drying hoppers for the most efficient material pre-conditioning system available. With a temperature range up to 350°F {178°C}, and a full complement of safety devices, Heat Boosters are exceptional for providing safe, precise temperatures for drying.

FAST RESPONDING, ENERGY EFFICIENT HEATERS

The HTC Heat Boosters feature tube type heaters with fast responding, energy efficient, open-wire resistance heaters located within mica-lined stainless steel tubes. High temperature safety shut off protection is an integral feature of each HTC.

The HTC controls feature a lockable fused disconnect switch, solid state heater contactor, isolation contactor for over temperature safety protection and a proportioning temperature controller. The temperature is monitored and controlled with a remote sensor located at the hopper air inlet.

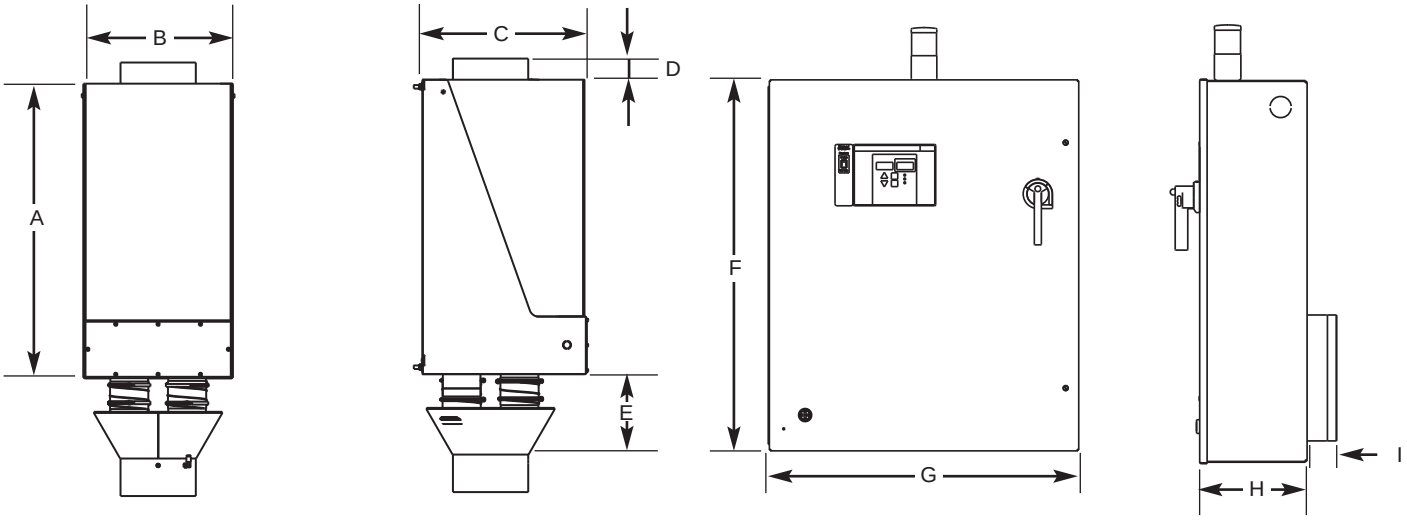
- **Individual heating units**
  Allows you to heat hoppers individually for your unique drying needs.
- **Precision heat control**
  Features dual display of setpoint and actual temperatures.
- **Safe surface temperature**
  Insulated heater box ensures safe surface temperature.
- **Safe operation**
  Redundant safety switches and alarms help eliminate accidents.

Accurate, safe temperature control

Drying temperatures are set and monitored easily with the DC Control which displays both setpoint and actual temperatures. Over/under temperature and temperature deviation faults are also clearly alerted along with low airflow conditions, which prevent operation during hopper cleaning or without airflow from the central dryer.

SPECIFICATIONS

HTC FOR CAROUSEL PLUS DRYERS



MODEL HTC	HTC-30H*	HTC-60H*		HTC-90H*	HTC-120H*	HTC-180H*	HTC-270H*
Carousel Plus dryer model	W600	W800 & W1000		W1600	W2400	W3200	W5000
Performance characteristics							
Temperature range	150° - 375° F {66° - 191° C}						
Flow rate cfm	300	400	500	800	1200	1600	2500
Pressure drop@flow rate							
inches WC†	3.0	1.8	2.3	4.0	3.8	5.9	6.4
{mm} WC†	{76.2}	{45.7}	{58.4}	{101.6}	{96.5}	{149.9}	{162.6}
Dimensions inches {cm} and weight lb {kg}							
Heater box dimensions							
Inlet size (OD)	8	8		12	12	12	12
Outlet size selection (OD)	8	8		12	12	12	12
A - Height	31.4 {79.8}	27.5 {69.9}		27.0 {68.6}	31.0 {78.7}	34.0 {86.4}	36.4 {92.5}
B - Width	10.1 {25.7}	13.6 {34.5}		16.0 {40.6}	16.0 {40.6}	18.0 {45.7}	24.2 {61.5}
C - Depth	10.7 {27.2}	10.9 {27.7}		10.9 {27.7}	16.0 {40.6}	17.0 {43.2}	17 {43.2}
D - Height of discharge	1.75	1.5		2.0	1.0	2.0	1.0
nozzle (above the heater box)	{4.4}	{3.8}		{5.1}	{2.5}	{5.1}	{2.5}
E - Height of inlet nozzle	10.6	7.1		8	10	13	15.4
(below the heater box)	{26.9}	{18.0}		{20.3}	{25.4}	{33.0}	{39.1}
Installed weight lb {kg}‡	38 {17}	37 {17}		78 {35}	93 {43}	102 {46}	131 {59}
Control center dimensions							
F - Height	24.0 {61.0}	24.0 {61.0}		36.0 {91.4}	48.0 {122.0}	60.0 {152.4}	60.0 {152.4}
G - Width	24.0 {61.0}	24.0 {61.0}		30.0 {76.2}	36.0 {91.4}	42.0 {106.7}	42.0 {106.7}
H - Depth	10.0 {25.4}	10.0 {25.4}		10.0 {25.4}	10.0 {25.4}	12.0 {30.5}	12.0 {30.5}
I - Clearance for heat sink	3.0 {7.6}	3.0 {7.6}		3.0 {7.6}	3.0 {7.6}	3.0 {7.6}	3.0 {7.6}
Installed weight lb {kg}	150.0 {68.0}	150.0 {68.0}		180.0 {81.6}	250.0 {113.0}	consult Conair	consult Conair
Voltage full load amps							
400V/3 phase/50 Hz	44	87		131	175	261	381
460 V/3 phase/60 Hz	38	76		114	152	227	340
575 V/3 phase/60 Hz	30	61		91	122	182	272

SPECIFICATION NOTES:

* The HTC model number reflects the kilowatts of each unit. For example, HTC-60 has a 60 kilowatt heater.

† The unit of measure WC is water column.

‡ Weights are approximate.

Specifications may change without notice. Consult a Conair representative for the most current information.

CGT350

RETROFIT ELECTRIC DRYERS WITH EFFICIENT GAS

Retrofit your existing electric dryer to cost effective natural gas with the Conair GasTrac Process Air Heater.

The unique combustion airflow system of the GasTrac consistently maintains drying temperatures under any conditions, while cutting energy costs below that of electric resistance heaters. The GasTrac Process Air Heater uses your dryer's desiccant beds, circulating air through the GasTrac heat exchanger and hopper. Because the GasTrac is designed to convert your existing electric dryer, realizing your energy savings has never been easier.

RETROFIT FOR LOWER BURNING EMISSIONS

Conair's GasTrac air heater uses a state-of-the-art radiant heat burner with one of the lowest emissions levels.

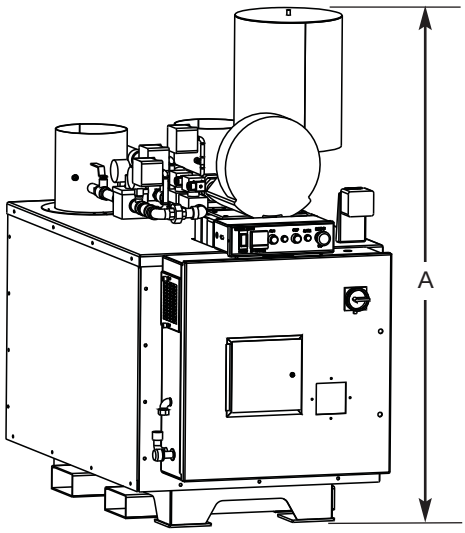
Gas-fired heaters substantially lower energy costs and provide energy savings up to 70% over an equal amount of electricity. The indirect heat exchanger, designed completely of stainless steel, separates process air from the combustion air, eliminating any possibility of contamination. The ceramic/fiber matrix burner provides safe, high-efficiency radiant heat.

Off-the-shelf controls and gas components monitor every function of the heater and are easy to maintain. Automatic shutdown occurs if pressure switches sense unsafe conditions.

- **Clean radiant heat burning**
  The GasTrac has one of the lowest emissions of any burner available in the world today. The ceramic/fiber matrix burner couples high heat transfer with extremely low emissions.
- **Space saving construction**
  Compact design provides a smaller footprint for easy out-of-the-way placement of your dryer.
- **Unique airflow system**
  The process airflow is heated indirectly as it flows around the heat exchanger. It never comes in contact with the combustion airflow and contamination.
- **Exceeds industry requirements**
  All GasTrac components meet or exceed industry requirements for UL, AGA, CGA, FM, NFPA and IAS.

GASTRAC PROCESS AIR HEATER

SPECIFICATIONS



MODELS	CGT150	CGT250	CGT350	CGT500	CGT700
Performance characteristics					
Temperature range ºF {ºC}	250 - 350 {122 - 177}				
Maximum flue temperature ºF {ºC}	750 {399}				
Combustion blower	0.5 Hp peripheral	0.5 Hp peripheral	1 Hp peripheral	1 Hp peripheral	1 Hp peripheral
Ignition source	Spark igniter, interrupted				
Burner type	Metal-ceramic				
Minimum burner capacity BTU/hr	40,000	75,000	90,000	125,000	150,000
Maximum burner capacity BTU/hr	150,000	225,000	350,000	500,000	700,000
Gas consumption*					
CFH @250ºF {L/hour}	50 {1416}	90 {2549}	105 {2973}	150 {4248}	230 {6513}
CFH @350ºF {L/hour}	140 {3964}	215 {6088}	325 {9203}	465 {13167}	675 {19114}
Gas pressure to regulator In. H_2O {kPa}	10 - 20 {2.49 - 4.98}				
Gas pressure from regulator In. H_2O {kPa}	4 - 7 {0.99 - 1.74}				
Gas heating rate BTU/ft³	1000				
Dimensions in. {mm}					
A - Height	54 {1372}	61{1549}	61 {1549}	61 {1549}	61 {1549}
Width	29 {737}	37 {940}	37 {940}	37 {940}	37 {940}
Depth	66 {1676}	64 {1626}	74 {1880}	74 {1880}	74 {1880}
Air inlet/outlet, OD	8 {203}	8 {203}	8 {203}	8 {203}	12 {300}
Gas inlet size (NPT)	3/4 {19.1}	3/4 {19.1}	3/4 {19.1}	3/4 {19.1}	1 {25.4}
Exhaust flue, OD	6 {152}	6 {152}	6 {152}	6 {152}	6 {152}
Approximate weight lb {kg}					
Installed	600 {272}	600 {272}	600 {272}	600 {272}	600 {272}
Shipping	700 {317}	700 {317}	700 {317}	700 {317}	600 {272}
Voltage Total amps					
400V/3 phase/50Hz	3.0	6.2	1.6	1.3	3.0
240V/3 phase/60Hz	3.0	10.9	2.5	2.0	3.0
480V/3 phase/60Hz	3.0	5.4	5.4	6.7	3.0

Emissions			
Primary excess air	10 - 30%	Carbon Monoxide (CO)	<10 ppm corrected to 3% O_2
Oxygen (O_2) (ideal 3 - 4%)	2 - 5%	NOX	<20 ppm corrected to 3% O_2
Carbon Dioxide (CO_2)	9 - 10.5%	Unburned hydrocarbons	<10 ppm corrected to 3% O_2

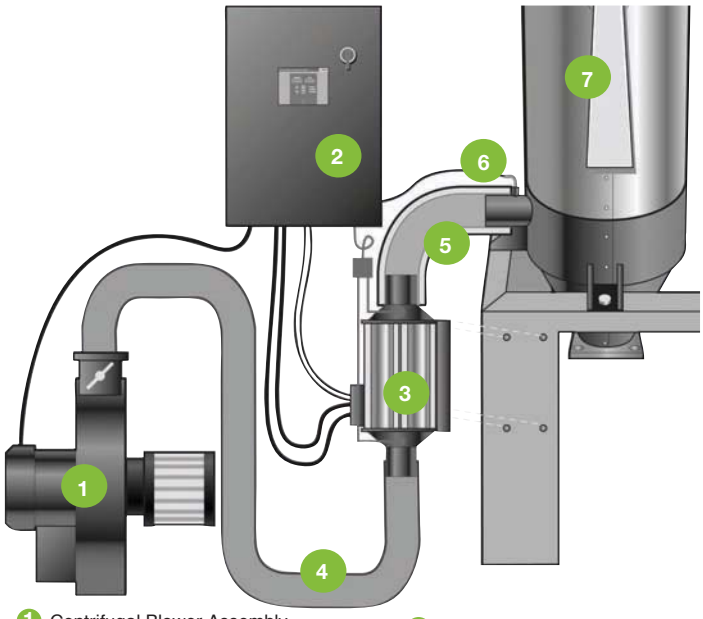
All GasTrac components meet:
UL372, UL795, FM, CGA, AGA, NFPA 54, NFPA 79, NFPA 86 and IAS

*Designed for natural gas. For alternate fuel, contact your Conair representative.

Specifications may change without notice. Consult a Conair representative for the most current information.

HAD MODELS, 600 - 5000

- **Ideal for preheating non-hygroscopic pellets**
  Removes surface moisture.
- **Modular construction**
  Adapts easily to every plant environment.
- **Available in five models**
  Throughput ranges of 600 through 5,000 lb/hr.
- **Temperatures up to 250° F**
- **Performance guaranteed**

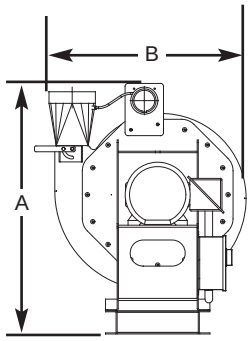


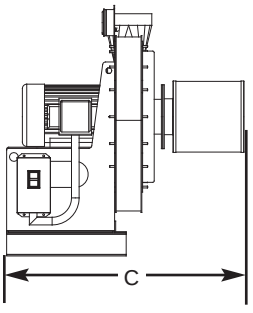
1. Centrifugal Blower Assembly
2. Control Center
3. Electrical Heater Assembly
4. Hose
5. Insulated Hose
6. Process Temperature RTD
7. Outlet Filter Sock (optional)

SPECIFICATIONS

HAD BLOWER

Hot Air Dryer model (HAD)	600	800	1000	1600	2400	3200	5000
RECOMMENDED MODEL HTC*	HTC-30B†	HTC-30B†	HTC-30A†	HTC-60A†	HTC-90A†	HTC-120A†	HTC-180A†
Performance characteristics							
Flow rate cfm	300	400	500	800	1200	1600	2500
Disc. pressure @flow rate							
inches WC‡	25	32	30	30	28	30	33
{mm} WC‡	{635}	{813}	{762}	{762}	{711}	{762}	{838}
Motor Hp kW	5 {3.7}	7.5 {5.6}		7.5 {5.6}	10 {7.5}	15 {11.2}	25 {18.6}
Dimensions inches {cm}							
Outlet size selection (OD)	5	5		8	8	8	12
A - Height	42 {107}	42 {107}		42 {107}	42 {107}	42 {107}	42 {107}
B - Width	33 {84}	33 {84}		33 {84}	33 {84}	33 {84}	33 {84}
C - Length	39 {99}	39 {99}		42 {107}	42 {107}	80 {203}	82 {208}
Weight							
Installed weight lb {kg}§	250 {113}	320 {145}		380 {172}	500 {227}	700 {317}	900 {408}
Voltage full load amps**							
400V/3 phase/50 Hz	9.1	13.2		13.2	16.8	25.2	40.8
460 V/3 phase/60 Hz	7.6	11.0		11.0	14.0	21.0	34
575 V/3 phase/60 Hz	6.1	9.0		9.0	11.0	17.0	27
Noise level††							
with standard soundproofing	< 90 dbA @ 5 ft.						



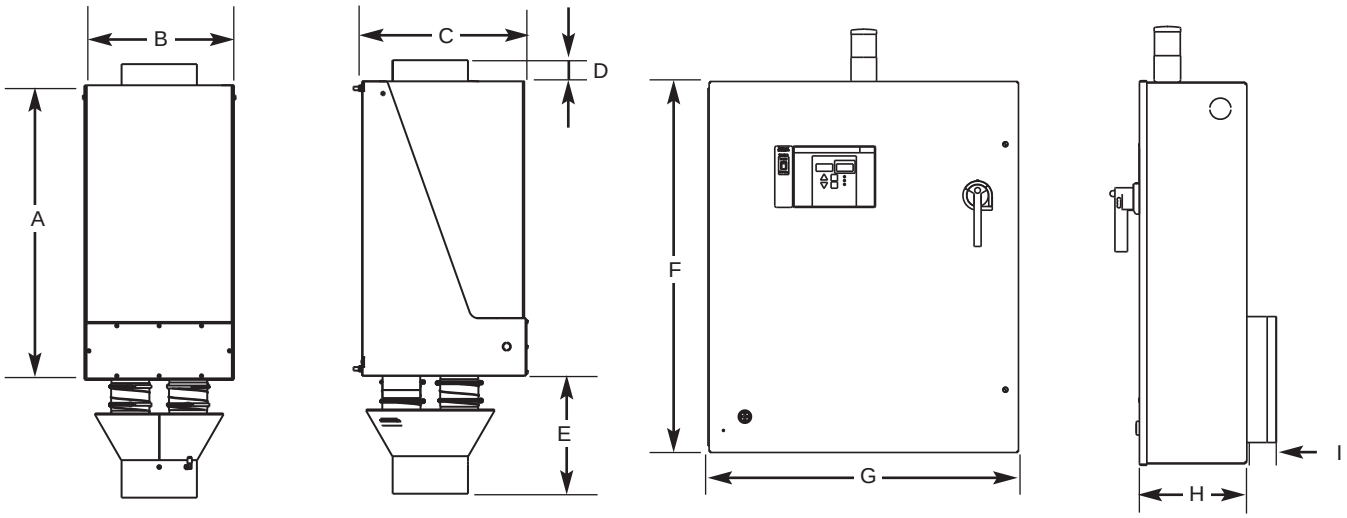


SPECIFICATION NOTES:

* For single hopper system.
† The HTC model number reflects the kilowatts of each unit. For example, HTC-60 has a 60 kilowatt heater.
‡ The unit of measure WC is water column.
§ Weights are approximate.
** Full load amps apply to the Hot Air Dryer (blower) only, see reverse side for heater amp draw.
†† Standard soundproofing will be included only when the rating exceeds 90 dbA.
Specifications may change without notice. Consult a Conair representative for the most current information.

SPECIFICATIONS

HTC FOR HAD



MODEL HTC	HTC-30B*		HTC-30A*	HTC-60A*	HTC-90A*	HTC-120A*	HTC-180A*
Hot air dryer model	600 and 800		1000	1600	2400	3200	5000
Performance characteristics							
Temperature range	120° - 250°F {49° - 121°C}						
Flow rate cfm	300	400	500	800	1200	1600	2500
Pressure drop@flow rate							
inches WC†	3.0	5.0	3.2	5.4	6.1	6.4	8.0
{mm} WC†	{76.2}	{127.0}	{81.2}	{137.2}	{155.0}	{163.0}	{203.2}
Dimensions inches {cm}							
Heater box dimensions							
Inlet size (OD)	5		5	8	8	8	12
Outlet size selection (OD)	5		5	8	8	8	12
A - Height	31.4 {79.8}		27.5 {69.9}	27.5 {69.9}	32.0 {81.3}	31.0 {79.0}	34.0 {86.3}
B - Width	10.1 {25.7}		13.6 {34.5}	13.6 {34.5}	15.9 {40.4}	16.0 {40.6}	18.0 {45.7}
C - Depth	10.7 {27.2}		10.7 {27.2}	10.9 {28.0}	16.0 {40.6}	17.0 {43.2}	20.0 {50.8}
D - Height of discharge nozzle above heater box	0 {0}		5.9 {15.0}	2.0 {5.1}	1.0 {2.5}	2.0 {5.1}	1.0 {2.5}
E - Height of inlet nozzle below the heater box	8.0 {20.3}		11.4 {30.0}	8.0 {20.3}	11.0 {27.9}	13.0 {33.0}	13.0 {33.0}
Installed weight lb {kg}	37 {17}		58 {26}	78 {35}	93 {42}	102 {46}	131 {59}
Control center dimensions							
F - Height	24.0 {61.0}		24.0 {61.0}	24.0 {61.0}	36.0 {91.4}	48.0 {122.0}	60.0 {152.4}
G - Width	24.0 {61.0}		24.0 {61.0}	24.0 {61.0}	30.0 {76.2}	36.0 {91.4}	42.0 {106.7}
H - Depth	10.0 {25.4}		10.0 {25.4}	10.0 {25.4}	10.0 {25.4}	10.0 {25.4}	12.0 {30.5}
I - Clearance for heat sink	3.0 {7.6}		3.0 {7.6}	3.0 {7.6}	3.0 {7.6}	3.0 {7.6}	3.0 {7.6}
Installed weight lb {kg}	150.0 {68.0}		150.0 {68.0}	150.0 {68.0}	180.0 {81.6}	250.0 {113.0}	consult Conair
Voltage full load amps‡							
400V/3 phase/50-60 Hz	44		44	87	131	175	261
460 V/3 phase/60 Hz	38		38	76	114	152	227
575 V/3 phase/60 Hz	30		30	61	91	122	182

SPECIFICATION NOTES:

* The HTC model number reflects the kilowatts of each unit. For example, HTC-60 has a 60 kilowatt heater.

† The unit of measure WC is water column.

‡ Full load amps apply to the Hopper Temperature Controller (heater) only, see reverse side for blower amp draw.

Specifications may change without notice. Consult a Conair representative for the most current information.

EFFICIENT DRYING WITH **MINIMUM DOWNTIME**

CH series drying hoppers save you time, energy and money by delivering consistent, efficient drying and fast, easy clean outs.

Conair hoppers are designed to promote even heat distribution and mass material flow to ensure adequate drying throughout the hopper. Large access doors and smooth interior surfaces keep downtime for material changes to a minimum.

We offer a wide range of hopper sizes, with capacities from 18 to 31,500 lb/ft^3 {288.3 to 504,581.6 kg/m^3}.

IMPROVE PRODUCT QUALITY, LOWER OPERATING COSTS

All hoppers may look the same, but they're not. Hopper design can influence three critical parameters that affect overall drying performance: airflow, drying temperature and drying time.

The shallow cone angles and perforated material spreaders found in some hopper designs can cause surface friction that holds dry material in the hopper while wet material flows into the process.

Conair hoppers have steep cone angles and smooth interior surfaces that promote mass material flow. This ensures that all material has dried at the same rate before it leaves the hopper.

Our insulated side walls prevent the heat loss that can drive up energy costs and keep material along the outer walls of the hopper from attaining the required drying temperature.

- **Quick-clean design**
  Large hinged doors, smooth walls and removable spreader cones make cleaning fast and easy.
- **Consistent drying time**
  Don't let your material leave the drying hopper before its time. Conair's air inlet design, smooth material/air spreaders and steep cone angles promote uniform mass material flow. This means material at every level has been exposed to drying air for the same amount of time before leaving the hopper.
- **Uniform air/heat distribution**
  Conair hoppers introduce heated drying air low in the cone of the hopper, ensuring that material at all levels in the hopper will be dry when you're ready to process it.
- **Prevents energy loss**
  Insulated side walls prevent the heat loss that occurs with uninsulated hoppers. This means consistent temperature levels throughout the hopper, better overall drying performance, and energy savings for you.

CH SERIES INSULATED HOPPERS

FEATURES/OPTIONS

Select the right dryer for your application

Hopper design can determine whether your material is dry when it enters the process, as well as how easy the hopper is to clean between material changes.

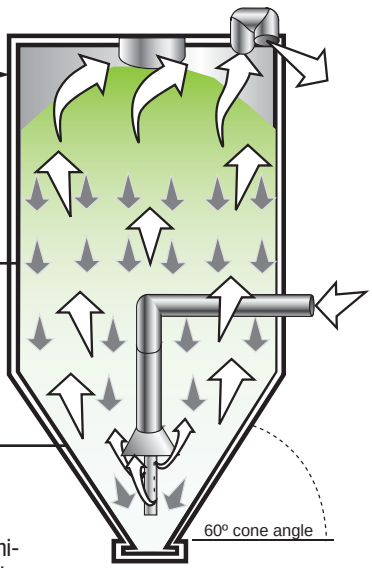
CONAIR DRYING HOPPER

Insulated side walls maintain temperature at desired level, prevent heat loss and protect workers from hot surfaces.

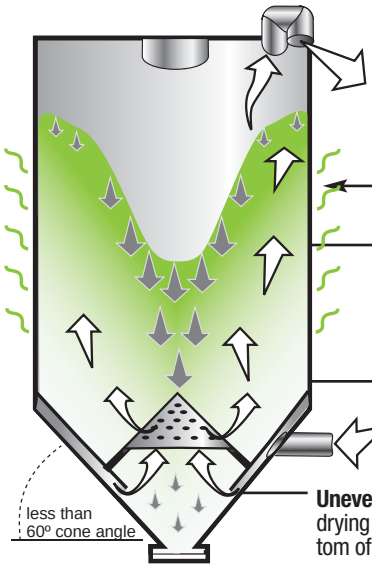
Mass material flow
Smooth surfaces and steep cone angles ensure that each pellet is exposed to heated drying air for the specified drying time.

Even air/heat distribution throughout the hopper.The air spreader has a drop tube that forces drying air to material at the bottom of the hopper.

A large access door, easily removable spreader cone and smooth interior walls minimize downtime for clean-out and material changes.



OTHER HOPPER DESIGNS



Heat loss through uninsulated side walls

Center "funnel" flow induced by a shallow cone angle allows wet material to enter the process.

Perforated metal inhibits mass material flow and can be difficult to clean.

Uneven heat distribution. No drying air is forced into the bottom of the hopper.

OPTIONS/ACCESSORIES

All Models

Floor Stand
(standard on CH39 and CH44 hoppers) Stands can be bolted to the floor or fitted with casters. Stands designed to fit over a gaylord are available for larger hopper models.

Hopper Loaders
Conair vacuum loaders and receivers mount easily to the top of the hopper. Select from a wide range of capacities to accommodate your throughput.

- **Distribution Boxes**
  Mount beneath the hopper to help convey the dried material to the processing machine.
- **Special Paint**
  Automotive or non-automotive paint (available only on carbon steel)

Models CH10, CH14, CH18 and CH24

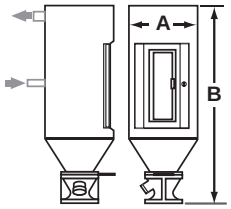
- **Thermometer**
  For the inlet or outlet of the drying hopper.
- **Material Level Sensor and Bracket**
  For mounting on strip sight glasses on insulated hoppers only.
- **Modular Precision Slide Gate**
  For above the drain port, to allow material sampling without draining the hopper.
- **Hand-fill Lid**
  For hand filling batches or hopper storage.
- **Passivation Treatment**
  Available only on stainless steel hoppers.
- **Strip Sight Glass**
  For viewing material levels within the hopper.

Models CH33, CH39 and CH44

- **Strip Sight Glass**
  For viewing material levels within the hopper.

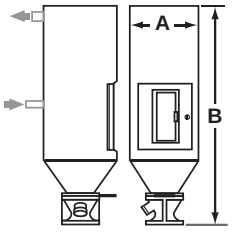
SPECIFICATIONS

CH SERIES INSULATED HOPPERS



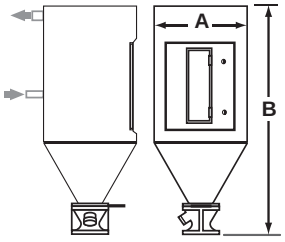
CH10-0.5
CH10-1
CH10-1.5

FIGURE 1



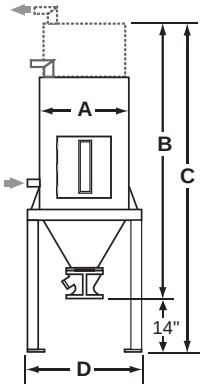
CH14-2
CH14-3
CH14-4

FIGURE 2



CH18-4
CH18-6
CH24-8

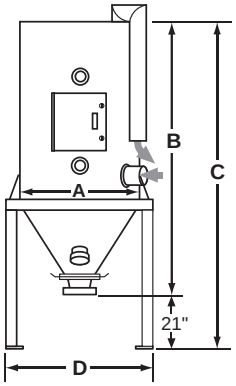
FIGURE 3



Hopper extension on CH24-15 and CH24-18 only

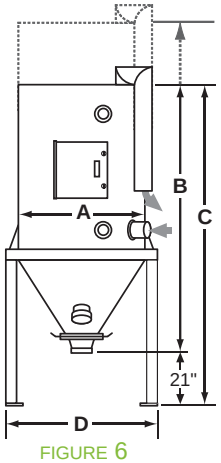
CH24-12
CH24-15
CH24-18

FIGURE 4



CH33-21
CH33-28

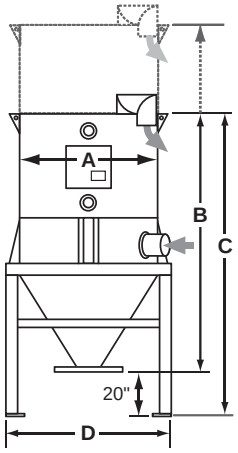
FIGURE 5



Hopper extension on CH39-42 only

CH39-35
CH39-42
CH44-58

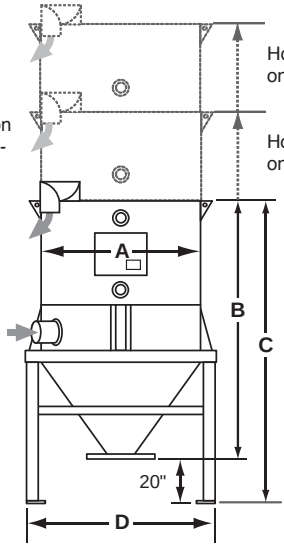
FIGURE 6



Hopper extension on all models except CH54-70 and CH64-158

CH54-70
CH54-85
CH54-99
CH54-114
CH54-129
CH64-158
CH64-187
CH64-215
CH64-248

FIGURE 7

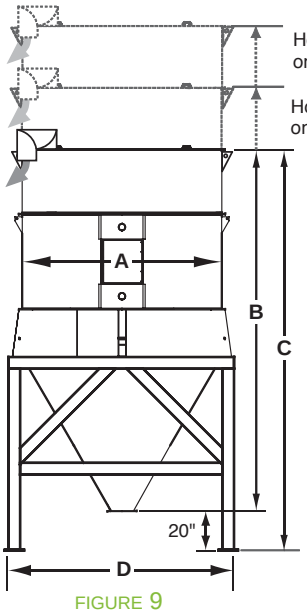


Hopper extension on CH74-487

Hopper extension on CH74-366

CH74-245
CH74-366
CH74-487

FIGURE 8



Hopper extension on CH100-900

Hopper extension on CH100-675

CH100-450
CH100-675
CH100-900

Note: The air inlet on the CH100 Series is located on the opposite side of the hopper.

FIGURE 9

KEY	Top for hopper loaders	Bottom at discharge
◎ **Sightglass** ⬅ **Air inlet/outlet**	**IT06** 3 equally spaced mounting clips on a 10.5 in. {267 mm} diameter bolt circle **IT07** 4 equally spaced mounting clips on a 16.375 in. {416 mm} diameter bolt circle	**IB02** 5 x 5 in. {127 x 127 mm} bolt pattern; 4 bolt holes, 7/16 in. {11 mm} **IB03** 7 x 7 in. {178 x 178 mm} bolt pattern; 4 bolt holes, 9/16 in. {14 mm} **IB09** 16 bolt holes, 7/16 in. {11 mm}, on a 16.25 in. {413 mm} square plate

CH SERIES INSULATED HOPPERS

SPECIFICATIONS

MODEL	CH10-0.5	CH10-1	CH10-1.5	CH14-2	CH14-3	CH14-4	CH18-4	CH18-6	CH24-8	CH24-12	CH24-15
FIGURE NUMBER	Fig. 1	Fig. 1	Fig. 1	Fig. 2	Fig. 2	Fig. 2	Fig. 3	Fig. 3	Fig. 3	Fig. 4	Fig. 4
Performance characteristics											
Capacity ft³ {liter}	0.5 {14}	1.0 {28}	1.5 {42}	2 {57}	3 {85}	4 {113}	4 {113}	6 {170}	8 {227}	12 {340}	15 {425}
Capacity @ 35 lb/ft³	18	35	53	70	105	140	140	210	280	420	525
Dimensions inches {cm}											
A - Inside diameter	10 {25}	10 {25}	10 {25}	14 {36}	14 {36}	14 {36}	18 {46}	18 {46}	24 {61}	24 {61}	24 {61}
B - Hopper height	25 {64}	39 {99}	50 {127}	41 {104}	52 {132}	58 {147}	44 {112}	64 {163}	60 {152}	73 {185}	89 {226}
C - Height with stand*	54 {137}	68 {173}	79 {201}	70 {178}	81 {206}	98 {249}	79 {201}	93 {236}	89 {226}	87 {221}	103 {262}
D - Footprint w/stand in {cm} sq.	31 {79}	31 {79}	31 {79}	31 {79}	31 {79}	31 {79}	31 {79}	31 {79}	31 {79}	34 {86}	34 {86}
Air inlet (OD)	1.75 {4.4}			2 {5.1}			2.5 {6.4}		2.5 {6.4}		
Air outlet (OD)	2 {5.1}			2.5 {6.4}			3 {7.6}		3 {7.6}		
Material discharge (ID)	2 {5.1}			2 {5.1}			2 {5.1}		2.5 {6.4}		
Weight lb {kg}											
Installed weight (hopper only)	40 {18}	50 {23}	70 {32}	80 {36}	95 {43}	110 {50}	145 {66}	170 {77}	210 {95}	230 {104}	240 {109}
Mounting interfaces											
Hopper loader (Top)	IT06	IT06	IT06	IT06	IT06	IT06	IT07	IT07	IT07	IT07	IT07
Material discharge (Bottom)	IB02	IB02	IB02	IB02	IB02	IB02	IB02	IB02	IB02	IB02	IB02

MODEL	CH24-18	CH33-21	CH33-28	CH39-35	CH39-42	CH44-58	CH54-70	CH54-85	CH54-99	CH54-114	CH54-129
FIGURE NUMBER	Fig. 4	Fig. 5	Fig. 5	Fig. 6	Fig. 6	Fig. 6	Fig. 7	Fig. 7	Fig. 7	Fig. 7	Fig. 7
Performance characteristics											
Capacity ft³ {liter}	18 {509}	21 {595}	28 {793}	35 {991}	42 {1189}	58 {1643}	70 {1982}	85 {2407}	99 {2804}	114 {3228}	129 {3653}
Capacity @ 35 lb/ft³	630	735	980	1225	1470	2030	2450	2975	3465	3990	4515
Dimensions inches {cm}											
A - Inside diameter	24 {61}	33 {84}	33 {84}	39 {99}	39 {99}	44 {112}	54 {137}	54 {137}	54 {137}	54 {137}	54 {137}
B - Hopper height	103 {262}	88 {224}	102 {259}	103 {262}	113 {287}	123 {312}	103 {262}	121 {307}	133 {338}	139 {353}	151 {384}
C - Height with stand*	117 {297}	109 {277}	123 {312}	124 {315}	134 {340}	144 {366}	123 {312}	141 {358}	153 {389}	159 {404}	171 {434}
D - Footprint w/stand in {cm} sq.	34 {87}	43 {109}	43 {109}	49 {125}	49 {125}	54 {137}	66 {168}	66 {168}	66 {168}	66 {168}	66 {168}
Air inlet (OD)	2.5 {6.4}	5 {12.7}					5 {12.7} or 8 {20.3}				
Air outlet (OD)	3 {7.6}	5 {12.7}					5 {12.7} or 8 {20.3}				
Material discharge (ID)	2.5 {6.4}	3 {7.6}					6 {15.2}				
Weight lb {kg}											
Installed weight (hopper only)	250 {113}	450 {204}	700 {318}	800 {363}	900 {408}	950 {431}	1100 {499}	1250 {567}	1450 {658}	1550 {703}	1650 {748}
Mounting interfaces											
Hopper loader (Top)	IT07	IT07	IT07	IT07	IT07	IT07	IT07	IT07	IT07	IT07	IT07
Material discharge (Bottom)	IB02	IB03	IB03	IB03	IB03	IB03	IB09	IB09	IB09	IB09	IB09

MODEL	CH64-158	CH64-187	CH64-215	CH64-248	CH74-245	CH74-366	CH74-487	CH100-450	CH100-675	CH100-900
FIGURE NUMBER	Fig. 7	Fig. 7	Fig. 7	Fig. 7	Fig. 8	Fig. 8	Fig. 8	Fig. 9	Fig. 9	Fig. 9
Performance characteristics										
Capacity ft³ {liter}	158 {4475}	187 {5296}	215 {6089}	248 {7023}	245 {6938}	366 {10365}	487 {13792}	450 {12743}	675 {19114}	900 {25485}
Capacity @ 35 lb/ft³	5530	6545	7525	8680	8575	12810	17045	15750	23625	31500
Dimensions inches {cm}										
A - Inside diameter	64 {163}	64 {162}	64 {162}	64 {163}	74 {188}	74 {188}	74 {188}	100 {254}	100 {254}	100 {254}
B - Hopper height	145 {368}	159 {434}	175 {445}	194 {493}	173 {439}	221 {561}	268 {681}	186 {472}	234 {594}	283 {719}
C - Height with stand*	165 {419}	179 {488}	195 {495}	214 {544}	193 {490}	241 {612}	288 {732}	206 {523}	254 {645}	303 {770}
D - Footprint w/stand in {cm} sq.	76 {193}	76 {193}	76 {193}	76 {193}	86 {218}	86 {218}	86 {218}	120 {305}	120 {305}	120 {305}
Air inlet (OD)	8 {20.3}				12 {30.5}			12 {30.5}		
Air outlet (OD)	8 {20.3}				12 {30.5}			12 {30.5}		
Material discharge (ID)	6 {15.2}				8 {20.3}			11.875 {30.2}		
Approximate weight lb {kg}										
Installed weight (hopper only)	1850 {839}	2050 {930}	2150 {975}	2250 {1021}	3230 {1465}	3830 {1737}	5030 {2282}	9750 {4423}	10800 {4899}	11850 {5375}
Mounting interfaces										
Hopper loader (Top)	IT07	IT07	IT07	IT07	IT07	IT07	IT07	IT07	IT07	IT07
Material discharge (Bottom)	IB09	IB09	IB09	IB09	IB09	IB09	IB09	IB09	IB09	IB09

SPECIFICATION NOTE:

* Add 5 inches {12.7 cm} to the height, if you order optional casters.
Specifications can change without notice. Contact a Conair representative for the most current information.

DH Hopper
(Shown with W Series Dryer and optional hard piping kit.)

ADDITIONAL INSULATION FOR **HIGHER TEMPERATURE MATERIALS**

DH Series Drying Hoppers save you time, energy and money by delivering consistent, efficient drying.

Conair hoppers are designed to promote even heat distribution and mass material flow to ensure adequate drying throughout the hopper. Large access doors and smooth interior surfaces keep downtime for material changes to a minimum.

We offer a wide range of hopper sizes, with capacities from 70 to 487 ft^3 {1.98 to 13.79 m^3}.

GREATER VOLUME OF HOT MATERIAL; LESS ENERGY

All hoppers may look the same, but they're not. Hopper design can influence three critical parameters that affect overall drying performance: airflow, drying temperature and drying time.

The shallow cone angles and perforated material spreaders found in some hopper designs can cause surface friction that holds dry material in the hopper while wet material flows into the process.

Conair hoppers have steep cone angles and smooth interior surfaces that promote mass material flow. This ensures that all material has dried at the same rate before it leaves the hopper.

Our insulated side walls prevent the heat loss that can drive up energy costs and keep material along the outer walls of the hopper from attaining the required drying temperature.

- **Quick-clean design**
  Large hinged doors and smooth walls make cleaning fast and easy.
- **Uniform material flow for more consistent drying**
  Don't let your material leave the drying hopper before its time. Conair's air inlet design, smooth material/air spreaders and steep cone angles promote uniform mass material flow. This means material at every level has been exposed to drying air for the same amount of time before leaving the hopper.
- **Engineered to optimize drying throughout the hopper**
  Conair hoppers introduce heated drying air low in the cone of the hopper, ensuring that material at all levels in the hopper will be dry when you're ready to process it. The spreader of the DH Series has been redesigned for improved air distribution in the cone section, and better process air to resin contact throughout the hopper.
- **Thicker insulation prevents heat loss, saves energy**
  Compared to our CH Series Hoppers, the DH Series has three inches of additional insulation all the way around, and has been engineered to keep large volumes of material at high temperature for a longer amount of time. Insulated side walls prevent the heat loss that occurs with uninsulated hoppers. This means consistent temperature levels throughout the hopper, better overall drying performance, and energy savings for you.

DH SERIES INSULATED HOPPERS

BENEFITS

Select the right hopper for your application

Hopper design can determine whether your material is dry when it enters the process, as well as how easy the hopper is to clean between material changes.

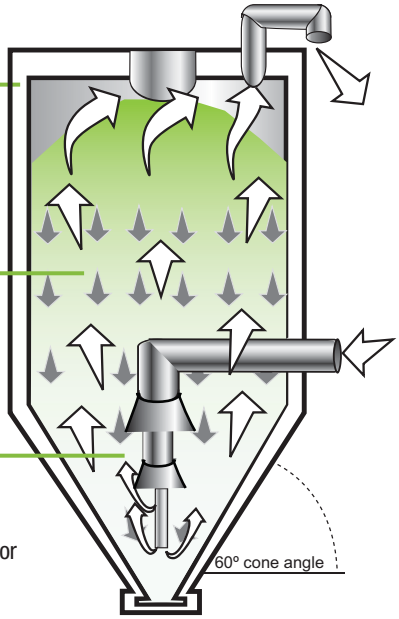
Extra insulation in the side walls maintains temperature at desired level, prevents heat loss and protects workers from hot surfaces.

Mass material flow
Smooth surfaces and steep cone angles ensure that each pellet is exposed to heated drying air for the specified drying time.

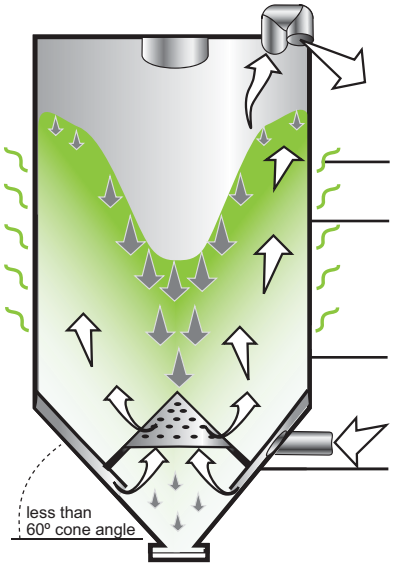
Even air/heat distribution throughout the hopper. The re-designed spreader improves air distribution and provides better process air to resin contact throughout the hopper.

A large access door and smooth interior walls minimize downtime for clean-out and material changes.

CONAIR DH HOPPER



OTHER HOPPER DESIGNS



Heat loss through uninsulated side walls.

Center "funnel" flow induced by a shallow cone angle allows wet material to enter the process.

Perforated metal inhibits mass material flow and can be difficult to clean.

Uneven heat distribution due to no drying air being forced into the bottom of the hopper.

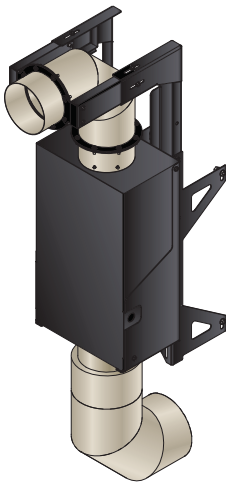
OPTIONS

- **Optional hard pipe kit**
  Recommended for pipe sizes eight inches and above, provides better airflow and a more finished look with less maintenance required than typical flex tubing.
- **Optional access ladder with handrail**
  For safety and ease of access.
- **Optional hopper mounted cyclone**
  The cyclone can be mounted left or right for your application needs.
- **Optional special paint**
  Automotive or non-automotive paint.
- **Optional heater pack**
  The heater packs for these hoppers mount so that air flows in the top and out the bottom. This keeps the area under the heat pack clear and keeps the hose off of the floor.
- **Optional gaylord floor stand**
  Allows for gaylord bin to fit below the hopper.
- **Optional distribution boxes**
  Mount beneath the hopper to help convey the dried material to the processing machine.

FEATURES

- **Hopper loader mounts**
  Conair vacuum loaders and receivers mount easily to the top of the hopper. Select from a wide range of capacities to accommodate your throughput.
- **Drying monitor probe anchor**
  The cones of the DH series hoppers include an anchor location for the drying monitor probe near the bottom of the hopper for increased stability. The RTD units inside the probe can be replaced without removing the probe.
- **Strip sight glass**
  For viewing material levels within the hopper.
- **Floor stand**
  Stands can be bolted to the floor.

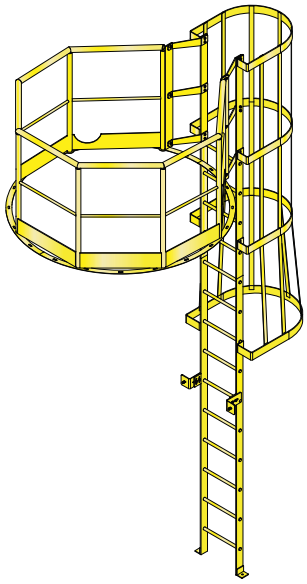
ACCESSORIES

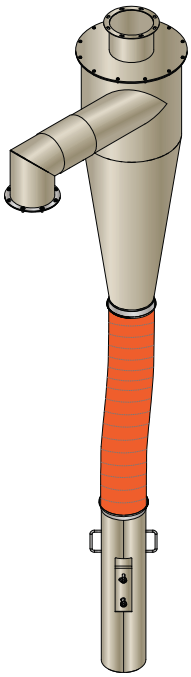


A **Heater Pack** designed specifically for applications requiring a DH hopper, has been engineered to increase efficiency and ease installation. Design advantages include:

- hot air from the Heater Pack enters directly into the bottom of the hopper.
- more efficient routing to the Heater Pack inlet for hard piping or flex hose.
- increased open floor space between the dryer and hopper since hoses are not routed along the floor.

The optional **Ladder and Hand Rail** provide sturdy, safe and easy access to the top of the hopper. Having the ladder and hand rail simplifies maintenance and installation tasks for loaders, RTD probes, and other accessories that are on top of the hopper. Simple maintenance procedures are convenient and quick, saving time and money. Made from industrial grade steel and painted safety yellow, the ladder and hand rail are not only functional, but add to the professional finished look of the hopper and your plant.



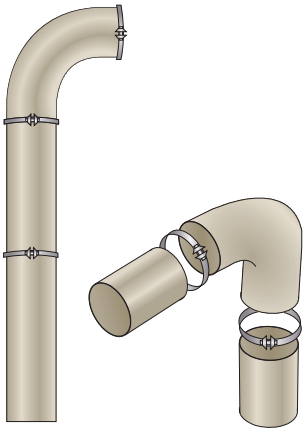


An optional **Hopper Mounted Cyclone** can be placed on either the right side, or the left side of the DH hopper, based on what works best for your application. The cyclone provides an added layer of protection for your dryer. Ideal for PET applications or applications which utilize regrind with dust and particles, the cyclone:

- has no moving parts, and no filter to clean. Simply dump the canister when necessary.
- uses cyclonic action to separate dust from the air before it reaches the dryer.
- is mounted directly to the hopper, decreasing footprint size and floor space requirements around the hopper.

An optional **Hard Piping Kit** (Conair highly recommends this accessory for line sizes of eight inches and above) can be used as an upgrade over standard flex hose. Hard piping kits are recommended because they:

- eliminate the possibility of sag or collapse, especially around corners where these are common issues with flex hose.
- eliminate the possibility of restricted air flow due to hose damage (collapse, puncture, leaking, moisture infiltration).
- minimize maintenance needs.
- create a more permanent finished appearance.
- reduce air flow drag due to the smooth interior surface.



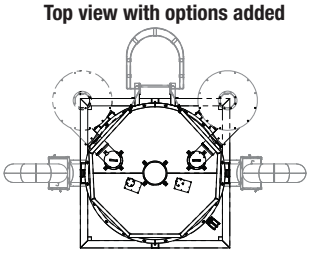
OPTIONS/ACCESSORIES NOTES:

Note: Heater pack adds to the overall width of the DH Hopper. Spacial considerations are: All models add 17.5 inches {44.5 cm} to overall width for box (not including piping).

Note: Optional cyclone adds to the overall width of the DH Hopper. Spacial considerations are: DH54 add 9.4 inches {24.0 cm}, DH64 add 15.0 inches {38.1 cm} and DH74 add 15.0 inches {38.1 cm}.

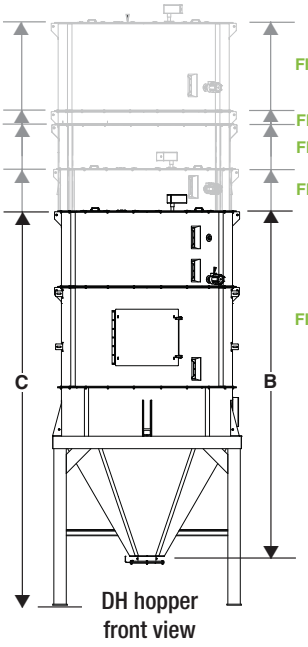
Note: Optional access ladder and handrail add 41 inches {104 cm} to height and 40 inches {102 cm} to depth of the hopper.

Top view with options added



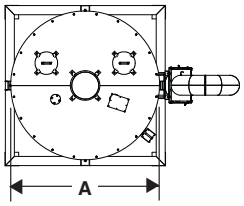
SPECIFICATIONS

DH SERIES INSULATED HOPPERS

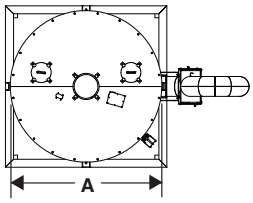


DH hopper
front view

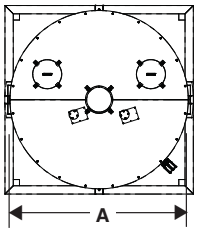
DH54
top view



DH64
top view



DH74
top view



SPECIFICATION NOTES:

* Note that the different figures represent different hopper sizes within a single model size range. For example, Figure 1 represents a DH74-215, the grayed extension to the height shown at Figure 2 represents a DH74-300, and so on. Depending on which model DH hopper you order, and what options you choose, your hopper may appear slightly different than the graphic. Refer to the specifications chart for specific dimensions.

† Note that adding options changes overall dimensions of the hopper. See the notes on the Options and Accessories pages for more details.

Specifications can change without notice. Contact a Conair representative for the most current information.

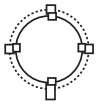
MODEL	DH54-70	DH54-85	DH54-99	DH54-114	DH54-129	DH64-158	DH64-187
FIGURE NUMBER*	Fig. 1	Fig. 2	Fig. 3	Fig. 4	Fig.5	Fig. 1	Fig. 2
Performance characteristics							
Capacity ft³ {liter}	70 {1982}	85 {2407}	99 {2804}	114 {3228}	129 {3653}	158 {4475}	187 {5296}
Capacity @ 35 lb/ft³	2450	2975	3465	3990	4515	5530	6545
Dimensions inches {cm}†							
A - Inside diameter	54 {137}	54 {137}	54 {137}	54 {137}	54 {137}	64 {163}	64 {163}
B - Hopper height	107 {272}	119 {301}	137 {347}	140 {354}	153 {387}	147 {373}	162 {411}
C - Height with stand	127 {324}	139 {353}	157 {399}	160 {406}	173 {439}	167 {424}	182 {462}
D - Footprint w/stand in {cm} sq.	71 {181}	71 {181}	71 {181}	71 {181}	71 {181}	81 {206}	81 {206}
Air inlet (OD)	8.0 {20}	8.0 {20}	8.0 {20}	8.0 {20}	8.0 {20}	8.0 {20}	8.0 {20}
Air outlet (OD)	8.0 {20}	8.0 {20}	8.0 {20}	8.0 {20}	8.0 {20}	8.0 {20}	8.0 {20}
Material discharge (ID)	6.0 {15}	6.0 {15}	6.0 {15}	6.0 {15}	6.0 {15}	6.0 {15}	6.0 {15}
Weight lb {kg}							
Installed weight (hopper only)	1568 {706}	1828 {823}	1953 {879}	1973 {888}	2066 {930}	2320 {1044}	2439 {1098}
Mounting interfaces							
Hopper loader (Top)	IT07	IT07	IT07	IT07	IT07	IT07	IT07
Material discharge (Bottom)	IB09	IB09	IB09	IB09	IB09	IB09	IB09

MODEL	DH64-215	DH64-248	DH74-245	DH74-300	DH74-366	DH74-487
FIGURE NUMBER*	Fig. 4	Fig. 5	Fig. 1	Fig. 2	Fig. 4	Fig. 5
Performance characteristics						
Capacity ft³ {liter}	215 {6089}	248 {7023}	245 {6938}	300 {8496}	366 {10,365}	487 {13,792}
Capacity @ 35 lb/ft³	7525	8680	8575	10,500	12,810	17,045
Dimensions inches {cm}						
A - Inside diameter	64 {163}	64 {163}	74 {188}	74 {188}	74 {188}	74 {188}
B - Hopper height	175 {445}	196 {498}	170 {431}	191 {485}	212 {539}	261 {663}
C - Height with stand	195 {495}	216 {549}	190 {483}	211 {537}	232 {590}	281 {714}
D - Footprint w/stand in {cm} sq.	81 {206}	81 {206}	91 {231}	91 {231}	91 {231}	91 {231}
Air inlet (OD)	8.0 {20}	8.0 {20}	12.0 {30}	12.0 {30}	12.0 {30}	12.0 {30}
Air outlet (OD)	8.0 {20}	8.0 {20}	12.0 {30}	12.0 {30}	12.0 {30}	12.0 {30}
Material discharge (ID)	6.0 {15}	6.0 {15}	8.0 {20}	8.0 {20}	8.0 {20}	8.0 {20}
Weight lb {kg}						
Installed weight (hopper only)	2551 {1148}	2929 {1318}	2847 {1281}	3285 {1478}	3485 {1568}	4185 {1883}
Mounting interfaces						
Hopper loader (Top)	IT07	IT07	IT07	IT07	IT07	IT07
Material discharge (Bottom)	IB09	IB09	IB09	IB09	IB09	IB09

MOUNTING INTERFACES

Top for hopper loaders

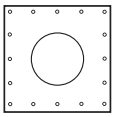
IT07



4 equally spaced mounting clips on a 16.375 in. {416 mm} diameter bolt circle

Bottom at discharge

IB09



16 bolt holes, 7/16 in. {11 mm}, on a 16.25 in. {413 mm} square plate

ResinWorks™ System
W400 Dryer shown with RWH33-21, RWH24-12 and RWH 16-6 hoppers

CONSOLIDATED RESIN DRYING HOPPER SYSTEMS

Conair ResinWorks™ systems offer a new level of manufacturing efficiency. By consolidating resin handling and pre-conditioning into a central area, material changes can take place quickly, cleanly, and safely away from the processing machine. Simplified resin dehumidification is the heart of the ResinWorks system, where multiple hoppers are supplied on a common, pre-plumbed, pre-wired sled, and connected to a dehumidifying dryer to provide superior drying and maximum productivity. Individual sleds can be connected to form an efficient, centralized resin drying area supplying large numbers of processing machines with a wide array of dried resins.

RUGGED HOPPER STANDS INCORPORATE HEAT/AIR CONTROL

ResinWorks central drying systems are designed to solve real-world productivity challenges. Energy and time saving features create an efficient central drying system. Starting with simplified shipping and installation, ResinWorks continually improves your bottom line.

Integral supply and return manifolds carry dehumidified air from your central dryer. Individual hoppers are easily isolated for clean out by dual air valves opened and closed with a single hand lever. This 3-position lever located beside the temperature controller provides fool-proof 'On/Off' operation for both heat and airflow. Three-phase disconnects at each sled conveniently distribute power to all hoppers.

Stainless steel drying hoppers provide exceptional air distribution and material mass flow. Removable air spreader cone and extra-large access door minimize clean out time. Use the hopper's extra-long sight glass with optional sensor bracket and sensor kits to easily adjust and indicate material level.

- **Quick clean hoppers**
  Located within easy operator reach, each hopper includes the industry's largest clean-out doors, a removable cone, and smooth all-stainless steel construction.
- **Superior mass flow**
  Design assures that all material is evenly exposed to dry air and heat. Funnel flow and material hang-up points are eliminated for superior drying.
- **100% insulated**
  From the base of the cone, to the oversized door, to the full body wrap, each hopper is designed to preserve heat and save energy.
- **Long life tube heaters**
  Highly accurate, compact 'tube' heaters are located at the inlet of each hopper for superior temperature control and minimal energy loss.
- **Super safe hopper control**
  Air is turned on and off with the exclusive ResinWorks control lever. Safe. Simple. Foolproof.
- **Automatic airflow balancing**
  Earlier designs meant having to independently adjust each hopper for proper airflow now, with this new design, there will never be any adjustment needed.

RESIN DRYING HOPPERS AND STANDS

SPECIFICATIONS

MODEL	RWH14-3	RWH18-6	RWH24-12	RWH24-18	RWH33-21	RWH33-28	RWH39-35‡	RWH39-42‡	RWH44-58‡
FIGURE NUMBER	Fig. 1	Fig. 1	Fig. 1	Fig. 1	Fig. 1	Fig. 1	Fig. 2	Fig. 2	Fig. 2
Performance characteristics									
Volume ft³ {liter}	3.0 {85.0}	6.0 {170.0}	12.0 {340.0}	18.0 {509.0}	21.0 {595.0}	28.0 {793.0}	35.0 {991.0}	42.0 {1189.0}	58.0 {1643.0}
Capacity @ 35 lb/ft³ lb {kg}	105.0 {48.0}	210.0 {95.0}	420.0 {191.0}	630.0 {286.0}	735.0 {333.0}	980.0 {445.0}	1225.0 {556.0}	1470.0 {667.0}	2030.0 {921.0}
Capacity @ 52 lb/ft³ lb {kg}	156.0 {71.0}	312.0 {142.0}	624.0 {283.0}	936.0 {425.0}	1092.0 {495.0}	1456.0 {660.0}	1820.0 {826.0}	2184.0 {991.0}	3016.0 {1368.0}
Air inlet/outlet OD {mm}	2.5 {64.0}	2.5 {64.0}	2.5 {64.0}	2.5 {64.0}	5.0 {127.0}	5.0 {127.0}	5.0 {127.0}	5.0 {127.0}	5.0 {127.0}
Inside diameter OD {mm}	14.0 {356.0}	18.0 {457.0}	24.0 {610.0}	24.0 {610.0}	33.0 {838.0}	33.0 {838.0}	39.0 {991.0}	39.0 {991.0}	44.0 {991.0}
Material inlet	IT06	IT07	IT07	IT07	IT07	IT07	IT07	IT07	IT07
Material outlet ID {mm}	2.38 {60.3}	2.38 {60.3}	2.38 {60.3}	2.38 {60.3}	2.38 {60.3}	2.38 {60.3}	3.0 {76.0}	3.0 {76.0}	3.0 {76.0}
Material discharge (bottom)	IB02	IB02	IB02	IB02	IB02	IB02	IB03	IB03	IB03
Voltages full load amps§									
Heater kW	4		10				30		
208 V/3 phase/60Hz	11.4	11.4	21.2*	21.2*	21.2*	21.2*	n/a	n/a	n/a
230 V/3 phase/60Hz	10.3	10.3	25.3	25.3	25.3	25.3	n/a	n/a	n/a
400 V/3 phase/50Hz	5.9	5.9	14.5	14.5	14.5	14.5	43.7	43.7	43.7
460 V/3 phase/60Hz	5.1	5.1	12.7	12.7	12.7	12.7	38.0	38.0	38.0
575 V/3 phase/60Hz	4.1	4.1	10.2	10.2	10.2	10.2	30.4	30.4	30.4
Dimensions inches {cm}									
Standard sled									
A - Overall height †	78.7 {200.0}	86.5 {219.7}	92.6 {235.2}	116.3 {295.4}	107.5 {273.1}	118.5 {300.9}	121.5 {308.0}	132.5 {337.0}	138.5 {352.0}
B - Height below mounting flange	29.3 {74.0}	25.6 {65.0}	20.6 {52.3}	20.6 {52.3}	24.0 {61.0}	24.0 {61.0}	19.5 {50.0}	19.5 {50.0}	14.5 {37.0}
C - Panel height	41.3 {104.8}	41.3 {104.8}	41.3 {104.8}	41.3 {104.8}	41.3 {104.8}	41.3 {104.8}	41.8 {106.0}	41.8 {106.0}	41.8 {106.0}
D - Sled width	25.0 {63.5}	25.0 {63.5}	36.0 {91.4}	36.0 {91.4}	45.0 {114.3}	45.0 {114.3}	69.0 {175.3}	69.0 {175.3}	74.0 {187.9}
E - Depth	51.3 {130.3}	51.3 {130.3}	51.3 {130.3}	51.3 {130.3}	51.3 {130.3}	51.3 {130.3}	59.0 {150.0}	59.0 {150.0}	64.0 {162.0}

SPECIFICATION NOTES:

* Uses 230V heater derated to 7.5 kW.

† For multi-hopper sled, be sure to use the largest hopper as the reference for the overall height dimension.

‡ Conair 39 and 44 inch hoppers are mounted on individual sleds.

§ FLA ratings are per hopper. FLA ratings for a ResinWorks sled is the sum of the sled's individual hopper FLA ratings.

Specifications can change without notice. Contact a Conair representative for the most current information.

OPTIONS

Multiple Sled Connection Kit
This option allows the connection between multiple sleds for the integral supply, return and conveying manifolds. For each junction between sleds a kit is required.

Adjustable Purge Valve
New design! This valve controls material flow from material source to destination. This easy to clean and install valve has a discharge that rotates 360 degrees to allow complete purge of material lines.

Hopper Discharge Drain Port
Facilitates hopper draining and clean out.

Precision Slide Gate
Use the precision Slide Gate to prevent material leakage when no purge valve or distribution box is specified on the hopper.

Communications
Options include: Modbus and DeviceNet.

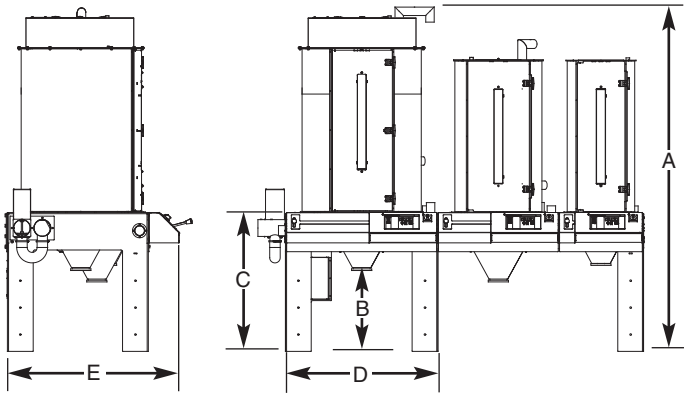
Temperature Setback RTD
Automatically reduces the drying temperature to a lower standby mode when the machine throughput is reduced or stopped.

SPECIFICATIONS

Depending upon hopper requirements, ResinWorks drying systems may be configured with single-hopper sleds, multiple-hopper sleds or a combination of both.

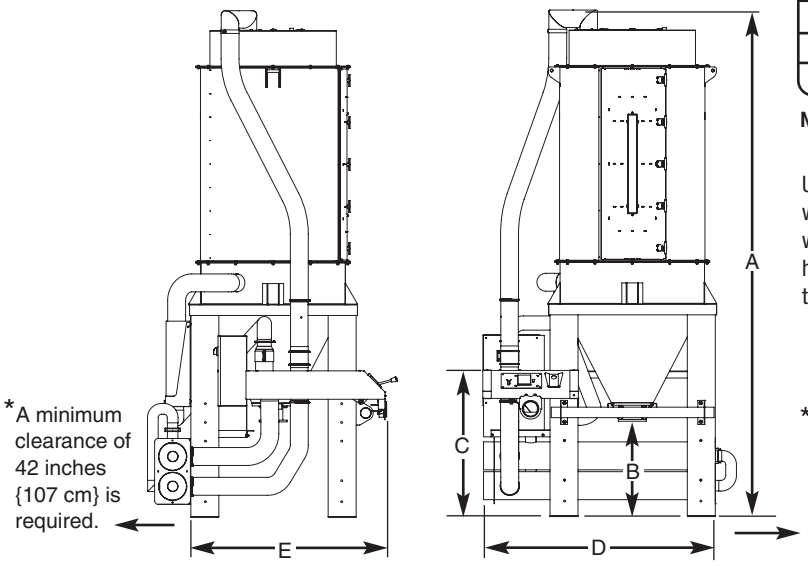
Multi-Hopper Sled

Figure 1



Single-Hopper Sled

Figure 2



*A minimum clearance of 42 inches {107 cm} is required.

*A minimum clearance of 14 inches {35.6 cm} is required.

Hoppers that are 33 inches in diameter and smaller may be joined together onto a single sled and shipped as a unit, installed as a unit and connected into your drying system as a single unit (see **Figure 1**). This consolidation greatly saves time and expense and once connected to the proper central drying unit, provides an optimum dehumidification system for all of your resins. Hoppers 39 inches and over in diameter are provided on their own individual floor stands (sleds) and each is equipped with air connections, heater, control, etc. (see **Figure 2**).

Available Hopper Combinations

Figure 3

RWH Hopper Models possible sled combinations				Sled Total Length in. {mm}	Sled Total Length ft. {cm}
33				45 {1143}	3.8 {116}
33	33			90 {2286}	7.5 {229}
33	33	24		126 {3200}	10.5 {320}
33	33	14/18		115 {2921}	9.6 {293}
33	24			70 {1778}	5.8 {177}
33	24	24		95 {2413}	7.9 {241}
33	24	14/18	14/18	131 {3327}	10.9 {332}
33	14/18	14/18	14/18	120 {3048}	10.0 {305}
24				36 {914}	3.0 {91}
24	24			72 {1829}	6.0 {183}
24	24	24		108 {2743}	9.0 {274}
24	24	14/18		97 {2464}	8.1 {247}
24	24	14/18	14/18	122 {3099}	10.2 {311}
24	14/18	14/18	14/18	111 {2814}	9.3 {283}
14/18				25 {635}	2.1 {64}
14/18	14/18			50 {1270}	4.2 {128}
14/18	14/18	14/18		75 {1905}	6.3 {192}
14/18	14/18	14/18	14/18	100 {2540}	8.3 {253}

NOTE: Conair 39 and 44 inch hoppers are mounted on their own individual sleds. (see Fig. 2)

Use **Figure 3** to identify the available hopper combinations that would be right for your operation, and determine the overall width of each multi-hopper sled. More specific dimensions for hoppers can be found on the previous page, in the specifications table.

RESIN DRYING HOPPERS AND STANDS

FEATURES

Systems that are conceived, configured and designed to make you more competitive, efficient, productive and profitable.

- **Provides full flexibility** – any material to any machine at any time.
- **Ten minute material changes** – pre-dried, pre-blended material always ready.
- **Clean, neat processing** – removes drying and blending equipment from the machine area.
- **Convey small batches** from dryer or blender to machine.
- **Conveying lines purged** after every cycle.
- **Minimizes labor,** energy, material and inventory costs.

ResinWorks **drying hopper sleds** can accommodate **up to four drying hoppers,** each sized specifically for either multi-machine, long run or single machine, short run operations. The sled is shipped with drying hoppers, heaters, controls, dry air manifolds and purge valves pre-assembled for easy installation.

We've eliminated the need for additional clearance behind the sled by relocating all electrical access points to the front of the sled. Now you can save valuable floor space and reduce troublesome equipment location problems.

The new fully automatic airflow balancing valve eliminates the need for tedious individual air flow adjustments at each hopper.

The Conair ResinWorks mass flow, stainless steel, drying hopper is equipped with an oversized door for quick, easy clean out and thorough material changes. A full length sight glass with level indication lets you see your material level at a glance.

Integrated supply and return air manifolds replace the externally mounted bulky manifolds for a simplified installation of material conveying lines to each hopper.

Each hopper is now equipped with individual three-phase disconnects allowing you to independently shut off one hopper without disrupting production.

SLIMLINE
SL MODELS 2.5, 5, 15, 25 AND 50

Model SL15

THE PERFECT SOLUTION; **THE RIGHT PRICE**

Simple, reliable, good looks and the right price - everything you'd expect from a Conair dryer. The Conair SlimLine Series of Compressed Air Dryers offer a cost-effective drying solution for any low throughput applications and most resins.

The SlimLine is desiccant-free, moving parts are eliminated, energy consumption and maintenance costs are minimal.

This is the *perfect solution* for efficient drying at an affordable price.

COMPACT DESIGN INSTALLS TO MACHINE THROAT

These small-sized, light-weight dryers are easy to handle and can be conveniently mounted onto the throat of your processing machine saving precious floor space.

SlimLine dryers use a continuous supply of clean, dehumidified compressed air at 100 psi {6.9 bar} to dry material. The standard dryer produces a dewpoint of 0°F {-18°C} which is sufficient for most drying applications. With the use of an optional membrane, process air can be generated with a dewpoint of -40°F {-40°C}.

Units are capable of delivering nominal throughput rates ranging from 0.25 {0.11} to more than 50 lb/hour {23 kg/hour}.

Operation of this dryer couldn't be easier: adjust the regulator, flip the switch to on, set the process temperature and you're drying.

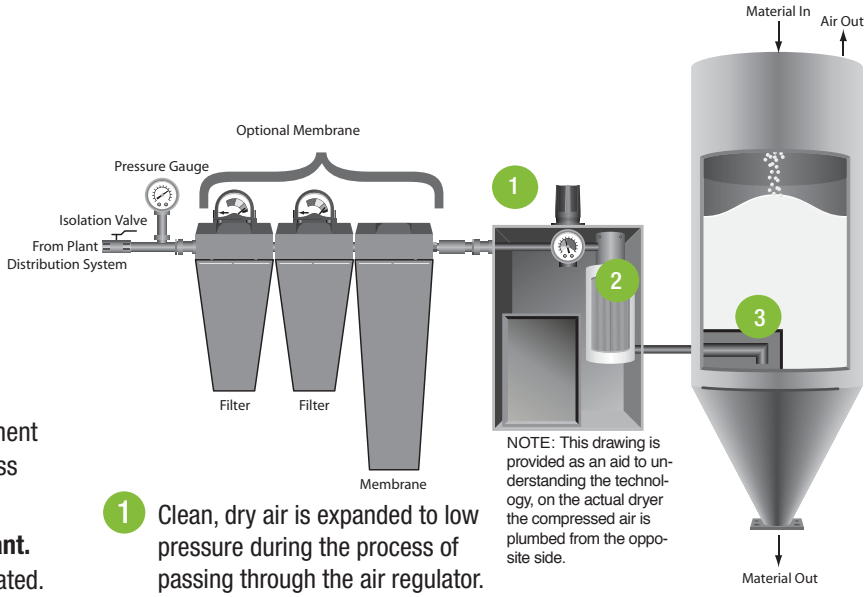
- **Easy to use**
  Installation is quick and easy. The on-board control is simple to learn – all functions are clearly identified right on the dryer label. You won't even have to think about this dryer once you start processing.
- **No maintenance required**
  No moving parts, no filters to contend with on standard units, no desiccant. This dryer will deliver the reliable performance you need.
- **Compact design**
  This slim, attractive dryer mounts easily to the throat of your machine. No need to buy or mount a separate hopper, the hopper for the SlimLine is incorporated into the sturdy, yet light-weight design.
- **Saves you money**
  Energy efficient and low cost initial investment, the Conair SlimLine Series of Compressed Air Dryers are a fraction of the price of traditional dryers. Dryer start-up is intuitive.

SLIMLINE
SL MODELS 2.5, 5, 15, 25 AND 50

HOW IT WORKS

The SlimLine Compressed Air Dryer uses clean, dehumidified compressed air* supplied from your plant's compressed air system or a portable air compressor to produce hot, low dewpoint air that removes moisture from hygroscopic plastic materials.

*Compressed air must meet specification requirement of 100 psi {6.9 bar} and 40°F {4°C} dewpoint and a residual oil content of less than 3mg/m³.



NOTE: This drawing is provided as an aid to understanding the technology, on the actual dryer the compressed air is plumbed from the opposite side.

The benefits

- **You'll save money.** The initial investment in a compressed air dryer costs far less than conventional dryers.
- **You won't have to deal with desiccant.** The use of desiccant has been eliminated.
- **You'll eliminate the hassle of up-keep maintenance.** No moving parts, no desiccant, no filter on standard units. This dryer ends the need for a lengthy list of standard maintenance procedures.

1. Clean, dry air is expanded to low pressure during the process of passing through the air regulator. Expanding the air reduces the dewpoint.
   The regulator is also used to adjust the airflow to the green range on the pressure gauge.

2. Next, the air passes through an electric heater where its' temperature is raised to the process setpoint temperature.

3. Then, the air is injected into the hopper where it passes over the pellets and reduces the final moisture content of the plastic material to acceptable processing levels.

   The air exhausts from the hopper into the atmosphere.

OPTIONS

Slide Gate
Shuts off the material flow and isolates the dryer from the machine throat.

Mounting Adapter with Drain
Install the mounting adapter with drain to facilitate clean out or material changeovers.

TLA Adapter for Loader Fill
This adapter lets you mount a TLA Loader to fill the hopper, eliminating the need to hand fill the material.

NOTE: Adapter shown is for models SL2.5 and 5. This adapter is not required for models SL15 and 25. The TLA Loader will not be used with model SL50, other loaders are available.

Compressed Air Membrane
This option is necessary when the compressed air supplied does not meet the 40°F {4°C} dewpoint.

The membrane serves as a refrigerant air conditioner and reduces the dewpoint to the 40°F {4°C} dewpoint specification. The included filters aid in cleaning the compressed air.

SL15 hopper has a hinged top plate. Hand-fill lid needed to cover center hole.

Hand-fill lid for models SL25 and SL50.

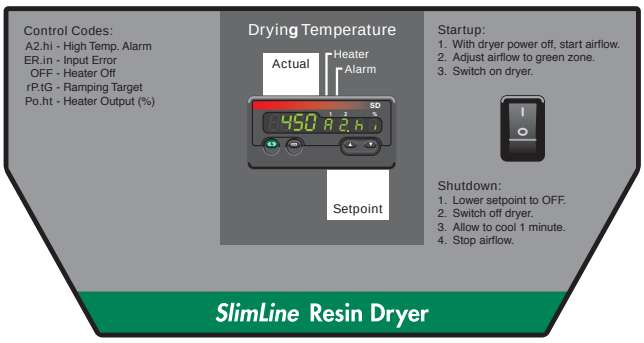
Hand-fill Lid
If you choose not to use a loader on Models SL15, SL25 or SL50 purchase the hand-fill lid to prevent material contamination.

SLIMLINE
SL MODELS 2.5, 5, 15, 25 AND 50

FEATURES

Simple, reliable control

You'll have all the functionality you need and not be burdened by an overly complicated control. Actual and setpoint drying temperatures are continuously displayed. Control functions are identified right on the label. Toggle between the percentage output of the heater (read only) and the high temperature alarm setpoint. Choose to view the temperature in fahrenheit or celsius.



Loader fill or Hand-fill feature (model dependent)

Models SL2.5 and SL5 come standard with a hand-fill lid.

Models SL15, SL25 and SL50 come standard with an IB06 mounting interface for mounting a loader.

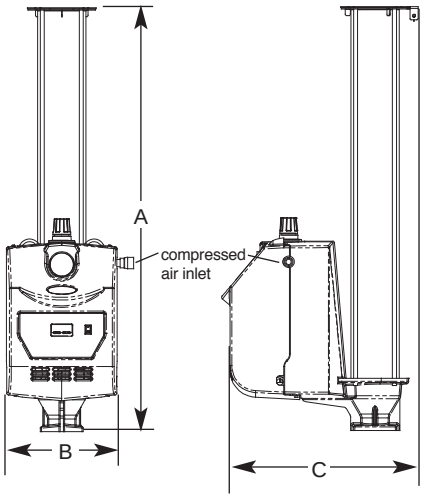
The loader is sold separately. This unit is pictured with an Access AL Series Loader installed.

A SlimLine to fit your application

The right technology for the right price, throughputs range from 0.25 {0.11} to 50 lb/hr {23 kg/hour}.

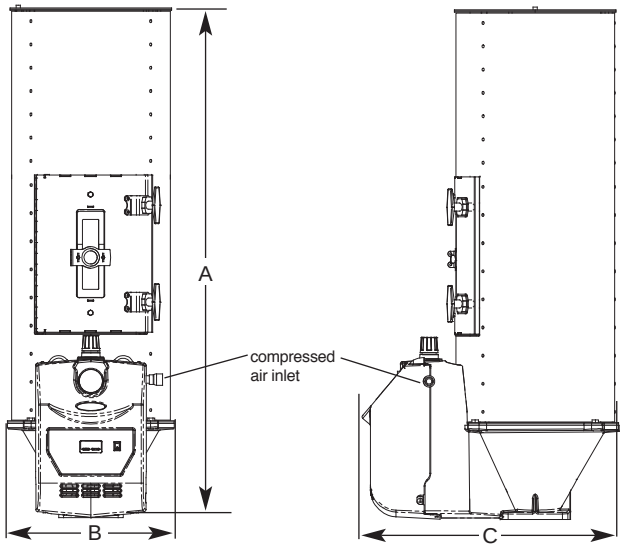
SLIMLINE
SL MODELS 2.5, 5, 15, 25 AND 50

SPECIFICATIONS



Front View
Models SL2.5 and SL5

Side View
Models SL2.5 and SL5



Front View
Model SL15*, 25 and 50

Side View
Model SL15*, 25 and 50

MODEL	SL2.5	SL5	SL15*	SL25	SL50
Performance characteristics (with full hopper)					
Drying temperature	All models 100° - 350°F {38° - 177°C}				
Dewpoint	0°F {-18°C} with optional membrane - 40°F {- 40°C}				
Airflow SCFM {SLM}	2.5 {70.8}	5.0 {141.6}	7.5 {212.4}	12.5 {354.0}	22.0 {623.0}
Airflow with membrane SCFM {SLM}	3.1 {88.0}	6.8 {193.0}	9.3 {263.0}	15.7 {445.0}	34.9 {988.3}
Hopper volume ft³ {L}	0.125 {3.5}	0.25 {7.1}	0.75 {21.2}	1.25 {35.4}	2.5 {71.0}
Heater size kW	1	1	1	2	2
Dimensions inches {cm}					
A - Height	22.5 {57.2}	40.0 {101.6}	26.5 {67.3}	32.0 {81.3}	47.5 {120.7}
B - Overall width	11.0 {27.9}	11.0 {27.9}	12.5 {31.8}	15.5 {39.4}	15.5 {39.4}
C- Depth	19.0 {48.3}	19.0 {48.3}	25.5 {64.8}	24.0 {61.0}	24.0 {61.0}
Drying hopper inlet pipe size	1/2 inch NPT female				
Weight lbs {kg}					
Standard dryer installed (empty)	32 {14.5}	37 {17}	56 {25}	87 {39}	107 {49}
Shipping	60 {27.2}	70 {31.8}	160 {72.6}	160 {72.6}	160 {72.6}
Voltage - Total amps					
120 V/1phase/60 Hz	8.5	8.5	8.5	16.7	16.7
220 V/1 phase/50 Hz	4.3	4.3	4.3	8.4	8.4
Compressed air requirements†					
	100 PSI {6.9 bar} clean, dry compressed air pressure dewpoint of 40°F {4°C}; residual oil content of less than 3 mg/m³				

APPLICATION NOTES:

Conair recommends purchasing the optional membrane when:

- Your process requires that you obtain a dewpoint of -40°F {40°C} or the compressed air dewpoint you are suppling is above 40°F {4°C} .

SPECIFICATION NOTES:

SCFM - Standard Cubic Feet per Minute
SLM - Standard Liters per Minute

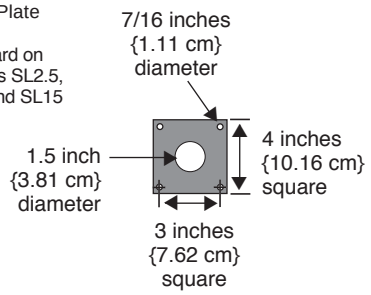
* Model SL15 does not include a access door on the hopper.

† Compressed air supplied to the dryer must meet specification requirement of 100 psi {6.9 bar} and 40°F {4°C} pressure dewpoint and a residual oil content of less than 3mg/m³.

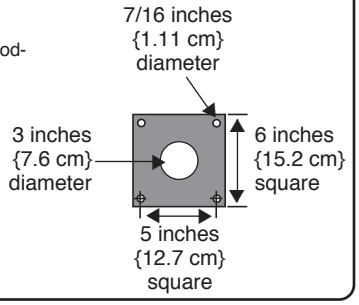
Specifications may change without notice. Consult a Conair representative for the most current information.

MOUNTING INTERFACES

Base Plate IB01 standard on models SL2.5, SL5 and SL15



Base Plate IB02 standard on models SL25 and SL50



CR Series

CONVERT AMORPHOUS PET TO USABLE CRYSTALLINE MATERIAL

With the increased use of PET in plastic processing the efficient use of amorphous regrind material is critical. A Conair crystallizing system allows you to convert amorphous PET to a crystalline state that then can be dried. The drying can occur at elevated temperatures to obtain low moisture levels without the fear of agglomeration.

The Conair Crystallizing system consists of a high temperature heat source, an insulated hopper with an agitator and a rotary discharge valve. This equipment can be easily integrated with other material handling equipment.

RELIABLE, HIGH-QUALITY MATERIAL OUTPUT

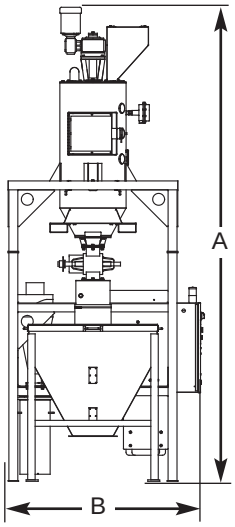
As amorphous PET material is loaded into the agitating hopper, the processing temperature is set on the control. When the system is turned on, the Crystallizer automatically directs heated air to the material through the bottom spreader cone of the agitating hopper. Constant, slow agitation of the blades prevents agglomeration and material degradation during heating.

Once material is crystallized, determined by a system monitor located in the hopper, a rotary discharge valve meters the material into a surge bin and distribution box. Material can then be transferred by your conveying system to storage or processing hoppers. Material is metered away at an appropriate rate depending on the temperature profile in the hopper. If the temperature profile falls below a selected level, the crystallizing system automatically stops the material discharge until the correct temperature profile is obtained.

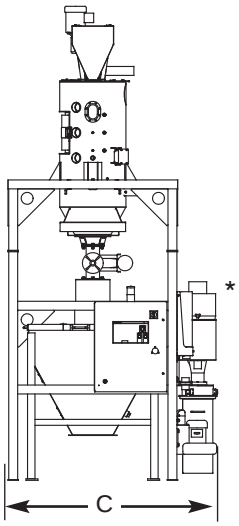
- **Continuous, automatic operation**
  Automatic monitoring of the temperature inside the hopper ensures a reliable output of high-quality crystallized material.
- **A configuration to meet your needs**
  Use in-line crystallizing for direct discharge into your processing or batch processing for storage of the crystallized material to re-use at a later time.
- **Agitating hopper prevents agglomeration**
  The combination of the agitator blades and stationary bars in the CR Series Crystallizers provide constant tumbling of the material breaking apart any clumps that may form and preventing agglomeration during processing.
- **Safe design, convenient clean out**
  Access doors and removable cone section have safety interlocks. The flexible design of these units allow the agitator weldment to be removed from the top or bottom. Internal breaker bars are removable to simplify clean out.

SPECIFICATIONS

Model CR4 and CR10

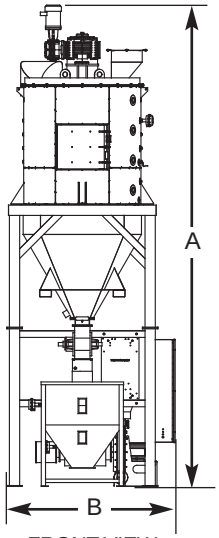


FRONT VIEW

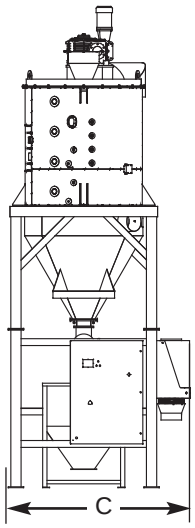


SIDE VIEW

Model CR21 - CR135

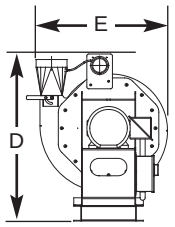


FRONT VIEW

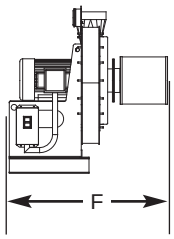


SIDE VIEW

Blower



FRONT VIEW



SIDE VIEW

MODELS	CR4†	CR10†	CR21†	CR42†	CR85†	CR135†
Performance characteristics						
Throughput ft³/hr {l/hr}	4 {113}	10 {283}	21 {595}	42 {1189}	85 {2407}	135 {3823}
Heater energy source	electric or natural gas	electric or natural gas	electric or natural gas	electric or natural gas	electric or natural gas	electric or natural gas
Air circuit	open or closed loop	open or closed loop	open or closed loop	open or closed loop	open or closed loop	open or closed loop
Dimensions inches {mm}						
A - Overall crystallizer height	159.2 {4043.7}	169.0 {4292.6}	192.5 {4889.5}	226.8 {5760.7}	261.8 {6649.7}	281.1 {7139.9}
B - Overall crystallizer width	66.0 {1676.4}	66.0 {1676.4}	69.0 {1752.6}	79.1 {2009.1}	86.3 {2192.0}	98.3 {2496.8}
C - Overall crystallizer depth	70.5 {1790.7}	75.0 {1905.0}	70.1 {1780.5}	81.4 {2067.6}	94.2 {2392.7}	106.3 {2700.0}
D - Blower height†	NA	NA	37.8 {960.1}	37.8 {960.1}	37.8 {960.1}	45.8 {1163.3}
E - Blower width†	NA	NA	32.5 {825.5}	32.5 {825.5}	32.5 {825.5}	37.5 {952.5}
F - Blower depth†	NA	NA	68.4 {1734.4}	70.4 {1788.2}	77.5 {1968.5}	80.6 {2047.2}
Approximate weight lbs {kg}						
Crystallizer installed	2863 {1299}	3130 {1420}	3315 {1504}	4422 {2006}	6590 {2989}	7754 {3517}
Surge bin installed	270 {122}	270 {122}	650 {295}	650 {295}	650 {295}	650 {295}
Blower installed	NA	NA	700 {318}	800 {363}	900 {408}	1100 {499}
Voltage total amps						
230V/3 phase/60 Hz	38.8	NA	NA	NA	NA	NA
400V/3 phase/50 Hz	22.3	55.6	107.5	159.1	292.5	305.3
460V/3 phase/60 Hz	19.3	48.4	93.5	138.4	254.4	265.5
575V/3 phase/60 Hz	15.5	38.7	74.8	110.7	203.5	212.4
Discharge type (via rotary air lock)						
Surge bin 10 ft³{281 l/hr}	standard	standard	standard	NA	NA	NA
Surge bin 17 ft³{481 l/hr}	NA	NA	NA	standard	standard	standard
Blower noise level						
	<90 dbA @5 ft.					

OPTIONS

- **Electric Heat or Natural Gas Energy Source**
- **Open-loop or Closed-Loop Air Circuit**
- **Gaylord Discharge**
- **Exhaust Filter**
  Choose a cyclone or a dust collection unit to keep fines contained. For particularly dusty applications both can be applied.
- **Special Paint**
  Automotive or non-automotive.

SPECIFICATION NOTES:

* Shown with optional cyclone mounted on stand this applies to model CR4 only.

† The blowers on models CR4 and CR10 are located on the stand. Blowers on models CR21, CR42, CR85 and CR135 are independent of the stand, adequate space will need to be planned for positioning of the blower on these models.

Specifications may change without notice. Consult a Conair representative for the most current information.

Blending/Feeding

GRAVIMETRIC BATCH BLENDERS

TrueBlend™ TB45-4 ..... B-1
TrueBlend™ TB100-4. ..... B-5
TrueBlend™ TB250-4 and TB250-6. ..... B-9
TrueBlend™ TB250R-4 ..... B-13
TrueBlend™ TB500-4 and TB500-6 ..... B-17
TrueBlend™ TB900-4 and TB900-6. ..... B-21
TrueBlend™ TB1800-4, TB1800-5 and TB1800-6. ..... B-25
TrueBlend™ TB2500-4, TB2500-5 and TB2500-6 ..... B-29
TrueBlend™ TB3500-4, TB3500-5 and TB3500-6 ..... B-33

HIGH HEAT GRAVIMETRIC BATCH BLENDERS

TrueBlend™ TBA (H)100-900 ..... B-37

EXTRUSION CONTROL BLENDER

TrueBlend™ EXT B-41

CONTINUOUS GRAVIMETRIC BLENDERS

TrueWeigh Continuous Blender B-47

BLENDER REPORTING SOFTWARE

TrueBlend™ Reporting Software B-53

ACCESSORIES

Level Alarm Control. B-55
WSB/GB Retrofit Control B-57

FEEDERS

TrueFeed TF Models B-59
BFS and BFH at-the-throat models. B-63

INTERMIXER

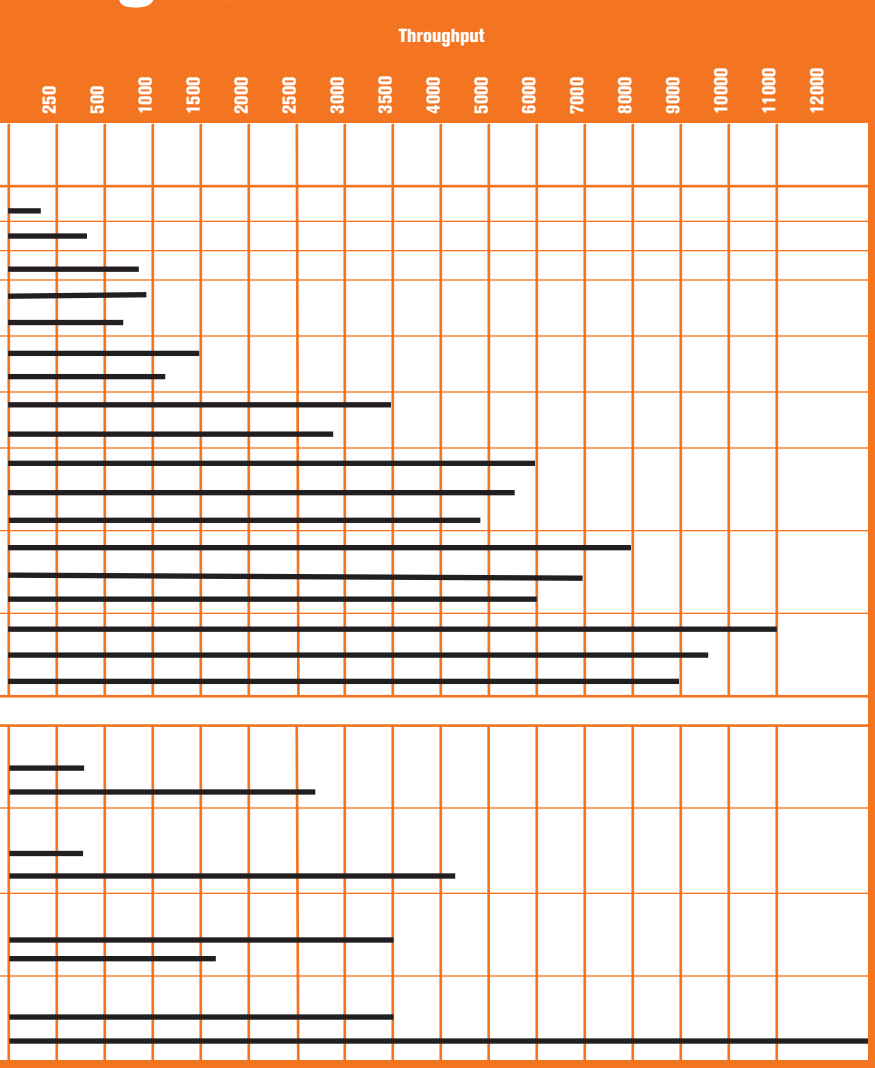
Material Mixer. B-67

FLOOR STANDS

TBBS Models. B-69
FS Models. B-70

Blending/Feeding Quick Reference

MODELS	Batch Size lb {g}	Maximum No. Materials	Maximum No. Additives
Gravimetric Batch Blenders			
TrueBlend TB45-4*	1 {450}	4	2
TrueBlend T100R-4*	2.2 {1000}	4	2
TrueBlend TB250R-4*	5.5 {2500}	4	2
TrueBlend TB250-4	5.5 {2500}	4	2
and TB250-6	5.5 {2500}	6	4
TrueBlend TB500-4	11 {5000}	4	2
and TB500-6	11 {5000}	6	4
TrueBlend TB900-4	20 {9000}	4	2
and TB900-6	20 {9000}	6	4
TrueBlend		4	0
TB1800-4/-5/-6	40 {18000}	5	2
		6	4
TrueBlend		4	0
TB2500-4/-5/-6	55 {25000}	5	2
		6	4
TrueBlend		4	0
TB3500-4/-5/-6	77 {35000}	5	2
		6	4
Gravimetric Continuous Blenders			
TrueWeigh TWB-07-4			
Direct Weigh Hopper	NA	4	4
No Weigh Hopper		4	4
TrueWeigh TWB-07-6			
Direct Weigh Hopper	NA	6	6
No Weigh Hopper		6	6
TrueWeigh TWB-30-4			
Direct Weigh Hopper	NA	4	4
No Weigh Hopper		4	4
TrueWeigh TWB-30-6			
Direct Weigh Hopper	NA	6	6
No Weigh Hopper		6	6



Also, see TrueBlend High Heat Models TBA/TBH100-900

*Removable additive bins

TrueBlend Accessories	
Throat Adaptors	TB45, TB100R, TB250R, TB250, TB500, TB900, TWB07, TWB30
Surge Bin Stand	TB45, TB100R, TB250R, TB250, TB500, TB900, TWB07, TWB30
Material Drain Chutes	TB45, TB100R, TB250R, TB250, TB500, TB900
Level Alarm Control	All models, Standard in TWB control

TrueBlend Options	
Integral Loader Control/Quick Clean Enhanced Flow Package	All TB models
Control Cable Extensions	All TB models
Loader Drop Cable with Connector	All TB models
Remote Demand Sensor	Remote mount models only
Air Blow-off for Mix Chamber Level Sensor	All TB models
Minor Component Flow Restrictor	TB100-TB3500
Major Component Flow Restrictor	All TB models
TrueBlend Reporting Software	All TB models
Extrusion Control	All models, including TWB models
SB-2 Controller	All models
Self-Clean	All TB models
High-Temperature	All TB models, All TWB models

Feeders	Hopper Volume	Motor (rpm/Hp)	Output range
Gravimetric TF1	0.2 ft^3	0.1-200 rpm / 1/10 Hp	0.11 to 280 lbs/hr {0.05 to 126 kg/hr or 0.01 to 35 g/s}
Volumetric BFS	0.4 ft^3	0-170 rpm / 1/8 Hp	0.08 to 162 lbs/hr {0.04 to 74 kg/hr or 0.01 to 21 g/s}
Volumetric BFH	0.6 ft^3	0-170 rpm / 1/8 Hp	0.16 to 880 lbs/hr {0.07 to 400 kg/hr or 0.02 to 111 g/s}

Model TB45-4
Shown with optional Access Receivers

ACCURATE GRAVIMETRIC BLENDING IN VERY SMALL BATCHES

Get accurate blends, better mixing, faster material changes and increased profits with Conair's TrueBlend Series Blenders. Steep-sided material compartments allow resin to flow evenly and freely through vertical dispense valves into the weigh chamber. Efficient mixing assures full integration of all recipe ingredients. Fully enclosed cabinet design assures no pellet spillage and clean operation. Standard convenient features such as quick access material compartment bins, a hinged chassis access door and removable components in the mixing chamber reduce downtime during cleanout.

THROUGHPUT RATES TO 175 POUNDS AN HOUR

The TrueBlend TB45 series blenders offer small extruders and small tonnage injection molding machines a superior way to blend color and additives centrally or at the throat of the processing machine.

The blender dispenses up to four materials from respective material compartments into a common weigh chamber. The control determines the correct weight of each ingredient based on setpoints entered on the touch screen display. Up to 1000 recipes and 250 resin names can be entered and stored in the processor.

Unique fast-acting "no stick" vertical valves control the amount of material dispensed. All dispense valves use two-way air cylinders assuring positive operation.

Choose between throat mounted or central blender models. Options include an integrated blender/loader control feature, and an addition of a flow control valve for central blending applications.

Blend accuracy to 1/2 of 1%

Colorant and/or additive weights are held to within 0.5% of setting. A selectable Precision Additive™ feature is also available for additives. The microprocessor control automatically calibrates after every cycle and compensates for variations in dispense method, resin bulk density or particle geometry.

Easy-to-use control

Intuitive 5.7 inch LCD touch screen control with full color graphics allows quick and easy setup of blender setpoints. All setpoints are displayed simultaneously. Enter the percentages of the blend on the touch screen display and the blender does the rest. The system automatically weighs the recipe ingredients in the proper sequence and maintains the correct blend relationship. Any position can be identified as one of the four material type selections adding flexibility to your application setup.

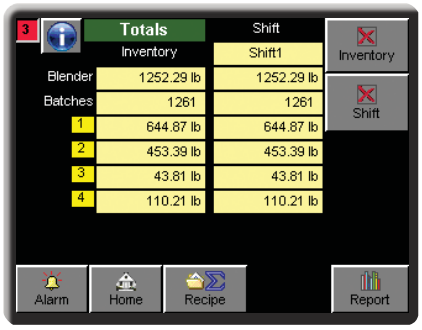
Convenient, easy clean out

Easy access to all material contact points for fast and safe cleaning during color or resin changes. Quick access material compartment bins, a removable weigh bin, mix agitator and mix chamber liner allow quick efficient cleaning. The blender features a built-in material shutoff valve below the mixing chamber, this can be replaced with the automatic flow control valve for remote and central blending applications.

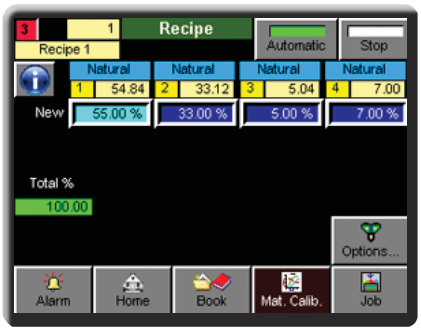
FEATURES

Intuitive, SB-2 touch screen control offers the industry's best multi-component accuracy

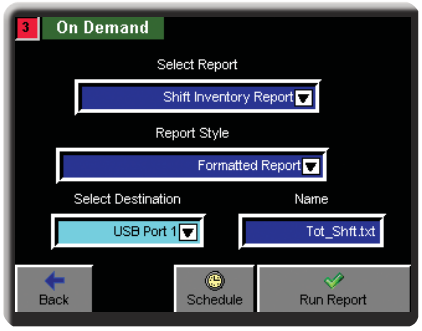
This easy-to-use touch screen control allows for fast setup of blender setpoints and automatically weighs recipe ingredients in the proper sequence to maintain correct blend relationship. Any position can be identified as one of the four material type selections adding flexibility to your application setup.



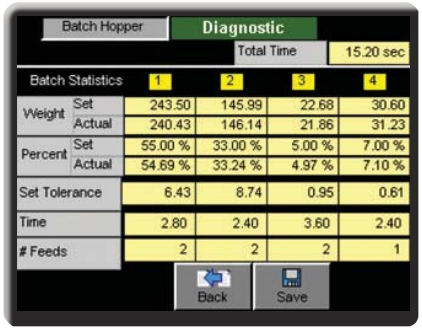
Instantly see your materials usage
Material usage / totals screen tracks the number of batches, weights dispensed by bin and weight dispensed in total since the last reset.



View and make changes to the active recipe
Save and recall up to 1000 recipes and 250 resin names in the Recipe Book.



Built-in reporting capabilities
Every SB-2 blender control is equipped with the capability to help users track their settings, alarms, material consumption, shift and inventory needs.



On-call diagnostics
Diagnostic screen displays target set point percentage and actual percentage dispensed. Also displays start and finish weights for each material per batch. Verifies true and accurate blend performance.

SmartBlend™ SB-2
Premium touch screen control offers these high performance functions to target the unique process needs of molders and extruders.

- Best choice for the needs of rapidly changing custom jobs or sophisticated extrusion and molding applications with complex and highly critical recipes.
- Progressivly approaches each ingredient target. Never over shoots.
- Precision metering yields industry's best batch-to-batch accuracy.
- Precision ratio control - all components.
- Individual matieral accuracy settings.
- SMS or text message alarm notification capable.
- VNC viewer

WHICH PACKAGE IS RIGHT FOR YOU?

STANDARD PACKAGES - 4 Component	TS	LS*
FEATURES		
Material bin sight glasses	●	●
Touch screen control	●	●
Loading control option		●
Material bin finger guards	●	●
Machine mount with manual slide gate discharge†	●	●
Remote/bin mount with pneumatic slide gate discharge†	●	●

FEATURE NOTES:

* Includes an optional integrated loader control feature.

† Choose between either machine or remote mounted blender packages.

Specifications may change without notice. Consult with a Conair representative for the most current information.

FEATURES

Simple and quick cleanout

Easy access to all material contact points for fast and safe cleaning during color or resin changes. Material compartment access doors, removable weigh bin, mix agitator and mix chamber liner allow quick, efficient cleaning.

Optional floor stand design!

Blender installs easily to this floor stand, which is equipped with a material reservoir.

Each blender stand features:

- Sturdy design
- Easy cleanout
- Fork-lift provisions
- Drawer magnet provision
- One standard material takeaway tube (up to two additional material tubes are available as options)
- Available with one or two cubic foot reservoir capacities
- Optional casters (model TBBS01 only)

OPTIONS

TB reports
Used to track and document material usage, alarms, batch and shift reports and recipes. *See TrueBlend Reporting Software and ControlWorks specification sheets.*

Air blow-off for mix chamber level sensor
This feature is integrated into the blender mix chamber to blow excessive dust and fines away from the sensing device and ensure accurate level sensor reading.

Material level alarm control
Eliminate costly material shortage problems and machine downtime with this early warning system. The control monitors up to six material levels at one blender. Individual switches can be adjusted to monitor high or low material levels. *See Level Alarm Control specification sheet.*

Remote mixer demand sensor
This sensor provides a fill-to level option in a surge bin or other material receptacle that sits below a remote mounted blender.

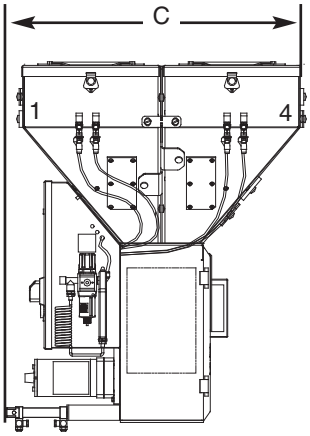
Drain chute
The material drain chute readily installs to the chassis opening of the blender for fast and simple cleanout.

Remote HMI operator cable
This option is for the 6 meter cable in lieu of the standard 2 meter cable.

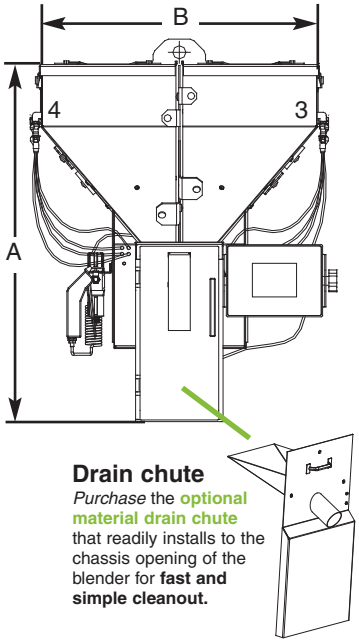
TRUEBLEND™ TB-45-4

SPECIFICATIONS

Side view



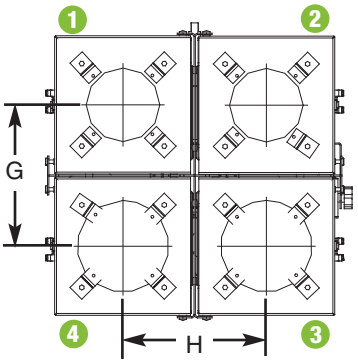
Front view



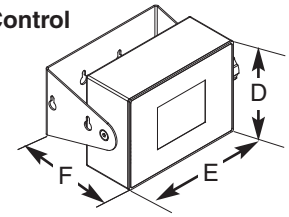
Drain chute

Purchase the **optional material drain chute** that readily installs to the chassis opening of the blender for **fast and simple cleanout.**

Top view§



Control

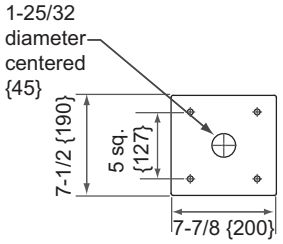


MODELS	TB45-4
Performance characteristics	
Batch size lb {g}	1.0 {450}
Maximum throughput rate lb/hr {kg/hr}*	175 {79}
Bin capacity - main ingredient ft³ {liter}	0.2 {5.7}
Bin capacity - minor ingredient ft³ {liter}	0.2 {5.7}
Maximum number of materials	4
Number of vertical discharge valves	4
Number/(size) of major bin valves	2 - (40 mm)
Number/(size) of minor bin valves	2 - (20 mm)
Dimensions inches {mm}	
A - Height above mounting plate†	32.50 {825.5}
B - Width	25.00 square {635}
C - Depth	27.00 square {686}
D - Control height	6.50 {165.1}
E - Control width	8.75 {222.3}
F - Control depth	6.75 {171.5}
G - Loader center distance	12.75 {323.9}
H - Loader center distance	12.91 {327.9}
Weight lbs {kg}	
Installed	75 {34}
Shipping	125 {57}
Voltage total amps	
115V/1 phase/60 hz	1.0
230V/1 phase/50 hz	0.5
Compressed air requirements	
Discharge valves	90 psi @ 0.2 ft³/min {6 bars @ 0.09 liters/sec}; 1/4 in. NPT fitting
Maximum loader sizes	
8 inch loaders	Number of loaders - 4

MOUNTING INTERFACE

Dimensions shown in inches and {mm}.

Mixing chamber access door - this side of the interface.



Mounting bolt hole size (4 holes) 7/16 inch {11.0 mm}.
Predrilled 5 x 5 mounting pattern as standard.

SPECIFICATION NOTES

* Maximum throughput rates are based on 35 lb/ft³ pelletized material, using all standard valve sizes. Use of reducer inserts will lower the rate shown.

Throughput rates are based on:

- **A 4-position blender recipe** of 20% regrind, 80% natural, 3% color and 2% additive material.

† The optional flow control valve will mount inside the chassis in the space of the manual slide valve. Conair recommends using the optional flow control valve when mounting the blender on a stand, surge bin or hopper.

‡ Hopper positions three and four are supplied with eight inch cover plates as standard.

§ Numbers in top view drawings represent hopper positions.

Specifications may change without notice. Consult with a Conair representative for the most current information.

Model TB100-4

Shown with optional Access Receivers

ACCURATE **GRAVIMETRIC BLENDING** IN SMALL BATCHES

Get accurate blends, better mixing, faster material changes and increased profits with Conair's TrueBlend Series Blenders. Steep-sided component hoppers allow material to flow evenly and freely through vertical dispense valves into the weigh chamber. Efficient mixing assures full integration of all recipe ingredients. The fully enclosed cabinet design assures no pellet spillage and clean operation. Standard convenient features such as wide access doors on each main material compartment, a hinged access door and removable components in the mixing chamber reduce downtime during cleanout.

THROUGHPUT RATES TO 400 POUNDS AN HOUR

The TrueBlend TB100 series blenders offer small extruders and medium tonnage injection molding machines a superior way to blend color and additives centrally or at the throat of the processing machine.

The blender dispenses up to four materials from respective material compartments into a common weigh chamber. The control determines the correct weight of each ingredient based on setpoints entered on the touch screen display. Up to 1000 recipes and 250 resin names can be entered and stored in the processor.

Unique fast-acting "no stick" vertical valves control the amount of material dispensed. All dispense valves use two-way air cylinders assuring positive operation.

Choose between throat mounted or central blender models. Options include an integrated blender/loader control feature, and an addition of a flow control valve for central blending applications.

Blend accuracy to 1/2 of 1%

Colorant and/or additive weights are held to within 0.5% of setting. A selectable Precision Additive™ feature is also available for additives. The microprocessor control automatically calibrates after every cycle and compensates for variations in dispense method, resin bulk density or particle geometry.

Easy-to-use control

Intuitive 5.7 inch LCD touch screen control with full color graphics allows quick and easy setup of blender setpoints. All setpoints are displayed simultaneously. Enter the percentages of the blend on the touch screen display and the blender does the rest. The system automatically weighs the recipe ingredients in the proper sequence and maintains the correct blend relationship. Any position can be identified as one of the four material type selections adding flexibility to your application setup.

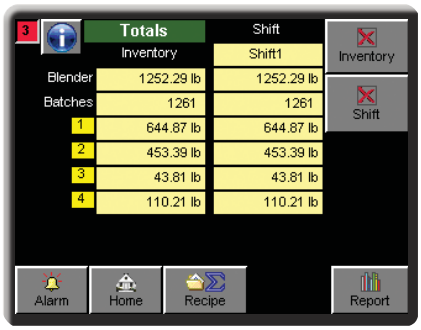
Convenient, no-tools clean out

Easy access to all material contact points for fast and safe cleaning during color or resin changes. Material compartment access doors, removable weigh bin, mix agitator and mix chamber liner allow quick efficient cleaning. The blender features a built-in material shutoff valve below the mixing chamber, this can be replaced with the automatic flow control valve for remote and central blending applications.

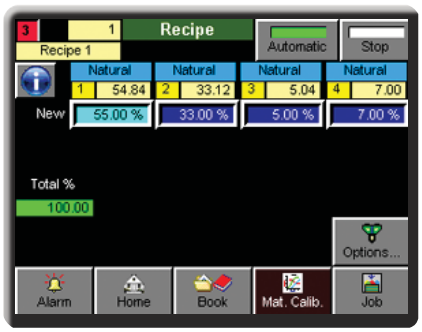
FEATURES

Intuitive, SB-2 touch screen control offers the industry's best multi-component accuracy

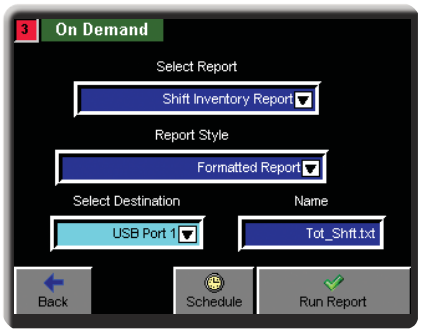
This easy-to-use touch screen control allows for fast setup of blender setpoints and automatically weighs recipe ingredients in the proper sequence to maintain correct blend relationship. Any position can be identified as one of the four material type selections adding flexibility to your application setup.



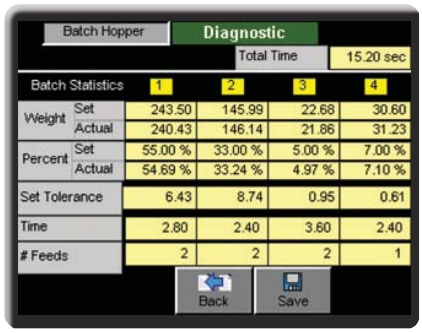
Instantly see your materials usage
Material usage / totals screen tracks the number of batches, weights dispensed by bin and weight dispensed in total since the last reset.



View and make changes to the active recipe
Save and recall up to 1000 recipes and 250 resin names in the Recipe Book.



Built-in reporting capabilities
Every SB-2 blender control is equipped with the capability to help users track their settings, alarms, material consumption, shift and inventory needs.



On-call diagnostics
Diagnostic screen displays target set point percentage and actual percentage dispensed. Also displays start and finish weights for each material per batch. Verifies true and accurate blend performance.

SmartBlend™ SB-2
Premium touch screen control offers these high performance functions to target the unique process needs of molders and extruders.

- Best choice for the needs of rapidly changing custom jobs or sophisticated extrusion and molding applications with complex and highly critical recipes.
- Progressivly approaches each ingredient target. Never over shoots.
- Precision metering yields industry's best batch-to-batch accuracy.
- Precision ratio control - all components.
- Individual matieral accuracy settings.
- SMS or text message alarm notification capable.
- VNC viewer

WHICH PACKAGE IS RIGHT FOR YOU?

STANDARD PACKAGES - 4 Component	TS	TE	LS‡	LE‡
FEATURES				
Material bin sight glasses and main bin clean out doors	●	●	●	●
Touch screen control	●	●	●	●
Loading control option			●	●
Loader, pump and compressed air interconnection kit			●	●
Material bin finger guards	●		●	
Quick clean/enhanced flow option*		●		●
Machine mount with manual slide gate discharge†	●	●	●	●
Remote/bin mount with pneumatic slide gate discharge†	●	●	●	●

FEATURE NOTES:

* Material bin door safety interlocks and drain ports.
† Choose between either machine or remote mounted blender packages.
‡ Includes an optional integrated loader control feature.

Specifications may change without notice. Consult with a Conair representative for the most current information.

FEATURES

TRUEBLEND™ TB100-4

Simple and quick cleanout

Easy access to all material contact points for fast and safe cleaning during color or resin changes. Material compartment access doors, removable weigh bin, mix agitator and mix chamber liner allow quick efficient cleaning.

New optional floor stand design!

Blender installs easily to this floor stand, which is equipped with a material reservoir.

Each blender stand features:

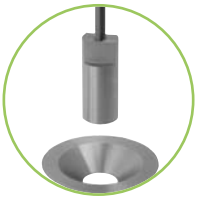
- Sturdy design
- Easy cleanout
- Fork-lift provisions
- Drawer magnet provision
- One standard material takeaway tube (up to two additional material tubes are available as options)
- Available with two or five cubic foot reservoir capacities

OPTIONS

TB reports
Used to track and document material usage, alarms, batch and shift reports and recipes. *See TrueBlend Reporting Software and ControlWorks specification sheets.*

Material level alarm control
Eliminate costly material shortage problems and machine downtime with this early warning system. The control monitors up to six material levels at one blender. Individual switches can be adjusted to monitor high or low material levels. *See Level Alarm Control specification sheet.*

Drain chute
The material drain chute readily installs to the chassis opening of the blender for fast and simple cleanout.



Major component flow restrictor
Available with TB/TBA/TBH models 100, 250, 500 and 900 on bin positions one and/or two. (Generally used when feeding more than two minor ingredients.)

Minor component flow restrictor
Available with TB/TBA/TBH models 100, 250, 500 and 900 on bin positions three and/or four. (Generally used when feeding 1% or less of an ingredient)

Air blow-off for mix chamber level sensor
This feature is integrated into the blender mix chamber to blow excessive dust and fines away from the sensing device and ensure accurate level sensor reading.

Remote mixer demand sensor
This sensor provides a fill-to level option in a surge bin or other material receptacle that sits below a remote mounted blender.

TrueBlend high-heat models
Used to process high temperature plastics such as ABS, nylon, polycarbonate and PET resins. Available in medium temperature (160° - 250°F {71° - 121°C}) TBA models and high temperature (250° - 375°F {121° - 191°C}) TBH models. *See TBA and TBH specification sheet.*

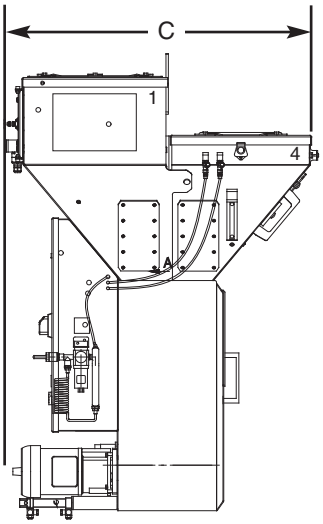
Dry air blanket
This option blankets the material compartments and mixing chamber with hot dry air to prevent moisture regain during processing. Available on both the TBA and TBH models. *See TBA and TBH specification sheet.*

Remote HMI operator cable
This option is for the 6 meter cable in lieu of the standard 2 meter cable.

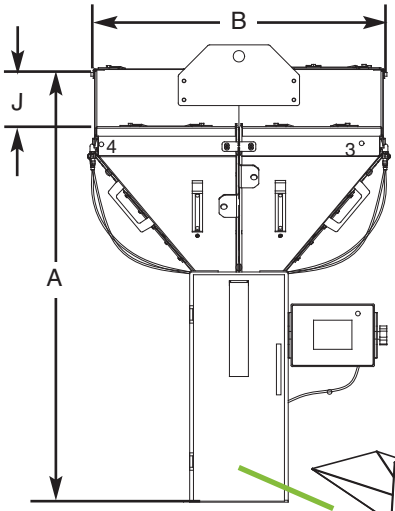
SPECIFICATIONS

TRUEBLEND™ TB100-4

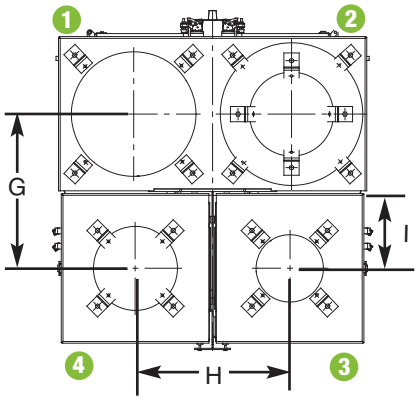
Side view



Front view

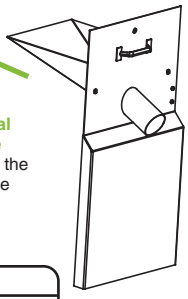


Top view§

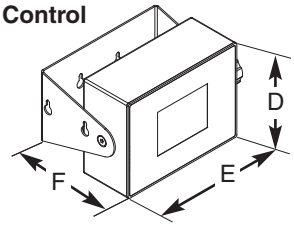


Drain chute

Purchase the **optional material drain chute** that readily installs to the chassis opening of the blender for **fast and simple cleanout.**



Control

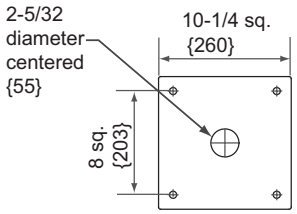


MODELS	TB100-4
Performance characteristics	
Batch size lb {g}	2.2 {1000}
Maximum throughput rate lb/hr {kg/hr}*	400 {181}
Bin capacity - main ingredient ft³{liter}	0.6 {17}
Bin capacity - minor ingredient ft³{liter}	0.3 {8}
Maximum number of materials	4
Number of vertical discharge valves	4
Number/(size) of major bin valves	2 - (60 mm)
Number/(size) of minor bin valves	2 - (20 mm)
Dimensions inches {mm}	
A - Height above mounting plate†	45.25 {1149}
B - Hopper width and depth (square)	30.25 {769}
C - Depth	32.75 {832}
D - Control height	6.50 {165.1}
E - Control width	8.75 {222.3}
F - Control depth	6.75 {171.5}
G - Loader center distance	16.25 {412.8}
H - Loader center distance	15.50 {393.7}
I - Loader center distance	7.75 {196.9}
J - Hopper height diffential	6.00 {152.4}
Weight lbs {kg}	
Installed	160 {72}
Shipping	270 {122}
Voltage total amps	
115V/1 phase/60 hz	3.0
230V/1 phase/50 hz	1.5
Compressed air requirements	
Discharge valves	90 psi @ 0.2 ft³/min {6 bars @ 0.09 liters/sec}; 1/4 in. NPT fitting
Maximum loader sizes	
8 inch loaders	Number of loaders - 2
12 inch loaders	Number of loaders - 2

MOUNTING INTERFACE

Dimensions shown in inches and {mm}.

Mixing chamber access door - this side of the interface.



Mounting bolt hole size (4 holes) 9/16 in. {14.0 mm}.
Predrilled 8 x 8 mounting pattern as standard.

SPECIFICATION NOTES

* Maximum throughput rates are based on 35 lb/ft³ pelletized material, using all standard valve sizes. Use of reducer inserts will lower the rate shown.

Throughput rates are based on:

- **A 4-position blender recipe** of 20% regrind, 80% natural, 3% color and 2% additive material.

† The optional flow control valve will mount inside the chassis in the space of the manual slide valve. Conair recommends using the optional flow control valve when mounting the blender on a stand, surge bin or hopper.

‡ Hopper positions three and four are supplied with eight inch cover plates as standard.

§ Numbers in top view drawings represent hopper positions.

Specifications may change without notice. Consult with a Conair representative for the most current information.

Model TB250-4

Shown with optional Access Receivers

ACCURATE **GRAVIMETRIC BLENDING** FOR HIGHER THROUGHPUTS

Get accurate blends, better mixing, faster material changes and increased profits with Conair's TrueBlend Series Blenders. Steep-sided component hoppers allow material to flow evenly and freely through vertical dispense valves into the weigh chamber. Efficient mixing assures full integration of all recipe ingredients. The fully enclosed cabinet design assures no pellet spillage and clean operation. Standard convenient features such as wide access doors on each main material compartment, a hinged access door and removable components in the mixing chamber reduce downtime during cleanout.

THROUGHPUT RATES TO 950 POUNDS AN HOUR

The TrueBlend TB250 series blenders offer processors with medium-sized extruders or large tonnage injection molding machines a superior way to blend color and additives centrally or at the throat of the processing machine.

The blender dispenses up to six materials (depending on model) from material compartments into a common weigh chamber. The control determines the correct weight of each ingredient based on setpoints entered on the touch screen display. Up to 1000 recipes and 250 resin names can be entered and stored in the control.

Unique fast-acting "no stick" vertical valves control the amount of material dispensed. All dispense valves use two-way air cylinders assuring positive operation.

Choose between four component or six component blender models. Options include an integrated blender/loader control feature, addition of a flow control valve for central blending applications and material compartment drainports.

Blend accuracy to 1/2 of 1%

Colorant and/or additive weights are held to within 0.5% of setting. A selectable Precision Additive™ feature is also available for additives. The microprocessor control automatically calibrates after every cycle and compensates for variations in dispense method, resin bulk density or particle geometry.

Easy-to-use control

New intuitive 5.7 inch LCD touch screen control with full color graphics allows quick and easy setup of blender setpoints. All setpoints are displayed simultaneously. Enter the percentages of the blend on the touch screen display and the blender does the rest. The system automatically weighs the recipe ingredients in the proper sequence and maintains the correct blend relationship. Any position can be identified as one of the four material type selections adding flexibility to your application setup.

Convenient, no-tools clean out

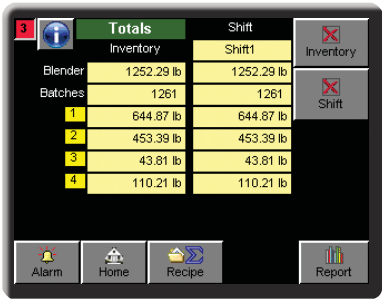
Easy access to all material contact points for fast and safe cleaning during color or resin changes. Material compartment access doors, removable weigh bin, mix agitator and mix chamber liner allow quick efficient cleaning. The blender features a built-in material shutoff valve below the mixing chamber, this can be replaced with the automatic flow control valve for remote and central blending applications.

TRUEBLEND™ TB250-4 AND TB250-6

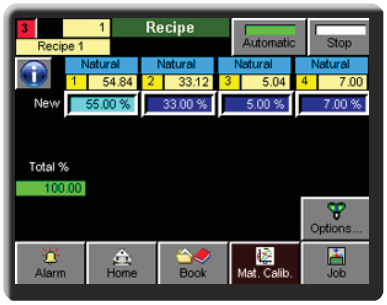
FEATURES

Intuitive, SB-2 touch screen control offers the industry's best multi-component accuracy

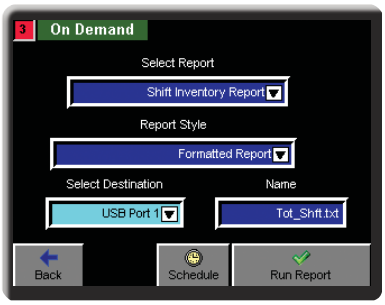
This easy-to-use touch screen control allows for fast setup of blender setpoints and automatically weighs recipe ingredients in the proper sequence to maintain correct blend relationship. Any position can be identified as one of the four material type selections adding flexibility to your application setup.



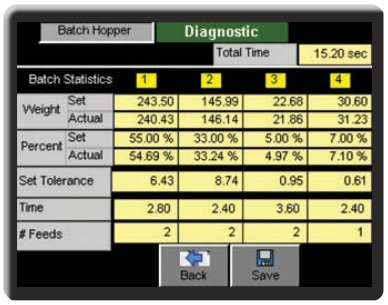
Instantly see your materials usage
Material usage / totals screen tracks the number of batches, weights dispensed by bin and weight dispensed in total since the last reset.



View and make changes to the active recipe
Save and recall up to 1000 recipes and 250 resin names in the Recipe Book.



Built-in reporting capabilities
Every SB-2 blender control is equipped with the capability to help users track their settings, alarms, material consumption, shift and inventory needs.



On-call diagnostics
Diagnostic screen displays target set point percentage and actual percentage dispensed. Also displays start and finish weights for each material per batch. Verifies true and accurate blend performance.

WHICH PACKAGE IS RIGHT FOR YOU?

STANDARD PACKAGES - 4 Component	TS	TE	LS‡	LE‡
FEATURES				
Material bin sight glasses and bin clean out doors	●	●	●	●
Touch screen control	●	●	●	●
Loading control option			●	●
Loader, pump and compressed air interconnection kit			●	●
Material bin finger guards	●		●	
Quick clean/enhanced flow option*		●		●
Machine mount with manual slide gate discharge†	●	●	●	●
Remote/bin mount with pneumatic slide gate discharge†	●	●	●	●

STANDARD PACKAGES - 6 Component	TS	TE	LS‡	LE‡
FEATURES				
Material bin sight glasses and clean out doors	●	●	●	●
Touch screen control	●	●	●	●
Loading control option			●	●
Loader, pump and compressed air interconnection kit			●	●
Material bin finger guards	●		●	
Quick clean/enhanced flow option*		●		●
Machine mount with manual slide gate discharge†	●	●	●	●
Remote/bin mount with pneumatic slide gate discharge†	●	●	●	●

FEATURE NOTES:

* Material bin door safety interlocks and drain ports.

† Choose between either machine or remote mounted blender packages.

‡ Includes an optional integrated loader control feature.

Specifications may change without notice. Consult with a Conair representative for the most current information.

200 West Kensinger Drive • Cranberry Township, PA 16066 • 724-584-5500 • fax 724-584-5299 • www.conairgroup.com

TRUEBLEND™ TB250-4 AND TB250-6

FEATURES

Simple and quick cleanout

Easy access to all material contact points for fast and safe cleaning during color or resin changes. Material compartment access doors, removable weigh bin, mix agitator and mix chamber liner allow quick efficient cleaning.

New optional floor stand design!

Blender installs easily to this floor stand, which is equipped with a material reservoir.

Each blender stand features:

- Sturdy design
- Easy cleanout
- Fork-lift provisions
- Drawer magnet provision
- One standard material takeaway tube (up to two additional material tubes are available as options)
- Available with two or five cubic foot reservoir capacities

OPTIONS

TB reports
Used to track and document material usage, alarms, batch and shift reports and recipes. *See TrueBlend Reporting Software and ControlWorks specification sheets.*

Material level alarm control
Eliminate costly material shortage problems and machine downtime with this early warning system. The control monitors up to six material levels at one blender. Individual switches can be adjusted to monitor high or low material levels. *See Level Alarm Control specification sheet.*

Drain chute
The material drain chute readily installs to the chassis opening of the blender for fast and simple cleanout.

Major component flow restrictor
Available with TB/TBA/TBH models 100, 250, 500 and 900 on bin positions one and/or two. (Generally used when feeding more than two minor ingredients.)

Minor component flow restrictor
Available with TB/TBA/TBH models 100, 250, 500 and 900 on bin positions three and/or four. (Generally used when feeding 1% or less of an ingredient)

Air blow-off for mix chamber level sensor
This feature is integrated into the blender mix chamber to blow excessive dust and fines away from the sensing device and ensure accurate level sensor reading.

Remote mixer demand sensor
This sensor provides a fill-to level option in a surge bin or other material receptacle that sits below a remote mounted blender.

TrueBlend high-heat models
Used to process high temperature plastics such as ABS, nylon, polycarbonate and PET resins. Available in medium temperature (160° - 250°F {71° - 121°C}) TBA models and high temperature (250° - 375°F {121° - 191°C}) TBH models. *See TBA and TBH specification sheet.*

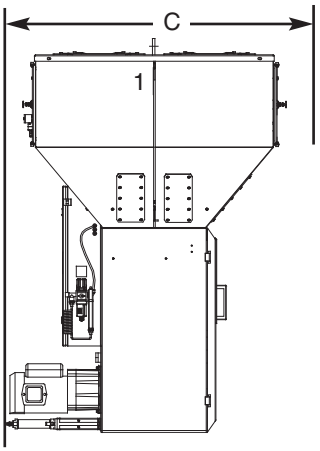
Dry air blanket
This option blankets the material compartments and mixing chamber with hot dry air to prevent moisture regain during processing. Available on both the TBA and TBH models. *See TBA and TBH specification sheet.*

Remote HMI operator cable
This option is for the 6 meter cable in lieu of the standard 2 meter cable.

SPECIFICATIONS

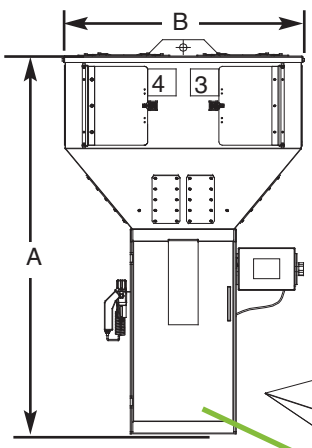
TRUEBLEND™ TB250-4 AND TB250-6

Side view



NOTE: Side and front view drawings are model TB250-4. The bin positions change for a TB250-6 see the top view.

Front view

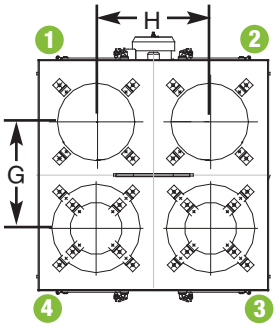


Drain chute

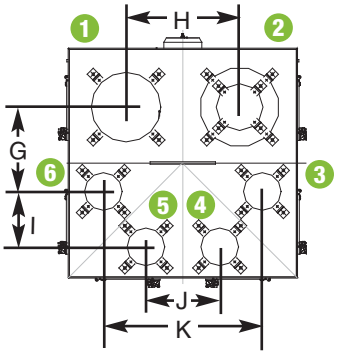
Purchase the **optional material drain chute** that readily installs to the chassis opening of the blender for **fast and simple cleanout.**

Top view§

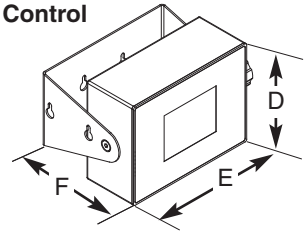
4 position‡



6 position‡



Control

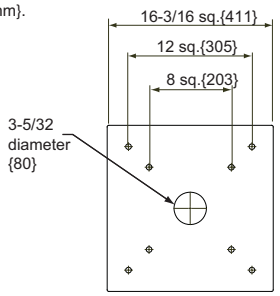


MODELS	TB250-4	TB250-6
Performance characteristics		
Batch size lb {g}	5.5 {2500}	5.5 {2500}
Maximum throughput rate lb/hr {kg/hr}*	950 {431}	750 {340}
Bin capacity - main ingredient ft³{liter}	1.6 {45.3}	2.7 {76.4}
Bin capacity - minor ingredient ft³{liter}	1.6 {45.3}	1.4 {39.6}
Maximum number of materials	4	6
Number of vertical discharge valves	4	6
Number/(size) of major bin valves	2 - (60 mm)	2 - (60 mm)
Number/(size) of minor bin valves	2 - (30 mm)	4 - (30 mm)
Dimensions inches {mm}		
A - Height above mounting plate†	57.50 {1461}	63.0 {1600}
B - Hopper Width and Depth (square)	36.50 {926}	40.13 {1026}
C - Depth	40.83 {1037}	42.67 {1084}
D - Control height	6.50 {165.1}	6.50 {165.1}
E - Control width	8.75 {222.3}	8.75 {222.3}
F - Control depth	6.75 {171.5}	6.75 {171.5}
G - Loader center distance	21.81 {554.0}	14.88 {377.8}
H - Loader center distance	20.13 {511.2}	20.0 {508}
I - Loader center distance	NA	9.75 {247.7}
J - Loader center distance	NA	13.00 {330.2}
K - Loader center distance	NA	28.00 {711.2}
Weight lbs {kg}		
Installed	320 {145}	400 {182}
Shipping	440 {200}	520 {236}
Voltage total amps		
115V/1 phase/60 hz	6.3	6.3
230V/1 phase/50 hz	3.2	3.2
Compressed air requirements		
Discharge valves	90 psi @ 0.2 ft³/min {6 bars @ 0.09 liters/sec}; 1/4 in. NPT fitting	
Maximum loader sizes		
15 inch loaders - number of loaders -	4	2
8 inch loaders- number of loaders -	NA	4

MOUNTING INTERFACE

Dimensions shown in inches and {mm}.

Mixing chamber access door - this side of the interface.



Mounting bolt hole size (8 holes) 9/16 inch {14.0 mm}. Predrilled 8 x 8 and 12 X 12 mounting pattern as standard.

SPECIFICATION NOTES

* Maximum throughput rates are based on 35 lb/ft³ pelletized material, using all standard valve sizes. Use of reducer inserts will lower the rate shown.

Throughput rates are based on:

- **A 4-position blender recipe** of 20% regrind, 80% natural, 3% color and 2% additive material.
- **A 6-position blender recipe** of 20% regrind, 80% natural, 3% color at position 3, 2% additive at position 4, 3% additive at position 5 and 2% additive at position 6.

† The optional flow control valve will mount inside the chassis in the space of the manual slide valve. Conair recommends using the optional flow control valve when mounting the blender on a stand, surge bin or hopper.

‡ TB250-4 hopper positions two and four are supplied with 12-8 adapters with eight inch cover plates as standard. TB250-6 hopper position two is supplied with a 12-8 adapter with an eight inch cover.

§ Numbers in top view drawings represent hopper positions.

Specifications may change without notice. Consult with a Conair representative for the most current information.

TRUEBLEND™ TB250R-4

Model TB250-4

Shown with AL-5 Loaders

ACCURATE GRAVIMETRIC BLENDING FOR HIGHER THROUGHPUTS

Get accurate blends, better mixing, faster material changes and increased profits with Conair's TrueBlend Series Blenders. Steep-sided component hoppers allow material to flow evenly and freely through vertical dispense valves into the weigh chamber. Efficient mixing assures full integration of all recipe ingredients. The fully enclosed cabinet design assures no pellet spillage and clean operation. Standard convenient features such as wide access doors on each main material compartment, a hinged access door and removable components in the mixing chamber reduce downtime during cleanout.

THROUGHPUT RATES TO 850 POUNDS AN HOUR

The TrueBlend TB250R-4 blender offers processors with medium-sized extruders or large tonnage injection molding machines a superior way to blend color and additives centrally or at the throat of the processing machine.

The blender dispenses up to four materials from respective material compartments into a common weigh chamber. The control determines the correct weight of each ingredient based on setpoints entered on the touch screen display. Up to 50 recipes can be entered and stored in the control.

Unique fast-acting "no stick" vertical valves control the amount of material dispensed. All dispense valves use two-way air cylinders assuring positive operation.

Choose between throat mounted or central blender models. Options include an integrated blender/loader control feature, addition of a flow control valve for central blending applications and material compartment drainports.

Blend accuracy to 1/2 of 1%

Colorant and/or additive weights are held to within 0.5% of setting. A selectable Precision Additive™ feature is also available for additives. The microprocessor control automatically calibrates after every cycle and compensates for variations in dispense method, resin bulk density or particle geometry.

Easy-to-use control

Intuitive 5.7 inch LCD touch screen control with full color graphics allows quick and easy setup of blender setpoints. All setpoints are displayed simultaneously. Enter the percentages of the blend on the touch screen display and the blender does the rest. The system automatically weighs the recipe ingredients in the proper sequence and maintains the correct blend relationship. Any position can be identified as one of the four material type selections adding flexibility to your application setup.

Convenient, no-tools clean out

Easy access to all material contact points for fast and safe cleaning during color or resin changes. Material compartment access doors, removable weigh bin, mix agitator and mix chamber liner allow quick efficient cleaning. The blender features a built-in material shutoff valve below the mixing chamber, this can be replaced with the automatic flow control valve for remote and central blending applications.

TRUEBLEND™ TB250R-4

FEATURES

Intuitive touch screen control for ease of use

The intuitive touch screen control allows for quick and easy setup of blender setpoints and automatically weighs recipe ingredients in the proper sequence to maintain correct blend relationship. Any position can be identified as one of the four material type selections adding flexibility to your application setup.

WHICH PACKAGE IS RIGHT FOR YOU?

STANDARD PACKAGES - 4 Component	TS	TE	LS ‡	LE ‡
FEATURES				
Material bin sight glasses and bin clean out doors	●	●	●	●
Touch screen control	●	●	●	●
Loading control option			●	●
Loader, pump and compressed air interconnection kit			●	●
Material bin finger guards	●		●	
Quick clean/enhanced flow option*		●		●
Machine mount with manual slide gate discharge†	●	●	●	●
Remote/bin mount with pneumatic slide gate discharge†	●	●	●	●

FEATURE NOTES:

* Material bin door safety interlocks and drain ports.

† Choose between either machine or remote mounted blender packages.

‡ Includes an optional integrated loader control feature.

Specifications may change without notice consult with a Conair representative for the most current information.

TRUEBLEND™ TB250R-4

FEATURES

Simple and quick cleanout

Easy access to all material contact points for fast and safe cleaning during color or resin changes. Material compartment access doors, removable weigh bin, mix agitator and mix chamber liner allow quick efficient cleaning.

Optional floor stand design

Blender installs easily to this floor stand, which is equipped with a material reservoir.

Each blender stand features:

- Sturdy design
- Easy cleanout
- Fork-lift provisions
- Drawer magnet provision
- One standard material take-away tube (up to two additional material tubes are available as options)
- Available with two or five cubic foot reservoir capacities

OPTIONS

TB reports
Used to track and document material usage, alarms, batch and shift reports and recipes. *See TrueBlend Reporting Software and ControlWorks specification sheets.*

Air blow-off for mix chamber level sensor
This feature is integrated into the blender mix chamber to blow excessive dust and fines away from the sensing device and ensure accurate level sensor reading.

Material level alarm control
Eliminate costly material shortage problems and machine downtime with this early warning system. The control monitors up to six material levels at one blender. Individual switches can be adjusted to monitor high or low material levels. *See Level Alarm Control specification sheet.*

Remote mixer demand sensor
This sensor provides a fill-to level option in a surge bin or other material receptacle that sits below a remote mounted blender.

Drain chute
The material drain chute readily installs to the chassis opening of the blender for fast and simple cleanout.

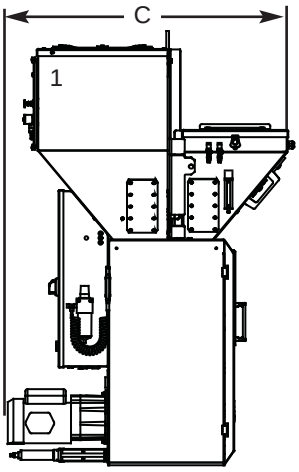
Minor component flow restrictor
Available with TB/TBA/TBH models 100, 250, 500 and 900 on bin positions three and/or four. (Generally used when feeding 1% or less of an ingredient.)

Major component flow restrictor
Available with TB/TBA/TBH models 100, 250, 500 and 900 on bin positions one and/or two. (Generally used when feeding more than two minor ingredients.)

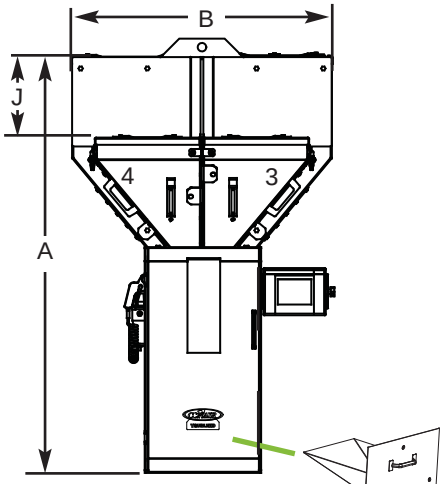
SPECIFICATIONS

TRUEBLEND™ TB250R-4

Side view

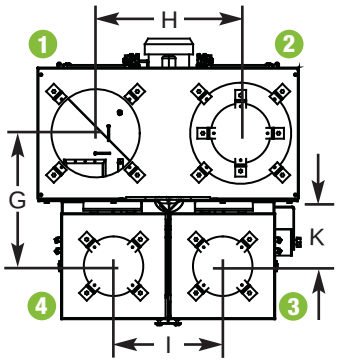


Front view



Top view

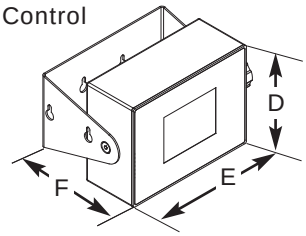
4 position‡



Drain chute

Purchase the optional material drain chute that readily installs to the chassis opening of the blender for fast and simple cleanout.

Control

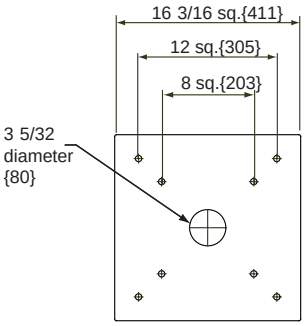


MODELS	TB250R-4
Performance characteristics	
Batch size lb {g}	5.5 {2500}
Maximum throughput rate lb/hr {kg/hr}*	850 {386}
Bin capacity - main ingredient ft³ {liter}	1.6 {45.3}
Bin capacity - minor ingredient ft³ {liter}	0.3 {8}
Maximum number of materials	4
Number of vertical discharge valves	4
Number/(size) of major bin valves	2 - {60 mm}
Number/(size) of minor bin valves (removable)	2 - {20 mm}
Dimensions inches {mm}	
A - Height above mounting plate†	57.75 {1467}
B - Hopper width and depth (square)	36.50 {926}
C - Overall depth	38.88 {988}
D - Control height	6.50 {165.1}
E - Control width	8.75 {222.3}
F - Control depth	6.75 {171.5}
G - Loader center distance	18.44 {468.3}
H - Loader center distance	20.13 {511.2}
I - Loader center distance	15.13 {388.2}
J - Loader center distance	11.25 {285.8}
K - Loader center distance	9.00 {228.6}
Weight lbs {kg}	
Installed	280
Shipping	400
Voltage total amps	
115V/1 phase/60 hz	6.3
230V/1 phase/50 hz	3.2
Compressed air requirements	
Discharge valves	90 psi @ 0.2 ft³/min {6 bars @ 0.09 liters/sec}; 1/4 in. NPT fitting
Maximum loader sizes	
15 inch loaders - number of loaders -	2
8 inch loaders- number of loaders -	2

MOUNTING INTERFACE

Dimensions shown in inches and {mm}.

Mixing chamber access door - this side of the interface.



Mounting bolt hole size (8 holes) 9/16 inch {14.0 mm}.
Predrilled 8 x 8 and 12 X 12 mounting pattern as standard.

SPECIFICATION NOTES

* Maximum throughput rates are based on 35 lb/ft³ pelletized material, using all standard valve sizes. Use of reducer inserts will lower the rate shown.

Throughput rates are based on:

A 4-position blender recipe of 20% regrind, 80% natural, 3% color and 2% additive material.

† The optional flow control valve will mount inside the chassis in the space of the manual slide valve. Conair recommends using the optional flow control valve when mounting the blender on a stand, surge bin or hopper.

‡ TB250R-4 hopper position two is supplied with a 12-8 adapter with an eight inch cover plate as standard. Position three and four are supplied with hand-fill lids.

Numbers in top view drawings represent hopper positions.

Specifications may change without notice consult with a Conair representative for the most current information.

Model TB500-6

ACCURATE GRAVIMETRIC BLENDING FOR MEDIUM TO HIGH THROUGHPUTS

Get accurate blends, better mixing, faster material changes and increased profits with Conair's TrueBlend Series Blenders.

Steep-sided component hoppers allow material to flow evenly and freely through respective vertical dispense valves into the weigh chamber. Efficient mixing assures full integration of all recipe ingredients. The fully enclosed cabinet design assures no pellet spillage and clean operation. Standard convenient features such as wide access doors on each material compartment, a hinged access door and removable components in the mixing chamber reduce downtime during cleanout.

BROAD RANGE OF STORAGE CAPACITIES AVAILABLE

The TrueBlend TB500 series blenders offer processors with medium-sized extruders or medium-to-large injection molding machines a superior way to blend color and additives centrally or at the throat of the processing machine.

The blender dispenses up to six materials (depending on model) from material compartments into a common weigh chamber. The control determines the correct weight of each ingredient based on setpoints entered on the touch screen display. Up to 1000 recipes and 250 resin names can be entered and stored in the control.

Unique fast-acting "no stick" vertical valves control the amount of material dispensed. All dispense valves use two-way air cylinders assuring positive operation.

Choose between four component or six component blender models. Options include an integrated blender/loader control feature, addition of flow control valve for central blending applications and material compartment drainports.

Blend accuracy to 1/2 of 1%

Colorant and/or additive weights are held to within 0.5% of setting. A selectable Precision Additive™ feature is also available for additives. The microprocessor control automatically calibrates after every cycle and compensates for variations in dispense method, resin bulk density or particle geometry.

Easy-to-use control

Intuitive 5.7 inch LCD touch screen control with full color graphics allows quick and easy setup of blender setpoints. All setpoints are displayed simultaneously. Enter the percentages of the blend on the touch screen display and the blender does the rest. The system automatically weighs the recipe ingredients in the proper sequence and maintains the correct blend relationship. Any position can be identified as one of the four material type selections adding flexibility to your application setup.

Convenient, no-tools clean out

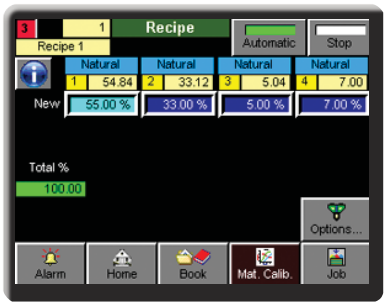
Easy access to all material contact points for fast and safe cleaning during color or resin changes. Material compartment access doors, removable weigh bin, mix agitator and mix chamber liner allow quick efficient cleaning. The blender features a built-in material shutoff valve below the mixing chamber, this can be replaced with the automatic flow control valve for remote and central blending applications.

FEATURES

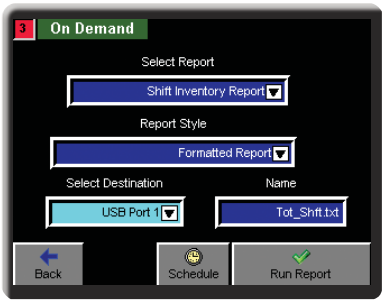
Intuitive, SB-2 touch screen control offers the industry's best multi-component accuracy

This easy-to-use touch screen control allows for fast setup of blender setpoints and automatically weighs recipe ingredients in the proper sequence to maintain correct blend relationship. Any position can be identified as one of the four material type selections adding flexibility to your application setup.

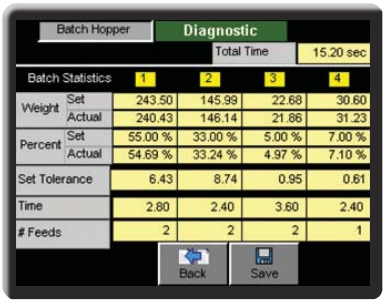
Instantly see your materials usage
Material usage / totals screen tracks the number of batches, weights dispensed by bin and weight dispensed in total since the last reset.



View and make changes to the active recipe
Save and recall up to 1000 recipes and 250 resin names in the Recipe Book.



Built-in reporting capabilities
Every SB-2 blender control is equipped with the capability to help users track their settings, alarms, material consumption, shift and inventory needs.



On-call diagnostics
Diagnostic screen displays target set point percentage and actual percentage dispensed. Also displays start and finish weights for each material per batch. Verifies true and accurate blend performance.

WHICH PACKAGE IS RIGHT FOR YOU?

STANDARD PACKAGES - 4 Component	TS	TE	LS‡	LE‡
FEATURES				
Material bin sight glasses and bin clean out doors	●	●	●	●
Touch screen control	●	●	●	●
Loading control option			●	●
Loader, pump and compressed air interconnection kit			●	●
Material bin finger guards	●		●	
Quick clean/enhanced flow option*		●		●
Machine mount with manual slide gate discharge†	●	●	●	●
Remote/bin mount with pneumatic slide gate discharge†	●	●	●	●

STANDARD PACKAGES - 6 Component	TS	TE	LS‡	LE‡
FEATURES				
Material bin sight glasses and clean out doors	●	●	●	●
Touch screen control	●	●	●	●
Loading control option			●	●
Loader, pump and compressed air interconnection kit			●	●
Material bin finger guards	●		●	
Quick clean/enhanced flow option*		●		●
Machine mount with manual slide gate discharge†	●	●	●	●
Remote/bin mount with pneumatic slide gate discharge†	●	●	●	●

FEATURE NOTES:

* Material bin door safety interlocks and drain ports.

† Choose between either machine or remote mounted blender packages.

‡ Includes an optional integrated loader control feature.

Specifications may change without notice consult with a Conair representative for the most current information.

TRUEBLEND™ TB500-4 AND TB500-6

FEATURES

Simple and quick cleanout

Easy access to all material contact points for fast and safe cleaning during color or resin changes. Material compartment access doors, removable weigh bin, mix agitator and mix chamber liner allow quick efficient cleaning.

Optional floor stand design!

Blender installs easily to this floor stand, which is equipped with a material reservoir.

Each blender stand features:

- Sturdy design
- Easy cleanout
- Fork-lift provisions
- Drawer magnet provision
- One standard material takeaway tube (up to two additional material tubes are available as options)
- Available with two or five cubic foot reservoir capacities

OPTIONS

TB reports
Used to track and document material usage, alarms, batch and shift reports and recipes. *See TrueBlend Reporting Software and ControlWorks specification sheets.*

Material level alarm control
Eliminate costly material shortage problems and machine downtime with this early warning system. The control monitors up to six material levels at one blender. Individual switches can be adjusted to monitor high or low material levels. *See Level Alarm Control specification sheet.*

Drain chute
The material drain chute readily installs to the chassis opening of the blender for fast and simple cleanout.

Major component flow restrictor
Available with TB/TBA/TBH models 100, 250, 500 and 900 on bin positions one and/or two. (Generally used when feeding more than two minor ingredients.)

Minor component flow restrictor
Available with TB/TBA/TBH models 100, 250, 500 and 900 on bin positions three and/or four. (Generally used when feeding 1% or less of an ingredient)

Air blow-off for mix chamber level sensor
This feature is integrated into the blender mix chamber to blow excessive dust and fines away from the sensing device and ensure accurate level sensor reading.

Remote mixer demand sensor
This sensor provides a fill-to level option in a surge bin or other material receptacle that sits below a remote mounted blender.

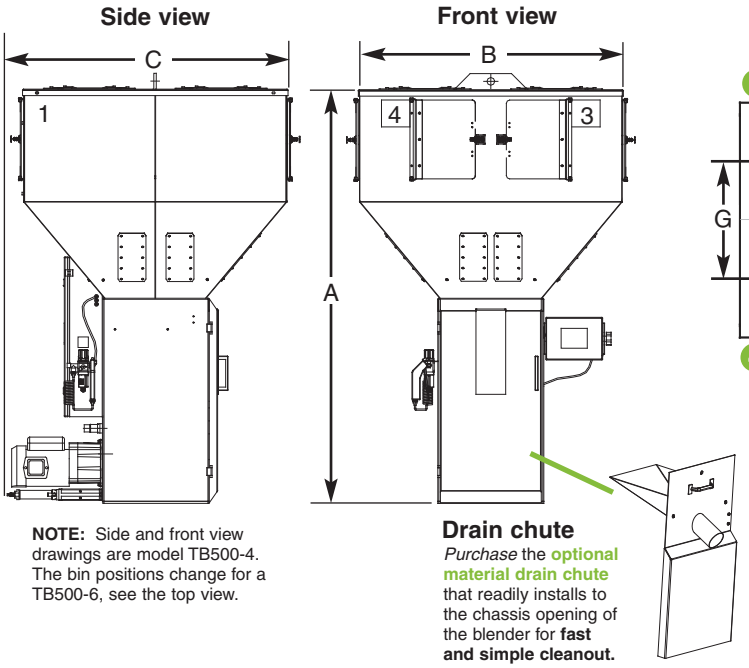
TrueBlend high-heat models
Used to process high temperature plastics such as ABS, nylon, polycarbonate and PET resins. Available in medium temperature (160° - 250°F {71° - 121°C}) TBA models and high temperature (250° - 375°F {121° - 191°C}) TBH models. *See TBA and TBH specification sheet.*

Dry air blanket
This option blankets the material compartments and mixing chamber with hot dry air to prevent moisture regain during processing. Available on both the TBA and TBH models. *See TBA and TBH specification sheet.*

Remote HMI operator cable
This option is for the 6 meter cable in lieu of the standard 2 meter cable.

TRUEBLEND™ TB500-4 AND TB500-6

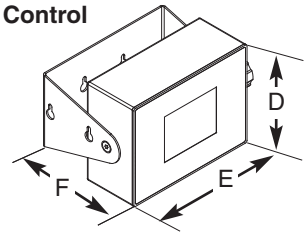
SPECIFICATIONS



NOTE: Side and front view drawings are model TB500-4. The bin positions change for a TB500-6, see the top view.

Drain chute

Purchase the **optional material drain chute** that readily installs to the chassis opening of the blender for **fast and simple cleanout.**

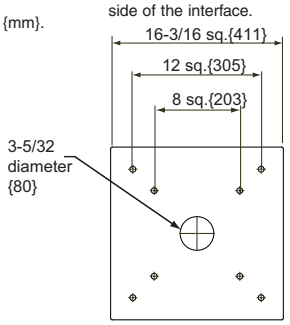


MODELS	TB500-4	TB500-6
Performance characteristics		
Batch size lb {g}	11 {5000}	11 {5000}
Maximum throughput rate lb/hr {kg/hr}*	1500 {680}	1150 {522}
Bin capacity - main ingredient ft³{liter}	2.7 {76.4}	2.7 {76.4}
Bin capacity - minor ingredient ft³{liter}	2.7 {76.4}	1.35 {38.2}
Maximum number of materials	4	6
Number of vertical discharge valves	4	6
Number/(size) of major bin valves	2 - (100/60 mm)	2 - (100/60 mm)
Number/(size) of minor bin valves	2 - (30 mm)	4 - (30 mm)
Dimensions inches {mm}		
A - Height above mounting plate†	63.00 {1600}	63.00 {1600}
B - Width	40.13 {1026}	40.13 {1026}
C - Depth	43.00 {1092}	43.00 {1092}
D - Control height	6.50 {165.1}	6.50 {165.1}
E - Control width	8.75 {222.3}	8.75 {222.3}
F - Control depth	6.75 {171.5}	6.75 {171.5}
G - Loader center distance	22.00 {558.8}	14.88 {377.8}
H - Loader center distance	22.00 {558.8}	20.00 {508.0}
I - Loader center distance	NA	9.75 {247.7}
J - Loader center distance	NA	13.00 {330.2}
K - Loader center distance	NA	28.00 {711.2}
Weight lbs {kg}		
Installed	400 {182}	400 {182}
Shipping	520 {236}	520 {236}
Voltage total amps		
115V/1 phase/60 hz	6.3	6.3
230V/1 phase/50 hz	3.2	3.2
Compressed air requirements		
Discharge valves	90 psi @ 0.2 ft³/min {6 bars @ 0.09 liters/sec}; 1/4 in. NPT fitting	
Maximum loader sizes		
15 inch loaders - number of loaders -	4	2
8 inch loaders - number of loaders -	NA	4

MOUNTING INTERFACE

Dimensions shown in inches and {mm}.

Mixing chamber access door - this side of the interface.



Mounting bolt hole size (8 holes) 9/16 inch {14.0 mm}.
Predrilled 8 x 8 and 12 X 12 mounting pattern as standard.

SPECIFICATION NOTES

* Maximum throughput rates are based on 35 lb/ft³ pelletized material, using all standard valve sizes. Use of reducer inserts will lower the rate shown.

Throughput rates are based on:

- **A 4-position blender** recipe of 20% regrind, 80% natural, 3% color and 2% additive material.
- **A 6-position blender** recipe of 20% regrind, 80% natural, 3% color at position 3, 2% additive at position 4, 3% additive at position 5 and 2% additive at position 6.

† The optional flow control valve will mount inside the chassis in the space of the manual slide valve. Conair recommends using the optional flow control valve when mounting the blender on a stand, surge bin or hopper.

‡ TB500-4 hopper positions three and four are supplied with 12-8 adapters with 8 inch cover plates as standard. TB500-6 hopper position two is supplied with a 12-8 adapter and an 8 inch cover plate as standard.

Specifications may change without notice. Consult with a Conair representative for the most current information.

Model TB900-6
Shown with optional
Access Loaders/Receivers

ACCURATE **GRAVIMETRIC BLENDING** FOR HIGHER THROUGHPUTS

Get accurate blends, better mixing, faster material changes and increased profits with Conair's TrueBlend Series Blenders. Steep-sided component hoppers allow material to flow evenly and freely through vertical dispense valves into the weigh chamber. Efficient mixing assures full integration of all recipe ingredients. The fully enclosed cabinet design assures no pellet spillage and clean operation. Standard convenient features such as wide access doors on each main material compartment, a hinged access door and removable components in the mixing chamber reduce downtime during cleanout.

THROUGHPUT RATES TO 3500 POUNDS AN HOUR

The TrueBlend TB900 series blenders offer processors with medium-to-large extruders or large tonnage injection molding machines a superior way to blend color and additives centrally or at the throat of the processing machine.

The blender dispenses up to six materials (depending on model) from material compartments into a common weigh chamber. The control determines the correct weight of each ingredient based on setpoints entered on the touch screen display. Up to 1000 recipes and 250 resin names can be entered and stored in the processor.

Unique fast-acting "no stick" vertical valves control the amount of material dispensed. All dispense valves use two-way air cylinders assuring positive operation.

Choose between four component or six component blender models. Options include an integrated blender/loader control feature, addition of a flow control valve for central blending applications and material compartment drainports.

Blend accuracy to 1/2 of 1%

Colorant and/or additive weights are held to within 0.5% of setting. A selectable Precision Additive™ feature is also available for additives. The microprocessor control automatically calibrates after every cycle and compensates for variations in dispense method, resin bulk density or particle geometry.

Easy-to-use control

Intuitive 5.7 inch LCD touch screen control with full color graphics allows quick and easy setup of blender setpoints. All setpoints are displayed simultaneously. Enter the percentages of the blend on the touch screen display and the blender does the rest. The system automatically weighs the recipe ingredients in the proper sequence and maintains the correct blend relationship. Any position can be identified as one of the four material type selections adding flexibility to your application setup.

Convenient, no-tools clean out

Easy access to all material contact points for fast and safe cleaning during color or resin changes. Material compartment access doors, removable weigh bin, mix agitator and mix chamber liner allow quick efficient cleaning. The blender features a built-in material shutoff valve below the mixing chamber, this can be replaced with the automatic flow control valve for remote and central blending applications.

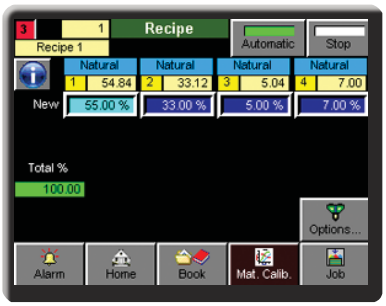
TRUEBLEND™ TB900-4 AND TB900-6

FEATURES

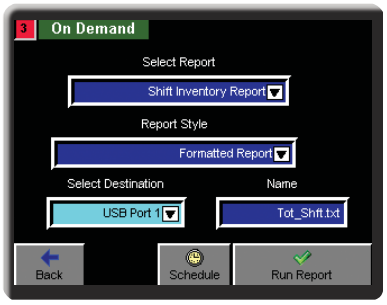
Intuitive, SB-2 touch screen control offers the industry's best multi-component accuracy

This easy-to-use touch screen control allows for fast setup of blender setpoints and automatically weighs recipe ingredients in the proper sequence to maintain correct blend relationship. Any position can be identified as one of the four material type selections adding flexibility to your application setup.

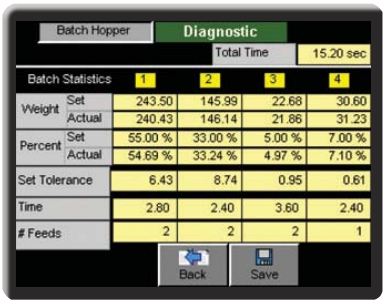
Instantly see your materials usage
Material usage / totals screen tracks the number of batches, weights dispensed by bin and weight dispensed in total since the last reset.



View and make changes to the active recipe
Save and recall up to 1000 recipes and 250 resin names in the Recipe Book.



Built-in reporting capabilities
Every SB-2 blender control is equipped with the capability to help users track their settings, alarms, material consumption, shift and inventory needs.



On-call diagnostics
Diagnostic screen displays target set point percentage and actual percentage dispensed. Also displays start and finish weights for each material per batch. Verifies true and accurate blend performance.

WHICH PACKAGE IS RIGHT FOR YOU?

STANDARD PACKAGES - 4 Component	TS	TE	LS‡	LE‡
FEATURES				
Material bin sight glasses and bin clean out doors	●	●	●	●
Touch screen control	●	●	●	●
Loading control option			●	●
Loader, pump and compressed air interconnection kit			●	●
Material bin finger guards	●		●	
Quick clean/enhanced flow option*		●		●
Machine mount with manual slide gate discharge†	●	●	●	●
Remote/bin mount with pneumatic slide gate discharge†	●	●	●	●

STANDARD PACKAGES - 6 Component	TS	TE	LS‡	LE‡
FEATURES				
Material bin sight glasses and clean out doors	●	●	●	●
Touch screen control	●	●	●	●
Loading control option			●	●
Loader, pump and compressed air interconnection kit			●	●
Material bin finger guards	●		●	
Quick clean/enhanced flow option*		●		●
Machine mount with manual slide gate discharge†	●	●	●	●
Remote/bin mount with pneumatic slide gate discharge†	●	●	●	●

FEATURE NOTES:

* Material bin door safety interlocks and drain ports.

† Choose between either machine or remote mounted blender packages.

‡ Includes an optional integrated loader control feature.

Specifications may change without notice. Consult with a Conair representative for the most current information.

200 West Kensinger Drive • Cranberry Township, PA 16066 • 724-584-5500 • fax 724-584-5299 • www.conairgroup.com

TRUEBLEND™ TB900-4 AND TB900-6

FEATURES

Simple and quick cleanout

Easy access to all material contact points for fast and safe cleaning during color or resin changes. Material compartment access doors, removable weigh bin, mix agitator and mix chamber liner allow quick efficient cleaning.

Optional floor stand design!

Blender installs easily to this floor stand, which is equipped with a material reservoir.

Each blender stand features:

- Sturdy design
- Easy cleanout
- Fork-lift provisions
- Drawer magnet provision
- One standard material takeaway tube (up to two additional material tubes are available as options)
- Available with two or five cubic foot reservoir capacities

OPTIONS

TB reports
Used to track and document material usage, alarms, batch and shift reports and recipes. *See TrueBlend Reporting Software and ControlWorks specification sheets.*

Material level alarm control
Eliminate costly material shortage problems and machine downtime with this early warning system. The control monitors up to six material levels at one blender. Individual switches can be adjusted to monitor high or low material levels. *See Level Alarm Control specification sheet.*

Drain chute
The material drain chute readily installs to the chassis opening of the blender for fast and simple cleanout.

Major component flow restrictor
Available with TB/TBA/TBH models 100, 250, 500 and 900 on bin positions one and/or two. (Generally used when feeding more than two minor ingredients.)

Minor component flow restrictor
Available with TB/TBA/TBH models 100, 250, 500 and 900 on bin positions three and/or four. (Generally used when feeding 1% or less of an ingredient)

Air blow-off for mix chamber level sensor
This feature is integrated into the blender mix chamber to blow excessive dust and fines away from the sensing device and ensure accurate level sensor reading.

Remote mixer demand sensor
This sensor provides a fill-to level option in a surge bin or other material receptacle that sits below a remote mounted blender.

TrueBlend high-heat models
Used to process high temperature plastics such as ABS, nylon, polycarbonate and PET resins. Available in medium temperature (160° - 250°F {71° - 121°C}) TBA models and high temperature (250° - 375°F {121° - 191°C}) TBH models. *See TBA and TBH specification sheet.*

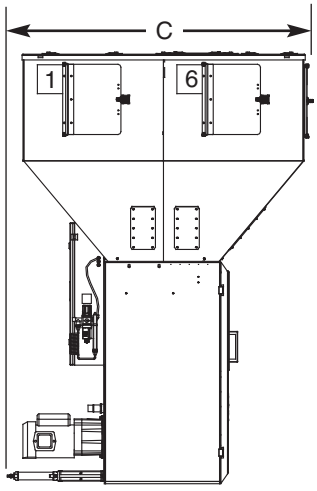
Dry air blanket
This option blankets the material compartments and mixing chamber with hot dry air to prevent moisture regain during processing. Available on both the TBA and TBH models. *See TBA and TBH specification sheet.*

Remote HMI operator cable
This option is for the 6 meter cable in lieu of the standard 2 meter cable.

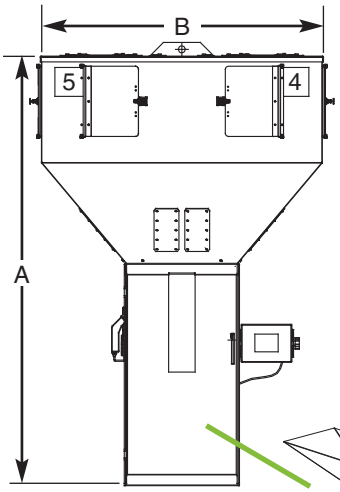
SPECIFICATIONS

TRUEBLEND™ TB900-4 AND TB900-6

Side view

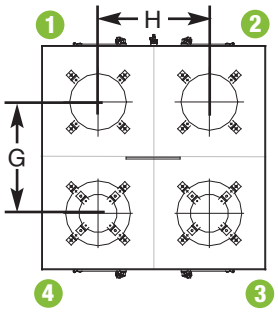


Front view

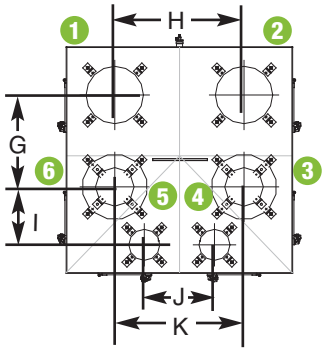


Top view§

4 position‡



6 position‡

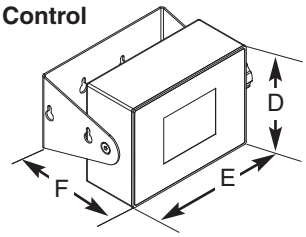


NOTE: Side and front view drawings are model TB900-6. The bin positions change for a TB900-4, see the top view.

Drain chute

Purchase the **optional material drain chute** that readily installs to the chassis opening of the blender for **fast and simple cleanout.**

Control

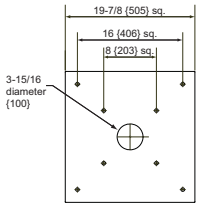


MODELS	TB900-4	TB900-6
Performance characteristics		
Batch size lb {g}	19.8 {9000}	19.8 {9000}
Maximum throughput rate lb/hr {kg/hr}*	3500 {1588}	2800 {1270}
Bin capacity - main ingredient ft³{liter}	4.4 {124.6}	4.4 {124.6}
Bin capacity - minor ingredient ft³{liter}	4.4 {124.6}	2.2 {62.3}
Maximum number of materials	4	6
Number of vertical discharge valves	4	6
Number/(size) of major bin valves	2 - (100 mm)	2 - (100 mm)
Number/(size) of minor bin valves	2 - (60 mm)	4 - (60 mm)
Dimensions inches {mm}		
A - Height above mounting plate†	74.75 {1896}	74.75 {1896}
B - Hopper width and depth (square)	48.00 {1219}	48.00 {1219}
C - Depth	51.00 {1296}	51.00 {1296}
D - Control height	6.50 {165.1}	6.50 {165.1}
E - Control width	8.75 {222.3}	8.75 {222.3}
F - Control depth	6.75 {171.5}	6.75 {171.5}
G - Loader center distance	24.00 {609.6}	24.00 {609.6}
H - Loader center distance	24.00 {609.6}	18.00 {457.2}
I - Loader center distance	NA	11.19 {284.2}
J - Loader center distance	NA	15.00 {381.0}
K - Loader center distance	NA	33.44 {849.3}
Weight lbs {kg}		
Installed	550 {249}	550 {249}
Shipping	700 {318}	700 {318}
Voltage total amps		
115V/1 phase/60 hz	6.3	6.3
230V/1 phase/50 hz	3.2	3.2
Compressed air requirements		
Discharge valves	90 psi @ 0.2 ft³/min {6 bars @ 0.09 liters/sec}; 1/4 in. NPT fitting	
Maximum loader sizes		
20 inch loaders - number of loaders	4	2
15 inch loaders - number of loaders	NA	2
8 inch loaders - number of loaders	NA	2

MOUNTING INTERFACE

Dimensions shown in inches and {mm}.

Mixing chamber access door - this side of the interface.



Mounting bolt hole size (8 holes) 9/16 inch {14.0 mm}.
Predrilled 8 x 8 and 16 X 16 mounting pattern as standard.

SPECIFICATION NOTES

* Maximum throughput rates are based on 35 lb/ft³ pelletized material, using all standard valve sizes. Use of reducer inserts will lower the rate shown.

Throughput rates are based on:

- **A 4-position blender recipe** of 20% regrind, 80% natural, 3% color and 2% additive material.
- **A 6-position blender recipe** of 20% regrind, 80% natural, 3% color at position 3, 2% additive at position 4, 3% additive at position 5 and 2% additive at position 6.

† The optional flow control valve will mount inside the chassis in the space of the manual slide valve. Conair recommends using the optional flow control valve when mounting the blender on a stand, surge bin or hopper.

‡ TB900-4 hopper positions three and four are supplied with 12-8 adapters with eight inch cover plates as standard. TB900-6 hopper positions three and six are supplied with 12-8 adapters and eight inch cover plates as standard.

§ Numbers in top view drawings represent hopper positions.

Specifications may change without notice. Consult with a Conair representative for the most current information.

TRUEBLEND™ TB1800-4, TB1800-5 AND TB1800-6

Model TB1800-5
Shown with (3) DL20 and (2) AR10 vacuum receivers.

ACCURATE **GRAVIMETRIC BLENDING** FOR HIGHER THROUGHPUTS

Get accurate blends, better mixing, faster material changes and increased profits with Conair's TrueBlend Series Blenders. Steep-sided component hoppers allow material to flow evenly and freely through vertical dispense valves into the weigh chamber. Efficient mixing assures full integration of all recipe ingredients. The fully enclosed cabinet design assures no pellet spillage and clean operation. Standard convenient features such as wide access doors on each main material compartment, a hinged access door and removable components in the mixing chamber reduce downtime during cleanout.

THROUGHPUT RATES TO 6000 POUNDS AN HOUR

The TrueBlend TB1800 series blenders offer processors with large extruders or central blending applications a superior way to blend naturals, regrinds and additives centrally or at the throat of the processing machine.

The blender dispenses up to six materials (depending on model) from respective material compartments into a common weigh chamber. The control determines the correct weight of each ingredient based on setpoints entered on the touch screen display. Up to 1000 recipes and 250 resin names can be entered and stored in the control.

Air solenoids and major electrical components are easy to access through the electrically interlocked main power box.

Choose between four, five or six component blender models. Options include an integrated blender/loader control feature, addition of a flow control valve for central blending applications, material compartment drainports, and ethernet communications.

Blend accuracy to 1/2 of 1%

Colorant and/or additive weights are held to within 0.5% of setting. A selectable Precision Additive™ feature is also available for additives. The microprocessor control automatically calibrates after every cycle and compensates for variations in dispense method, resin bulk density or particle geometry.

Easy-to-use control

Intuitive 5.7 inch LCD touch screen control with full color graphics allows quick and easy setup of blender setpoints. All setpoints are displayed simultaneously. Enter the percentages of the blend on the touch screen display and the blender does the rest. The system automatically weighs the recipe ingredients in the proper sequence and maintains the correct blend relationship. Any position can be identified as one of the four material type selections adding flexibility to your application setup.

Convenient, no-tools clean out

Easy access to all material contact points for fast and safe cleaning during color or resin changes. Material compartment access doors, removable weigh bin, mix agitator and mix chamber liner allow quick efficient cleaning. The blender features a built-in material shutoff valve below the mixing chamber, this can be replaced with the automatic flow control valve for remote and central blending applications.

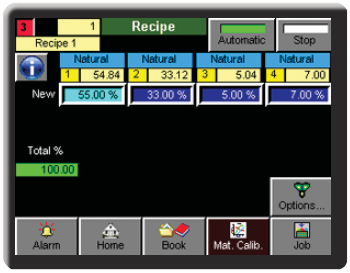
TRUEBLEND™ TB1800-4, TB1800-5 AND TB1800-6

FEATURES

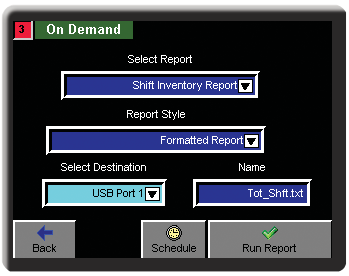
Intuitive, SB-2 touch screen control offers the industry's best multi-component accuracy

This easy-to-use touch screen control allows for fast setup of blender setpoints and automatically weighs recipe ingredients in the proper sequence to maintain correct blend relationship. Any position can be identified as one of the four material type selections adding flexibility to your application setup.

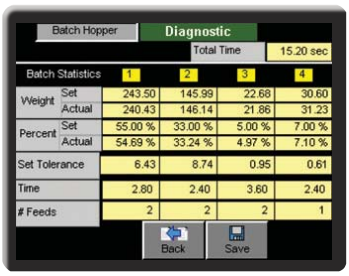
Instantly see your materials usage
Material usage / totals screen tracks the number of batches, weights dispensed by bin and weight dispensed in total since the last reset.



View and make changes to the active recipe
Save and recall up to 1000 recipes and 250 resin names in the Recipe Book.



Built-in reporting capabilities
Every SB-2 blender control is equipped with the capability to help users track their settings, alarms, material consumption, shift and inventory needs.



On-call diagnostics
Diagnostic screen displays target set point percentage and actual percentage dispensed. Also displays start and finish weights for each material per batch. Verifies true and accurate blend performance.

WHICH PACKAGE IS RIGHT FOR YOU?

STANDARD PACKAGES - 4 Component	TS	TE	LS‡	LE‡
FEATURES				
Material bin sight glasses and clean out doors	●	●	●	●
Touch screen control	●	●	●	●
Electrical material bin door interlocks	●	●	●	●
Loading control option			●	●
Loader, pump and compressed air interconnection kit			●	●
Quick clean/enhanced flow option*		●		●
Machine mount with manual slide gate discharge†	●	●	●	●
Remote/bin mount with pneumatic slide gate discharge†	●	●	●	●

STANDARD PACKAGES - 5 Component	TS	TE	LS‡	LE‡
FEATURES				
Material bin sight glasses and clean out doors	●	●	●	●
Touch screen control	●	●	●	●
Electrical material bin door interlocks	●	●	●	●
Loading control option			●	●
Loader, pump and compressed air interconnection kit			●	●
Quick clean/enhanced flow option*		●		●
Machine mount with manual slide gate discharge†	●	●	●	●
Remote/bin mount with pneumatic slide gate discharge†	●	●	●	●

STANDARD PACKAGES - 6 Component	TS	TE	LS‡	LE‡
FEATURES				
Material bin sight glasses and clean out doors	●	●	●	●
Touch screen control	●	●	●	●
Loading control option			●	●
Loader, pump and compressed air interconnection kit			●	●
Material bin finger guards	●		●	
Quick clean/enhanced flow option*		●		●
Machine mount with manual slide gate discharge†	●	●	●	●
Remote/bin mount with pneumatic slide gate discharge†	●	●	●	●

FEATURE NOTES:

* Material bin door safety interlocks and drain ports.

† Choose between either machine or remote mounted blender packages.

‡ Includes an optional integrated loader control feature.

Specifications may change without notice. Consult with a Conair representative for the most current information.

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TRUEBLEND™ TB1800-4, TB1800-5 AND TB1800-6

FEATURES

Simple and quick cleanout

Easy access to all material contact points for fast and safe cleaning during color or resin changes. Material compartment access doors, removable weigh bin, mix agitator and mix chamber liner allow quick efficient cleaning.

Custom stands available

Custom-built blender stands offer:

- Application specific modular construction
- One or two level designs
- Designs to accommodate low overhead clearances
- Available in Conair beige with standard safety yellow handrails and optional ladders

OPTIONS

TB reports
Used to track and document material usage, alarms, batch and shift reports and recipes. *See TrueBlend Reporting Software and ControlWorks specification sheets.*

Air blow-off for mix chamber level sensor
This feature is integrated into the blender mix chamber to blow excessive dust and fines away from the sensing device and ensure accurate level sensor reading.

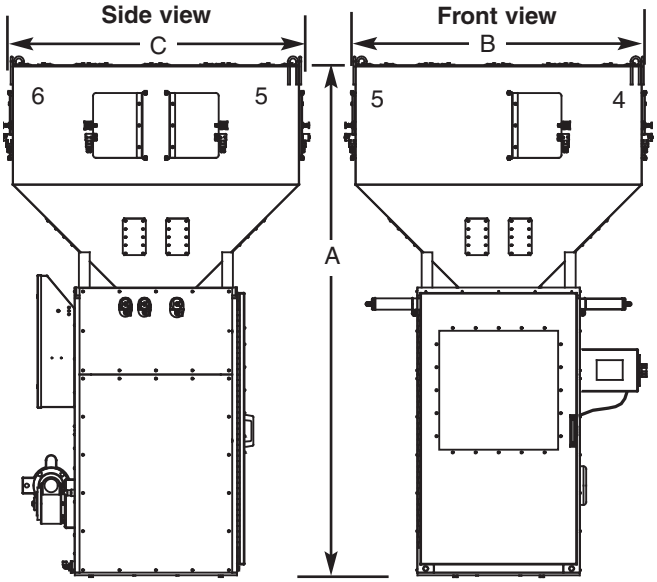
Material level alarm control
Eliminate costly material shortage problems and machine downtime with this early warning system. The control monitors up to six material levels at one blender. Individual switches can be adjusted to monitor high or low material levels. *See Level Alarm Control specification sheet.*

Remote mixer demand sensor
This sensor provides a fill-to level option in a surge bin or other material receptacle that sits below a remote mounted blender.

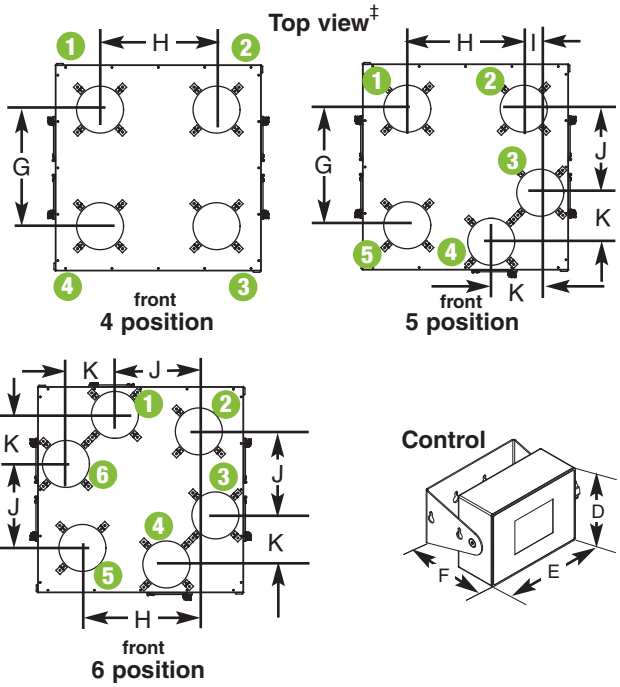
Remote HMI operator cable
This option is for the 6 meter cable in lieu of the standard 2 meter cable.

SPECIFICATIONS

TRUEBLEND™ TB1800-4, TB1800-5 AND TB1800-6

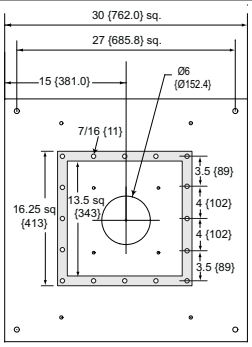


NOTE: Side and front view drawings are shown for model TB1800-6. The bin positions change for a TB1800-4 and TB1800-5 models, see the top view.



MODELS	TB1800-4	TB1800-5	TB1800-6
Performance characteristics			
Batch size lbs {g} (grams or kilograms)	40 {18000}	40 {18000}	40 {18000}
Maximum throughput lbs/hr {kg/hr}*	6000 {2722}	5500 {2495}	4800 {2177}
Bin capacity - main ingredient ft³ {liter}	6 {170}	6 {170}	6 {170}
Bin capacity - minor ingredient ft³ {liter}	6 {170}	4 {113}	4 {113}
Maximum number of materials	4	5	6
Number of major valves	4 (5X5)	3 (5X5)	2 (5X5)
Number of minor valves	0	2 (2X5)	4 (2X5)
Dimensions inches {mm}			
A - Height above mounting plate†	94.4 {2397.8}	94.4 {2397.8}	94.4 {2397.8}
B - Hopper width and depth (square)	53.0 {1346.2}	53.0 {1346.2}	53.0 {1346.2}
C - Depth	53.0 {1346.2}	53.0 {1346.2}	53.0 {1346.2}
D - Controller height	6.50 {165.1}	6.50 {165.1}	6.50 {165.1}
E - Controller width	8.75 {222.3}	8.75 {222.3}	8.75 {222.3}
F - Controller depth	6.75 {171.5}	6.75 {171.5}	6.75 {171.5}
G - Loader center distance	30.00 {762.0}	30.00 {762.0}	30.00 {762.0}
H - Loader center distance	30.00 {762.0}	30.00 {762.0}	30.00 {762.0}
I - Loader center distance	N/A	4.25 {108.0}	4.25 {108.0}
J - Loader center distance	N/A	21.63 {549.3}	21.63 {549.3}
K - Loader center distance	N/A	12.63 {320.7}	12.63 {320.7}
Weight lbs {kg}			
Installed	1465 {665}	1498 {679}	1532 {695}
Shipping	1715 {778}	1748 {793}	1782 {808}
Voltage total amps			
220V/1 phase/50 hz	11.3	11.3	11.3
220V/1 phase/60 hz	11.3	11.3	11.3
240V/3 phase/60 hz	7.5	7.5	7.5
400V/3 phase/50 hz	5.0	5.0	5.0
480V/3 phase/60 hz	4.5	4.5	4.5
575V/3 phase/60 hz	3.9	3.9	3.9
Compressed air requirements			
	0.3 ft³/min @ 90 psi {6 bars @ 0.14 liters/sec} 3/8 in. NPT fitting		
Maximum loader sizes	4 DL25 2 DL25 | 2 DL15 2 DL25 | 2 AR10 4 DL20	3 DL25 3 DL25	2 DL15 2 AR10	2 DL25 2 DL25 4 DL20 4 DL20	4 DL15 4 AR10 2 DL15 2 AR10

MOUNTING INTERFACE



Dimensions shown in inches and {mm}.

SPECIFICATION NOTES

* Maximum throughput rates are based on 35 lb/ft³ pelletized material, using all standard valve sizes. Use of reducer inserts will lower the rate shown.

Throughput rates are based on:

- **A 4-position blender recipe** of 50% natural, 40% natural, 5% additive material and 5% additive material.
- **A 5-position blender recipe** of 50% natural, 20% natural, 20% natural, 5% additive material and 5% additive material.
- **A 6-position blender recipe** of 50% natural, 20% natural, 10% natural, 10% natural, 5% additive material and 5% additive material.

† The optional flow control valve will mount inside the chassis in the space of the manual slide valve. Conair recommends using the optional flow control valve when mounting the blender on a stand, surge bin or hopper.

‡ Numbers in top view drawings represent hopper positions.

Specifications may change without notice. Consult with a Conair representative for the most current information.

TRUEBLEND™ TB2500-4, TB2500-5 AND TB2500-6

Model TB2500-6
Shown with (3) DL20 and (4) DL20 vacuum receivers.

ACCURATE **GRAVIMETRIC BLENDING** FOR HIGHER THROUGHPUTS

Get accurate blends, better mixing, faster material changes and increased profits with Conair's TrueBlend Series Blenders. Steep-sided component hoppers allow material to flow evenly and freely through vertical dispense valves into the weigh chamber. Efficient mixing assures full integration of all recipe ingredients. The fully enclosed cabinet design assures no pellet spillage and clean operation. Standard convenient features such as wide access doors on each main material compartment, a hinged access door and removable components in the mixing chamber reduce downtime during cleanout.

THROUGHPUT RATES TO 9000 POUNDS AN HOUR

The TrueBlend TB2500 series blenders offer processors with large extruders or central blending applications a superior way to blend naturals, regrinds and additives centrally or at the throat of the processing machine.

The blender dispenses up to six materials (depending on model) from respective material compartments into a common weigh chamber. The control determines the correct weight of each ingredient based on setpoints entered on the touch screen display. Up to 1000 recipes and 250 resin names can be entered and stored in the control.

Air solenoids and major electrical components are easily accessed through the electrically interlocked main power box.

Choose between four, five or six component blender models. Options include an integrated blender/loader control feature, addition of a flow control valve for central blending applications, material compartment drainports, and ethernet communications.

Blend accuracy to 1/2 of 1%

Colorant and/or additive weights are held to within 0.5% of setting. A selectable Precision Additive™ feature is also available for additives. The microprocessor control automatically calibrates after every cycle and compensates for variations in dispense method, resin bulk density or particle geometry.

Easy-to-use control

Intuitive 5.7 inch LCD touch screen control with full color graphics allows quick and easy setup of blender setpoints. All setpoints are displayed simultaneously. Enter the percentages of the blend on the touch screen display and the blender does the rest. The system automatically weighs the recipe ingredients in the proper sequence and maintains the correct blend relationship. Any position can be identified as one of the four material type selections adding flexibility to your application setup.

Convenient, no-tools clean out

Easy access to all material contact points for fast and safe cleaning during color or resin changes. Material compartment access doors, removable weigh bin, mix agitator and mix chamber liner allow quick efficient cleaning. The blender features a built-in material shutoff valve below the mixing chamber, this can be replaced with the automatic flow control valve for remote and central blending applications.

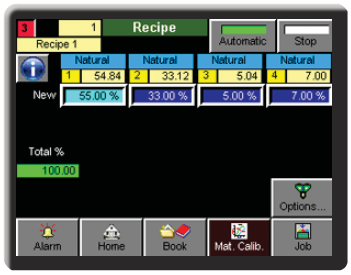
TRUEBLEND™ TB2500-4, TB2500-5 AND TB2500-6

FEATURES

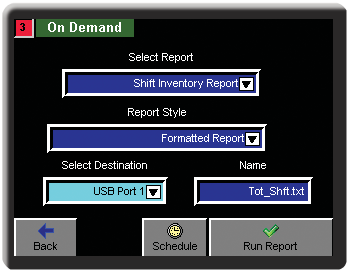
Intuitive, SB-2 touch screen control offers the industry's best multi-component accuracy

This easy-to-use touch screen control allows for fast setup of blender setpoints and automatically weighs recipe ingredients in the proper sequence to maintain correct blend relationship. Any position can be identified as one of the four material type selections adding flexibility to your application setup.

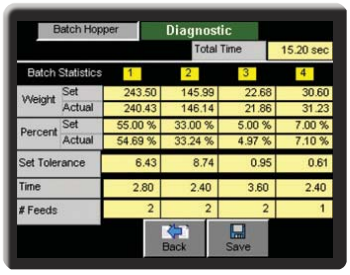
Instantly see your materials usage
Material usage / totals screen tracks the number of batches, weights dispensed by bin and weight dispensed in total since the last reset.



View and make changes to the active recipe
Save and recall up to 1000 recipes and 250 resin names in the Recipe Book.



Built-in reporting capabilities
Every SB-2 blender control is equipped with the capability to help users track their settings, alarms, material consumption, shift and inventory needs.



On-call diagnostics
Diagnostic screen displays target set point percentage and actual percentage dispensed. Also displays start and finish weights for each material per batch. Verifies true and accurate blend performance.

WHICH PACKAGE IS RIGHT FOR YOU?

STANDARD PACKAGES - 4 Component	TS	TE	LS‡	LE‡
FEATURES				
Material bin sight glasses and clean out doors	●	●	●	●
Touch screen control	●	●	●	●
Electrical material bin door interlocks	●	●	●	●
Loading control option			●	●
Loader, pump and compressed air interconnection kit			●	●
Quick clean/enhanced flow option*		●		●
Machine mount with manual slide gate discharge†	●	●	●	●
Remote/bin mount with pneumatic slide gate discharge†	●	●	●	●

STANDARD PACKAGES - 5 Component	TS	TE	LS‡	LE‡
FEATURES				
Material bin sight glasses and clean out doors	●	●	●	●
Touch screen control	●	●	●	●
Electrical material bin door interlocks	●	●	●	●
Loading control option			●	●
Loader, pump and compressed air interconnection kit			●	●
Quick clean/enhanced flow option*		●		●
Machine mount with manual slide gate discharge†	●	●	●	●
Remote/bin mount with pneumatic slide gate discharge†	●	●	●	●

STANDARD PACKAGES - 6 Component	TS	TE	LS‡	LE‡
FEATURES				
Material bin sight glasses and clean out doors	●	●	●	●
Touch screen control	●	●	●	●
Loading control option			●	●
Loader, pump and compressed air interconnection kit			●	●
Material bin finger guards	●		●	
Quick clean/enhanced flow option*		●		●
Machine mount with manual slide gate discharge†	●	●	●	●
Remote/bin mount with pneumatic slide gate discharge†	●	●	●	●

FEATURE NOTES:

* Material bin door safety interlocks and drain ports.

† Choose between either machine or remote mounted blender packages.

‡ Includes an optional integrated loader control feature.

Specifications may change without notice. Consult with a Conair representative for the most current information.

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TRUEBLEND™ TB2500-4, TB2500-5 AND TB2500-6

FEATURES

Simple and quick cleanout

Easy access to all material contact points for fast and safe cleaning during color or resin changes. Material compartment access doors, removable weigh bin, mix agitator and mix chamber liner allow quick efficient cleaning.

Custom stands available

Custom-built blender stands offer:

- Application specific modular construction
- One or two level designs
- Designs to accommodate low overhead clearances
- Available in Conair beige with standard safety yellow handrails and optional ladders

OPTIONS

TB reports
Used to track and document material usage, alarms, batch and shift reports and recipes. *See TrueBlend Reporting Software and ControlWorks specification sheets.*

Air blow-off for mix chamber level sensor
This feature is integrated into the blender mix chamber to blow excessive dust and fines away from the sensing device and ensure accurate level sensor reading.

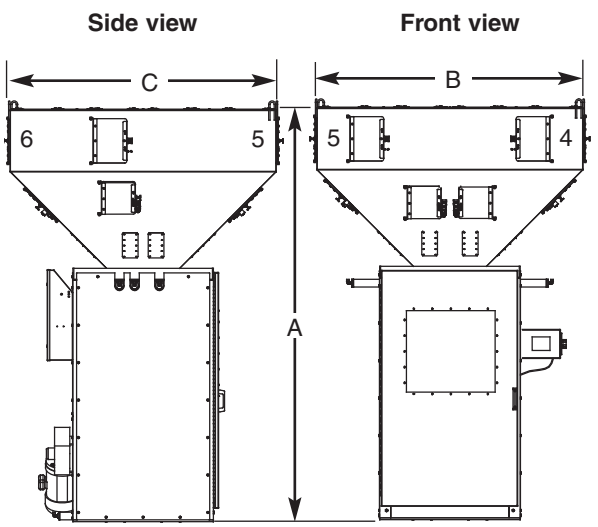
Material level alarm control
Eliminate costly material shortage problems and machine downtime with this early warning system. The control monitors up to six material levels at one blender. Individual switches can be adjusted to monitor high or low material levels. *See Level Alarm Control specification sheet.*

Remote mixer demand sensor
This sensor provides a fill-to level option in a surge bin or other material receptacle that sits below a remote mounted blender.

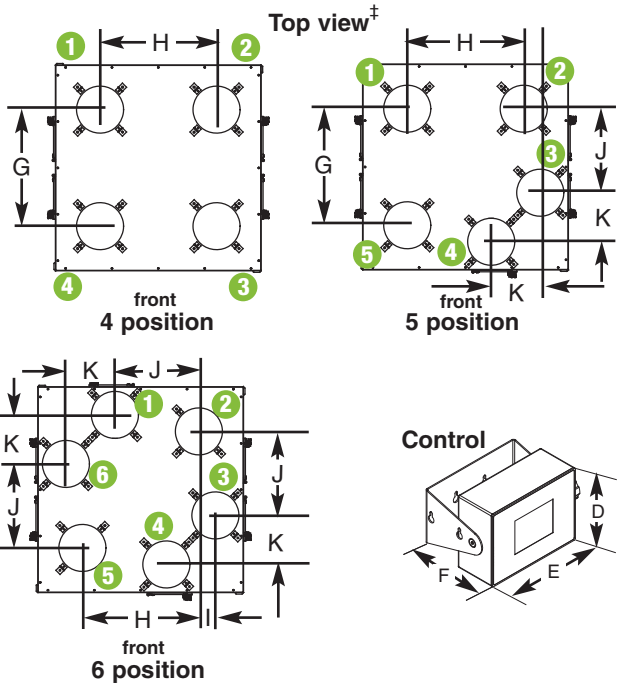
Remote HMI operator cable
This option is for the 6 meter cable in lieu of the standard 2 meter cable.

SPECIFICATIONS

TRUEBLEND™ TB2500-4, TB2500-5 AND TB2500-6

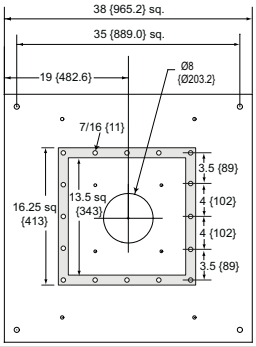


NOTE: Side and front view drawings are shown for model TB2500-6. The bin positions change for a TB2500-4 and TB2500-5 models, see the top view.



MODELS	TB2500-4	TB2500-5	TB2500-6
Performance characteristics			
Batch size lbs {g} (grams or kilograms)	55 {25000}	55 {25000}	55 {25000}
Maximum throughput lbs/hr {kg/hr}*	9000 {4082}	8000 {3629}	7000 {3175}
Bin capacity - main ingredient ft³{liter}	10 {283}	10 {283}	10 {283}
Bin capacity - minor ingredient ft³{liter}	10 {283}	5 {142}	5 {142}
Maximum number of materials	4	5	6
Number of major valves	4 (6X6)	3 (6X6)	2 (6X6)
Number of minor valves	0	2 (2X6)	4 (2X6)
Dimensions inches {mm}			
A - Height above mounting plate†	111.5 {2832.1}	111.5 {2832.1}	111.5 {2832.1}
B - Width	72 {1828.0}	72 {1828.0}	72 {1828.0}
C - Depth	72 {1828.0}	72 {1828.0}	72 {1828.0}
D - Controller height	6.50 {165.1}	6.50 {165.1}	6.50 {165.1}
E - Controller width	8.75 {222.3}	8.75 {222.3}	8.75 {222.3}
F - Controller depth	6.75 {171.5}	6.75 {171.5}	6.75 {171.5}
G - Loader center distance	35.75 {908.1}	35.75 {908.1}	35.75 {908.1}
H - Loader center distance	35.75 {908.1}	35.75 {908.1}	35.75 {908.1}
I - Loader center distance	NA	10.5 {266.7}	10.5 {266.7}
J - Loader center distance	NA	26.13 {663.6}	26.13 {663.6}
K - Loader center distance	NA	20.0 {508.0}	20.0 {508.0}
Weight lbs {kg}			
Installed	2483 {1126}	2531 {1148}	2580 {1170}
Shipping	2783 {1262}	2831 {1080}	2880 {1306}
Voltage total amps			
240V/3 phase/60 hz	10.3	10.3	10.3
400V/3 phase/50 hz	7.7	7.7	7.7
480V/3 phase/60 hz	6.4	6.4	6.4
575V/3 phase/60 hz	5.6	5.6	5.6
Compressed air requirements			
	0.3 ft³/min @ 90 psi {6 bars @ 0.14 liters/sec} 3/8 in. NPT fitting		
Maximum loader sizes			
Number of 25 inch loaders	4	5	6

MOUNTING INTERFACE



Dimensions shown in inches and {mm}.

SPECIFICATION NOTES

* Maximum throughput rates are based on 35 lb/ft³ pelletized material, using all standard valve sizes. Use of reducer inserts will lower the rate shown.

Throughput rates are based on:

- **A 4-position blender recipe** of 50% natural, 40% natural, 5% additive material and 5% additive material.
- **A 5-position blender recipe** of 50% natural, 20% natural, 20% natural, 5% additive material and 5% additive material.
- **A 6-position blender recipe** of 50% natural, 20% natural, 10% natural, 10% natural, 5% additive material and 5% additive material.

† The optional flow control valve will mount inside the chassis in the space of the manual slide valve. Conair recommends using the optional flow control valve when mounting the blender on a stand, surge bin or hopper.

‡ Numbers in top view drawings represent hopper positions.

Specifications may change without notice. Consult with a Conair representative for the most current information.

TRUEBLEND™ TB3500-4, TB3500-5 AND TB3500-6

Model TB3500-6
Shown with (3) DL20 and (4) DL20 vacuum receivers.

ACCURATE **GRAVIMETRIC BLENDING** FOR HIGHER THROUGHPUTS

Get accurate blends, better mixing, faster material changes and increased profits with Conair's TrueBlend Series Blenders. Steep-sided component hoppers allow material to flow evenly and freely through vertical dispense valves into the weigh chamber. Efficient mixing assures full integration of all recipe ingredients. The fully enclosed cabinet design assures no pellet spillage and clean operation. Standard convenient features such as wide access doors on each main material compartment, a hinged access door and removable components in the mixing chamber reduce downtime during cleanout.

THROUGHPUT RATES TO 12000 POUNDS AN HOUR

The TrueBlend TB3500 series blenders offer processors with large extruders or central blending applications a superior way to blend naturals, regrinds and additives centrally or at the throat of the processing machine.

The blender dispenses up to six materials (depending on model) from respective material compartments into a common weigh chamber. The control determines the correct weight of each ingredient based on setpoints entered on the touch screen display. Up to 1000 recipes and 250 resin names can be entered and stored in the control.

Air solenoids and major electrical components are easily accessed through the electrically interlocked main power box.

Choose between four, five or six component blender models. Options include an integrated blender/loader control feature, addition of a flow control valve for central blending applications, material compartment drainports and ethernet communications.

Blend accuracy to 1/2 of 1%

Colorant and/or additive weights are held to within 0.5% of setting. A selectable Precision Additive™ feature is also available for additives. The microprocessor control automatically calibrates after every cycle and compensates for variations in dispense method, resin bulk density or particle geometry.

Easy-to-use control

Intuitive 5.7 inch LCD touch screen control with full color graphics allows quick and easy setup of blender setpoints. All setpoints are displayed simultaneously. Enter the percentages of the blend on the touch screen display and the blender does the rest. The system automatically weighs the recipe ingredients in the proper sequence and maintains the correct blend relationship. Any position can be identified as one of the four material type selections adding flexibility to your application setup.

Convenient, no-tools clean out

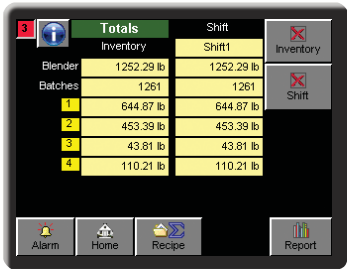
Easy access to all material contact points for fast and safe cleaning during color or resin changes. Material compartment access doors, removable weigh bin, mix agitator and mix chamber liner allow quick efficient cleaning. The blender features a built-in material shutoff valve below the mixing chamber, this can be replaced with the automatic flow control valve for remote and central blending applications.

TRUEBLEND™ TB3500-4, TB3500-5 AND TB3500-6

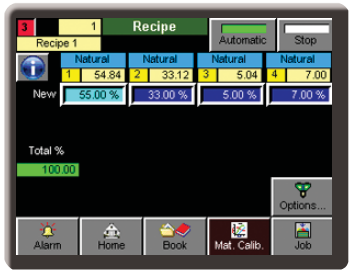
FEATURES

Intuitive, SB-2 touch screen control offers the industry's best multi-component accuracy

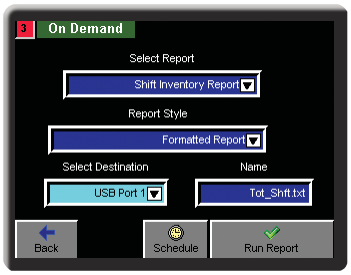
This easy-to-use touch screen control allows for fast setup of blender setpoints and automatically weighs recipe ingredients in the proper sequence to maintain correct blend relationship. Any position can be identified as one of the four material type selections adding flexibility to your application setup.



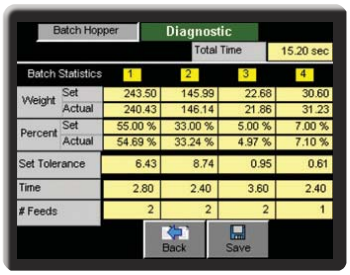
Instantly see your materials usage
Material usage / totals screen tracks the number of batches, weights dispensed by bin and weight dispensed in total since the last reset.



View and make changes to the active recipe
Save and recall up to 1000 recipes and 250 resin names in the Recipe Book.



Built-in reporting capabilities
Every SB-2 blender control is equipped with the capability to help users track their settings, alarms, material consumption, shift and inventory needs.



On-call diagnostics
Diagnostic screen displays target set point percentage and actual percentage dispensed. Also displays start and finish weights for each material per batch. Verifies true and accurate blend performance.

WHICH PACKAGE IS RIGHT FOR YOU?

STANDARD PACKAGES - 4 Component	TS	TE	LS‡	LE‡
FEATURES				
Material bin sight glasses and clean out doors	●	●	●	●
Touch screen control	●	●	●	●
Electrical material bin door interlocks	●	●	●	●
Loading control option			●	●
Loader, pump and compressed air interconnection kit			●	●
Quick clean/enhanced flow option*		●		●
Machine mount with manual slide gate discharge†	●	●	●	●
Remote/bin mount with pneumatic slide gate discharge†	●	●	●	●

STANDARD PACKAGES - 5 Component	TS	TE	LS‡	LE‡
FEATURES				
Material bin sight glasses and clean out doors	●	●	●	●
Touch screen control	●	●	●	●
Electrical material bin door interlocks	●	●	●	●
Loading control option			●	●
Loader, pump and compressed air interconnection kit			●	●
Quick clean/enhanced flow option*		●		●
Machine mount with manual slide gate discharge†	●	●	●	●
Remote/bin mount with pneumatic slide gate discharge†	●	●	●	●

STANDARD PACKAGES - 6 Component	TS	TE	LS‡	LE‡
FEATURES				
Material bin sight glasses and clean out doors	●	●	●	●
Touch screen control	●	●	●	●
Loading control option			●	●
Loader, pump and compressed air interconnection kit			●	●
Material bin finger guards	●		●	
Quick clean/enhanced flow option*		●		●
Machine mount with manual slide gate discharge†	●	●	●	●
Remote/bin mount with pneumatic slide gate discharge†	●	●	●	●

FEATURE NOTES:

* Material bin door safety interlocks and drain ports.

† Choose between either machine or remote mounted blender packages.

‡ Includes an optional integrated loader control feature.

Specifications may change without notice. Consult with a Conair representative for the most current information.

200 West Kensinger Drive • Cranberry Township, PA 16066 • 724-584-5500 • fax 724-584-5299 • www.conairgroup.com

TRUEBLEND™ TB3500-4, TB3500-5 AND TB3500-6

FEATURES

Simple and quick cleanout

Easy access to all material contact points for fast and safe cleaning during color or resin changes. Material compartment access doors, removable weigh bin, mix agitator and mix chamber liner allow quick efficient cleaning.

Custom stands available

Custom-built blender stands offer:

- Application specific modular construction
- One or two level designs
- Designs to accommodate low overhead clearances
- Available in Conair beige with standard safety yellow handrails and optional ladders

OPTIONS

TB reports
Used to track and document material usage, alarms, batch and shift reports and recipes. *See TrueBlend Reporting Software and ControlWorks specification sheets.*

Air blow-off for mix chamber level sensor
This feature is integrated into the blender mix chamber to blow excessive dust and fines away from the sensing device and ensure accurate level sensor reading.

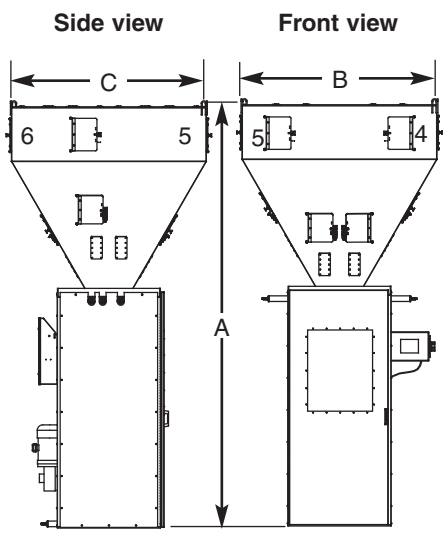
Material level alarm control
Eliminate costly material shortage problems and machine downtime with this early warning system. The control monitors up to six material levels at one blender. Individual switches can be adjusted to monitor high or low material levels. *See Level Alarm Control specification sheet.*

Remote mixer demand sensor
This sensor provides a fill-to level option in a surge bin or other material receptacle that sits below a remote mounted blender.

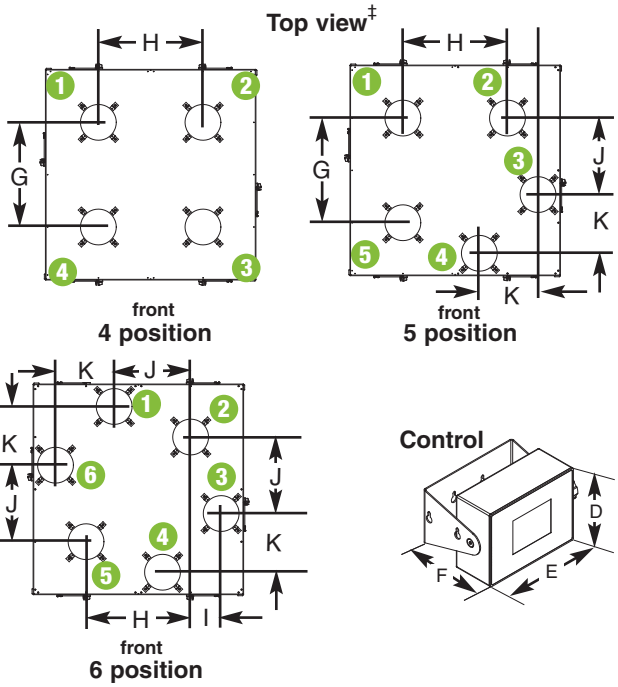
Remote HMI operator cable
This option is for the 6 meter cable in lieu of the standard 2 meter cable.

SPECIFICATIONS

TRUEBLEND™ TB3500-4, TB3500-5 AND TB3500-6

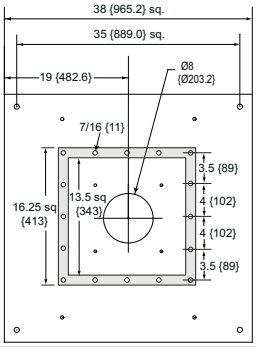


NOTE: Side and front view drawings are shown for model TB3500-6. The bin positions change for a TB3500-4 and TB3500-5 models, see the top view.



MODELS	TB3500-4	TB3500-5	TB3500-6
Performance characteristics			
Batch size lbs {g}	77 {35000}	77 {35000}	77 {35000}
Maximum throughput lbs/hr {kg/hr}*	12000 {5443}	10500 {4763}	9000 {4082}
Bin capacity - main ingredient ft³ {liter}	18 {510}	18 {510}	18 {510}
Bin capacity - minor ingredient ft³ {liter}	18 {510}	9 {255}	9 {255}
Maximum number of materials	4	5	6
Number of major valves	4 (6X6)	3 (6X6)	2 (6X6)
Number of minor valves	0	2 (2X6)	4 (2X6)
Dimensions inches {mm}			
A - Height above mounting plate†	156 {3962}	156 {3962}	156 {3962}
B - Width	72 {1828}	72 {1828}	72 {1828}
C - Depth	72 {1828}	72 {1828}	72 {1828}
D - Controller height	6.50 {165.1}	6.50 {165.1}	6.50 {165.1}
E - Controller width	8.75 {222.3}	8.75 {222.3}	8.75 {222.3}
F - Controller depth	6.75 {171.5}	6.75 {171.5}	6.75 {171.5}
G - Loader center distance	35.75 {908.1}	35.75 {908.1}	35.75 {908.1}
H - Loader center distance	35.75 {908.1}	35.75 {908.1}	35.75 {908.1}
I - Loader center distance	NA	10.5 {266.7}	10.5 {266.7}
J - Loader center distance	NA	26.13 {663.6}	26.13 {663.6}
K - Loader center distance	NA	20.0 {508.0}	20.0 {508.0}
Weight lbs {kg}			
Installed	2982 {1353}	3049 {1383}	3115 {1413}
Shipping	3282 {1489}	3349 {1519}	3415 {1549}
Voltage total amps			
240V/3 phase/60 hz	10.3	10.3	10.3
400V/3 phase/50 hz	7.7	7.7	7.7
480V/3 phase/60 hz	6.4	6.4	6.4
575V/3 phase/60 hz	5.6	5.6	5.6
Compressed air requirements			
	0.3 ft³/min @ 90 psi {6 bars @ 0.14 liters/sec} 3/8 in. NPT fitting		
Maximum loader sizes			
Number of 25 inch loaders	4	5	6

MOUNTING INTERFACE



Dimensions shown in inches and {mm}.

SPECIFICATION NOTES

* Maximum throughput rates are based on 35 lb/ft³ pelletized material, using all standard valve sizes. Use of reducer inserts will lower the rate shown.

Throughput rates are based on:

- **A 4-position blender recipe** of 50% natural, 40% natural, 5% additive material and 5% additive material.
- **A 5-position blender recipe** of 50% natural, 20% natural, 20% natural, 5% additive material and 5% additive material.
- **A 6-position blender recipe** of 50% natural, 20% natural, 10% natural, 10% natural, 5% additive material and 5% additive material.

† The optional flow control valve will mount inside the chassis in the space of the manual slide valve. Conair recommends using the optional flow control valve when mounting the blender on a stand, surge bin or hopper.

‡ Numbers in top view drawings represent hopper positions.

Specifications may change without notice. Consult with a Conair representative for the most current information.

TBH500-4 High Heat model

ACCURATE BLENDING FOR **HIGH HEAT APPLICATIONS**

TrueBlend high-temperature models allow processors running engineering plastics like ABS, nylon, polycarbonate and PET to blend these resins after they have been dried.

Until now, processors had to blend the material before drying, but by doing so ran the risk that some ingredients could separate out of the mix during the drying and conveying process.

Like all TrueBlend models, the new high-heat blenders feature a fully enclosed cabinet design assuring no pellet spillage and clean operation. Standard convenience features, such as wide access doors on each component bin, a hinged chassis access door and removable components in the mixing chamber reduce material waste and downtime during clean out.

DRY AIR BLANKET PREVENTS MOISTURE REGAIN

Models 100, 250, 500 and 900, which offer throughputs ranging from 450 to 3500 lbs/hr are available with two different high-temperature packages. One to handle temperatures from 160° to 250°F {71° to 121°C} for materials such as Nylons, ABS and PC. The second package handles temperature levels from 160° to 375° F {71° to 191°C}, including materials like PBT, PET and other polyesters.

Both temperature levels are available with an optional dry air blanket package. This option blankets the material compartments and the mixing chamber with dry air to prevent moisture regain during processing.

- **Blend accuracy to 1/2 of 1%**
  Colorant and additive weights are held to within 0.5% of the requested ratio. The control automatically calibrates after each cycle and corrects for variations in material and dispensing.
- **Easy-to-use control**
  Enter the percentages of the blend using the touch screen. The blender does the rest. The system automatically adds ingredients in the proper ratio and maintains the correct level of material in the mix chamber.
- **Convenient, no-tools clean out**
  Electrically interlocked access doors provide fast, safe cleaning of component bins. The weigh bin, mix blade and mix chamber slide out for easy cleaning.
- **A package to fit your needs**
  Two temperature levels are available. One for temperatures of 160° to 250°F {71° to 121°C} with the second package covering temperatures from 160° to 375°F {71° to 191°C}. A dry air blanket option introduces dry air into the material compartments and the mixing chamber from an external source to prevent moisture regain.

FEATURES

A high heat blender to fit your application

Choose from two temperature levels. TBA models cover medium processing temperatures, those ranging up to 250°F {121°C}. TBH models handle higher processing temperatures - up to 375°F {191°C}. Both are specifically designed to accept engineered resins that have been dried prior to processing.

TBA models
Medium temperature unit

Designed for temperatures of more than 160°F and ranging to 250°F {71°C to 121°C}. Materials such as Nylons, ABS and PC.

Some blender enhancements include:

- Safety disconnect relocated to the outside of the door.
- High temperature air cylinders and hosing.
- High temperature load cells.
- Standoff to isolate the power box from the chassis.

TBH models
High temperature unit

Handle temperatures ranging up to 375°F {191°C}. Materials such as PBT, PET and other polyesters.

Some blender enhancements include:

- Safety disconnect relocated to the outside of the door.
- High temperature air cylinders and hosing.
- High temperature load cells.
- High temperature level sensor.
- Standoff to isolate power box from chassis.
- High temperature glass-tempered sight glasses.
- Each access door opening has high temperature glass-tempered sight glasses.

Each access door opening has two round heat-treated sight glasses.

TBH models.

High temperature, heat-treated sight glasses.

TBH models.

High temperature level sensors. Located on the rear of the unit.

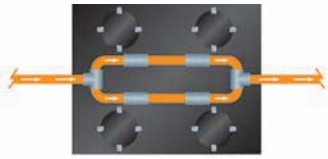
TBH models.

Safety disconnect has been relocated to the outside of the door.

TBH and TBA models.

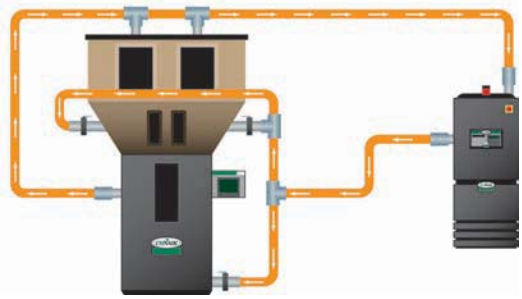
OPTIONS

Dry air blanket
Introduce hot dry air to the material bins of your blender with the dry air blanket option. This option blankets the material compartments and mixing chamber with dry air to prevent moisture regain during processing. Available on both the TBA and TBH models.



Adjusting the airflow

Isolation valves allow the air flow to be adjusted independently or completely shut-off depending on the need at each of the material bins.



NOTE: This dry air source is not included with this package, but can be purchased separately from Conair.

Drain chute
The material drain chute readily installs to the chassis opening of the blender for fast and simple cleanout.

Minor component flow restrictor
Available on TBA/TBH models 250, 500 and 900 on bin positions three and/or four. (Generally used when feeding 1% or less of an ingredient.)

Major component flow restrictor
Available of TBA/TBH models 100, 250, 500 and 900 on bin positions one and/or two. (Generally used when feeding more than two minor ingredients.)

Air blow-off for mix chamber level sensor
This feature is integrated into the blender mix chamber to blow the dust and fines away from the sensing device and ensure accurate level sensor reading.

Remote mixer demand sensor
This sensor provides a fill-to level option in a surge bin or other material receptacle that sits below the blender.

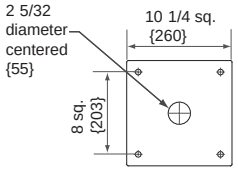
Material level alarm control
Eliminate costly material shortage problems and machine downtime with this early warning system. The control monitors up to six levels of material at one blender. Individual switches can be adjusted to monitor high or low material levels.

MOUNTING INTERFACES

Dimensions shown in inches and {mm}.

TBA and TBH100

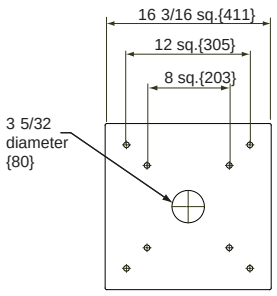
Mixing chamber access door - this side of the interface.



Mounting bolt hole size (4 holes) 9/16 inch {14.0 mm}. Predrilled 8 x 8 mounting pattern as standard.

TBA and TBH250

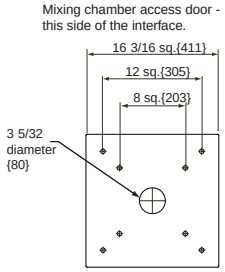
Mixing chamber access door - this side of the interface.



Mounting bolt hole size (8 holes) 9/16 inch {14.0 mm}. Predrilled 8 x 8 and 12 X 12 mounting pattern as standard.

TBA and TBH500

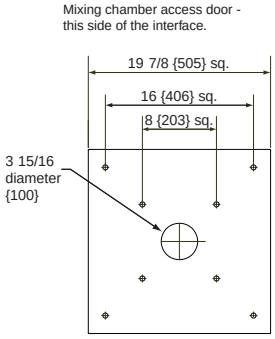
Mixing chamber access door - this side of the interface.



Mounting bolt hole size (8 holes) 9/16 inch {14.0 mm}. Predrilled 8 x 8 and 12 X 12 mounting pattern as standard.

TBA and TBH900

Mixing chamber access door - this side of the interface.

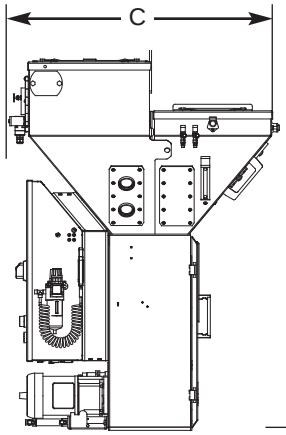


Mounting bolt hole size (8 holes) 9/16 inch {14.0 mm}. Predrilled 8 x 8 and 16 X 16 mounting pattern as standard.

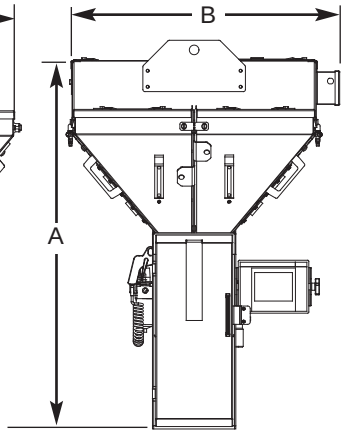
SPECIFICATIONS

TRUEBLEND™ HIGH HEAT MODELS

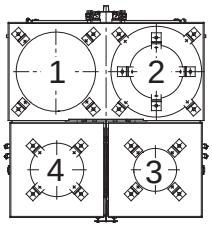
Model TBA TBH100



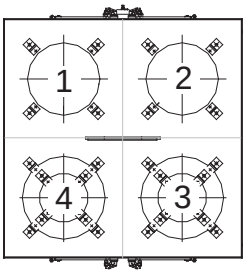
SIDE VIEW



FRONT VIEW

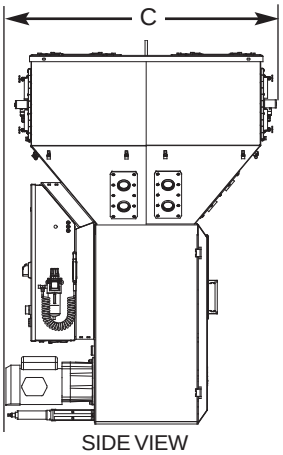


TOP VIEW TBA H100

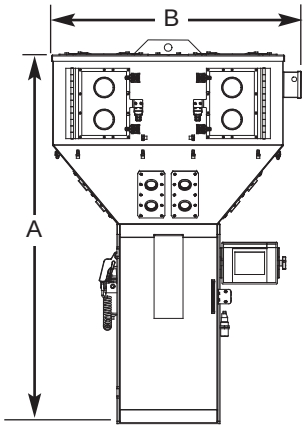


TOP VIEW TBA H250-500

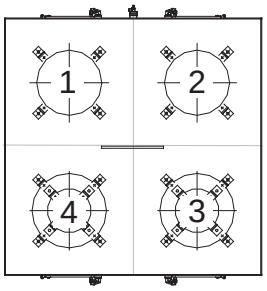
Model TBA TBH250 - TBA TBH900



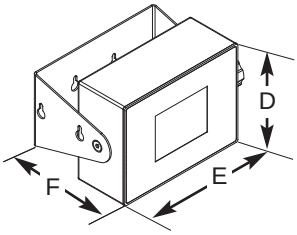
SIDE VIEW



FRONT VIEW



TOP VIEW TBA H900



CONTROL

MODELS	TBA TBH100	TBA TBH250	TBA TBH500	TBA TBH900
Performance characteristics				
Batch size lbs {g}	2.2 {1000}	5.5 {2500}	11 {5000}	19.8 {9000}
Maximum throughput lbs/hr {kg/hr}*	400 {181}	950 {431}	1500 {680}	3500 {1588}
Bin capacity - main ingredient ft³ {liter}	0.6 {17}	1.6 {45.3}	2.7 {76.4}	4.4 {124.6}
Bin capacity - minor ingredient ft³ {liter}	0.3 {8}	1.6 {45.3}	2.7 {76.4}	4.4 {124.6}
Maximum number of materials	4	4	4	4
Number of vertical discharge valves	4	4	4	4
Number of major bin valves	2 - (60 mm)	2 - (60 mm)	2 - (100/60 mm)	2 - (100 mm)
Number of minor bin valves	2 - (20 mm)	2 - (30 mm)	2 - (30 mm)	2 - (60 mm)
Dimensions inches {mm}				
A - Height above mounting plate†	45.25 {1149}	57.50 {1461}	63.00 {1600}	74.75 {1896}
B - Width	30.25 {769}	36.50 {926}	40.13 {1026}	48.00 {1219}
C - Depth	32.75 {832}	40.83 {1037}	43.00 {1092}	51.00 {1296}
D - Controller height	6.50 {165.1}	6.50 {165.1}	6.50 {165.1}	6.50 {165.1}
E - Controller width	8.75 {222.3}	8.75 {222.3}	8.75 {222.3}	8.75 {222.3}
F - Controller depth	6.75 {171.5}	6.75 {171.5}	6.75 {171.5}	6.75 {171.5}
Weight lbs {kg}				
Installed	160 {72}	320 {145}	400 {182}	550 {249}
Shipping	270 {122}	440 {120}	520 {236}	700 {318}
Voltage Total amps				
115V/1 phase/60 Hz	3.0	6.3	6.3	6.3
230V/1 phase/50 Hz	1.5	3.2	3.2	3.2
Compressed air requirements				
Discharge valves	90 psi @ 0.2 ft³/min. {6 bars @0.09 liters/sec}, 1/4 inch NPT fitting			
Maximum loader sizes‡				
20 inch loaders - number of loaders	NA	NA	NA	4
15 inch loaders - number of loaders	NA	4	4	NA
12 inch loaders - number of loaders	2	NA	NA	NA
8 inch loaders - number of loaders	2	NA	NA	NA

SPECIFICATION NOTES:

* Maximum throughput rates are based on 35 lb/ft³ pelletized material and using all of the standard valve sizes. Use of valve inserts will lower the rate shown.

Throughput rates are based on:

A 4-position blender recipe of 20% regrind, 80% natural, 3% color and 2% additive material.

† The optional flow control valve will mount inside the chassis in the space of the manual slide valve. Conair recommends using the optional flow control valve when mounting the blender on a stand, surge bin or hopper.

‡ For loader mounting dimension details, refer to the corresponding TrueBlend blender specifications sheet.

Specifications may change without notice, consult with a Conair representative for the most current information.

Model TB45-4 EXT

GRAVIMETRIC BATCH BLENDING **WITH EXTRUSION YIELD CONTROL**

TrueBlend EXT™ extrusion control blenders combine precision gravimetric batch blending with extrusion yield monitoring or control to provide the tightest possible output and blend quality control for single layer extrusion lines.

With the extrusion control option, you can control extruder output to 0.5% accuracy and blended batches to 0.025% accuracy. Tie in an encoder and take-off drive control and you can control line speed and product weight-per-length.

INTEGRATED EXTRUSION CONTROL BLENDER

TrueBlend EXT™ delivers the industry's best multi-component feed accuracy and precision extrusion control.

Better product quality: TrueBlend EXT's advanced dosing algorithm meters the target weight of each batch ingredient in progressively smaller 'approach' amounts to achieve extremely precise dosing without ever overshooting. The batch continues only after the desired accuracy is achieved for the current ingredient.

Better yield: TrueBlend EXT™ employs adaptive control and monitoring software that measures the throughput rate and automatically controls the extruder screw and/or take-off speed to achieve the yield or extrusion thickness tolerance you need.

Better flexibility: Standard systems blend up to 12 components. Designed for feed throat mounting, the blender can optionally be remote mounted from the TrueWeigh™ loss-in-weight hopper.

Simple operator control meets every need

Designed for extruder operators with varying skill sets. Intuitive input and recipe screens are laid out according to the extrusion process. Touch buttons provide access to recipes, extruder output, line speed, weight-per-length, material usage, alarms and reports. Built-in help screens walk you effortlessly through set-up and operations.

Up-to-the-minute inventory reporting

TrueBlend EXT™ provides real time and historical trending production status reports. Comprehensive reports include; job name, recipe setpoint and actual, components, inventory and shift totals, alarms and more. Alarm log holds 100 or more events in memory. Automated reports can be sent direct to printer, USB or accumulated on a customer's PC hard drive.

Anywhere access

The TrueBlend EXT™ comes standard with a built-in VNC viewer (Virtual Network Client) and OPC server. VNC allows remote Ethernet IP based monitoring and control anywhere within a private network and OPC offers simple integration with an extruder or plant supervisory control system. The control is supplied standard with Modbus TCP, Ethernet IP and FTP. Optional interface protocols are available.

HOW IT WORKS

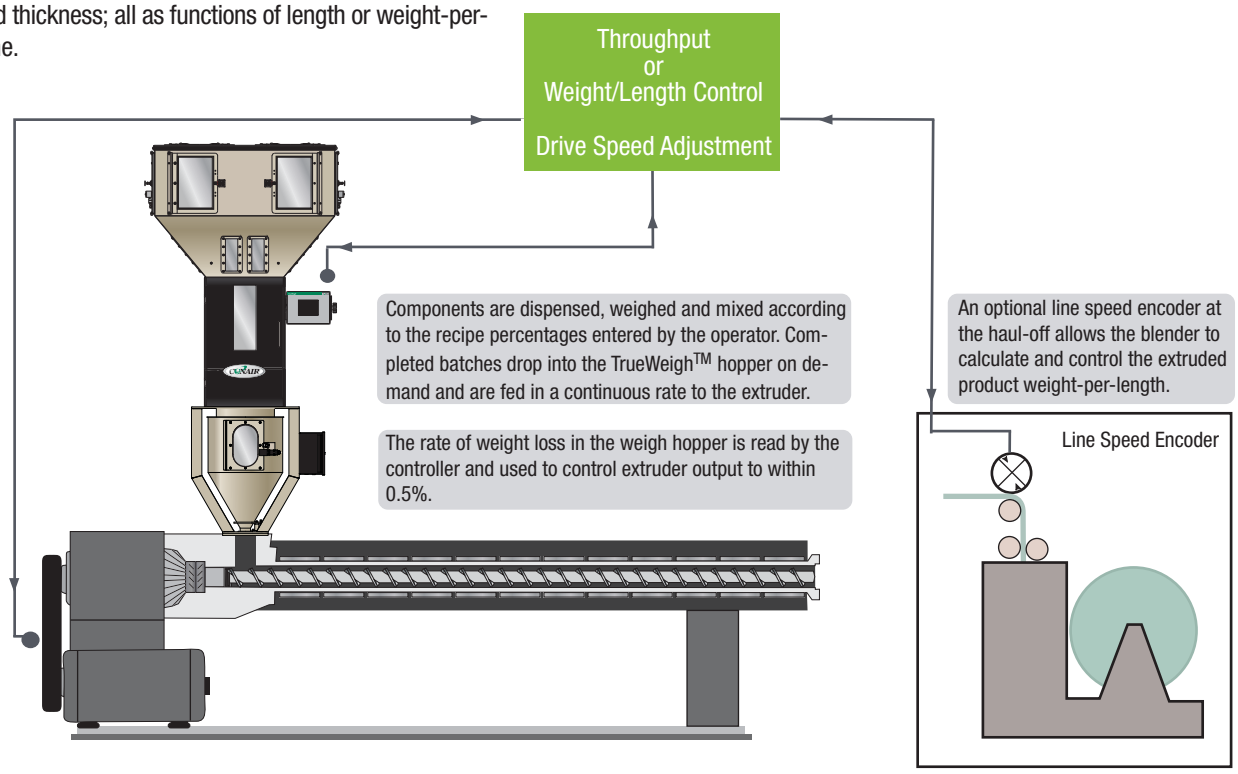
TrueBlend EXT™ can control the extrusion process, as well as gravimetrically blend material. Throughput and haul-off control options allow you to:

- Monitor or control extruder throughput.
- Monitor or control haul-off.
- Monitor and control line haul-off and extruder throughput to provide yield control.

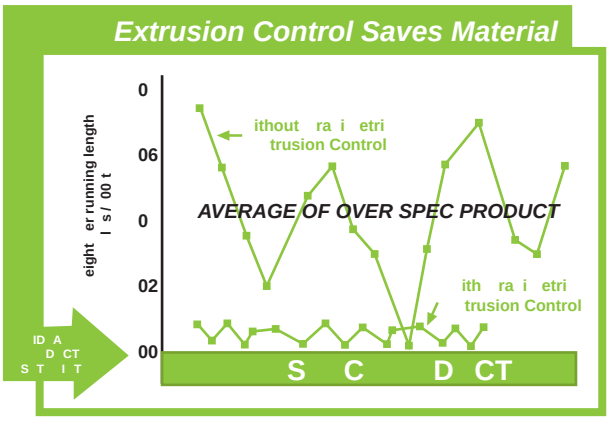
Line control options include weight-per-length, weight-per-area and thickness; all as functions of length or weight-per-time.

TrueBlend EXT™ can control one mono-extrusion line consisting of a homogenous blend of up to twelve ingredients.

For co-extrusion lines, the optional TWC layer ratio control system supervises up to twelve extruders feeding a common die.



The TrueBlend EXT™ yield control option adjusts the extruder screw speed to compensate for material variations and other process variables while monitoring/controlling the haul-off speed – continually delivering precise dimensional stability at minimal tolerances.



Increase yield up to 4%

The TrueBlend EXT™ blending system slashes raw material waste by providing precise control of consumption and length of extruded product.

TrueBlend EXT's advanced control algorithm automatically compensates for material variations to maintain consistent throughput or weight-per-length.

This means material can be extruded at the ideal set point and optimum tolerances.

TRUEBLEND™ EXT

FEATURES

Safety first
All major electrical components are UL and CE approved. Material bins are provided standard with finger guards or optionally with bin access door interlocks. The mixing chamber access door is interlocked with the power supply to the blender motor and compressed air solenoids.

No spills, no leak chassis
Rugged, closed chassis assures all weighed pellets move from the weigh pan to the mixer to the machine. No pellets escape the chassis, improving operator safety and ensuring blend integrity.

100% visibility into the materials bins
Material levels, ingredient type, and position are quickly identified and confirmed.

Internal, protected, no-stick vertical valves
Internal 2-way pneumatic valves are away from external operator access and are separated from the pellet flow by protective shrouds.

Blend up to 12 components
Comes standard with 4 or 6 bins. The blender can be upgraded to 12 positions for material staging or complex recipes.

Any material from any bin
Any bin can be set up for any material type. Bin sequencing is automatic or can be set manually.

No-tools cleaning
Clean-out for materials and color changes is fast and easy. No hang-up or hiding places in material bins. Weighing and mixing components remove in seconds.

Paddle mixer
Aggressive paddle mixer assures homogeneous blending. Relief notches in the mixer blades prevent trapping of pellet. All models are supplied with electric mixing motors for complete 360 degree mixing rotation.

Mass flow loss-in-weight hopper
60° cone angle assures mass flow to prevent separation in the weigh hopper.

Weigh hopper precision load cell
High accuracy precision cantilever load cell allows extruder output control to +/- 0.5%.

OPTIONS

Reports
Used to track and document material usage, alarms, batch and shift reports and recipes. Constant data logging to customers PC, and can be opened in Excel format.

Air blow-off for mix chamber level sensor
This feature is integrated into the blender mix chamber to blow excessive dust and fines away from the sensing device and ensure accurate level sensor reading.

Material level alarm control
Eliminate costly material shortage problems and machine downtime with this early warning system. The control monitors bin material levels at one blender. Individual switches can be adjusted to monitor high or low material levels. *See Level Alarm Control specification sheet.*

Remote mixer demand sensor
This sensor provides a fill-to level option in a surge bin or other material receptacle that sits below a remote mounted blender.

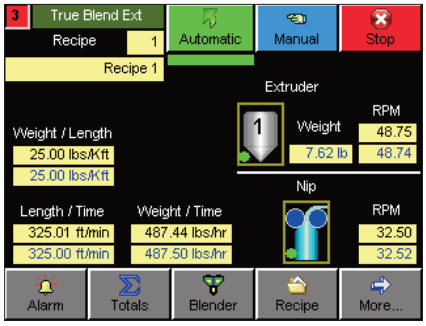
Drain chute
The material drain chute readily installs to the chassis opening of the blender for fast and simple cleanout.

Self Clean
Hands-free cleanout. No equipment teardown. TrueBlend self clean system sequences compressed air nozzles to evacuate material from all contact surfaces, providing fast material changeovers.

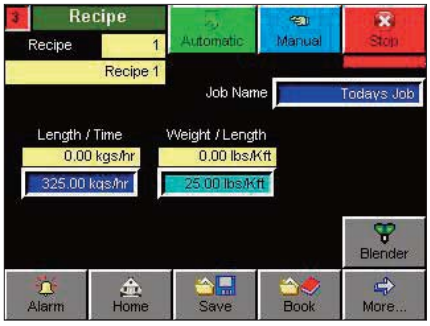
Other available options include:

- TrueBlend high heat models
- Remote blender mounting
- Regrind flow enhancers
- Major component flow restrictor
- Minor component flow restrictor
- Dry air blanket

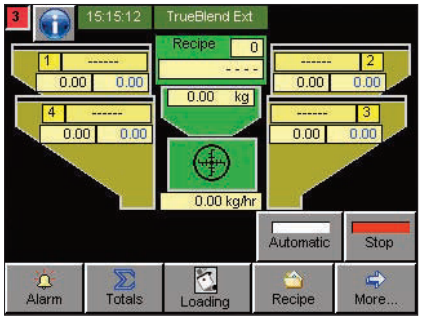
CONTROL



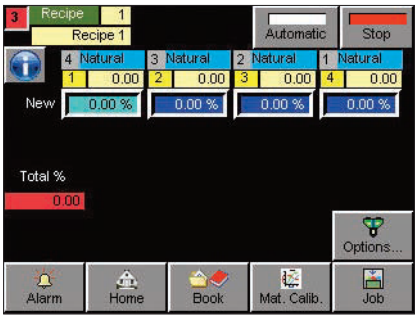
Home screen shows up-to-the-moment line performance. Settings and the actual status from the weigh hopper, extruder output, extruder and haul-off drive RPM, line speed and weight-per-length are presented in an easy to read full-color graphic display.



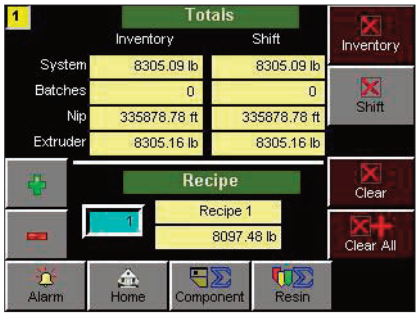
Line recipes are easy to enter and save to ensure repeatability, improved inventory and process control job to job. Material set points are automatically loaded and locked independent of operator skills. A recipe book provides access to up to 500 stored production recipes.



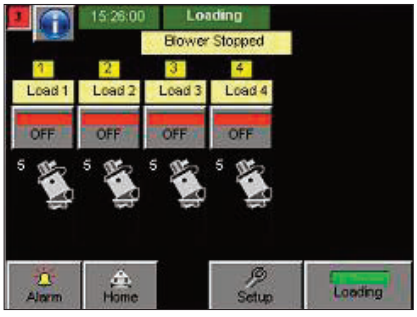
The blender home screen offers instant viewing of recipe set points and the actuals by bin position and total inventory processed since last reset. Touch buttons provide easy access to blender recipes, total materials, reports, loader settings and more.



Blender recipe simply asks for component as a percent or part of the batch. Up to 500 recipes can be stored in the recipe book for quick set-up and assured repeatability. Options allows quick setup of any position for any material and allows automatic or manual bin sequence selection.



Totals screens instantly show up-to-date inventory and shift data for total inventory processed, number of batches, linear feet (m) processed through the nip or puller, and extruder output. Totals for recipes and individual components are also shown. Data is easily outputted to several report options.



Operate up to thirteen loaders and one pump directly through the blender control. Allows full loader functionality, including priority loading selection.

STANDARD FEATURES

- 5.7 inch touch screen operator interface panel
- PLC based controls
- Numerous languages available with one button key press
- Audible/Visual alarm
- Control up to 12 material positions
- Simple, menu driven, Q&A set-up

OPTIONAL FEATURES

- Extrusion control.
- Extruder and haul-off drive control cards. The type of drive control outputs are: 0-10 VDC, up/down interface and motorized potentiometer.
- Haul-off drive control includes drive card and pulse encoder.
- Remote communication protocols.
- Bumpless transfer of control (motorized potentiometer or signal isolator board or pulse encoder).
- Integral Loading System allows the user to load up to a 13 receivers (12 component blender) within the same blender/extrusion control touch screen interface. Utilizing a single controller to maintain both the integrity of the blend, the extrusion process and the loading equipment provides the most economical approach to gravimetric blending, extrusion control and blender loading interface.
- VNC Viewer (Virtual Network Client) allows you to view or operate the touch screen remotely on any Windows XP compatible PC. The user is presented with a virtual image of the system touch screen. This off-the-shelf remote communication solution can view or operate any number of TrueBlend EXT or TrueWeigh touch screens within a customer's plant. All the parameters accessed at the system touch screen can be accessed with the VNC viewer.

SPECIFICATIONS

MODEL	TB-45 EXT†	TB-100 EXT	TB250-4 EXT	TB250-6 EXT	TB500-4 EXT	TB500-6 EXT	TB900-4 EXT‡	TB900-6 EXT
FIGURE NUMBER	Fig. 1	Fig. 2	Fig. 3	Fig. 3	Fig. 3	Fig. 3	Fig. 3	Fig. 3
Performance characteristics								
Batch size lb {g}	1.0 {450}	2.2 {1000}	5.5 {2500}	5.5 {2500}	11 {5000}	11 {5000}	19.8 {9000}	19.8 {9000}
Maximum throughput rate lb/hr {kg/hr}*	140 {63}	310 {140}	880 {399}	675 {306}	1400 {635}	1050 {476}	2850 {1292}	2350 {1066}
Bin capacity- main ingredient ft³ {l}	0.2 {5.7}	0.6 {17}	1.6 {45.3}	2.7 {76.4}	2.7 {76.4}	2.7 {76.4}	4.4 {124.6}	4.4 {124.6}
Bin capacity- minor ingredient ft³ {l}	0.2 {5.7}	0.3 {8}	1.6 {45.3}	1.4 {39.6}	2.7 {76.4}	1.35 {38.2}	4.4 {124.6}	2.2 {62.3}
Maximum number of materials	4	4	4	6	4	6	4	6
Number of vertical discharge valves	4	4	4	6	4	6	4	6
Number (size) of major bin valves	2 -{40mm}	2 -{60mm}	2 -{60mm}	2 -{60mm}	2 -{100/60mm}	2 -{100/60mm}	2 -{100mm}	2 -{100 mm}
Number (size) of minor bin valves	2 -{20mm}	2 -{20mm}	2 -{30mm}	4 -{30mm}	2 -{30mm}	4 -{30mm}	2 -{60mm}	4 -{60mm}
Dimensions inches {mm}								
A- Height above mounting plate	30.90 {785}	45.0 {1145}	57.50 {1461}	63.0 {1600}	63.0 {1600}	63.0 {1600}	74.75 {1896}	74.75{1896}
B- Width	23.63 {600}	30.25 {769}	36.50 {926}	40.13 {1026}	40.13 {1026}	40.13 {1026}	48.5 {1229}	48.5 {1229}
C- Depth	25.78 {655}	31.85 {809}	40.83 {1037}	42.67 {1084}	43 {1092}	43 {1092}	51.0 {1296}	51.0 {1296}
D- Control height	8.25 {209.6}	8.25 {209.6}	8.25 {209.6}	8.25 {209.6}	8.25 {209.6}	8.25 {209.6}	8.25 {209.6}	8.25 {209.6}
E- Control width	9.25 {235}	9.25 {235}	9.25 {235}	9.25 {235}	9.25 {235}	9.25 {235}	9.25 {235}	9.25 {235}
F- Control depth	4.75 {120.6}	4.75 {120.6}	4.75 {120.6}	4.75 {120.6}	4.75 {120.6}	4.75 {120.6}	4.75 {120.6}	4.75 {120.6}
Weight lbs {kg}								
Installed	75 {34}	160 {72}	320 {145}	400 {182}	400 {182}	400 {182}	550 {249}	500 {249}
Shipped	125 {57}	270 {122}	440 {200}	520 {236}	520 {236}	520 {236}	700 {318}	700 {318}
Voltage total amps								
115 V/ 1 phase/ 60 Hz	1	3	6.3	6.3	6.3	6.3	6.3	6.3
230 V/ 1 phase/ 50 Hz	0.5	1.5	3.2	3.2	3.2	3.2	3.2	3.2
Compressed air requirements								
Discharge valves	90 psi @ 0.2 ft³/min (6 bars @ 0.09 liters/sec); 1/4 in. NPT fitting							
Maximum Loader sizes								
8 inch loaders	4	2	-	4	-	4	-	2
12 inch loaders	-	2	-	-	-	-	-	-
15 inch loaders	-	-	4	2	4	2	-	2
20 inch loaders	-	-	-	-	-	-	4	2
TrueWeigh Hopper								
Configurable hopper	TWH-05	TWH-05	-	-	-	-	-	-
Configurable hopper	TWH-27†	TWH-27	TWH-27	TWH-27	TWH-27	TWH-27	-	-
Configurable hopper	-	TWH-44	TWH-44	TWH-44	TWH-44	TWH-44	TWH-44	TWH-44

MODEL	TWH-05	TWH-27	TWH-44
Performance characteristics			
Hopper capacity ft³ {l}	0.5 {14}	2.7 {76}	4.4 {125}
Dimensions			
G- Height	18.5 {469.9}	30.5 {774.7}	42 {1066.8}
H- Depth	12 {343.8}	20 {508}	20 {508}
I- Hopper width	18{457.2}	26 {660.4}	26 {660.4}
J- Overall width	23.91 {607.3}	32.12 {815.9}	32.12 {815.9}
K- Mounting plate width	10.16 {257.9}	11 {279.4}	11 {279.4}
L- Square bolt pattern	8 {203.2}	9 {228.6}	9 {228.6}
M- Hole diameter (bottom)	2.68 {68.28}	3 {76.2}	3 {76.2}
Approximate weight lbs {kgs}			
Shipping	75 {34}	125 {57}	250 {114}

SPECIFICATION NOTES

* Maximum throughput rates are based on 35lb/ft pelletized material, using all standard valve sizes. Use of reducer inserts will lower the rate shown.
Throughput rates are based on:

A 4-position blender recipe of 20% regrind, 80% natural, 3% color and 2% additive material.

A 6-position blender recipe of 20% regrind, 80% natural, 3% color at position 3, 2% additive at position 4, 3% additive at position 5 and 2% additive at position 6.

Higher throughput models are available, consult with a Conair representative for more information.

SPECIFICATION NOTES (CONTINUED)

† TB45 EXT requires a plate adapter to bolt directly to a TWH-27 hopper.

‡ TB900 EXT cannot be supported directly by a weigh hopper. Blender requires remote stand or mezzanine mounting. Associated weigh hopper requires separate surge hopper with slide gate and loader.

TB45 and 100 hopper positions three and four are supplied with 12-8 adapters with eight inch cover plates as standard.

** TB250-4 hopper positions two and four are supplied with 12-8 adapters with eight inch cover plates as standard.

†† TB250-6 hopper position two is supplied with a 12-8 adapter with an eight inch cover.

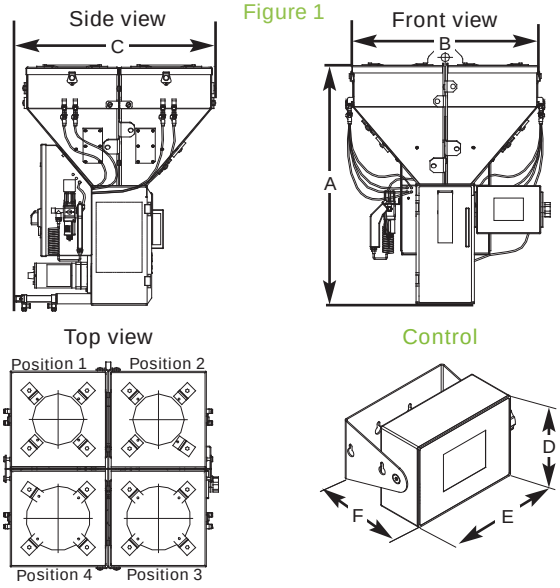
‡‡ TB500-4 hopper positions three and four are supplied with 12-8 adapters with eight inch cover plates as standard. TB500-6 hopper position two is supplied with a 12-8 adapter and an eight inch cover plate as standard.

TB900-4 hopper positions three and four are supplied with 12-8 adapters with eight inch cover plates as standard. TB900-6 hopper positions three and six are supplied with 12-8 adapters and eight inch cover plates as standard.

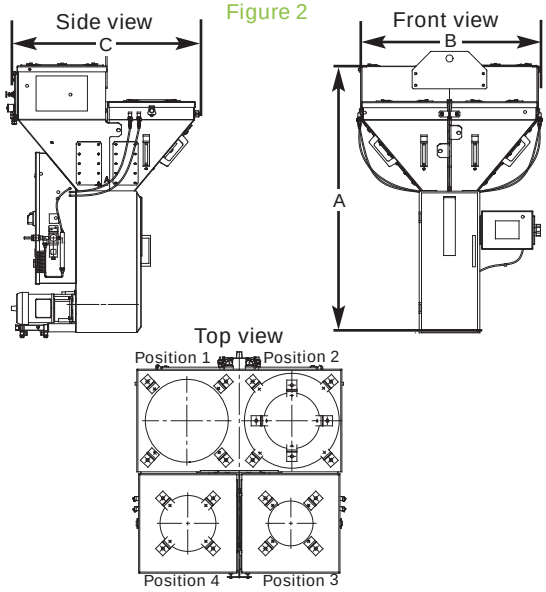
Specifications may change without notice, consult with a Conair representative for the most current information.

SPECIFICATIONS

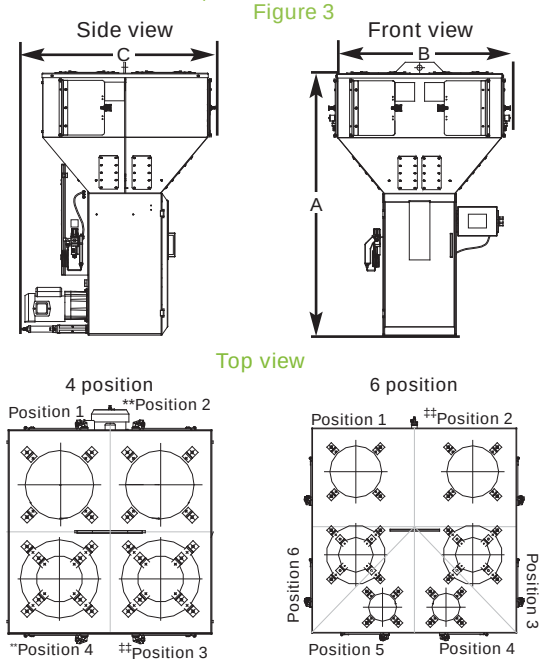
TB45 EXT
Figure 1



TB100 EXT
Figure 2

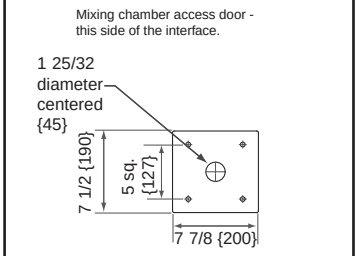


TB250, TB500 and TB900 EXT
Figure 3



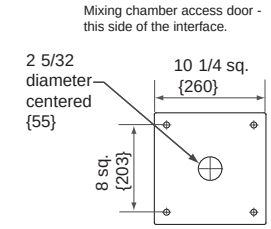
Dimensions shown in inches and {mm}.

MOUNTING INTERFACE TB45-4



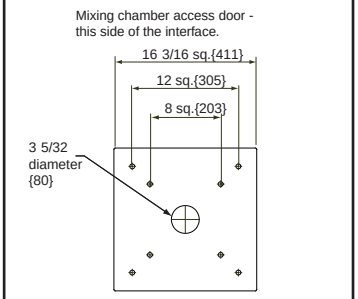
Mounting bolt hole size (4 holes) 7/16 inch {11.0 mm}. Predrilled 5 x 5 mounting pattern as standard.

MOUNTING INTERFACE TB100



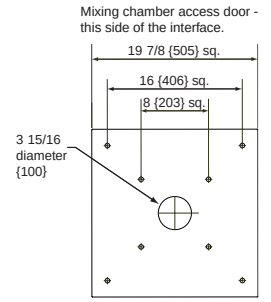
Mounting bolt hole size (4 holes) 9/16 in. {14.0 mm}. Predrilled 8 x 8 mounting pattern as standard.

MOUNTING INTERFACE TB250 - 500



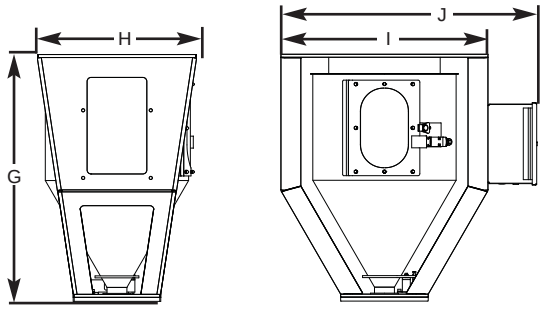
Mounting bolt hole size (8 holes) 9/16 inch {14.0 mm}. Predrilled 8 x 8 and 12 X 12 mounting pattern as standard.

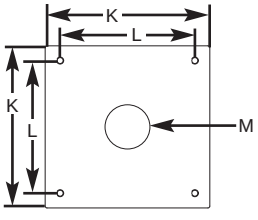
MOUNTING INTERFACE TB900



Mounting bolt hole size (8 holes) 9/16 inch {14.0 mm}. Predrilled 8 x 8 and 16 X 16 mounting pattern as standard.

TrueWeigh Hopper





Model TWB07-4

CONTINUOUS BLENDING IN EXACT, PRECISE RATIOS

TrueWeigh Continuous Blenders provide extremely precise loss-in-weight dispensing of dry solids of various size and bulk densities including pellet, regrind, micro-bead and powder. These highly consistent and repeatable blenders are ideally suited to extrusion processes that require perfect blend homogeneity and extremely accurate dosing.

Designed for extrusion rates to 3,000 lb/hr {1,360 kg/hr}, TWB Blenders are available with up to six component positions.

PERFECT MULTI-COMPONENT HOMOGENOUS BLEND

TrueWeigh Continuous Gravimetric Blenders consist of a series of loss-in-weight material hoppers symmetrically located above a cascade mixing chamber to simultaneously and homogeneously meter all components within a recipe. The system incorporates an extruder throat-mounted weigh hopper which can be supplied as part of the blender or sourced independently. The weigh hopper measures the blended material feed rate and sends that information to the PLC control for monitoring and reporting.

All component hopper-feeder assemblies are mounted on individual single-point contact load cells and are supplied with quick-release, variable speed synchronous motors and configured to accept a range of interchangeable feed augers designed to accommodate specific material shape and flow characteristics. Feeders are inclined for more consistent output and to accommodate fast material drain-out.

Accuracy to +/- 0.5% of set point

The PLC-based control holds each component to +/- 0.5% of its set point. The control uses a proprietary learning algorithm that simultaneously monitors and adjusts each feeder for material flow and bulk density changes.

Homogenously blend dissimilar materials

Easily and accurately blend virgin pellets, free flowing powders, regrinds, granules, flakes, concentrates and additives. Each component is simultaneously metered through material-specific feed augers. A conical cascade static mixer integrates the materials and eliminates separation caused by ledge or step type cascades.

Add-on extrusion yield control

The blender PLC readily communicates with an extruder through an optional drive card to provide yield control. Add an encoder and haul-off drive control card and you can control line speed and product weight-per-length to +/- 0.5% of target set point.

TRUEWEIGH CONTINUOUS BLENDERS

CONFIGURATIONS

Machine mounted

The machine mounted design includes a TrueWeigh gravimetric hopper mounted direct to the feed throat for monitoring feed rate to the extruder or for optional extrusion yield control.

Stand mounted

The stand mounted design feeds material exiting the static mixer through a central tube design to a remote destination.

FEATURES

Integral loading platform
Canopy cover provides stable mounting platform for hopper material loaders.

Easy material and auger changes
Quick change material feed augers are available from 0.5 to 2.0 inch diameters. The material cutoff slide gate allows auger changes to occur with material still present in the hopper. Auger feeder motors are easily removed with quick-release clamps. The inclined auger tube allows a complete and easy way of draining materials.

Mass flow loss-in-weight hoppers
Sixty degree cone angle assures consistent mass flow, and prevents material separation within the central weigh hopper.

Positive position slide gates
Detents hold slide gates open to protect against vibration induced closure.

100% visibility into material hoppers
Material levels, ingredient type and position are quickly identified and confirmed. Since each material bin is weighed, automatic audible alarms are available for each ingredient.

Static mixer
The conical static mixing chamber provides the most homogenous material blend available. Discriminating processors that require a perfect mix, with no mechanical agitation required, can rely on the Conair cascade static mixer for those critical product applications.

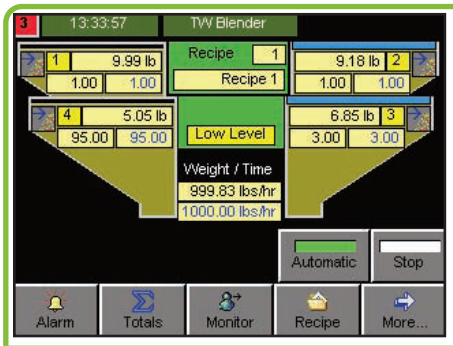
Single point-of-contact load cells
Cantilever load-cells achieve repeatable, precise readings since there is no effect from an imbalanced load from a second point of reference. Load cells are duty-rated, provide a long, reliable service life and allows ingredient feeder or optional extruder output control to +/- 0.5%.

Rigid frame construction
Heavy-duty tubular steel frame resists bending and provides rigid structural stability to minimize vibration and aid precision dosing and blending.

CONTROL FEATURES

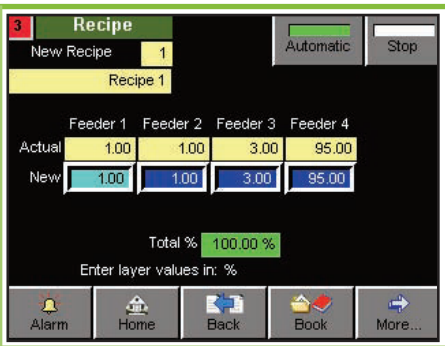
Designed for extruder operators with varying skill sets, intuitive input and recipe screens are laid out according to the extrusion process. Touch-button access to recipes, material usage, alarms, reports, and optionally to extruder output, line speed and weight-per-length. Built-in help screens walk you effortlessly through set-up and operations.

- PLC control with user friendly setup and control screens
- 5.7 inch touchscreen HMI (can be remote located)
- Full color, high visibility graphics
- Stores up to 250 recipes
- Built-in diagnostics / self-calibrating
- Material usage monitoring
- Remote communications: Modbus TCP, Ethernet IP
- Three levels of security passwords for limiting access
- Screen languages: English, Spanish, French, German, Chinese
- Loader control (seven [7] loaders and one [1] pump)
- Remote start/stop
- SMS or text message alarm capable
- Vented NEMA-1 control cabinet
- Built-in Virtual Network Client (VNC). VNC allows remote Ethernet IP based monitoring and control within a private network.
- Fully configurable priority of hopper specific or system level alarms. Stores up to 100 alarms for recall.
- Material inventory, recipe and diagnostic reports. Automated reports can be sent direct to printer, USB or accumulated on memory stick.



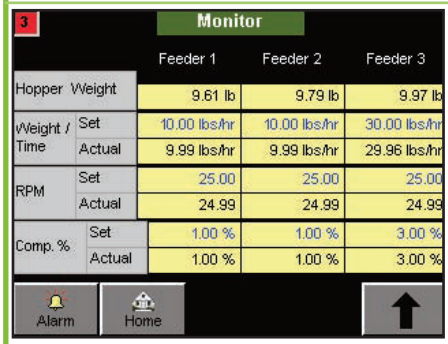
Home page

The blender home page shows all primary information including set point and actual values for component dosing percentages and blender output, weigh hopper fill weights, selected recipe and blender start-stop.



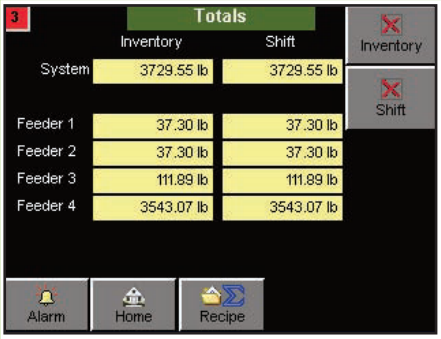
Recipe

The recipe screen offers very simple, intuitive operator inputs for each component position. Recipes can be input by job or selected from memory. The onboard recipe book can store up to 500 recipes for quick set up and assured repeatability.



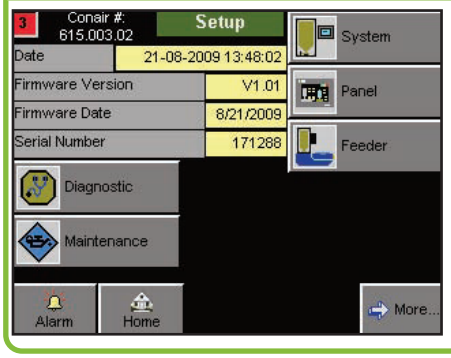
Monitor

Monitor screens are presented in an easy to read table format. Process variable settings are shown for each component position. Up and down arrows toggle through additional or prior positions.



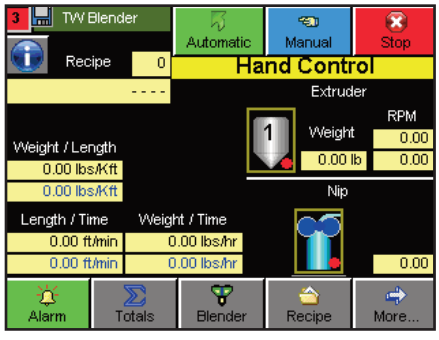
Totals

Instant access to cumulative material weights processed in total, by component position and by shift since last reset. Data is available for output to reporting software.



Setup

Setup touch button access for easy configuration of system and all components, as well as access to diagnostics, trend screens and maintenance.



Extrusion control

Optional extrusion control shows up-to-the-moment line performance. Line settings and actual status are shown in this upper level screen and include weigh hopper, extruder output, extruder and haul-off drive RPM, line speed and weight-per-length.

HOW IT WORKS WITH EXTRUSION CONTROL

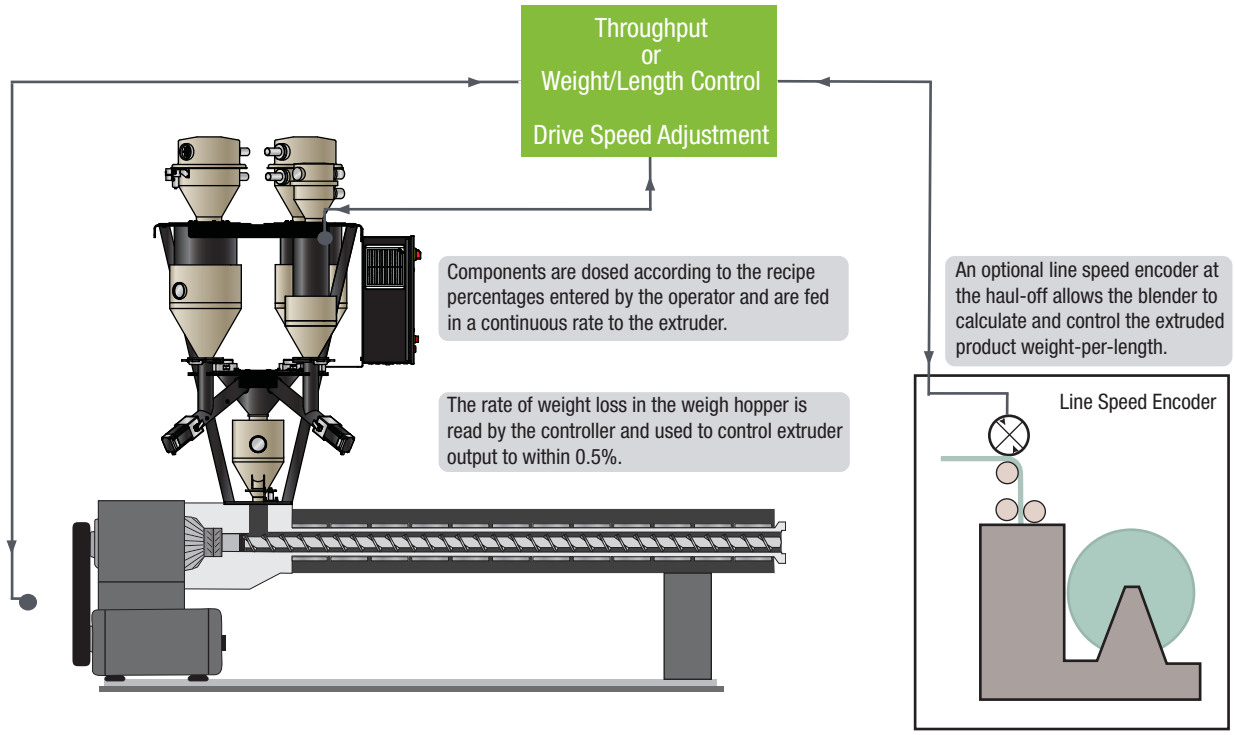
TrueWeigh Continuous Blenders can control the extrusion process, as well as gravimetrically blend material. Throughput and haul-off control options allow you to:

- Monitor or control extruder throughput.
- Monitor or control haul-off.
- Monitor and control line haul-off and extruder throughput to provide yield control.

Line control options include weight-per-length, weight-per-area and thickness; all as functions of length or weight-per-time.

TrueWeigh Continuous Blenders can control one mono-extrusion line consisting of a homogenous blend of up to six ingredients.

For co-extrusion lines, the optional TWC layer ratio control system supervises up to twelve extruders feeding a common die.



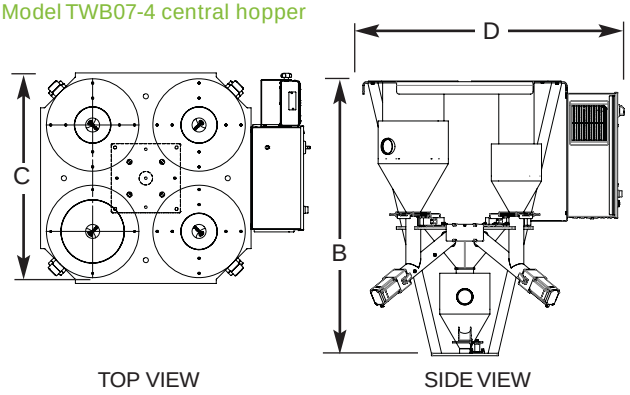
The TrueWeigh Continuous Blender yield control option adjusts the extruder screw speed to compensate for material variations and other process variables while monitoring/controlling the haul-off speed – continually delivering precise dimensional stability at minimal tolerances.

OPTIONS

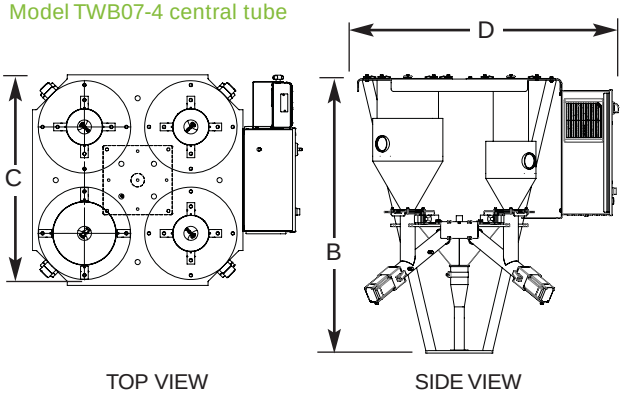
- Powder feeder
- Regrind feeder
- Custom augers
- UL or cUL label on control panel
- Remote throat-mounted weigh hopper
- High temperature 350°F {177°C} operation
- Extension cable for remote control mount
- Stainless steel hoppers and material contact points
- Remote communications: Modbus Serial, Profibus, A-B DH+, Canbus, DeviceNet
- CE approval
- Special paint
- Haul-off encoder
- Non-fused rotary disconnect
- Bumpless transfer of control (motorized potentiometer or signal isolator board or pulse encoder)
- Extruder and haul-off drive control cards - The drive control outputs are: 0-10 VDC, up/down interface and motorized potentiometer

SPECIFICATIONS

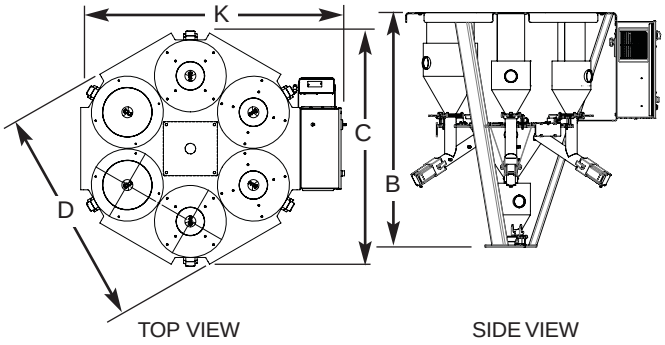
Model TWB07-4 central hopper



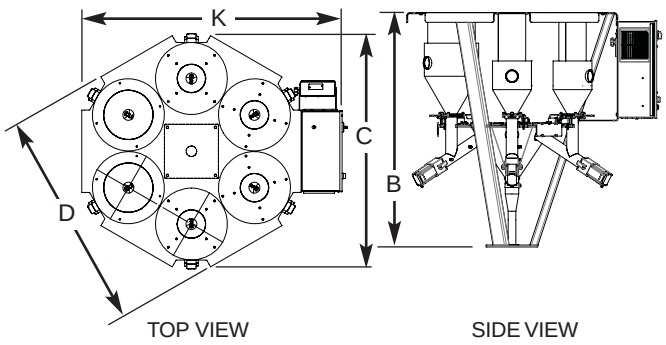
Model TWB07-4 central tube



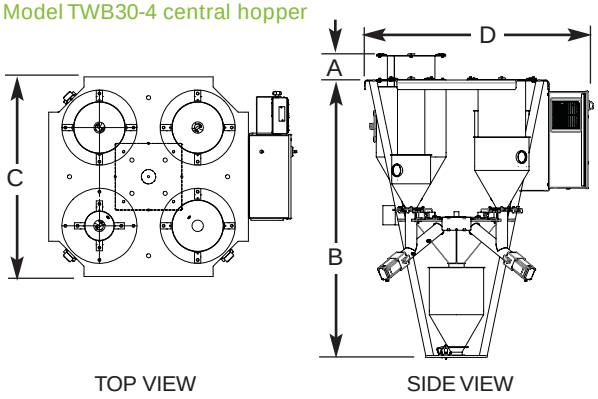
Model TWB07-6 central hopper



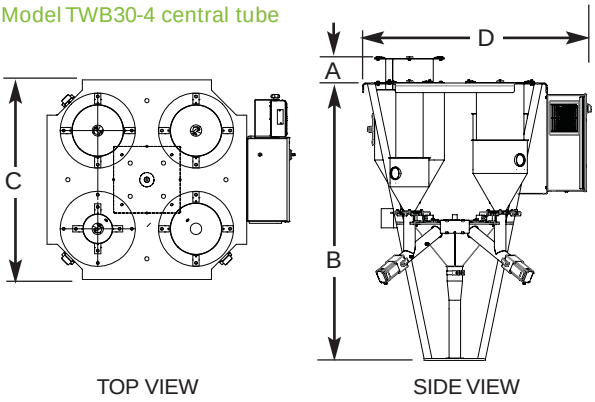
Model TWB07-6 central tube



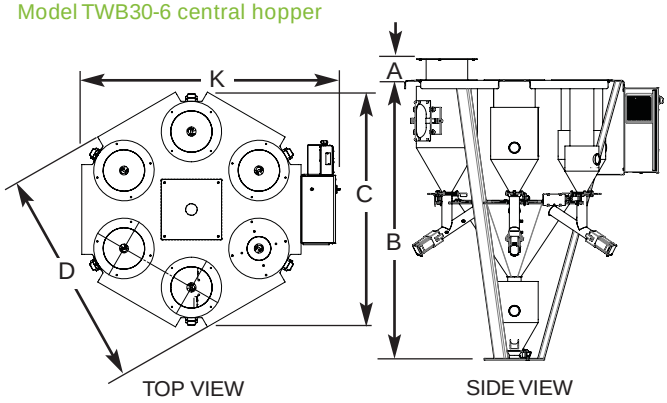
Model TWB30-4 central hopper



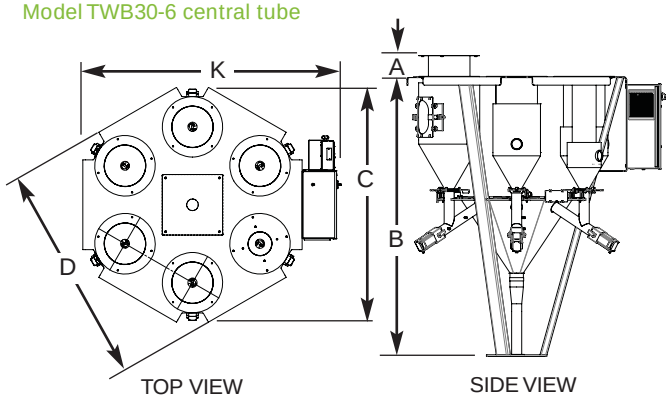
Model TWB30-4 central tube



Model TWB30-6 central hopper



Model TWB30-6 central tube



SPECIFICATIONS

MODELS	TWB07-4	TWB07-6	TWB30-4	TWB30-6
Performance characteristics				
Maximum throughput lbs {kg}				
with central hopper*	700 {317}	700 {317}	3000 {1360}	3000 {1360}
with central discharge tube†	2800 {1270}	4300 {1950}	12000 {5443}	18000 {8164}
Dimensions in. {mm}				
A - Riser height	NA	NA	6.4 {162.1}	6.4 {162.1}
B - Height to loader mounting deck	55.3 {1403.4}	61.0 {1549.4}	72.3 {1835.2}	83.3 {2114.6}
C - Width	41.1 {1044.6}	57.8 {1467.9}	48.0 {1219.2}	69.9 {1775.1}
D - Depth	51.4 {1304.7}	54.8 {1392.9}	58.2 {1477.8}	65.3 {1657.9}
E - Controller height	6.5 {165.1}	6.5 {165.1}	6.5 {165.1}	6.5 {165.1}
F - Controller width	8.8 {222.3}	8.8 {222.3}	8.8 {222.3}	8.8 {222.3}
G - Controller depth	6.8 {171.5}	6.8 {171.5}	6.8 {171.5}	6.8 {171.5}
H - Mounting plate width (sq.)	13.5 {342.9}	13.5 {342.9}	13.5 {342.9}	13.5 {342.9}
I - Mounting plate bolt pattern (sq.)	12.0 {304.8}	12.0 {304.8}	12.0 {304.8}	12.0 {304.8}
J - Mounting plate center hole dia.	2.6 {66.7}	2.6 {66.7}	2.6 {66.7}	2.6 {66.7}
K - Total depth 6 position model	NA	65.1 {1653.1}	NA	75.5 {1918.1}
Weight lb {kg}				
Installed with central weigh hopper	550 {249}	750 {340}	720 {326}	1050 {476}
Shipping with central weigh hopper	700 {317}	900 {408}	870 {394}	1200 {544}
Installed with central discharge tube	520 {235}	730 {331}	700 {317}	1020 {462}
Shipping with central discharge tube	680 {308}	880 {399}	850 {385}	1170 {530}
Electrical requirements full load amps				
115V/1 phase/ 60 Hz	15	20	15	20

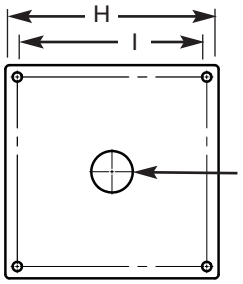
SPECIFICATION NOTES:

* Maximum throughput rate is limited to the throughput capacity of the central weigh hopper. Calculation is based on 35 lb/ft³ pelletized material.

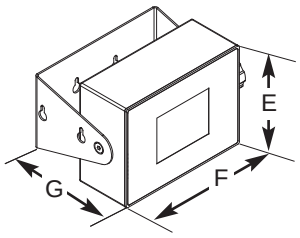
† Maximum throughput rate is for all positions configured with the largest available material hopper and the largest associated feed auger. Calculation is based on 35 lb/ft³ pelletized material.

‡ Any position can accept the largest hopper size available for the model size.

Specifications may change without notice. Consult a Conair representative for the most current information.



MOUNTING PLATE



CONTROL

HOPPER AND LOADER CHOICES

Hopper choices - (any position)‡	TWB07-4	TWB07-6	TWB30-4	TWB30-6
HOPPERS				
3.4 ft³ {96.3 liter}	NA	NA	●	●
1.7 ft³ {48.1 liter}	NA	NA	●	●
1.0 ft³ {28.3 liter}	●	●	●	●
0.3 ft³ {8.5 liter}	●	●	●	●

Maximum loader sizes

HOPPERS	LOADER SIZE
3.4 ft³ {96.3 liter}	20 inch
1.7 ft³ {48.1 liter}	15 inch
1.0 ft³ {28.3 liter}	12 inch
0.3 ft³ {8.5 liter}	8 inch

TRUEBLEND™ REPORTING SOFTWARE

GET CONTROL OF YOUR PROCESS

Rising material costs, increased competition and demands from your customers make it absolutely essential for you to track your material usage. When you choose a Conair TrueBlend Gravimetric Blender you are already well on your way to making efficient use of every pellet of material you process. Pair your blender purchase with Conair's new TrueBlend reporting and recording software for easy and precise tracking and documentation of your material usage.

Many different types of reports can be generated with the software including: Material data (shift); Batch data; Alarm messages; Scale data; Recipe parameters and Diagnostic data.

PRODUCTION DATA FROM YOUR BLENDER

The TB reporting software runs on Microsoft® Windows® 98, NT, 2000 and XP operating systems. The connection from the blender to the computer can be a RS-232 serial connection or an Ethernet network connection (preferred).

The RS-232 connection is limited to one blender and a maximum of 50 feet between the blender and the computer. The Ethernet connection has the advantages of connecting multiple blenders to one computer and faster data collection.

Data can be easily viewed on screen and also exported to Microsoft® Excel spreadsheets for data manipulation.

Precise inventory control

Use the reporting software to track your material usage to help with your "just in time" material order process, to control costs, and to estimate the cost of future jobs. These important measurements can help you to improve your bottom line.

Product specification and quality

TrueBlend Reports make it easy for ISO certified companies to prove that they are meeting quality, safety and recycling requirements.

Identify your costs

The data will help you identify your production costs for quoting jobs. Helps you to track your material costs - no more guessing where your material has gone.

Job tracking

Understand your process. You will be able to verify how much material was used and how much product was molded. Need a printout...merely select the time interval required and send it to the printer.

SPECIFICATIONS

TRUEBLEND™ REPORTING SOFTWARE

TB Reporting Software	
Computer	800 MHz Processor PC recommended with a minimum of 20 MB free hard disk space, 128 MB RAM, printer port, free serial connection using DB9 connector or an ethernet port (preferred). Mouse required.
Operating system	Microsoft® Windows ®98, NT, 2000 or XP
Video	SVGA
Printer	Required for hard copy reports
Interface (serial or ethernet)	
RS-232 Serial Connection	Serial cable using DB9 connectors
Ethernet connection	Category 5 ethernet cable

SPECIFICATION NOTES

Specifications can change without notice. Contact your Conair representative for the most current information.

Reports - Use your TB Reporting software to generate on-screen or printed reports that contain valuable production information about your process. These reports can be used to track your material usage, troubleshoot your process, to determine production costs and plan for future jobs. Several types of reports can be generated with the software including:

- Material Data Report (Shift Report) - Shows material usage within a date and time period you specify. *See Figure 1 below.*
- Batch Report - Shows current recipe, date, time, batch number, percentage of weight for each ingredient (target and actual). *See Figure 2 below.*
- Alarm Report - Gives you a report of the alarm as it occurs and a summary of up to 100 events.
- Scale Data Report - A report of the last calibration information.
- Recipe Data Report - A report of all the recipes that have been saved. *See Figure 3 below.*
- Diagnostic Data Report - An advanced troubleshooting report.

Figure 1

Material Data - Shift Report

Date: 6/27/2005 Station: TB01
Time: 8:55:35 AM TB Des. / Unit: TB01 / 249
Range: 6/27/2005 12:00:00 AM <> 6/27/2005 8:55:31 AM

Date/Time	Batch	Order #	Mat 1	Total 1 [kg]	Mat 2	Total 2 [kg]	Mat 3	Total 3 [kg]	Mat 4	Total 4 [kg]	Mat 5	Total 5 [kg]	Mat 6	Total 6 [kg]	Total all [kg]
6/27/2005 8:16:21 AM	583		Reg	46.64	Nat	168.18	Reg	11.66	Addn	6.73	Off	0.00	Off	0.00	233.20
6/27/2005 8:21:01 AM	604		Reg	48.32	Nat	174.23	Addn	12.08	Addb	6.97	Off	0.00	Off	0.00	241.60
6/27/2005 8:21:01 AM	0		Reg	0.00	Nat	0.00	Addn	0.00	Addb	0.00	Off	0.00	Off	0.00	0.00
6/27/2005 8:26:20 AM	45		Reg	3.60	Nat	13.40	Addn	0.27	Addb	0.72	Off	0.00	Off	0.00	17.99
6/27/2005 8:36:19 AM	133		Reg	10.63	Nat	39.61	Addn	0.79	Addb	2.13	Off	0.00	Off	0.00	53.16

Figure 2

Batch Data

Date: 1/31/2006 Station: TB01
Time: 8:54:57 AM TB Des. / Unit: TB01 / 249
Range: 1/31/2006 12:00:00 AM <> 1/31/2006 8:54:14 AM

Date/Time	Batch	R #	RNa	Order #	Mat	svA 1 [%]	pvA 1 [%]	pvW 1 [g]	Mat	svA 2 [%]	pvA 2 [%]	pvW 2 [g]	Mat	svA 3 [%]	pvA 3 [%]	pvW 3 [g]	Mat	svA 4 [%]	pvA 4 [%]	pvW 4 [g]
1/31/2006 8:53:07 AM	3201	0	---		Reg	25.00	25.00	225.00	Nat	100.00	100.00	611.65	Addn	3.00	3.00	18.35	Addb	5.00	5.00	45.00
1/31/2006 8:53:13 AM	3202	0	---		Reg	25.00	25.00	225.00	Nat	100.00	100.00	611.65	Addn	3.00	3.00	18.35	Addb	5.00	5.00	45.00
1/31/2006 8:53:19 AM	3203	0	---		Reg	25.00	25.00	225.00	Nat	100.00	100.00	611.65	Addn	3.00	3.00	18.35	Addb	5.00	5.00	45.00

Figure 3

Recipe Data

Date: 6/27/2005 Station: TB01
Time: 8:57:26 AM TB Des. / Unit: TB01 / 249
Range: 6/27/2005 12:00:00 AM <> 6/27/2005 8:57:18 AM

Date/Time	R #	RNa	Mat 1	svA 1 [%]	Mat 2	svA 2 [%]	Mat 3	svA 3 [%]	Mat 4	svA 4 [%]	Mat 5	svA 5 [%]	Mat 6	svA 6 [%]
6/27/2005 8:57:11 AM	001	AAA	Reg	20.00	Nat	100.00	Addn	2.00	Addb	4.00	Off	0.00	Off	0.00
6/27/2005 8:57:11 AM	002	BBB	Reg	20.00	Nat	100.00	Reg	5.00	Addn	4.00	Off	0.00	Off	0.00

Level Alarm Control
Model LAC-1

CONSISTENTLY MONITOR MATERIAL LEVELS

Eliminate costly material shortage problems and machine downtime with Conair's Level Alarm Control. Sensors mounted to your blender's material bins constantly monitor the level of material within the blender. Audible and visual indicators will activate when material levels are above or below your sensor position depending on your selection.

Individual sensors are available with detachable monitoring cables for use with removable bins. Also, individual sensor switches allow you to change the level alarm to sense high or low material levels.

SIMPLE-TO-USE MATERIAL LEVEL ALARM CONTROL

The Conair Level Alarm Control module is a simple-to-use early warning detection system for your blending equipment. This module is capable of monitoring up to six levels of material at one blender with an extra input for auxiliary needs, typically a surge bin or other material supply. Selector switches can be adjusted to monitor high or low material levels depending on your blender application.

Audible and visual alarms indicate an excess or shortage of material within a blender. The alarm indicates exactly which material bin is alarming with an associated LED.

Optional remote warning alarms can be added to your module to alert you to alarm conditions from further distances with audible and/or visual indicators.

Multiple monitoring setpoints

Configure the Level Alarm Control module to detect a combination of high or low material levels within one blender. Individual setpoints can be used to keep your material bins from being overfilled by your conveying equipment or to closely monitor the low levels of critical materials.

Easy to install

The Level Alarm Control module is mounted directly to the blender cabinet with four self-tapping screws for easy visual alarm indication. Additional optional remote warning indicators can be added to the module to signal you of alarm conditions from further distances.

Monitor up to six material bins, plus one

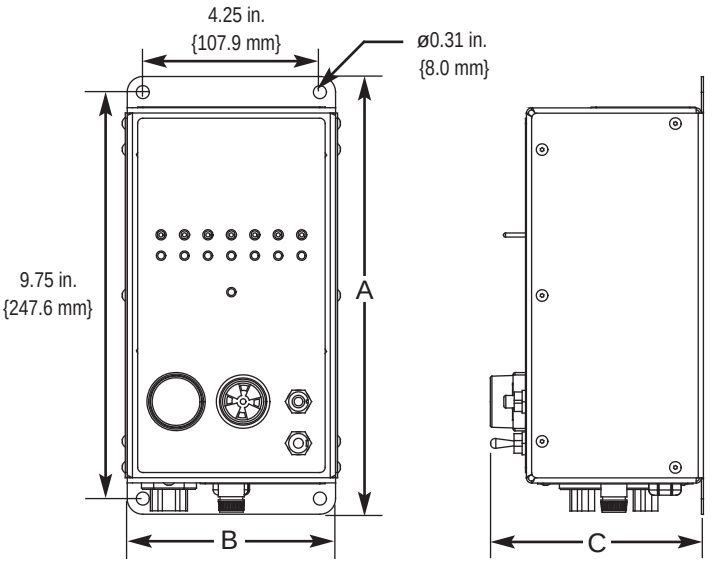
Monitor a combination of up to six material bins with one additional input to monitor auxiliary material sources.

Easy disconnects for material bin removal

Optional sensor cables are available for removable material bins. These cables can also be joined together for larger size blenders with the addition of extension cables.

LEVEL ALARM CONTROL

SPECIFICATIONS



MODELS	LAC-1
Dimensions inches {mm}	
A - Height	10.5 {267}
B - Width	5.2 {132}
C - Depth	5.0 {127}
Approximate weight lb {kg}	
Installed	7 {3.2}
Shipping	17 {7.7}
Voltages full load amps*	
110V/1 phase/60Hz	5
220V/1 phase/50Hz	2.5
Line voltage output*	
110V/1 phase/60Hz	(2) 110V @ 2.5 amps
220V/1 phase/50Hz	(2) 220V @ 1.3 amps
Dry contact voltage outputs	
	24VDC @ 8 amps 115VAC @ 10 amps

SPECIFICATION NOTES:

*The line voltage output is determined by the voltage requirements of the LAC-1.

Specifications can change without notice. Contact a Conair representative for the most current information.

OPTIONS

- Sensor cable length extensions (6 m, 20 m)
- Additional capacitance sensors (for use with a surge bin or other material sources)
- Remote alarms (compatible with Conair's Universal Alarm Box)

APPLICATION NOTE:

The Level Alarm Control module has seven (7) capacitance sensor connections. Up to six (6) can be used for the monitoring of material levels. The seventh sensor can be used with a surge bin or other material storage device located beneath the blender. The eighth connection is a dry contact output with (1) N.O. (normally opened) and (1) N.C. (normally closed) contact that can be connected to other processing equipment or monitoring devices. (For example, an output used with an alarm connected to a PC monitoring system.)

Capacitance Sensor Connections

The Level Alarm Control module s capacitance sensors are positioned within a blender s material bin sight glass to provide adjustable material level detection. The sensor can be positioned high on the sight glass (left image) to monitor material levels of high throughput applications or low on the sight glass (right image) to monitor material levels of low or less critical throughput applications.

Remote Alarms Option

Satisfactory State:
When there is no alarm condition this outlet will supply a continuous flow of 110V/220V single phase power. Only during an alarm will the power supply be terminated.

Alarm State:
During an alarm condition this outlet will energize any 110V/220V remote alarm indictor that is connected. This outlet will not have power at any time other than during alarm conditions.

WSB/GB Retrofit Control

UPGRADE TO TOUCH SCREEN TECHNOLOGY

No more complicated key sequences, mechanical switches or clumsy thumbwheels. In just a few simple steps, you can replace your out-of-date thumbwheel controller with Conair's TrueBlend touch screen technology.

The WSB/GB Retrofit Control can be used with WSB/GB blenders of all sizes to convert the existing thumbwheel controller to a 5.7 inch LCD touch screen control. This updated technology offers full color graphics and quick and easy blender setup.

INTUITIVE: EASY TO SET-UP; EASY TO USE

The WSB/GB Retrofit Control will convert your thumbwheel blender control to a TrueBlend touch screen control.

You will very simply remove your WSB/GB thumbwheel controller and replace it with the WSB/GB retrofit control and a TrueBlend touch screen operator panel. Once you have installed the touch screen interface it will function exactly as the TrueBlend control.

Easy to install

In just a few simple steps, you can replace your out-of-date thumbwheel controller with Conair's TrueBlend touch screen technology. The converter box was designed specifically to fit in the space where the WSB/GB controller was located. The touch screen control can be conveniently mounted to your blender or blender stand.

Simple, more versatile control

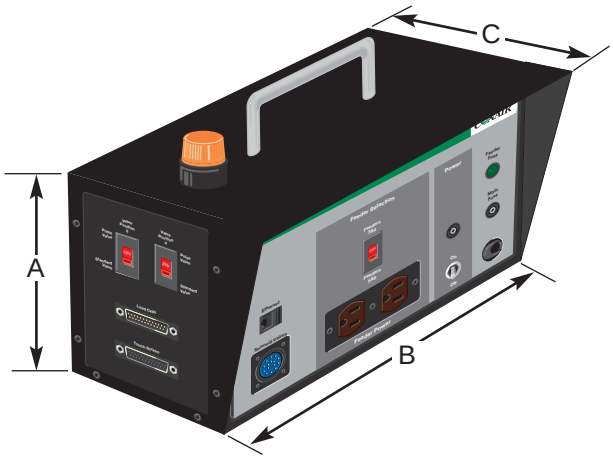
The touch screen control is intuitive, easy to set up, operate and troubleshoot. All setpoints are displayed simultaneously. You just enter the percentages on the blender touch screen control display and the blender does the rest. The system automatically weighs the recipe ingredients in the proper sequence and maintains the correct blend relationship.

Upgrade to the latest technology

The TrueBlend control sets the industry standard for excellence. Our customers who have made the switch to touch screen technology are amazed and delighted at the simplicity and intuitiveness of this control. It's faster, better and easier than antiquated thumbwheel technology.

WSB/GB RETROFIT CONTROL

SPECIFICATIONS

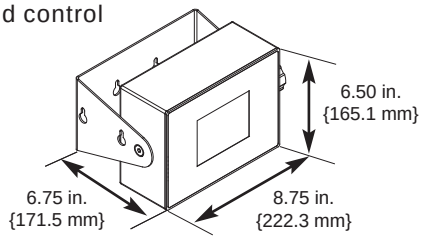


MODELS	
Dimensions inches {mm}	
A - Height	8.5 {215.9}
B - Width	12.1 {307.3}
C - Depth	8.1 {206.0}
Approximate weight lb {kg}	
Installed	14.0 {6.4}
Shipping	24.0 {10.1}
Voltages full load amps*	
110V/1 phase/60Hz	5
220V/1 phase/50Hz	3

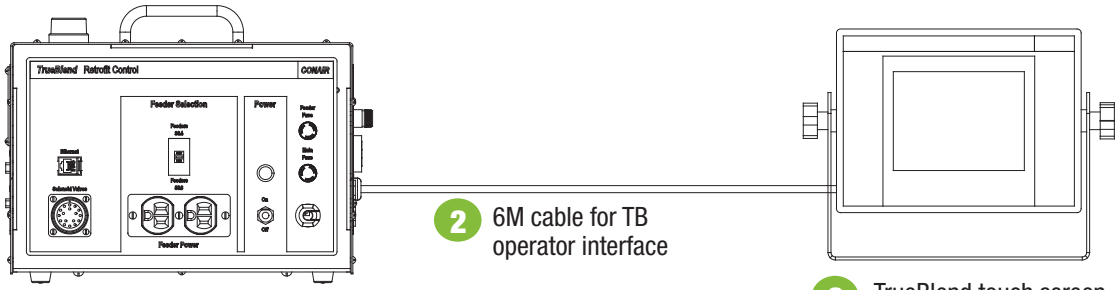
SPECIFICATION NOTES:

Specifications can change without notice. Contact a Conair representative for the most current information.

TrueBlend control



The WSB/GB retrofit control includes:



1. WSB/GB Retrofit Control
2. 6M cable for TB operator interface
3. TrueBlend touch screen operator panel

4. Load cell adapter † (if needed)

APPLICATION NOTES:

† WSB and GB micro and 100 model blenders require a load cell adapter to be placed between the existing load cell cable and the load cell connection on the retrofit control.

The WSB/GB retrofit can only be used on existing WSB/GB controllers with 17-pin amphenol connectors and 24 volt DC solenoids. The WSB/GB retrofit control is not available with older 8-pin or 14-pin models with 120 volt AC solenoids.

Minor wiring changes will be required to modify the mixing chamber level sensor from normally opened to normally closed. Detailed instructions appear in the user guide. All electrical connections should be made only by qualified personnel.

Model TF01AA with handfill hopper lid

NO MORE WASTING EXPENSIVE COLORANT

Optimize your feeding process with the NEW Conair TrueFeed gravimetric feeder. Units are simple to install and use, extremely accurate and economical. These color and additive feeders deliver accurate feeding rates on the basis of continuous loss-in-weight metering technology with closed-loop control of the feeding speed.

The TrueFeed can be used in injection molding, extrusion and blow molding processes. All operate with the same bi-lingual, user-friendly control.

COSTLY DOWNTIME ELIMINATED

Unlike volumetric feeders the new gravimetric feeders from Conair are self-calibrating, adjusting automatically for changes in material type, bulk density or pellet geometry.

Color changes are quick - under 60 seconds - and easy. The TrueFeed does not require time-consuming color calibration when materials are changed.

Each feeder is equipped with a throat adapter that fits between the machine hopper and the throat. The feeder installs easily to the adapter allowing additives to be metered by the dispensing cylinder into the flow of material as it passes through the adapter. Metering and feeding additives at the throat result in even greater savings in material inventory and colorant over traditional pre-colored, centrally blended materials or imprecise volumetric technologies.

Reduce your material costs

The consistency of this feeder ensures that every pellet counts. Absolutely no material waste. Unique dispensing cylinder eliminates pulsing outputs of auger and pocket type feeders.

Increased productivity

The TrueFeed does not require time-consuming color calibration when materials are changed. Eliminates machine downtime associated with conventional volumetric feeders.

Unbeatable accuracy

The dispensing cylinder is driven by a stepper motor for consistent speed. The design ensures that the colorant is dispensed evenly, extremely accurate, and without any pulsation from the cylinder into the plastic, giving you maximum control of the process and the end product.

Super simple to use

Injection molders, simply set the additive percentage, enter the shot weight, screw recovery time and press start. For extrusion processes the unit can be run open-loop or slaved to the extruder (extrusion tracking).

Fast return-on-investment

Call today! These value-priced units quickly pay for themselves in material savings and machine uptime.

TRUEFEED TF MODELS

FEATURES

Improve your processing time and your profits!
...ask about our payback analysis.

No tools required for material and color changes.

The unit is easy to disassemble. Simply release the knob holding the feeder to the scale, remove the feeder, pull back on the slide gate to drain the material from the hopper, then release the motor clamps and remove the motor and dispense cylinder.

OPTIONS

Compressed Air Loading Lid
Choose the TrueFeed with the compressed air loading for processing granular pellets.

Compressed Air Vacuum Loading Lid
Use the TrueFeed with the vacuum loading option for dusty or granular materials. The vacuum loading option offers increasing pulling power and a filter to trap dust and fines. Vacuum is generated with compressed air.

Dispense Cylinder
Cylinders are designed to provide a non-pulsing consistent feed and are more accurate than traditional auger screws. The cylinders allow for quick and easy change out during cleaning. Several sizes are available to fit with your application.

Slide Mount Base
Makes cleanout and calibration even more convenient and easier than the standard unit. It allows quick interchange of feeders.

Communications
Track material usage with the Ethernet TCP/IP communications package.

Throat Adapters
A variety of throat adapters are available to fit with your processing machine. The standard adapter has a 76 mm diameter inlet and 45 mm square outlet. See page 3 and 4.

Water-cooled Throat Adapter
This throat adapter provides temperature isolation from hot dried material. Used when combining a temperature sensitive additive into a hot dried material.

Alarms - visual and/or audible
An alarm light and/or a alarm horn are available to alert the operator to low material level.

Large Capacity Hopper
A 12 liter hopper is available for larger throughput requirements and light density materials.

REGRIND AND HARD-TO-FLOW MATERIAL APPLICATIONS

High Torque Stepper Motor
The high torque stepper motor is required for feeding regrind or hard to flow materials. This motor is always used in conjunction with the A-20HT or A-30HT dispense cylinder.

TRUEFEED TF MODELS

FEATURES

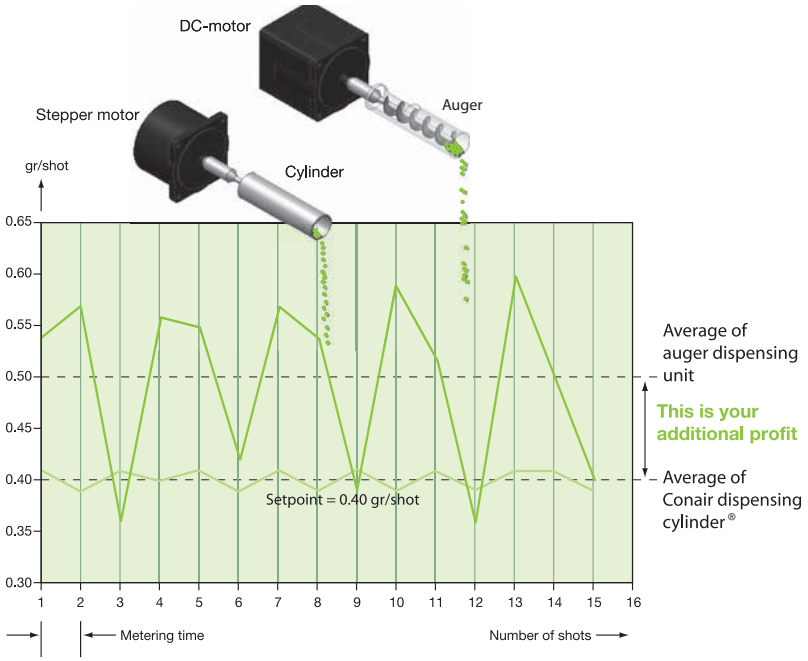
In control of your *expensive* colorant and additives.

The Conair dispensing cylinder gives you outstanding control of the feeding process. The consistent feeding of this unit allows the actual setpoint to be lowered, ensuring a substantially ***faster return on your investment.***

Find your additional profits here

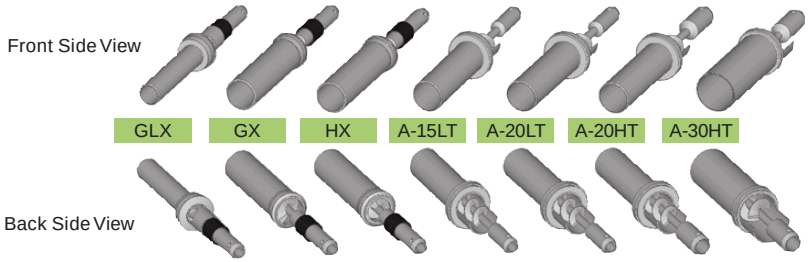
The graph compares the Conair Dispensing Cylinder to an auger. An auger dispensing device will give an irregular output because of the pulsations created by the auger, which in turn, causes the colorant to be dispensed irregularly into the main material. A Conair Dispensing Cylinder guarantees even dispensing. The dispensing cylinder works in combination with a stepper motor that ensures exact, controllable cylinder speed time after time.

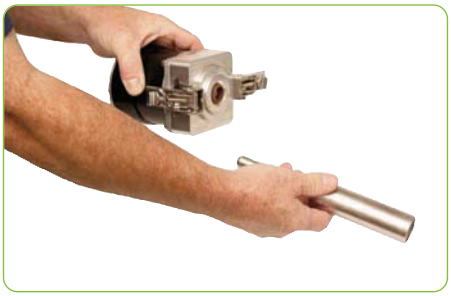
Both tests were performed under identical circumstances, using the same material.



Dispensing Cylinders

Choose the dispensing cylinder that is right for your application.





Feeding system	Pellet material	Regrind hard-to-flow material	Feed rate† gram/sec	Feed rate† kg/hr	Feed rate† lb/hr
GLX	Yes	No	0.01 to 1.1	0.05 to 4.1	0.11 to 8.9
GX	Yes	No	0.1 to 5.0	0.5 to 12.6	1.11 to 28.0
HX‡	No	No	0.007 to 0.4	0.03 to 1.3	0.56 to 2.78
A-15LT	Yes	Yes	0.1 to 5.0	0.5 to 12.6	1.11 to 28.0
A-20LT	Yes	No	0.4 to 14.0	1.3 to 50.4	2.78 to 112.0
A-20HT*	Yes	Yes	0.4 to 14.0	1.3 to 50.4	2.78 to 112.0
A-30HT*	Yes	Yes	1.4 to 35.0	5.0 to 126	11.1 to 280.0

* Used for regrind and irregular shaped materials. † Feed rates are based on materials with a bulk density of 35 lb/ft³. ‡ For granular/free-flowing powder.

Throat Adapters

Choose the throat adapter that is right for your application.

NOTE: See page B-62 for a throat adapter drawing reference. Model 07 shown.

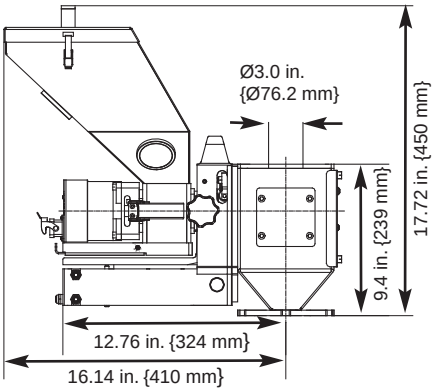
Model	Inlet	Outlet (sq.)	Height	Top Flange (sq.)	Bottom Flange (sq.)	Bottom Mounting Center Range (sq.)
07	ø3.0 {ø76.2}	1.77 {45}	9.4 {239}	6.0 {152}	5.5 {140}	2.75 - 4.5 {69.9 - 114.3}
08	ø3.0 {ø76.2}	3.54 {90}	9.4 {239}	6.0 {152}	5.5 {180}	4.5 - 6.0 {114.3 - 152.4}
09**	ø3.0 {ø76.2}	1.77 {45}	9.4 {239}	6.0 {152}	5.5 {140}	2.75 - 4.5 {69.9 -114.3}

Dimensions are shown in inches and {mm}. ** Model 09 is a water-cooled throat adapter.

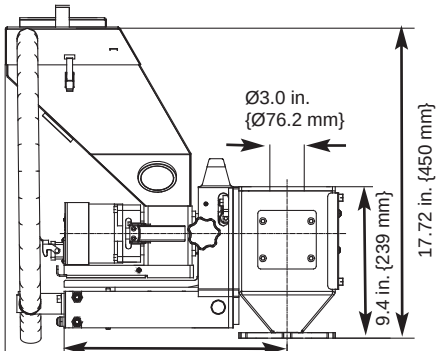
SPECIFICATIONS

TRUEFEED TF MODELS

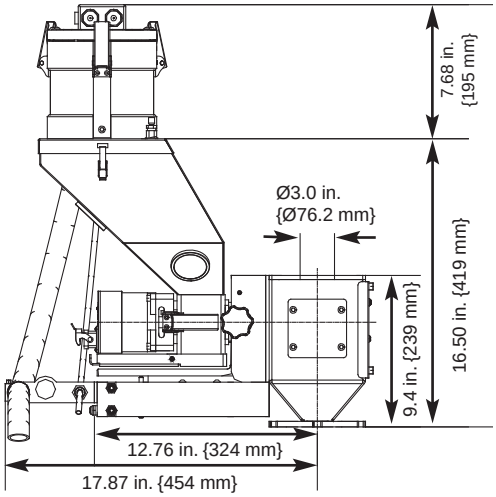
Side View - TF01AA
Shown with standard hand-fill lid



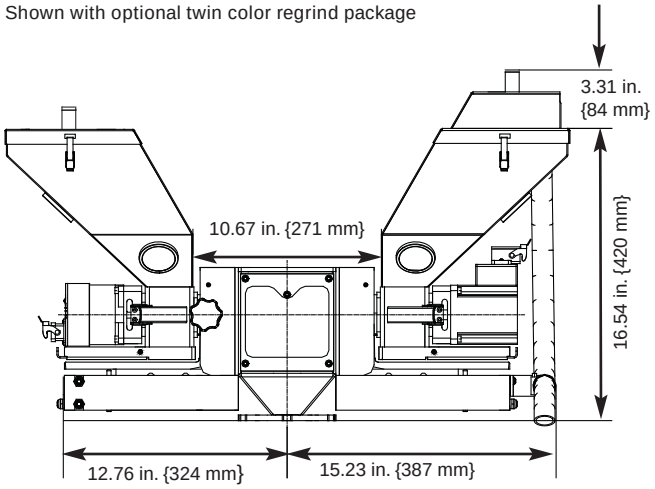
Side View - TF01AB
Shown with optional compressed air loading lid



Side View - TF01AK
Shown with optional compressed air vacuum loading lid

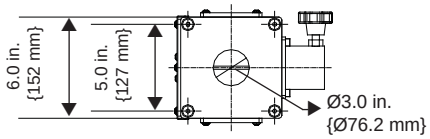


Side View - TF01AH A
Shown with optional twin color regrind package

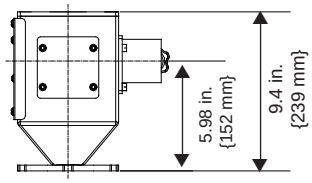


THROAT ADAPTER REFERENCE - Model 07 shown.

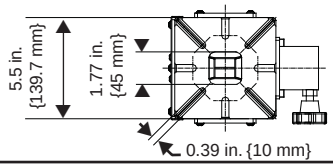
Throat Adapter Top



Throat Adapter Height



Throat Adapter Bottom



MODELS*	TF01AA	TF01AB	TF01AK	TF01AH A
Dimensions inches {mm}				
	See drawings above for all dimensions except depth.			
Depth	8.31 {211}	17.94 {456}	18.94 {481}	17.94 {456}
Weight lbs {kg}				
Standard feeder installed (empty)	49 {22}	54 {24}	65 {29}	74 {34}
Shipping (approximate)	55 {25}	60 {27}	75 {34}	84 {38}
Voltage total amps				
120 V/1 phase/60 Hz	0.75	0.75	0.75	1.5
220 V/1 phase/50 Hz	0.38	0.38	0.38	0.75

Loader (option) specifications† ‡	
Maximum conveying distance	3 meters
Compressed air hose	1/4 NPT fitting to 8 mm hose
Compressed air requirements	
Compressed air loader	58 -116 psi {4 -8 bar}; 8.8 to 15.9 ft³/min {0.25 to 0.45 m³/min}
Compressed air vacuum loader	58 -116 psi {4 -8 bar}; 5.3 to 9.6 ft³/min{0.15 to 0.27 m³/min}

SPECIFICATION NOTES:

* All models shown with 0.2 ft³ {6 liter} material hoppers.

† Applies to Models TF01AB and TF01AK (models that are sold with the loading option).

‡ The loader option is provided with a control solenoid to be installed/mounted by the customer.

Model TF01AB - compressed air loader supplied material hose is 25 mm diameter, 3 m in length. Model TF01AK vacuum compressed air loader supplied material hose size is 38 mm diameter, 3 m in length.

Specifications may change without notice. Consult a Conair representative for the most current information.

ECONOMICAL FEEDING OF COLORANTS, ADDITIVES

Conair feeders provide injection molders and extruders with a versatile, economical way to volumetrically meter colorants or other additives into the flow of virgin material directly at the throat of the processing machine.

By metering additives directly at the throat, greater savings in material inventory and colorant can be achieved over traditional pre-colored or centrally blended material schemes.

PRECISE METERING REDUCES COLORANT COSTS

Each feeder is equipped with a throat adapter that fits between the material supply hopper and the processing machine throat. The feeder connects easily to the adapter allowing additives to be metered by an auger into the flow of material as it passes through the adapter. Up to two feeders may be mounted on one throat adapter.

For injection machines the feeder's digital timer controls the metering motor during screw recovery. This supplies a consistent volume of additive in proportion to the flow of material into the machine throat.

For extruders the feeder meters continuously. The speed control of the extrusion models includes a voltage tracking circuit to slave the feeder metering rate to the speed of the extruder.

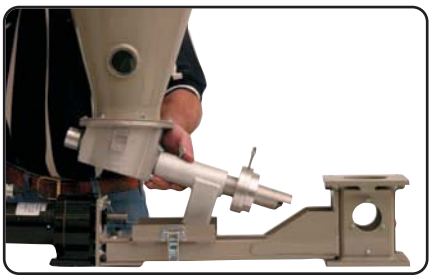
- **Models for low/high throughput**
  Model BFS and BFH feeders feature a compact size for metering additives to machines down to 0.01 gram per second or up to 160 lb. per hour. Model BFH provides high throughput metering up to 100 grams per second or 800 lb. per hour.
- **Injection or extrusion control**
  The precision injection control provides on-demand metering, based on a signal from the press. The extrusion control is designed to operate continuously with the extruder.
- **Easy, no-tools cleanout**
  BFH models have removable supply hoppers and augers to allow fast clean-out for color changes. The standard BFS model has a stationary hopper, a removable supply hopper option is available.
- **Digital setpoint accuracy**
  Easy-to-set thumbwheel switches provide digital accuracy for speed and time rate control.
- **Optional low level alarm**
  Small add-on module offers audible and visual warnings if the additive level drops below the hopper sight glass.

CONTROLS

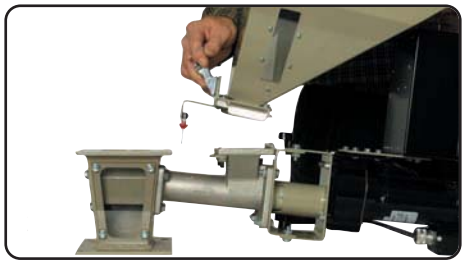
The precision feeder control for injection molding provides on-demand metering, based on a signal from the press (for example, the screw retraction start.) The signal may be a contact closure or a voltage (Choose from these available voltages: 120 VAC; 240 VAC; or 24 VDC). Push button thumbwheels set the metering cycle time and motor speed. An accurate digital timer controls the metering duration indicated by the setting. The feeder speed setting is a percentage of maximum motor speed.

The extrusion control for the feeder is designed to operate continuously with the extruder, to meter a precise flow of additives at the desired rate. Push button thumbwheels set the speed of the metering auger. The speed of the feeder may be slaved to the extruder with a DC voltage follower circuit, driven by the extruder tach generator or armature voltage (0 to 600 VDC or 4-20 milliamps). (Shown is control with optional voltmeter.)

FEATURES AND OPTIONS



The standard BFH model includes a combination hopper/auger assembly that may be quickly removed from the feeder's mainframe/motor assembly. No tools are required.



The compact BFS model is available with an optional quick release hopper with a built-in electrical interlock and slide gate that allows quick removal cleaning and replacement for color changes. No tools are required.

OPTIONS

Hopper loaders for feeders keep feeder hoppers full automatically.

The BFS Feeder with a Conair self-contained vacuum loader.
The loader automatically fills the additive hopper with color concentrate or other pelletized additives.

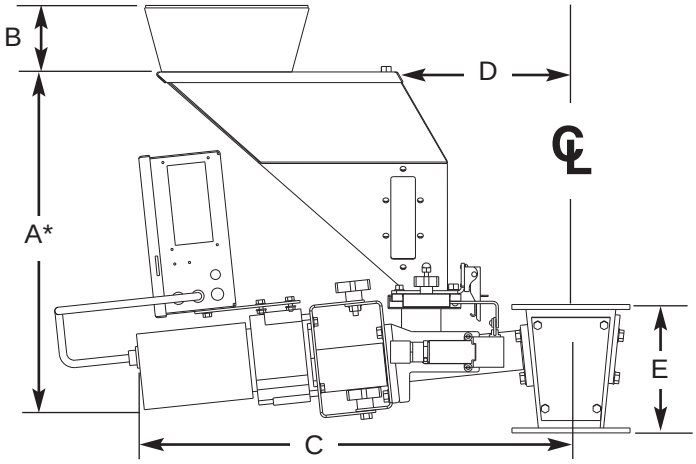
The BFH Feeder with a DustBeater mounted on a high volume loader extension.
At 500 pounds per hour, the standard Conair DustBeater assures a reliable material supply for extrusion or continuous molding. Choose the brushless DustBeater for loading rates up to 1000 pounds per hour.

Low level alarm kit

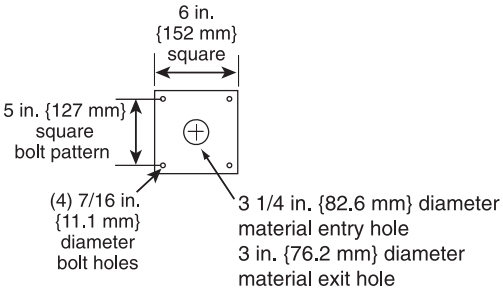
The low level alarm kit may be factory ordered, or may be installed later on any feeder control package.

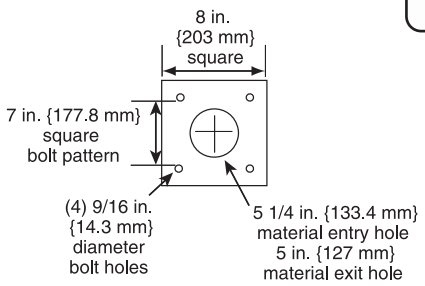
BFS AT-THE-THROAT MODELS

SPECIFICATIONS



BFS augers





MODEL		BFS				
AUGER SIZES	inches	3 8 X 1 4	3 8 X 3 8	1 2 X 1 2	3 4 X 3 4	1 X 1
	mm	{9.53 X 6.35}	{9.53 X 9.53}	{12.70 X 12.70}	{19.05 X 19.05}	{25.40 X 25.40}
Performance Characteristics - pellets only						
Throughput@9 rpm, Injection†	grams/sec	0.005 to 0.05	0.007 to 0.071	0.016 to 0.16	0.049 to 0.49	0.11 to 1.1
Throughput@9 rpm, Extrusion†	lb/hour	0.042 to 0.42	0.056 to 0.56	0.13 to 1.3	0.39 to 3.9	0.86 to 8.6
Throughput@30 rpm, Injection†	grams/sec	0.018 to 0.18	0.024 to 0.24	0.054 to 0.54	0.16 to 1.6	0.36 to 3.6
Throughput@30 rpm, Extrusion†	lb/hour	0.14 to 1.4	0.19 to 1.9	0.43 to 4.3	1.3 to 13.0	2.9 to 29.0
Throughput@64 rpm, Injection†	grams/sec	0.038 to 0.38	0.051 to 0.51	0.12 to 1.2	0.35 to 3.5	0.77 to 7.7
Throughput@64 rpm, Extrusion†	lb/hour	0.30 to 3.0	0.40 to 4.0	0.92 to 9.2	2.8 to 28.0	6.1 to 61.0
Throughput@95 rpm, Injection†	grams/sec	0.056 to 0.56	0.075 to 0.75	0.17 to 1.7	0.52 to 5.2	1.1 to 11.0
Throughput@95 rpm, Extrusion†	lb/hour	0.45 to 4.5	0.60 to 6.0	1.4 to 14.0	4.1 to 41.0	9.0 to 90.0
Throughput@170 rpm, Injection†	grams/sec	0.10 to 1.0	0.13 to 1.3	0.31 to 3.1	0.92 to 9.2	2.0 to 20.0
Throughput@170 rpm, Extrusion†	lb/hour	0.80 to 8.0	1.1 to 11.0	2.4 to 24.0	7.3 to 73.0	16.0 to 162.0
Hopper capacity	ft^3 {liter}	0.68 {19.2}	0.68 {19.2}	0.68 {19.2}	0.68 {19.2}	0.68 {19.2}
Motor power	Hp {kW}	1/8 {0.093}	1/8 {0.093}	1/8 {0.093}	1/8 {0.093}	1/8 {0.093}
Gear motor output	rpm	0 - 8, 0 - 30, 0 - 60, 0 - 95, 0 - 170				
Dimensions inches {mm}						
Top bottom throat adapter plate		6 X 6 {152 X 152}		8 X 8 {203 X 203}		
A - Overall height - with removable hopper		21.6875 {550.9}		21.6875 {550.9}		
A - Overall height - with standard hopper		21.3125 {541.3}		21.3125 {541.3}		
B - Loader lid adapter height‡ (optional)		3.375 {85.7}		3.375 {85.7}		
C - Length to centerline throat plate		22.5 {571.5}		23.5 {596.9}		
D - Hopper to centerline throat plate		8.875 {225.4}		9.875 {250.8}		
E - Throat adapter height		6.5 {165.1}		7 {177.8}		
Weight lb {kg}						
Installed		61 {27.7}				
Shipping		110 {49.9}				
Voltage Total running amps						
120/1 phase/60 Hz		4				
0/1 phase/50-60 Hz		2				

SPECIFICATION NOTES

* Overall height is different with the optional removable hopper. See the specification table.

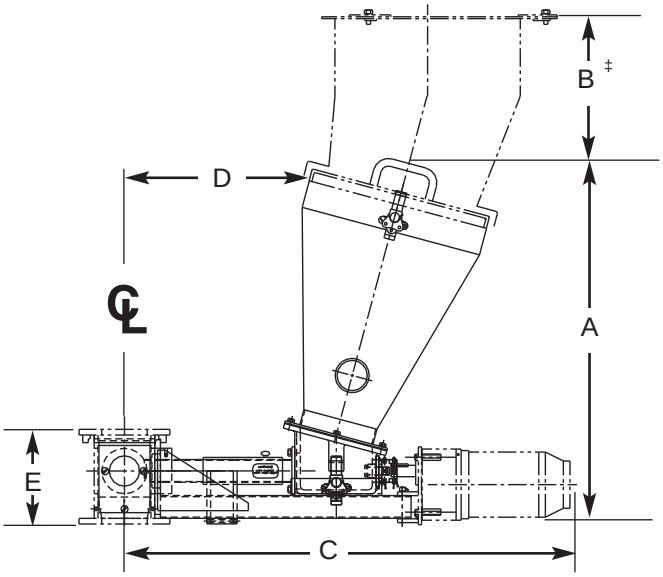
† Throughput is dependent upon the combination of auger and motor rpm selected.

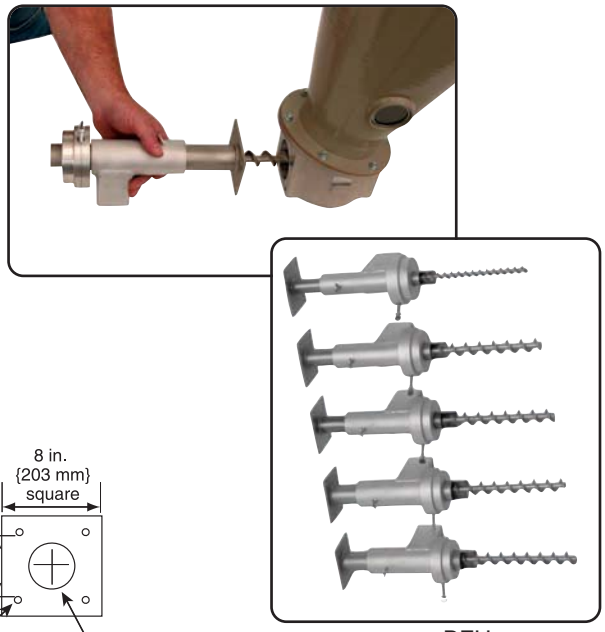
‡ Optional loader adapter lid is shown for use with 8 inch and TLM tube loader, standard is supplied with a handfill lid.

Specifications can change without notice. Check with a Conair representative for the most current information.

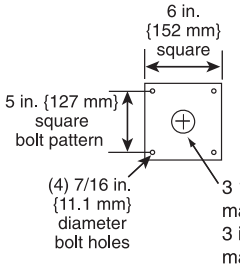
SPECIFICATIONS

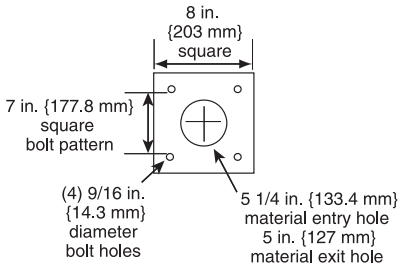
BFH AT-THE-THROAT MODELS





BFH augers





MODEL		BFH				
AUGER SIZES	inches	1 2 X 1 2	3 4 X 3 4	1 X 1	1 1 2 X 1 1 2	2 X 2
	mm	{12.7 X 12.7}	{19.05 X 19.05}	{25.4 X 25.4}	{38.1 X 38.1}	{50.8 X 50.8}
Performance Characteristics (pellets and free flowing powder*)						
Throughput@9 rpm, Injection†	grams/sec	0.013 to 0.13	0.037 to 0.37	0.081 to 0.81	0.26 to 2.6	0.59 to 5.9
Throughput@9 rpm, Extrusion†	lb/hour	0.10 to 1.0	0.29 to 2.9	0.64 to 6.4	2.1 to 21.0	4.7 to 47.0
Throughput@30 rpm, Injection†	grams/sec	0.043 to 0.43	0.12 to 1.2	0.27 to 2.7	0.87 to 8.7	2.0 to 20.0
Throughput@30 rpm, Extrusion†	lb/hour	0.34 to 3.4	0.97 to 9.7	2.1 to 21.0	6.9 to 69.0	16 to 155.0
Throughput@64 rpm, Injection†	grams/sec	0.091 to 0.91	0.26 to 2.6	0.57 to 5.7	1.9 to 19	4.2 to 42.0
Throughput@64 rpm, Extrusion†	lb/hour	0.72 to 7.2	2.1 to 21.0	4.6 to 46.0	15.0 to 147.0	33.0 to 331.0
Throughput@95 rpm, Injection†	grams/sec	0.14 to 1.4	0.39 to 3.9	0.85 to 8.5	2.8 to 28.0	6.2 to 62.0
Throughput@95 rpm, Extrusion†	lb/hour	1.1 to 11.0	3.1 to 31.0	6.8 to 68.0	22.0 to 219.0	49 to 491.0
Throughput@170 rpm, Injection†	grams/sec	0.24 to 2.4	0.69 to 6.9	1.5 to 15.0	4.9 to 49.0	11.0 to 111.0
Throughput@170 rpm, Extrusion†	lb/hour	1.9 to 19.0	5.5 to 55.0	12.0 to 121.0	39.0 to 391.0	88.0 to 878.0
Hopper capacity	ft^3 {liter}	0.62 {17.5}	0.62 {17.5}	0.62 {17.2}	0.62 {17.2}	0.62 {17.2}
Motor power	Hp {kW}	1/8 {0.19}	1/8 {0.19}	1/8 {0.19}	1/8 {0.19}	1/8 {0.19}
Gear motor output	rpm	0 - 8, 0 - 30, 0 - 60, 0 - 95, 0 - 170				
Dimensions inches {mm}						
Top bottom throat adapter plate		6 X 6 {152 X 152}		8 X 8 {203 X 203}		
A - Overall height		23.5 {596.9}		23.5 {596.9}		
B - Loader lid adapter height‡ (optional)		10 {254.0}		10 {254.0}		
C - Length to centerline throat plate		29.25 {743.0}		30.25 {768.4}		
D - Hopper to centerline throat plate		12.4 {315.0}		13.4 {340.4}		
E - Throat adapter height		6.25 {158.8}		6.25 {158.8}		
Weight lb {kg}						
Installed		61 {27.7}				
Shipping		110 {49.9}				
Voltage Total running amps						
120/1 phase/60 Hz		4				
240/1 phase/50-60 Hz		2				

SPECIFICATION NOTES

* Powder requires a different auger.

† Throughput is dependent upon the combination of auger and motor rpm selected.

‡ Standard handfill loading is shown in measurement A". Optional adapter also shown in measurement B" available for 8-inch, TLM tube loader and 12-inch loaders.

Specifications can change without notice. Check with a Conair representative for the most current information.

Inline

Offset

ECONOMICAL, COMPACT MATERIAL MIXING

An intermixer mounts between the processing machine throat and material supply. The intermixer can be combined with a Conair throat feeder, material hopper and vacuum loader to provide economical and reliable mixing, feeding and loading.

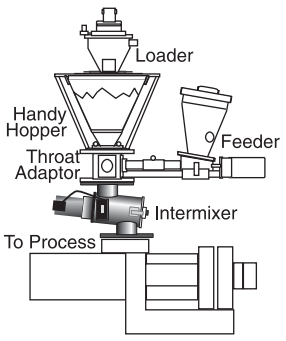
The unit's removable plexiglass front cover provides visual inspection of the mixing and easy access for clean out. Compact rugged construction with choice of 6 or 8 inch mounting flanges features a product for enhancing the mixing capability of your process machine.

TWO MODELS AVAILABLE: INLINE AND OFFSET

For materials requiring minimal mixing the use of an inline intermixer provides a tumbling of materials as they feed by gravity through the blades of the mixing paddle. Compact size and straight through design allows application with almost any equipment arrangement.

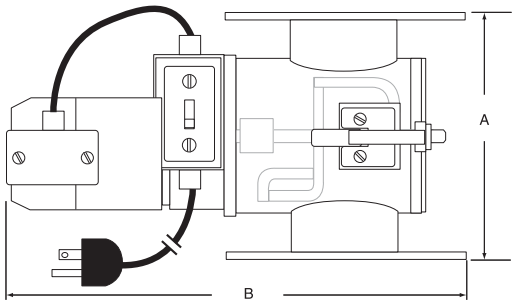
Use the offset intermixer for materials requiring increased mixing before entering the process or machine throat. The offset intermixer forces material to traverse its length and undergo agitation before exiting. The offset design provides thorough mixing to improve the mixing screw capabilities in both injection presses and extruders. This model is ideal for larger shot sizes that may evacuate the in-line model before sufficient mixing.

- **Easy, no-tools cleaning**
  Smooth surface chamber body won't trap material. Quick release latches allow easy access to mixing chamber.
- **Ideal for use with feeders**
  Matches with Conair feeder models BF0 (low to medium) throughputs and BF6 (medium to high) throughputs.
- **Mix resins/additives on process**
  Continuous mixing enhances the blend consistently to the process machine when throat feeding colorants and additives.

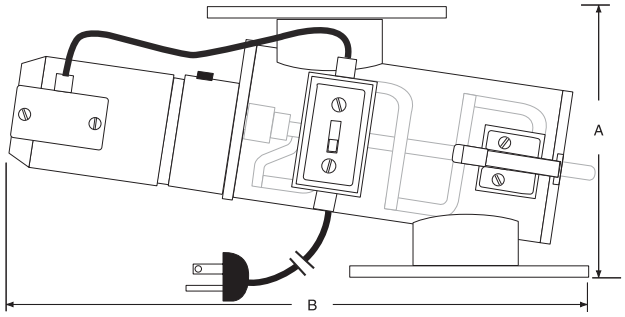


In-line and offset Intermixers provide an inexpensive way to mix material at the machine throat.

SPECIFICATIONS



INLINE INTERMIXER

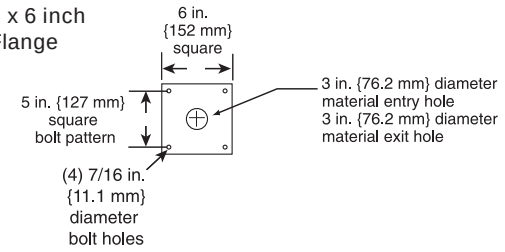


OFFSET INTERMIXER

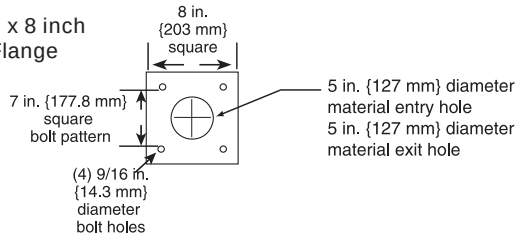
MODELS	INLINE		OFFSET	
	110V	230V	110V	230V
Performance characteristics				
Mixer speed rpm	42	47	42	47
Volumetric capacity	0.1	0.1	0.15	0.15
Dimensions inches {mm}				
A - Height	11 {279}	11 {279}	10.75 {273}	10.75 {273}
B - Length	16 {406}	16.875 {429}	20.125 {511}	21 {533}
Width	10.25 {260}	10.25 {260}	10.25 {260}	10.25 {260}
Top/bottom mounting flange*	6 X 6 or 8 X 8 specify to match selected feeder			
Weight lbs {kg}				
Installed	46 {21}	46 {21}	59 {27}	59 {27}
Shipping	65 {30}	65 {30}	70 {32}	70 {32}
Voltage Total amps				
110V/1 phase/60 Hz	3.6	NA	3.6	NA
230V/1phase/50 or 60 Hz	NA	0.78	NA	0.78

MOUNTING FLANGE PATTERNS

6 x 6 inch Flange



8 x 8 inch Flange

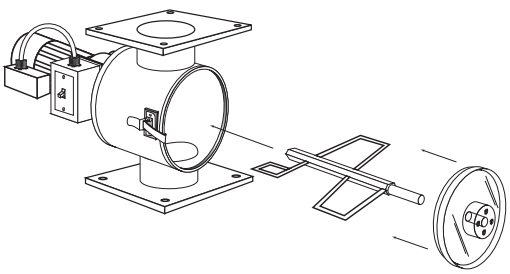


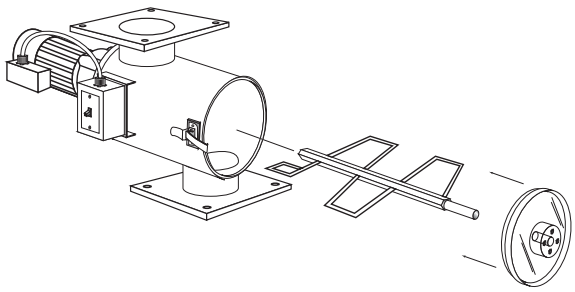
SPECIFICATION NOTES:

* Inline intermixers are only available with 3 inch {76.2 mm} diameter material holes and 6 x 6 inch {152 x 152 mm} flanges. Offset intermixers are available with 5 inch {127 mm} or 3 inch {76.2 mm} diameter material holes and 6 x 6 inch {152 x 152 mm} or 8 x 8 inch {203 x 203 mm} flanges.

Check with a Conair representative for the most current information.

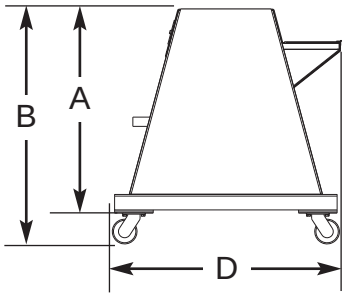
Inline and offset intermixers are easily disassembled for quick and easy cleaning.

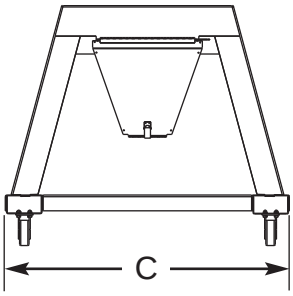


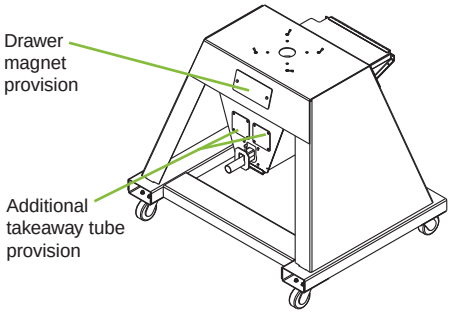


FOR ELEVATING BLENDING EQUIPMENT

- **Sturdy construction**
  Long-lasting construction provides years of operation.
- **Easy cleanout**
  Built-in reservoir for fast and thorough material clean out.
- **Easy to place and move**
  New design incorporates fork-lift user-friendly provision.
- **Optional casters**
  Make movement easy. (Model TBBS01 only)







MODELS	TBBS01	TBBS02	TBBS05
Blender applications	TB45, TB100	TB45, TB100, TB250, TB500	TB100, TB250, TB500, TB900
Dimensions in {mm}			
A - Height	33.0 {838}	32.5 {826}	40 {1016}
B - Height with casters	37.9 {963}	NA	NA
C - Width	45.0 {1143}	53.5 {1359}	60 {1524}
D - Depth	36.7 {932}	48.0 {1219}	48.4 {1229}
Reservoir capacity ft³{m³}	1 {0.02}	2 {0.05}	5 {0.14}
Takeaway tube OD in {mm}*	1.5, 1.75, 2 {38.1, 44.5, 50.8}	1.5, 1.75, 2, 2.25, 2.5, 3 {38.1, 44.5, 50.8, 57.2, 63.5, 76.2}	1.5, 1.75, 2, 2.25, 2.5, 3 {38.1, 44.5, 50.8, 57.2, 63.5, 76.2}

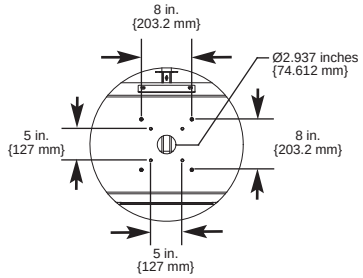
SPECIFICATION NOTES:

* Blender stands are provided with one take-away tube as standard. Up to two additional takeaway tubes can be included as an option.

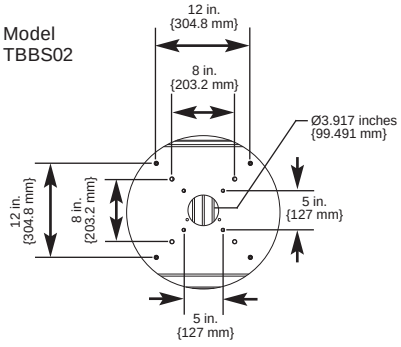
Specifications can change without notice. Check with a Conair representative for the most current information.

MOUNTING PATTERN

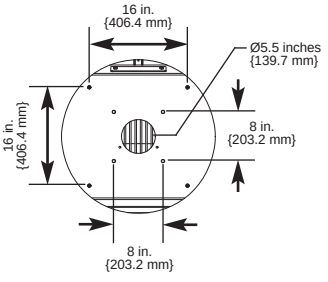
Model TBBS01



Model TBBS02



Model TBBS05



FOR ELEVATING AUXILIARY EQUIPMENT

- **Standard and custom sizes**
  Ensure the perfect fit for your equipment.
- **Full welded construction**
  Provides strength and durability.
- **Mounting pads on legs**
  Allow stand to be bolted to the floor.
- **Optional casters***
  Make movement easy.

Model FS2, shown at right, and Model FS3 feature angle iron construction. Model FS1 has a solid sheet metal top surface with an opening for the adapter plate.

When ordering, please detail the equipment to be mounted on the stand so that the correct adapter plate may be specified.

A 1/4"-thick **adapter plate**, matching the bolt pattern of the auxiliary equipment, is bolted to the top of the floor stand.

SPECIFICATIONS

	STANDARD MODELS			CUSTOM MODELS		
MODEL	FS1	FS2	FS3	FS1	FS2	FS3
MAXIMUM WEIGHT CAPABILITY / lb {kg}	1000 {454}	2000 {907}	3000 {1361}	1000 {454}	2000 {907}	3000 {1361}
OUTSIDE DIMENSIONS / in {mm}						
Height	29 {737}	66 {1676}	66 {1676}	12–42 {305–1067}	18–66 {457–1676}	18–66 {457–1676}
Width	30 {762}	60 {1524}	60 {1524}	24–36 {610–914}	38–70 {965–1778}	40–70 {1016–1778}
Depth	30 {762}	60 {1524}	60 {1524}	24–36 {61—914}	38–70 {965–1778}	40–70 {1016–1778}
CASTERS* Casters may be added *only* if the combined stacked height of the mounted equipment is *less* than 3.5 times the selected width or depth. If casters are added, specify desired height, less caster dimension (5" for FS1, 6" for FS2).						
Addition to Height / in {mm}	+5 {127}	+6 {152}	Not Available	+5 {127}	+6 {152}	Not Available
INSIDE DIMENSIONS / in {mm} For Custom Models, subtract the value shown from the outside dimensions.						
Height	26.75 {679}	58.25 {1480}	59.25 {1505}	H – 2.25 {57}	H – 7.75 {197}	H – 6.75 {171}
Width	24 {610}	46.5 {1181}	51 {1295}	W – 6 {152}	W – 13.5 {343}	W – 9 {229}
Depth	25 {635}	51.25 {1302}	51 {1295}	D – 5 {127}	D – 8.75 {222}	D – 9 {229}

SPECIFICATION NOTES:

Specifications can change without notice. Check with a Conair representative for the most current information.

Model TF-LQ weigh platform with liquid color drum

GRAVIMETRIC PRECISION FOR LIQUID COLORING

Put gravimetric precision to work on your liquid additives with the Conair TrueFeed LQ series liquid dispensing system. By weighing the colorant storage vessel while metering, the TrueFeed LQ model delivers consistent, precise gravimetric dosing of colorant to the machine throat, or throat mounted mixer.

The TrueFeed LQ Feeding System can be used for injection molding or extrusion and includes a user friendly, multi-language control, a rugged weigh scale platform for your colorant supply and a choice of dispensers.

SIMPLE, CLEAN, PRECISE LIQUID DOSING

The TrueFeed LQ utilizes precision peristaltic liquid color pumps while measuring the loss in weight of the colorant supply to deliver precision dosing never before possible. No calibration is required since the additive is continuously weighed and metering is adjusted automatically. Variations in liquid viscosity and even air in the dispensing line are automatically self-compensated.

Colorant can be metered directly to the machine throat, to be mixed with base materials during processing. The TrueFeed LQ can also operate with a throat mounted mixer to assure and visually confirm thorough dispersion and mixing of ingredients before they enter the machine throat.

Meter by weight

By carefully tracking the loss in weight of the colorant supply the TrueFeed LQ delivers accuracy in liquid dosing never before possible.

Reduce colorant cost, increase color precision

Precision color weighing eliminates costly under or over-dosing, saving you colorant, time, material and money.

Simple to use

For molders, simply enter letdown percentage, shot weight, screw recovery time and press start. For extruders, run open loop or precisely track the metering rate with the extruder speed.

Feed it your way

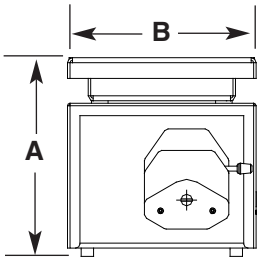
Use the simple, rugged throat adaptor plate with metering nozzle or feed to a throat mounted mixer to assure thorough mixing with your base materials.

Make it portable

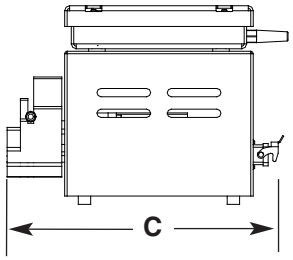
The optional trolley provides easy transport of your colorant, the TrueFeed control and the weigh scale/pump for a compact, portable metering system.

TRUEFEED LQ MODEL

SPECIFICATIONS



Front view



Side view

MODEL	TF-LQ	
Pump type	**Low rate**	**High rate**
Performance characteristics		
Flow rate*		
Minimum	0.22 ml/min	1.7 ml/min
Maximum	60 ml/min=1.0 ml/sec	792 ml/min=13.2 ml/sec
Dimensions inches {mm}		
Weigh platform		
A- Height	9.45 {240}	9.45 {240}
B- Width	8.98 {228}	8.98 {228}
C- Depth (with pump)	12.90 {327.60}	12.90 {327.60}
Throat adaptor inches {mm} square		
Large		
Outside dimensions	7.09 {180}	7.09 {180}
Throat opening	3.54 {90}	3.54 {90}
Small		
Outside dimensions	5.9 {150}	5.9{150}
Throat opening	1.77 {45}	1.77 {45}
Weight lb {kg}		
Weigh platform	15 {68}	15 {68}
Voltage total watts		
80-260 VAC, 50/60 Hz	80	80

SPECIFICATION NOTES

* Flow rate is measured using water 71.6°F {22°C} with Norprene and Tygon tubing. Multiple hoses are supplied for optimizing feeding rate.

Input signals: Potential free (24 VDC) or extruder tachometer (0-30 VDC) start input.

Communications: TCP/IP, Modbus, CANbus.

Control languages include English, German, Spanish, French, Polish and Italian.

Specifications may change without notice. Check with a Conair representative for the most current information.

FEATURES

Pump features

- A choice of peristaltic pumps to match colorant delivery tube diameters.
- Easy, safe tubing placement into pump mechanism.
- Automatic check valve prevents back-flow of colorant.
- Pump is integrated into weigh scale platform.

Weigh platform features

- Load cell, loss-in-weight detection of colorant supply.
- Accommodates all common supply vessels with simple flat platform scale.
- Weigh platform may be separated from pump housing if desired.
- Precision stepper motor drives peristaltic pump.

OPTIONS

- **Aluminum throat adaptors**- Available in two sizes, throat adapters fit to the machine throat below your material supply equipment to deliver colorant directly into the material flow. A nozzle with spigot valve is included. The universal "star" mounting pattern provides easy installation without custom drilling.

- **Intermixers**- A choice of two robust intermixers may be used to pre-mix colorant and base material(s) above the machine throat. The inline model provides basic mixing, while the offset model extends material flow for increased mixing. Both include sight glass cleanout end caps, thick mounting plates, rugged gear motors, an on/off switch with over load protection and removable agitators.

Inline intermixer

Offset intermixer

- The convenient TrueFeed transport trolley consolidates the LQ weigh platform, pump, control and a liquid colorant buffer tank onto a rugged, yet mobile cart for portability between machines.
- Color usage can be accurately tracked by the use of Conair's powerful MC-LAN software, developed specifically for gravimetric additive metering feeders.

TrueFeed Touch Control

PRECISELY **CONTROLLED DOSING** IN-LINE

Selecting the touch screen control option for your gravimetric feeder gives precise control, optimum efficiency, and extreme savings. Using continuous loss-in-weight measuring, this TrueFeed Touch Control continuously calibrates dosages and adjusts automatically, ensuring the best results with the highest accuracy and efficiency.

This 8-inch touch screen control is now available for all Conair TrueFeed Gravimetric Feeders, allowing very simple operation of single and multi-component systems.

USER-FRIENDLY TOUCH SCREEN FEEDER CONTROL

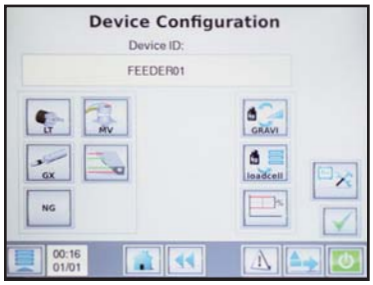
Built with stainless steel housing, the robust TrueFeed Touch is the next generation of gravimetric dosing control.

In addition to being the most user-friendly and intuitive feeder control to date, the TrueFeed Touch allows for double station setup all on one easy to understand screen. Make changes to recipes, weights, percentages and times all from the main screen, while viewing live data.

Device configuration is simple thanks to self-explanatory menus, intuitive icons, and automatic calibration features. This control has an easy setup procedure for each of the additives, making the process from installation to operation much quicker.

Control for extrusion allows setpoint percentage adjustment, and auto synchronization to the extruder speed. Control for injection molding allows setpoint percentage adjustment, and auto metering time synchronization. For both extrusion and injection applications, dosing calculations just became a thing of the past.

Touch screen simplicity



The full-color touch screen allows for simple, intuitive screen navigation. It visually displays parameters as well as alarm descriptions, calibration process, current system status, and allows for download of history to a flash drive.

Multiple unit control

The TrueFeed Touch control advantage is not only that it is easier to use, it also allows for control of multiple feeders.

Up to 50% savings of additives

Saving up to 50% of additives yields a huge return on your investment.

Simple data storage and transfer

The TrueFeed Touch utilizes internal recipe and data storage, which can be transferred via USB. Software updates and recipe exchanges are also completed using the simple and versatile USB. External communication is through Ethernet Modbus TCP/IP, for easy connectivity.

TRUEFEED TOUCH CONTROL

FEATURES

DOUBLE STATION SETUP

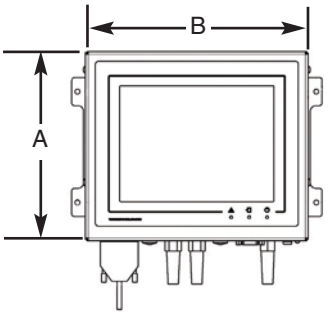
- A huge advantage when working with multiple feeders, the new TrueFeed Touch allows you to view, and control both feeders on the same screen.

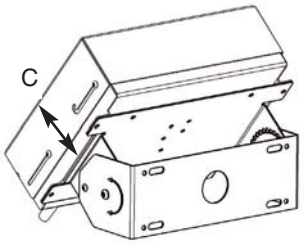
FOUR COMPONENT SETUP

- Now processors can view four components all on one screen, and make changes to each component as necessary. From one screen, you can see which materials are currently filling and dosing.

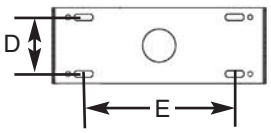
SPECIFICATIONS

MODEL	TrueFeed Touch Control
Performance characteristics	
Power supply	95-250 VAC, 50-60 Hz
Power consumption	150 watt maximum
Operating temperature	14 - 140°F {-10 - 60°C}
Weighing	20 bits A/D resolution
Input signals:	
Start input	Potential free, 24VDC, 0-30 VDC Tacho
Output signals:	
Warning/alarm/filling valve	24 VDC
Alarm, running	Potential free relay
Communications:	
Modbus TCP/IP	Standard
VNC (Virtual Network Client)	Optional
Data storage	Internal or via USB
Software update and recipe exchange	via USB
Dimensions inches {mm}	
A - Height	7.91 {247}
B - Width	9.29 {236}
C - Depth	3.39 {86}
D - Control bracket bolt pattern	2.36 {60}
E - Control bracket bolt pattern	6.30 {160}





optional tilt mounting bracket



mounting bracket bolt pattern

SPECIFICATION NOTES:

Specifications may change without notice. Consult a Conair representative for the most current information.

Model TBI-900
2-component
Insulated
Blender

KEEP IT DRY WHILE YOU BLEND

When process flow specifications dictate that materials are dried and then blended, your process can suffer from unwanted moisture regain in your dried material. Standard blenders, incapable of dealing with hot material can operate erratically, with seal and/or bearing failures, heat loss, sensor malfunctions and hot surface hazards.

Conair TBI Insulated Blenders are specifically outfitted to handle hot material safely, reliably and most importantly, prevent moisture from re-saturating your dried material.

MATERIAL RETAINS HEAT AND STAYS DRY

Built upon the highly accurate and reliable TrueBlend gravimetric batch blender design, the TBI series assures that all ingredients being blended do not lose heat, nor regain moisture as they are inventoried, blended and mixed. The model TBI provides insulated hoppers, blanketed with dry air and special high heat components that accompany a wide range of standard TB options like vacuum loading systems that can be operated from within the blender control, flow aids, easy cleanout and intuitive touch screen control. Material usage reports and other data logging are all available via TrueBlend reporting software. All TrueBlend controls can be networked through Conair's exclusive ControlWorks networking software.

- **Built to handle hot material**
  Blender is specifically designed for material temperatures up to 375°F {177°C} with insulated drying hopper supply bins.
- **Designed to prevent moisture regain**
  Hot air recirculation through the supply bins keeps materials dry and prevents the re-introduction of wet, ambient air.
- **High temperature construction**
  Load cells, level sensors and air cylinders are specified for their ability to stand up to elevated temperatures. Electronics are isolated from elevated temperatures.
- **A full range of models**
  Models range from 1000 to 9000 gram batches.
- **Fully-featured precision blenders**
  Gravimetric accuracy to ½ of 1%. Automatic self-calibration compensates for material and flow variations. Up to 50 recipes can be stored in the 5.7 inch touch screen control. Loaders or receivers can be controlled right from the blender control.

TRUEBLEND™ TBI INSULATED MODELS

FEATURES

Keep it hot and sealed
Supply hoppers are insulated, sealed and equipped with large cleanout doors with strip sight glasses.

Short circuit
By-pass/drain line allows priming the process with unblended material and/or draining supply hopper(s).

Industrial mixer
Mixing chamber includes a heavy-duty agitator, duty-rated for demanding PET materials plus a high temperature demand sensor.

Firm footing
Rugged support frame may be customized for mezzanine, on-the-throat or beside the process mounting.

Add conveying
High temperature loading equipment can be specified and controlled by the TrueBlend control.

Keep it dry
Dry air is blanketed throughout the supply hoppers to prevent moisture regain as materials wait to be blended.

Fully enclosed
Weigh hopper is protected inside enclosure, but is easily accessed or removed for inspection and cleaning.

Keep inventory dry
Optional, insulated receiving hopper retains heat and dryness while blended material awaits processing.

PERFECT FOR RECYCLED PET

Producers of PET sheet, strapping and other products using recycled polyesters can reap significant energy savings and productivity benefits with insulated TBI blenders. These blenders allow separation of virgin and recycled materials until just before they are fed to the feed throat, with these benefits:

- Contamination or other problems in the recycled content does not require shutting down the entire production line. Production can continue on one material, while the questionable ingredient is corrected.
- Virgin and regrind, with significantly different bulk densities and flow characteristics, will reach the machine throat with far less separation (common to drying and conveying), by blending them last.
- Retaining drying heat throughout the blending process means less heat is required during processing, saving significant energy.

SPECIFY YOUR TBI BLENDER

TBI batch blenders are capable of handling materials up to 375°F {177 ºC} and may be specified:

- Batches from 1000 to 9000 grams.
- Up to 6 components.
- Conveying equipment for supply and takeaway.
- By-pass and drain lines.
- Mezzanine, floor or machine mounting.

Each TBI includes these features for long life, blending of hot materials:

- High temperature air cylinders and hosing.
- High temperature load cells.
- High temperature level sensor.
- Tempered sight glasses.

Heat Transfer

TEMPERATURE CONTROLLERS

Thermolator® TW Series H-1
Thermolator® TW-CD Series H-5
Thermolator® microTemp (MTC-1) H-7
Thermolator® vacuTrac (VTR1-DI and VTR2-DI) H-9
Positive/Negative Pressure
Thermolator® heatTrac (HTR1-500) H-13
Oil Temperature Controller
Thermolator® TW-HT H-17
High Temperature (Water)
Thermolator® TW-HTM H-21
High Temperature Maximum (Water)
Thermolator® TW-ALT H-25
Alternating High Temperature

PORTABLE CHILLERS

ECM Air-Cooled Series (mini) H-29
ECA Air-Cooled Series H-31
ECW Water-Cooled Series H-35

COOLING TOWER SYSTEMS

E1 Series Forced Draft Models 10 to 75 Tons H-39
E2 Series Forced Draft Models 55 to 250 Tons H-41
E3 Series Forced Draft Models 250 to 500 Tons H-43
E4 Series Forced Draft Models 300 to 810 Tons H-45

CENTRAL CHILLERS

Air-Cooled Models ESA-22 to ESA-136 ..... H-47
Air-Cooled Models A-156SK to A-527SK H-51
Water-Cooled Models W-86SK to W-163SK H-55
Water-Cooled Models W-205SK-W-481SK H-59

PUMP TANKS

Polymer Pump Tank
Models PT200, PT450, PT1400 ..... H-63
Steel Pump Tank
Models 666, 866, 1077 and 1477 ..... H-67

ACCESSORIES

Stainless Steel CFS Series Water Strainers H-71
SMF Tower Water Filter System H-73
Tower Isolation PF Series Heat Exchangers H-75

SYSTEM SOLUTIONS

Central Cooling Systems H-77

Heat Transfer Quick Reference

MODELS	Temperature Range °F	Process Fluid	Pump Range (Hp)	Heater Range (kW)	No. of Zones	Cooling Method
Temperature Control Units						
Thermolator TW – Direct Injection	32 to 250	water	0.75 to 7.5	9 to 48	1 or 2	direct injection
Thermolator TW – Closed Circuit	32 to 250	water	0.75 to 7.5	9 to 24	1 or 2	closed circuit
Thermolator TW – Isolated Circuit	32 to 180	water	0.75 to 7.5	9 to 24	1 or 2	isolated circuit
Thermolator TW-CD Series	32 to 250	water	0.75	9 to 24	1	direct injection
Thermolator microTemp (MTC)	32 to 250	water	0.33 to 0.5	3 or 6	1	direct injection
Thermolator vacuTrac (VTR)	32 to 180	water	2.0 to 7.5	9 to 12	1	direct injection
Thermolator heaTrac (HTR)	50 to 500	oil	1.0 to 3.0	6 to 18	1	isolated circuit
Thermolator (TW-HT) High Temperature	50 to 392	water	0.75 to 15	6 to 108	1	isolated circuit
Thermolator (TW-HTM) High Temperature max.	50 to 437	water	0.75	6	1	isolated circuit
Thermolator (TW-ALT)	50 to 392	water	1.3 to 10	36 to 144	1	isolated circuit
Alternating High Temperature						alternating temp.

MODELS	Capacity Range (tons)	Pump Range (Hp)	Standard Process Flow Rate (GPM)	Cooling Method
Portable Chillers				
ECM (Air-Cooled Mini)	0.41 & 0.70	0.25 & 0.50	0.9 & 1.7	air
ECA (Air-Cooled)	1.5 to 29.4	0.75 to 15	4 to 73	air
ECW (Water-Cooled)	1.6 to 31.9	0.75 to 15	4 to 79	water

MODELS	Capacity Range (tons)	Fan Motor Range (Hp)	Standard Process Flow Rate (GPM)
Cooling Towers			
E1 Series	10 to 75	1.0 to 7.5	30 to 225
E2 Series	55 to 250	2.0 to 15.0	165 to 750
E3 Series	250 to 500	2x5 to 3x10	750 to 1500
E4 Series	300 to 810	2x5 to 4x15	900 to 2430

MODELS	Capacity Range (tons)	Compressor Range (Hp)	Compressor Type	Cooling Method
Central Chillers				
ESA (Small Air-Cooled)	22 to 125	2x10 to 4x30	scroll	air
A-SK (Large Air-Cooled)	154 to 533	2x70 to 4x125	screw	air
W-SK (Medium Water-Cooled)	86 to 163	2x35 to 1x60 & 1x70	screw	water
W-SK (Large Water-Cooled)	205 to 481	1x200 to 1x500	screw	water

MODELS	Tank Capacity Range (gal)	Chiller Capacity Range (tons)	Tower Capacity Range (tons)
Pump Tanks			
Polymer PT Series	200 to 1400	1.5 to 230	10 to 125
(Stainless) Steel Series	1525 to 5010	250 to 1050	50 to 560

MODELS	Process Flow Rate (GPM)	Chiller Capacity Range (tons)	Tower Capacity Range (tons)
Accessories			
Full Flow Filters (CFS Series)	10 to 1000	10 to 850	10 to 670
Sand and Gravel Units (SMF Series)	N/A	N/A	10 to 1590
Isolation Heat Exchangers (PF Series)	60 to 1900	N/A	20 to 630

TW-1 Thermolator

CONSISTENT, RELIABLE TEMPERATURE CONTROL

The Thermolator® TW Series is designed to maintain the process temperature with circulated water that has been heated or cooled to the required setpoint.

All models offer incoloy heaters; silicon carbide pump seals; pressure gauges; easy-to-use microprocessor controls and tool-free access panels for fast removal. We offer options that include process line purge; a choice of temperature control points; autostart capability; SPI communications; and remote-mounted operator panels.

THE BROADEST LINE IN THE INDUSTRY

Units are available in direct injection, closed circuit or isolated circuit cooling; single-zone and dual-zone configurations. Pump sizes to 7.5 Hp per zone. Heaters to 48 kW per zone. Process temperatures to 250°F {121°C}.

We have a Thermolator® model to fit your application.

Dual-zone models can control two process temperatures at different locations in a mold. Two-zone models have common cooling water manifolds and electrical connections for convenience.

Isolated circuit units keep the process fluid separated from the cooling water, allowing you to use two different fluid sources.

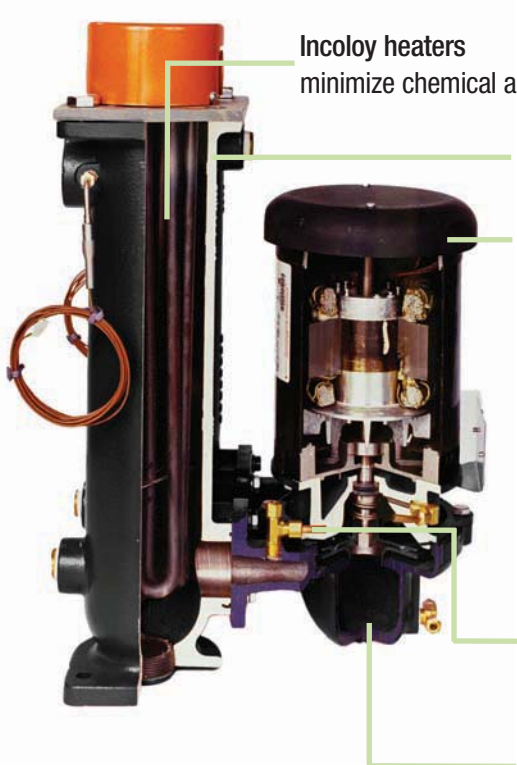
- **State-of-the-art controls**
  Microprocessor controls with adjustable tuning parameters offer uniform temperature control, regardless of external loading.
- **High-efficiency pumps**
  Pump sizes range from 3/4 to 7.5 Hp. All feature silicon carbide seals, seal flush lines and sediment traps for extended pump seal life. Drip covers are included to protect the motor from water damage. Stainless steel impellers are standard on 3/4 through 2 Hp pumps.
- **Incoloy heaters**
  Standard on all models, incoloy heaters resist damage from high temperature and chemicals.
- **“Casters up” warranty**
  Three full years on all Thermolator® TW Series models. And a full four-year warranty on the TW-1 and TW-2 controls.

THERMOLATOR® TW SERIES
WATER TEMPERATURE CONTROLLER

FEATURES

Built-in pressure gauges
standard for all Conair TW Series Thermolators.

Two-zone models
allow independent control of dual cooling zones with the convenience of common cooling water manifolds and electrical connections. (TW, TW-1 and TW-2 only.)



Incoloy heaters
minimize chemical and high temperature damage.

Two-piece cast construction
eliminates potential leak points.

Motor drip cover
protects motor windings from moisture damage.

High efficiency pumps
from 3/4 to 7.5 Hp. Stainless steel pump impellers on 3/4 to 2 Hp pumps. Industry standard cast iron pump impellers on 3 Hp to 7.5 Hp models.

Silicon carbide pump seals standard on all models.

Pump seal flush line
continuously cleans the pump seal for extended life.

Built-in sediment trap
settles contaminants away from the pump seals.

OPTIONS

Modulating Cooling Valve
The slow open/close cycle time eliminates thermal shock and water hammer from your process circuit.

Compressed Air Purge Valve
Quickly evacuates fluid from the process circuit, allowing for faster, cleaner disconnection of the temperature controller from molds and hoses.

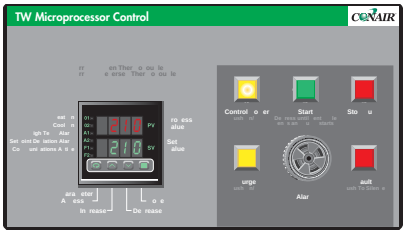
Stacking Rack
Save floor space by stacking Thermolators two-high. The stacking rack can be used only with single-zone models in 28-inch high cabinets.

Alarm packages
Call attention to alarm conditions with a bell, strobe light or sonalert.

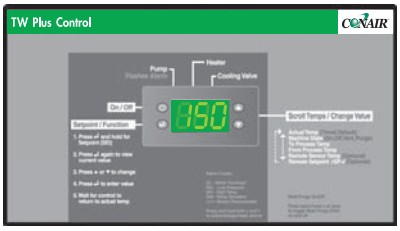
Corrosion Resistance Package
Protect components from damage with bronze external fittings, non-ferrous pump impellers, stainless steel heater flanges and corrosion-resistant coating on all interior fluid surfaces, including heater tanks and pump volute.

OPTIONS

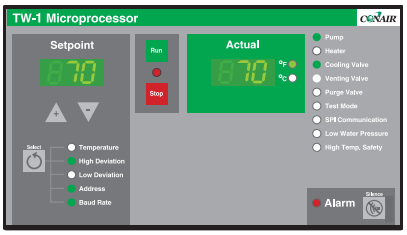
Choose the control you need....TW, TW Plus, TW-1 and TW-2



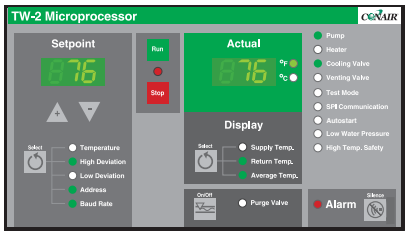
TW CONTROL



TW Plus CONTROL



TW-1 CONTROL



TW-2 CONTROL

COOLING TYPE	TW CONTROL	TW PLUS CONTROL	TW-1 CONTROL	TW-2
Direct In ection	●	●	●	●
Closed Circuit			O	O
Isolated Circuit			O	O
CONSTRUCTION				
Standard Pump Range	3 4 to 7.5 Hp	3 4 or 2 Hp	3 4 to 7.5 Hp	3 4 to 7.5 Hp
Standard Heater Range	9 to 36 kW	12 kW	9 to 48 kW	9 to 48 kW
Cast Heater Pump	●	●	●	●
Incoloy Heaters	●	●	●	●
Silicon Carbide Seal	●	●	●	●
Seal Flush Line	●	●	●	●
Pressure Gauges	●	●	●	●
CONTROLS				
PID Control	●	(PI only)	●	●
Setpoint Actual Display	●	(Toggled)	●	●
Password Protection	●		●	●
RS485 SPI Communication			O	O
Auto Start Capability				●
High Temperature Safety	O		O	O
Purge Valve Control	O	●	O	●
Phase Detection Circuit				●
Choice of Control Points		●		●
Remote-Mount Control				●
STATUS ALARM LIGHTS				
Panel-mounted status lights	3 small LED s	3 small LED s	15 large LED s	19 small LED s
Panel-mounted alarm lights	2 small LED s	5 Alpha Text	11 large LED s	11 large LED s
Audible alarm Strobe light	O	O	O	O

● = Standard
O = Optional

PID Control with auto tune function

Auto Start works with external timers or switches for convenient pre-heating of molds.

Purge On/Off button included on control.

Phase detection indicates incorrect pump rotation or an open electrical leg.

Control temperature based on temperature at process supply or return points, or an average of the two points.

THERMOLATOR® TW SERIES
WATER TEMPERATURE CONTROLLER

SPECIFICATIONS

PERFORMANCE CHARACTERISTICS

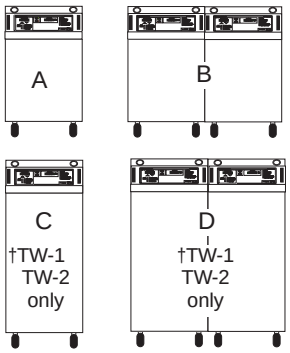
Models	TW-DI‡, any control	TW-CC , TW1 or TW2 control	TW-IC** TW1 or TW2 control
Minimum setpoint temperature °F {°C}	32 {0}	32 {0}	32 {0}
Maximum setpoint temperature °F {°C}	250 {121}	250 {121}	180 {82}
Minimum operating temperature °F {°C}	Approximately 20° {11°} above the cooling water inlet temperature*		
Standard cooling valve size inches {mm}	1/4 {6.35}	3/4 {19.05}	3/4 {19.05}
Available pump sizes	0.75, 1, 2, 3, 5 or 7.5 Hp {0.56, 0.75, 1.49, 2.24, 3.73 or 5.59 kW}		
Available heater sizes	9, 12, 18, 24, 36 or 48 kW	9, 12, 18 or 24 kW	

PUMP PERFORMANCE - Consult your Conair representative for pump performance characteristics at other operating points.

Pump	3 4 Hp {0.56 kW}	1 Hp {0.75 kW}	2 Hp {1.49 kW}	3 Hp {2.24 kW}	5 Hp {3.73 kW}	7.5 Hp {5.59 kW}
Nominal flow gpm {lpm}	40 {151}	45 {170}	55 {208}	80 {303}	100 {379}	115 {435}
Pressure@ nominal flow psi {kg/cm²}	17 {1.2}	18 {1.3}	31 {2.2}	35 {2.5}	43 {3}	51 {3.6}

CABINET STYLE REFERENCE

Heater	Voltage Selection	Single Zone	Dual Zone
Direct In ection (DI)			
9, 12, 18 or 24 kW	208, 230, 460, 575	A	B
36 kW†	208 or 230	C	D
36 kW	460 or 575	A	B
48 kW†	208, 230, 460, 575	C	D
Closed Circuit (CC)			
9 or 12 kW	208, 230, 460, 575	A	B
18 or 24 kW	208, 230, 460, 575	C	D
Isolated Circuit (IC)			
9, 12, 18 or 24 kW	208, 230, 460, 575	C	D



WATER CONNECTIONS

All models
NPT inches (female)

To/From process	1.25
Cooling water in/out	0.75

DIMENSIONS in. {mm}

Cabinet Style	A	B	C	D
Height	28.0 {710}	28.0 {710}	43.0 {1090}	43.0 {1090}
Depth	22.5 {570}	22.5 {570}	31.5 {800}	31.5 {800}
Width	13.75 {350}	27.5 {700}	14.0 {355}	28.0 {710}

SHIPPING WEIGHT RANGES lb {kg} Weights vary depending on cabinet size and cooling type (DI, CC or IC).

Pump	Single Zone Min	Single Zone Max	Dual Zone Min	Dual Zone Max
0.75 Hp {0.56 kW}	240 {109}	300 {136}	480 {218}	600 {272}
1 Hp {0.75 kW}	240 {109}	300 {136}	480 {218}	600 {272}
2 Hp {1.49 kW}	250 {113}	310 {141}	500 {226}	620 {282}
3 Hp {2.24 kW}	260 {118}	320 {145}	520 {236}	640 {290}
5 Hp {3.73 kW}	270 {122}	330 {150}	540 {244}	660 {300}
7.5 Hp {5.59 kW}	280 {127}	340 {154}	560 {254}	680 {308}

TOTAL FULL LOAD AMPS PER ZONE All voltages are 3 phase, 60 Hz.

Heater	9 kW				12 kW				18 kW				24 kW				36 kW				48 kW†			
Voltage	208V	230V	460V	575V	208V	230V	460V	575V	208V	230V	460V	575V	208V	230V	460V	575V	208V	230V	460V	575V	208V	230V	460V	575V
Pump																								
0.75 Hp {0.56 kW}	28.9	26.2	13.1	10.5	37.3	33.8	16.9	13.5	54.0	48.8	24.4	19.5	70.7	64.0	32	25.6	104.0	94.0	47.0	37.6	137.0	124.0	62.1	49.7
1 Hp {0.75 kW}	29.4	26.6	13.3	10.6	37.8	34.2	17.1	13.7	54.4	49.2	24.6	19.7	71.2	64.4	32.2	25.8	104.3	94.4	47.2	37.8	137.7	124.6	62.3	49.6
2 Hp {1.49 kW}	31.8	28.8	14.4	11.5	40.2	36.4	18.2	14.6	56.8	51.4	25.7	20.6	73.6	66.6	33.3	26.6	106.7	96.6	48.3	38.6	140	126.8	63.4	50.7
3 Hp {2.24 kW}	34.7	31.4	15.7	12.6	43.1	39.0	19.5	15.6	59.7	54.0	27.0	21.6	76.5	69.2	34.6	27.7	109.6	99.2	49.6	39.7	143	129.4	64.7	51.8
5 Hp {3.73 kW}	38.5	34.8	17.4	13.9	46.9	42.4	21.2	17.0	63.4	57.4	28.7	23	80.2	72.6	36.3	29.0	113.4	102.6	51.3	41.0	146.7	132.8	66.4	53.1
7.5 Hp {5.59 kW}	45.7	41.4	20.7	16.6	54.1	49.0	24.5	19.6	70.7	64.0	32.0	25.6	87.5	79.2	39.6	31.7	120.7	109.2	54.6	43.7	154	139.4	69.7	55.8

SPECIFICATION NOTES:

* Lower operating temperatures can be obtained with larger cooling valves.

† Available in tall cabinet only.

‡ Direct Inject (DI) cooling injects cooling water directly into the process loop upon demand.
Closed Circuit (CC) cooling injects cooling water into the process loop only during the initial filling or when make-up water is needed.

** Isolated Circuit (IC) cooling separates the cooling water from the process fluid, which is held in a 3-gallon reservoir.

Specifications can change without notice. Check with a Conair representative for the most current information.

Model MTC-1

COMPACT, RELIABLE TEMPERATURE CONTROLLER

The microTemp water temperature controller is designed to maintain the process temperature with circulated water that has been heated or cooled to the required setpoint.

The microTemp is manufactured specifically for small processing machines, such as 80-ton or smaller injection molding machines.

SOLID CONSTRUCTION, EASY MAINTENANCE

The microTemp is a direct injection, single-zone unit that can heat or cool water to 250°F {121°C}. Pump sizes are available to 1/2 Hp, heaters to 6 kW.

Three-piece cast construction nearly eliminates leak-prone pipe fittings.

IEC rated contactors are field tested and offer proven reliability.

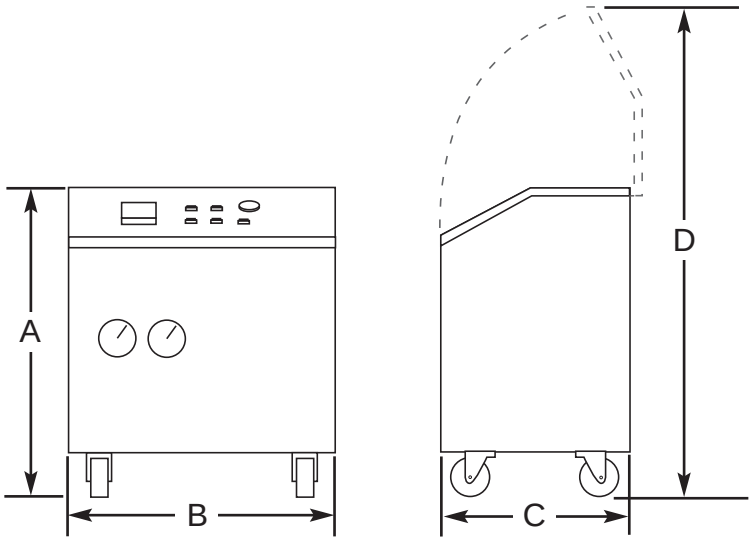
The microprocessor control is a full function, automatic tuning PID controller designed for precise temperature control.

Options include high-temperature safety switch; prewired alarm package with audible and visual warnings; SPI communications; and a compressed air purge circuit to speed up mold changes and help conserve water.

- **Compact, low-profile cabinet**
  Save valuable floor space with one of the smallest temperature controllers available.
- **Lift-off access panel**
  Convenient access to internal components. Turn one fastener by hand, and the cabinet lifts away for easy servicing. The hinged operator console offers tool-free access to electrical components.
- **State-of-the-art controls**
  The off-the-shelf, plug-in microprocessor control is easy to use and simultaneously displays process and setpoint temperatures.
- **Incoloy heaters**
  Standard on the microTemp, incoloy heaters offer better resistance to chemical degradation than stainless steel and better heat strength characteristics than copper.
- **Two-year warranty**
  From the casters up, there is a two-year warranty.

THERMOLATOR® MICROTEMP (MTC-1) WATER TEMPERATURE CONTROLLER

SPECIFICATIONS



MODEL	MTC-1			
Performance characteristics				
Minimum operating temperature*	20°F {-7°C} above cooling water			
Minimum setpoint temperature	32°F {0°C}			
Maximum setpoint temperature	250°F {121°C}			
Pump performance				
Pump Hp {kW}	1/3 Hp {0.25}		1/2 Hp {0.37}	
Heater element	3 kW	6 kW	3 kW	6 kW
Nominal flow gpm {l/min}	10 {38}		25 {95}	
Pressure@nominal flow psi {bar}	15 {1.0}		13 {0.9}	
Dimensions inches {mm}				
A - Height	18 {457}			
B - Width	15.5 {394}			
C - Depth	11 {279}			
D - Height with hinged console open	29 {737}			
Weight lb {kg}				
Pump size	1/3 Hp {0.25}		1/2 Hp {0.37}	
Operating	75 {34}		79 {36}	
Shipping	85 {39}		89 {40}	
Water connections NPT (female)				
Process	3/4 inch			
Cooling	1/2 inch			

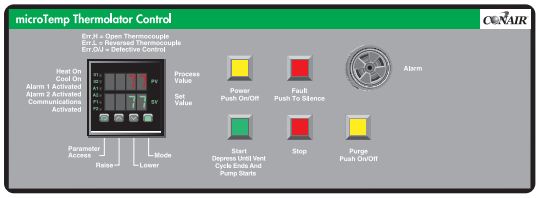
TOTAL FULL LOAD AMPS (all voltages are 3 phase, 60 Hz)

Heater	3 kW			6 kW		
Voltage	208V	230V	460V	208V	230V	460V
Pump						
1/3 Hp {0.25 kW}	13.7	12.4	6.2	23.7	21.4	10.7
1/2 Hp {0.37 kW}	14.2	12.8	6.4	24.2	21.8	10.9

SPECIFICATION NOTES:

*Requires 25 psi cooling water supply for normal operation.

Specifications may change without notice. Check with a Conair representative for the most current information.



Digital microprocessor control provides simultaneous display of process and setpoint temperatures. This waterproof, durable control is operator friendly.

Standard features:

- Process temperature display
- Setpoint temperature display
- Status lights indicate heating and cooling cycles and high or low deviation alarms.
- Auto-tune of PID parameters for precise temperature control

Optional features:

- SPI communications port
- Visual and audible alarms
- Compressed air mold-water purge

THERMOLATOR® vacuTrac
(VTR1-DI AND VTR2-DI)
POSITIVE/NEGATIVE PRESSURE

Model VTR-DI
single zone

CONTROL TEMPERATURE AND STOP MOLD LEAKS

Keep your operation up and running with the Thermolator® vacuTrac water temperature controller. This positive/negative pressure unit can be used as a temporary fix for a leaky mold or bad O-rings.

The vacuTrac is equipped with a manual three-way ball valve that allows you to change the unit from positive pressure to negative pressure by moving the valve handle on the back of the unit counterclockwise. Changing the unit to operate with negative pressure allows the unit to draw air into the mold effectively stopping leaks.

SINGLE OR DUAL ZONE MODELS AVAILABLE

Use the vacuTrac to produce negative pressure in the from process lines. Otherwise, the unit functions like a direct injection temperature control unit and can be used when your application requires process temperatures up to 180°F {82.2°C}.

The unit is equipped with a high-capacity, heavy-duty jet pump/venturi. Choose 9 or 12 kW heaters and pumps from 2 to 7.5 Hp.

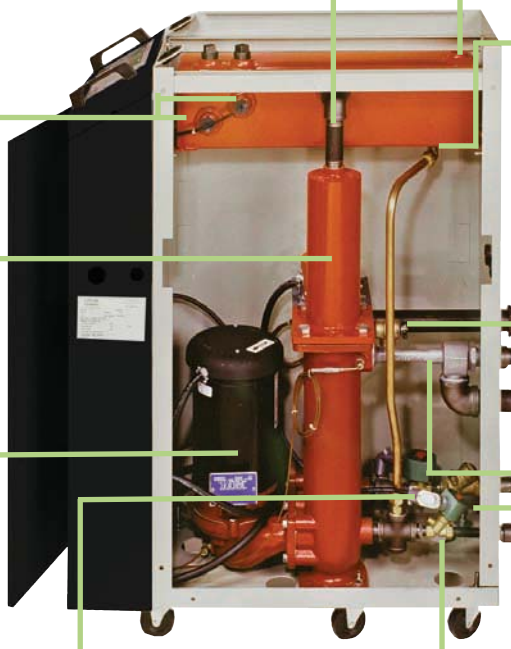
Specify single zone if you need one temperature throughout your mold, or dual zone if two different setpoints are required.

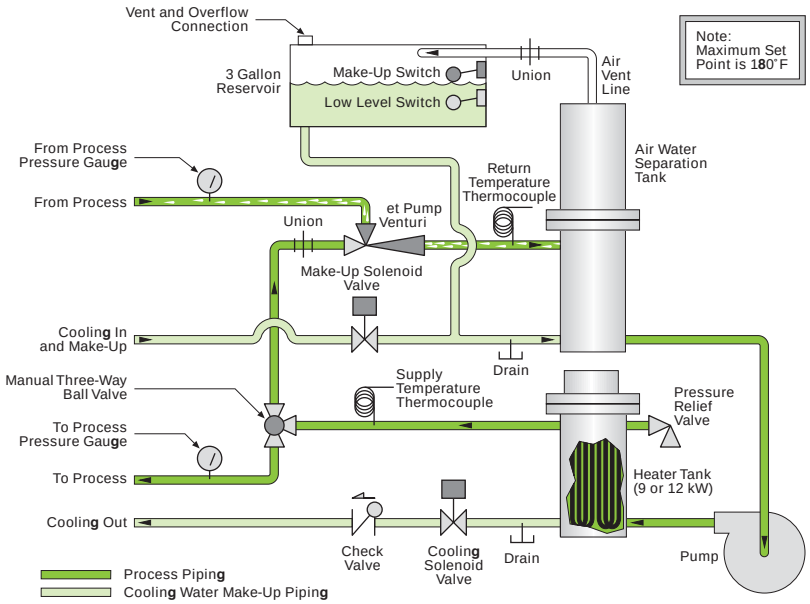
You have a choice of two advanced microprocessor control systems. Other options include: bell, strobe or piezo horn for alarm conditions.

- **Incoloy heaters**
  Standard on the vacuTrac, Incoloy heaters resist damage from high temperatures and chemicals.
- **Three-way ball valve**
  Quick and easy changeover from standard positive pressure to negative pressure operation.
- **Lift-off access panels**
  Convenient, tool-free access to internal components. The cabinet lifts away for easy maintenance and servicing.
- **State-of-the-art controls**
  Easy-to-use microprocessor controls provide accurate temperature control. Auto-tuning of the PID control parameter provides uniform temperature control regardless of light or heavy external loading.
- **Compact, sturdy design**
  Small footprint. Designed for efficient use of your valuable floor space.

THERMOLATOR® vacuTrac (VTR1-DI AND VTR2-DI) POSITIVE/NEGATIVE PRESSURE

FEATURES

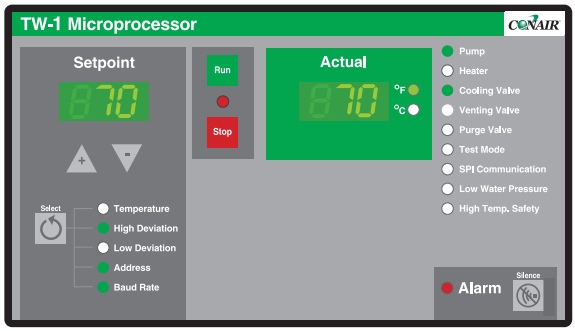




Positive/negative pressure units use a jet pump/venturi to produce negative pressure in the “from process” lines. Water at positive pressure will leak out of mold cracks or bad o-rings. During negative pressure operation, however, air is drawn through the lines, and the mold operates without leaking. A manual three-way ball valve can be closed to make these units into standard direct injection units. Because the units use water and vent to the atmosphere, they have a maximum process temperature of 180°F {82.2°C}.

THERMOLATOR® vacuTrac (VTR1-DI AND VTR2-DI) POSITIVE/NEGATIVE PRESSURE

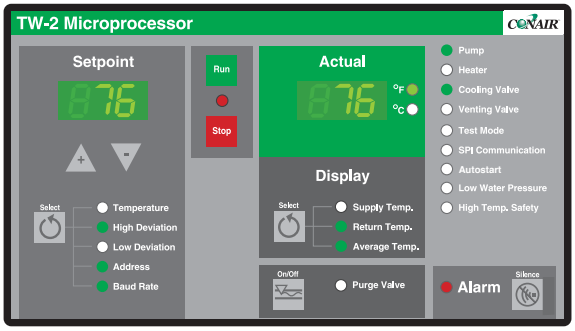
CONTROLS



vacuTrac Control (TW-1)

Our waterproof, durable control is operator friendly and smart. Standard features:

- Automatic fine-tuning of PID control parameters provides uniform temperature control regardless of external loading.
- Adjustable high/low deviation warnings track with your setpoint temperature. Pre-programmed acceleration feature speeds up setting parameters.
- 18 operating and fault indicator lights, including 7 bi-color LEDs, tell you the status of critical components and parameters.
- Password entry prevents unauthorized or accidental changes to operating parameters.



vacuTrac Plus Control (TW-2)

Includes all of the features of the standard vacuTrac control, PLUS:

- Autostart capability for convenient preheating of molds. Works with external timers or switches.
- Choice of temperature control points allows you to monitor and control from the process supply or process return temperature, or from an average of the two.
- Phase detection circuit indicates incorrect pump rotation or an open electrical leg.
- Remote control up to 50 feet. Magnetic panel back allows you to place the controls where you need them. Comes with 15-foot cable. Lengths of 30 or 50 feet optional.
  Note: The purge option is not available on the vacuTrac positive/negative pressure water temperature controllers.

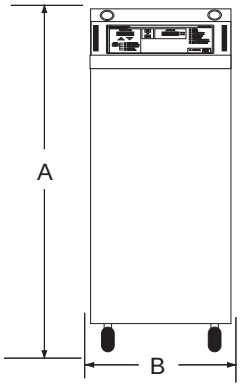
OPTIONS

Alarm packages
Call attention to alarm conditions with a light and horn package.

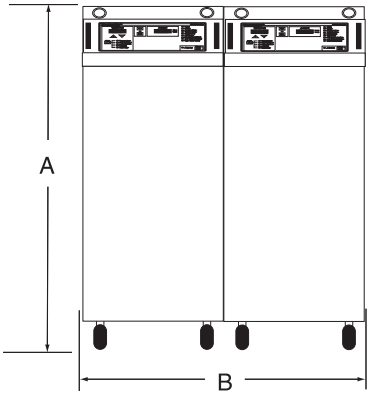
RS485 communication using SPI protocol. Baud rates and addresses are programmable on the operator panel.

THERMOLATOR® vacuTrac (VTR1-DI AND VTR2-DI) POSITIVE/NEGATIVE PRESSURE

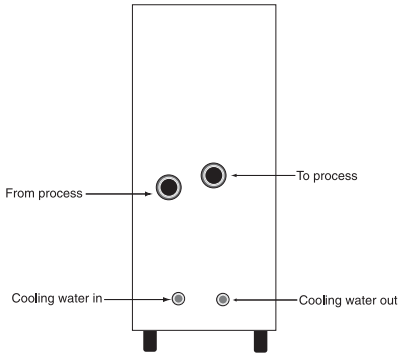
SPECIFICATIONS



VTR1-DI (single zone)



VTR2-DI (dual zone)



VTR1-DI rear view and connections

MODELS	VTR1-DI				VTR2-DI			
Performance characteristics								
Minimum setpoint	32°F {0°C}				32°F {0°C}			
Maximum setpoint	180°F {82°C}				180°F {82°C}			
Pump performance per zone								
Pump Size Hp {kW}	2 {1.49}	3 {2.24}	5 {3.73}	7.5 {5.59}	2 {1.49}	3 {2.24}	5 {3.73}	7.5 {5.59}
Nominal flow gpm {l/min}	55 {208}	80 {303}	100 {379}	115 {435}	55 {208}	80 {303}	100 {379}	115 {435}
Pressure @ nominal flow psi {bar}	31 {2.2}	35 {2.5}	43 {3}	51 {3.6}	31 {2.2}	35 {2.5}	43 {3}	51 {3.6}
Dimensions inches {mm}								
A -Height	43 {1090}				43 {1090}			
B- Width	14 {355}				28 {710}			
Depth	31.5 {800}				31.5 {800}			
Weight lb {kg}								
Operating	300 {136}	305 {138}	310 {141}	320 {145}	600 {272}	610 {277}	620 {281}	640 {290}
Shipping	470 {213}	475 {216}	480 {218}	490 {222}	770 {349}	780 {354}	790 {358}	810 {367}
Water connections NPT inches (Female)								
To/From Process	1.25				1.25			
Cooling Water Inlet/Outlet	0.75				0.75			

ELECTRICAL RE UIREMENTS - full load amps*	VTR1-DI								VTR2-DI							
Heater	9 kW				12 kW				9 kW				12 kW			
Voltage	208V	230V	460V	575V	208V	230V	460V	575V	208V	230V	460V	575V	208V	230V	460V	575V
Pump sizes																
2 Hp {1.49 kW}	31.8	28.8	14.4	11.5	40.2	36.4	18.2	14.6	63.6	57.6	28.8	23.0	80.4	72.8	36.4	29.1
3 Hp {2.24 kW}	34.7	31.4	15.7	12.6	43.1	39.0	19.5	15.6	69.3	62.8	31.4	25.1	86.1	78.0	39.0	31.2
5 Hp {3.73 kW}	38.5	34.8	17.4	13.9	46.8	42.4	21.2	17.0	76.9	69.9	34.8	27.8	93.7	84.8	42.4	33.9
7.5 Hp {5.59 kW}	45.7	41.4	20.7	16.6	54.1	49.0	24.5	19.6	91.5	82.8	41.4	33.1	108.3	98.0	49.0	39.2

SPECIFICATIONS NOTES:

*All voltages are 3 phase, 60 Hz.

Specifications can change without notice. Check with a Conair representative for the most current information.

THERMOLATOR® heaTrac
HTR1-500
OIL TEMPERATURE CONTROLLER

Model HTR1-500

CONSISTENT, HIGH HEAT TEMPERATURE CONTROL

The Thermolator® heaTrac oil temperature controller circulates heat transfer oil, adding or removing heat as needed to maintain a precise process temperature.

Certain materials and processes require the use of oil as a heat transfer fluid for precise temperature control.

Unlike water or glycol mixtures, oil can be safely operated at temperatures ranging from 70ºF to 500ºF {21.1ºC to 260ºC}.

DESIGNED FOR APPLICATIONS OVER 250ºF

Use the heaTrac oil temperature controller when your application requires process temperatures above 250ºF {121.1ºC}.

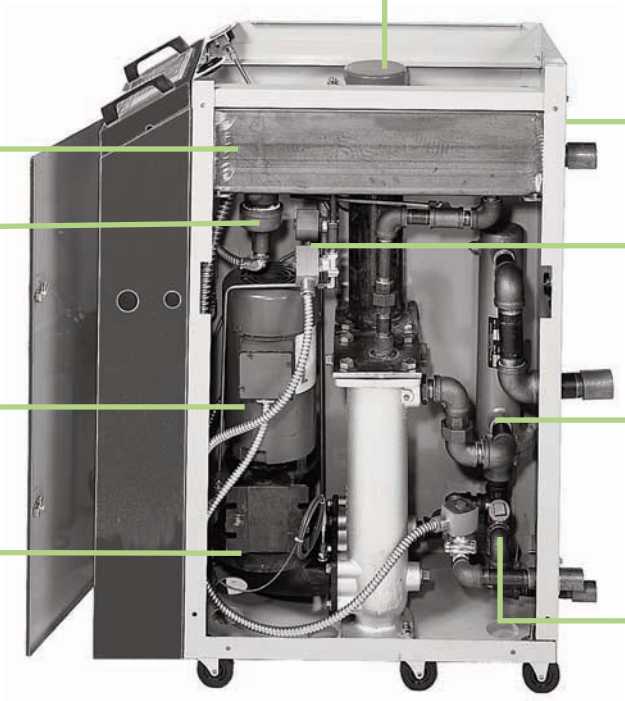
Typical applications include thermoplastic resins, reactor vessels, roll stands or platen presses.

The optional heat exchanger cooling circuit is recommended for process cooling or end-of-cycle cooling.

- **Low-watt density heater**
  Does not allow your oil to heat up to the point of degradation giving longer life to your oil.
- **Air-cooled pump seals**
  No need to supply water to the unit to cool the seals. Air-cooled seals extend the life of the seal and eliminate the need for an additional water connection.
- **Lift-off access panels**
  Convenient, tool-free access to internal components. The cabinet lifts away for easy servicing.
- **State-of-the-art controls**
  Easy-to-use microprocessor controls provide accurate temperature control. Auto-tuning of the PID control parameter provides uniform temperature control regardless of light or heavy external loading.
- **Compact, sturdy design**
  Small footprint. Designed for efficient use of your valuable floor space.

THERMOLATOR® heaTrac
HTR1-500
OIL TEMPERATURE CONTROLLER

FEATURES



Low-watt density electric immersion heater

Sight glass for visual inspection of oil level.

Venting solenoid valve prevents trapped air in system.

Shell and tube heat exchanger cooling circuit (optional) cools the unit before powering it down.

Cooling check valve prevents coolant back flow into the exchanger.

Expansion Fluid reservoir tank

Low level pump shutoff safety

TEFC Pump
Totally enclosed fan cooled pump motor.

Air-cooled seal cavity no cooling water required.

OPTIONS

Alarm packages
Call attention to alarm condition with a bell, strobe or horn.

THERMOLATOR® heaTrac
HTR1-500
OIL TEMPERATURE CONTROLLER

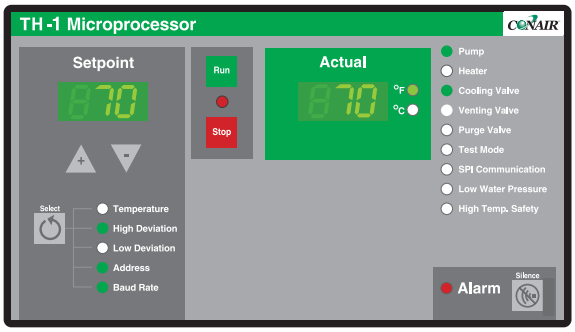
TH-1 CONTROL

Digital microprocessor controls provide simultaneous display of the process and setpoint temperatures. These waterproof, durable controls come with unparalleled standard features.

heaTrac Control (TH-1)

Our waterproof, durable control is operator friendly and smart. Standard features:

- Automatic fine-tuning of PID control parameters provides uniform temperature control regardless of external loading.
- Adjustable high/low deviation warnings track with your setpoint temperature. Pre-programmed acceleration feature speeds up setting parameters.
- 18 operating and fault indicator lights, including 7 bi-color LEDs, tell you the status of critical components and parameters.
- Password entry prevents unauthorized or accidental changes to operating parameters.



OPTIONS

RS485 communication using SPI protocol. Baud rates and addresses are programmable on the operator panel.

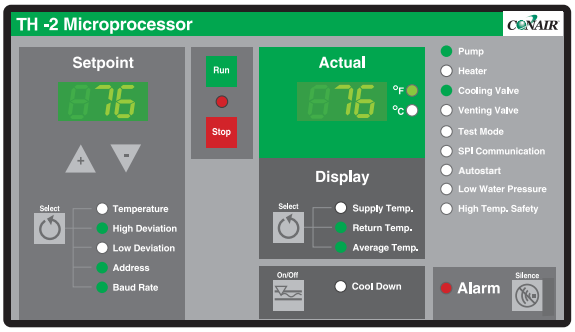
TH-2 CONTROL

heaTrac Plus Control (TH-2)

Includes all of the features of the standard heaTrac control, PLUS:

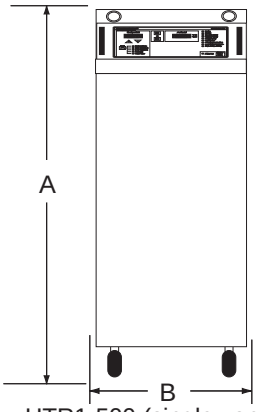
- Autostart capability for convenient preheating of molds. Works with external timers or switches.
- Choice of temperature control points allows you to monitor and control from the process supply or process return temperature, or from an average of the two.
- Phase detection circuit indicates incorrect pump rotation or an open electrical leg.
- Remote control up to 50 feet. Magnetic panel back allows you to place the controls where you need them. Comes with 15-foot cable. Lengths of 30 or 50 feet optional.

Note: The purge option is not available on the heaTrac or positive/negative pressure water temperature controllers.

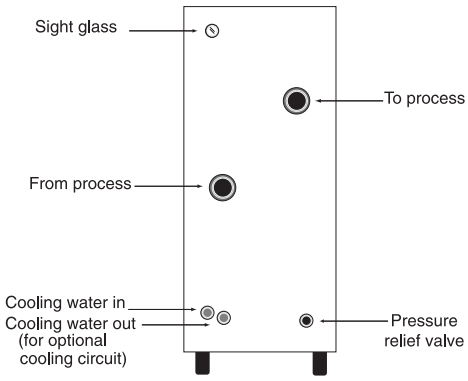


THERMOLATOR® heaTrac
HTR1-500
OIL TEMPERATURE CONTROLLER

SPECIFICATIONS



HTR1-500 (single zone)



HTR1-500 rear view and connections

MODELS	HTR1-500			
Performance characteristics				
Minimum setpoint °F {°C}	70 {21}			
Maximum setpoint °F {°C}	500 {260}			
Pump performance				
Pump Size Hp {kW}	1 {0.75}	1.5 {1.12}	2 {1.49}	3 {2.24}
Nominal flow gpm {l/min}	35 {132}	40 {151}	45 {170}	55 {208}
Pressure @ nominal flow psi {bar}	15 {1.0}	18 {1.3}	23 {1.6}	28 {1.9}
Dimensions inches {mm}				
A -Height	43 {1090}			
B- Width	14 {355}			
C- Depth	31.5 {800}			
Weight lb {kg}				
Operating	300 {136}	305 {138}	310 {141}	320 {145}
Shipping	470 {213}	475 {216}	480 {218}	490 {222}
Oil connections NPT inches (Female)				
To/From Process	1.25			
Cooling Water Inlet/Outlet *	0.75			

SPECIFICATIONS NOTES:

* For units equipped with optional heat exchange cooling circuit.

† All voltages are 3 phase, 60 Hz.

Specifications can change without notice. Check with a Conair representative for the most current information.

Full load amps†	HTR1-500											
Heater	6 kW				12 kW				18 kW			
Voltage	208V	230V	460V	575V	208V	230V	460V	575V	208V	230V	460V	575V
Pump												
1 Hp {0.75 kW}	21.2	19.2	9.6	7.7	37.8	34.2	17.1	21.4	54.4	49.2	24.6	19.7
1.5 Hp {1.12 kW}	21.9	19.8	9.9	7.9	38.5	34.8	17.4	13.9	55.0	49.8	24.9	19.9
2 Hp {1.49 kW}	23.6	21.4	10.7	8.6	40.2	36.4	18.2	14.6	56.8	51.4	25.7	20.6
3 Hp {2.24 kW}	26.5	24.0	12	9.6	43.1	39.0	19.5	15.6	59.7	54.0	27.0	21.6

TW-HT Series

SUPERHEATED WATER MEDIA TEMPERATURE CONTROL

For processors of high temperature thermoplastics, the exceptional heat transfer properties of water optimize process efficiencies and deliver production of highest quality parts and faster cycle times for increased output.

Conair TW-HT series water media mold temperature control systems are plug-in solutions for processes requiring circulating temperatures up to 392ºF {200ºC}. The systems operate closed-loop under design pressures to 218 psi {15 bar}.

WATER OPERATED HIGH-TEMP MOLD CONTROL

Advanced technology TW-HT series Thermolators are designed for use across a broad range of high temperature process applications. The systems deliver superheated water for faster, more efficient heat transfer as compared to traditional oil operated systems. Water systems offer reduced cycle times, are a better ecological choice than oil, and are safer and less expensive to operate.

These units are equipped with high-performance stainless steel hydronic components and multiple sensors for constant process monitoring and closed-loop control.

The TW-HT series offers heating capacities of 6kW-144kW and control of external cooling capacity of 8 to 66 cooling tons based on 176ºF {80ºC} pre-run temperature and 59ºF {15ºC} cooling water.

Safer, oil-free operation

Risk of injury is far less than with an oil system since any closed-loop system leak rapidly depressurizes and evaporates. Water is non-combustible and there are no dangerous off-gasses, no collection pans, no oil absorbents and no oil-spill slip hazard.

Lower operating costs save money

Lower viscosity means less pressure drop and lower energy costs to pump water through the system. Heat/cool energy costs are reduced due to much faster heat up and cool down times. Water media cost is less than oil. Water is a non-hazardous material and can be dumped to drain, saving paperwork and disposal costs. Mold heat transfer media evacuation is reduced to a simple hose drain.

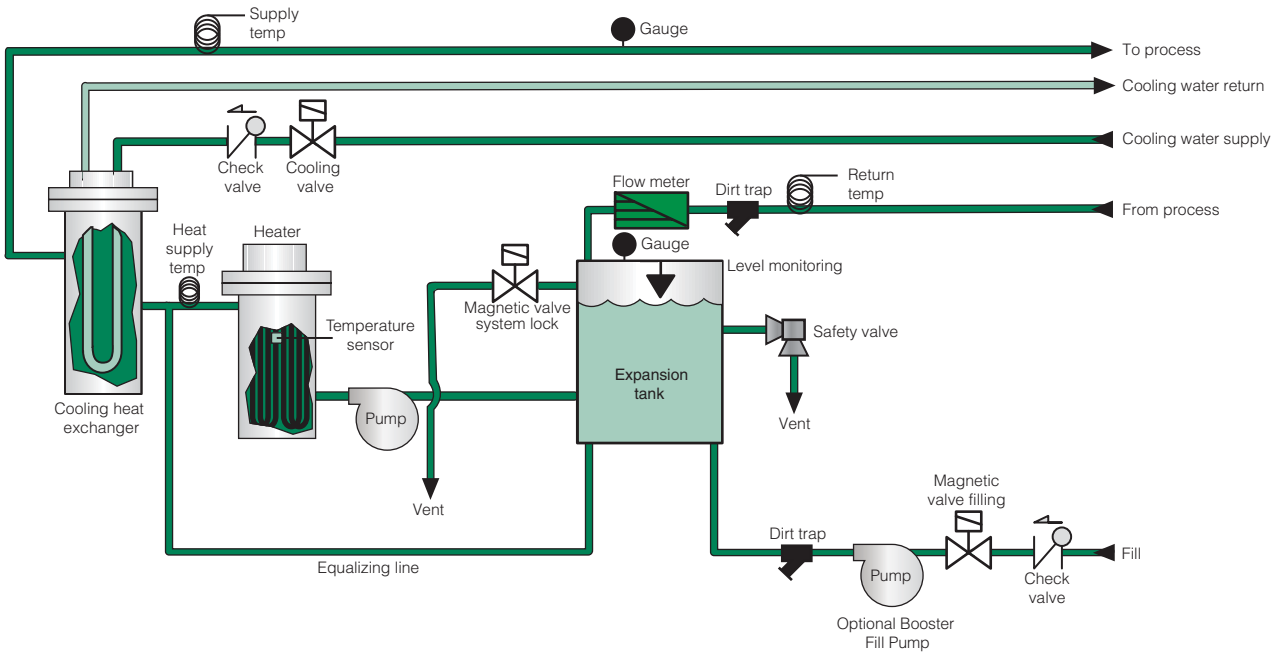
Faster tool changes

Water's comparative higher heat transfer rate allows much faster cooling and re-heating of the mold. This has been proven to reduce access time to the tool by up to 35%. Also, water eliminates the need for an oil recovery system to evacuate and contain oil from the mold.

Best process efficiency

Faster response time to temperature change results in tighter control of the heat transfer media and mold temperature. Compared to oil, superheated water offers higher specific heat capacity, five times the thermal conductivity and a heat transfer rate eight times better.

HOW IT WORKS



At startup, pressurized water fills the expansion tank to a preset fill level monitored by a magnetic float switch. An operator enters the process set point and starts the system. The temperature rise expands the circulating heat transfer media, forcing air from the system. Upon reaching 176ºF {80ºC}, a magnetic valve closes and locks the system in a closed loop.

As the circulating fluid heat reaches the set point, continued expansion adds pressure to the closed loop system. An air pocket in the expansion tank likewise expands with temperature and exerts pressure, preventing phase change of the superheated fluid. All hydronic components are designed to safely handle normal system pressures at temperature.

Heating is via Incoloy stainless steel tubular heaters. Heat control is via solid state relay. Cooling is performed by a tubular finned heat exchanger.

THERMOLATOR® TW-HT

FEATURES

- Return and cooling water supply line strainers
- Stainless steel piping and vessels
- Incoloy tubular heaters
- Solid state heater control relay with fail-safe pilot contactor
- Hot/cold circuit pressure balance
- Control cabinet IP 54/NEMA-3 with casters
- Heater element over-temperature safety cutout
- Minimum flow sensor
- Leak detection sensor
- Plug connection for external temperature sensor. Sensor activation can be via hard switch or set in the controller.
- Differential pressure flow meter tied to heater-off switch and low flow rate alarm
- Tubular-finned nickel alloy heat exchanger

CONTROLS

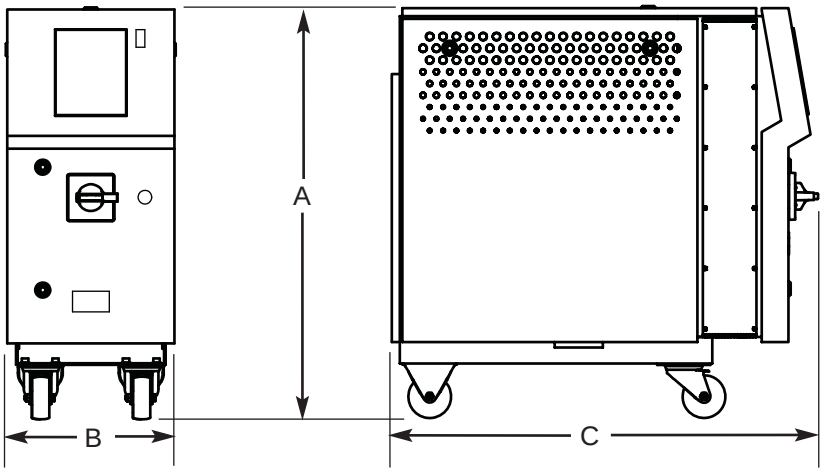
TW-HT control systems are PLC based and feature a panel mounted graphics-capable text display. The control will automatically switch between open-hoop and closed-loop. Control features include:

- Detailed operation and alarm messages as well as real-text parameter descriptions
- Graphic presentation of actual and set point values of all temperatures and flow rates
- Tool recipes (up to 20) text or graphic display with tool naming capability
- Programmable start-stop
- Maintenance scheduling
- Digital interfaces for communication with external devices

OPTIONS

- Remote control (with 49.2 foot {15m} cable)
- Stainless steel sheathed hoses (for process water to 437ºF {225ºC})
- Fill/cooling water booster pump for models TW-HT-H1 and TW-HT-H2
- High capacity process water pump for models TW-HT-H3 and TW-HT-HT4
- Heat exchanger bypass (up to 392ºF {200ºC}) for models TW-HT-H2 through TW-HT-H4
- Connection port for external temperature sensor
- UL/CSA coded electrical panels
- Special voltage/frequency
- Decalcification unit
- 24V control voltage
- Special paint

SPECIFICATIONS



Front view

Side view

MODELS	TW-HT-H0	TW-HT-H1	TW-HT-H2	TW-HT-H3	TW-HT-H4
Performance characteristics					
Max. temperature range °F {°C}	392 {200}	392 {200}	392 {200}	392 {200}	392 {200}
Max. external volume gal {l}	2.38 {9}	2.91 {11}	9.25 {35}	47.29 {179}	83.48 {316}
Heating capacity heating circuit kW	6/9/12	6/9/12/18	24/36	36/48/60/72	36/72/96/108
Cooling capacity cooling circuit 176°F {80°C} flow and 59°F {15°C} cooling water cooling tons	8/12	8/12	12/20/33	33/66	33/66
Dimensions inches {mm}					
A - Height	30.12 {765}	37.21 {945}	53.15 {1350}	65.56 {1665}	83.08 {2110}
B - Width	12.41 {315}	13.59 {345}	19.88 {505}	21.66 {550}	32.68 {830}
C - Depth	30.91 {785}	39.18 {995}	53.74 {1365}	69.69 {1770}	76.38 {1940}
Connections NPT inches (female)					
Process fluid (water)	0.50	0.75	1.00	2.00	2.50
Cooling fluid	0.50	0.50	0.75	1.00	1.00
Fill	0.50	0.50	0.50	0.50	0.50
Pump performance					
Maximum flow rate gpm {l/min}	16 {60}	27 {100}	53 {200}	74 {280}	230 {870}
Maximum outlet pressure psi {bar}	88 {6.0}	117 {8.0}	117 {8.0}	61 {4.2}	61 {4.2}
Pump capacity Hp {kW}	1.5 {1.1}	3.8 {2.8}	5.4 {4.0}	5.4 {4.0}	10 {7.5}
Approximate weight lbs {kg}					
Installed	210 {95}	287 {130}	574 {260}	904 {410}	1764 {800}
Shipping	510 {231}	687 {312}	1099 {499}	1504 {682}	2489 {1129}

SPECIFICATION NOTE:

Specifications may change without notice. Consult a Conair representative for the most current information.

TW-HTM

WATER TCU FOR ULTRA-HIGH TEMPERATURE POLYMERS

For medical molders and processors of ultra-high temperature thermoplastics, the exceptional heat transfer properties of water optimize process efficiencies and deliver production of highest quality parts and faster cycle times for increased output.

TW-HTM water temperature control systems are plug-in solutions for processes requiring circulating mold temperatures up to 437ºF {225ºC}. The systems operate closed-loop under design pressures to 435 psi {30 bar}.

WATER TEMP CONTROL FOR PEEK AND ULTEM USE

TW-HTM Thermolators are designed for use across a broad range of high temperature process applications. The systems deliver superheated water for faster, more efficient heat transfer as compared to traditional oil operated systems. Water systems offer reduced cycle times, are a better ecological choice than oil, and are safer and less expensive to operate.

The TW-HTM is equipped with high-performance stainless steel hydronic components and multiple sensors for constant process monitoring and closed-loop control.

Unit offers external volume to 0.93 gal {3.5l}, heating capacity of 6kW and control of external cooling capacity of 8 cooling tons based on 176ºF {80ºC} pre-run temperature and 59ºF {15ºC} cooling water temperature.

Safer, oil-free operation

Any closed-loop system leak rapidly depressurizes and evaporates. Risk of injury is far less than with an oil system since hot oil will spray at high temperature and coat whatever it strikes. Water is non-combustible and there are no dangerous off-gasses, no collection pans, no oil absorbents and no oil-spill slip hazard.

Lower operating costs save money

Lower viscosity means less pressure drop and lower energy costs to pump water through the system. Heat/cool energy costs are reduced due to much faster heat up and cool down times. Water media cost is less than oil. Water is a non-hazardous material and can be dumped to drain – saving paperwork and disposal costs. Mold heat transfer media evacuation is reduced to a simple hose drain.

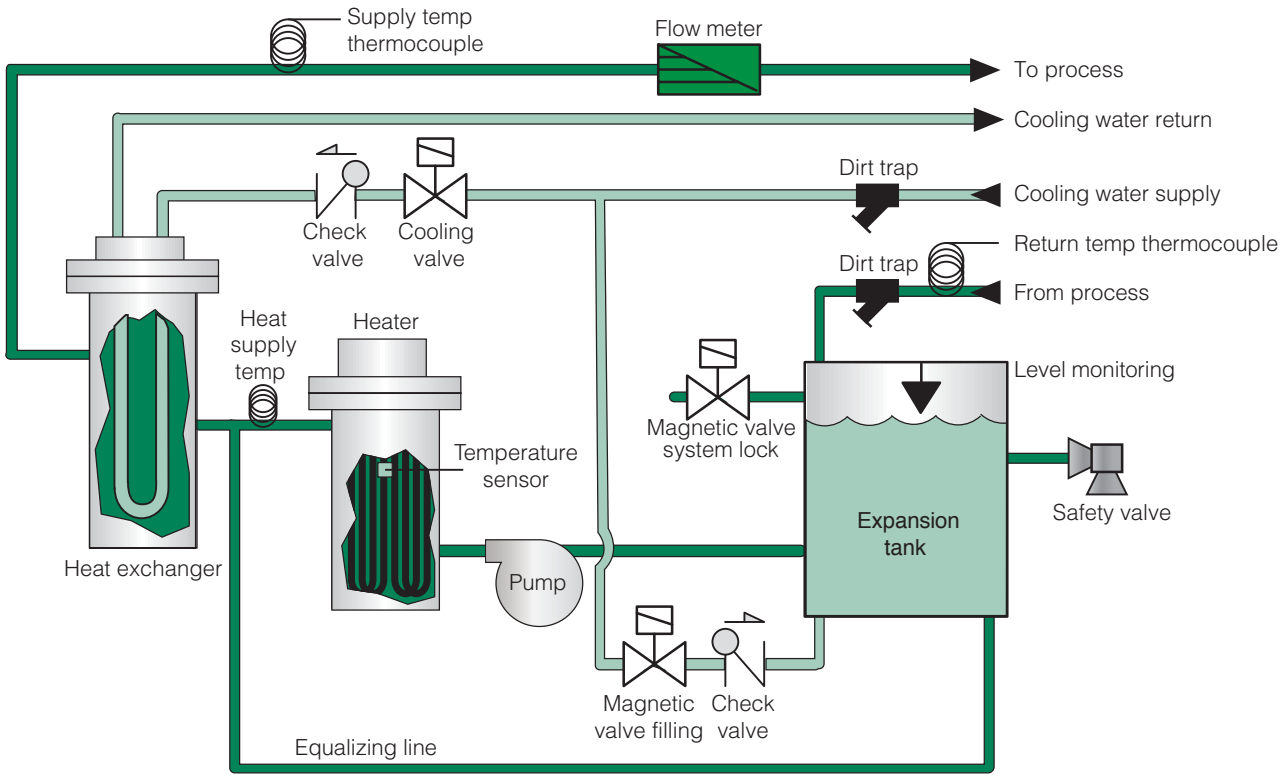
Faster tool changes

Water's comparative higher heat transfer rate allows much faster cooling and re-heating of the mold. This has been proven to reduce access time to the tool by up to 35%. Also, water eliminates the need for an oil recovery system to evacuate and contain oil from the mold.

Best process efficiency

Faster response time to temperature change results in tighter control of the heat transfer media and resulting mold temperature. Compared to oil, superheated water offers higher specific heat capacity, five times the thermal conductivity and a heat transfer rate eight times better.

HOW IT WORKS



At startup, pressurized water fills the expansion tank to a preset fill level monitored by a magnetic float switch. An operator enters the process set point and starts the system. The temperature rise expands the circulating heat transfer media, forcing air from the system. Upon reaching 176ºF {80ºC}, a magnetic valve closes and locks the system in a closed loop.

As the circulating fluid heat reaches the set point, continued expansion adds pressure to the closed loop system. An air pocket in the expansion tank likewise expands with temperature and exerts pressure, preventing phase change of the superheated fluid. All hydronic components are designed to safely handle normal system pressures at temperature.

Heating is via Incoloy stainless steel tubular heaters. Heat control is via solid state relay. Cooling is performed by a tubular finned heat exchanger.

FEATURES

- Return and cooling water supply line strainers
- Stainless steel piping and vessels
- Incoloy tubular heaters
- Solid state heater control relay with fail-safe pilot contactor
- Hot/cold circuit pressure balance
- Cooling side heat-exchanger bypass to dissipate steam
- Control cabinet IP 54/NEMA-3 with casters
- Heater element over-temperature safety cutout
- Minimum flow sensor
- Leak detection sensor
- Plug connection for external temperature sensor. Sensor activation can be via hard switch or set in the controller.
- Differential pressure flow meter tied to heater-off switch and low flow rate alarm
- Tubular-finned nickel alloy heat exchanger

CONTROLS

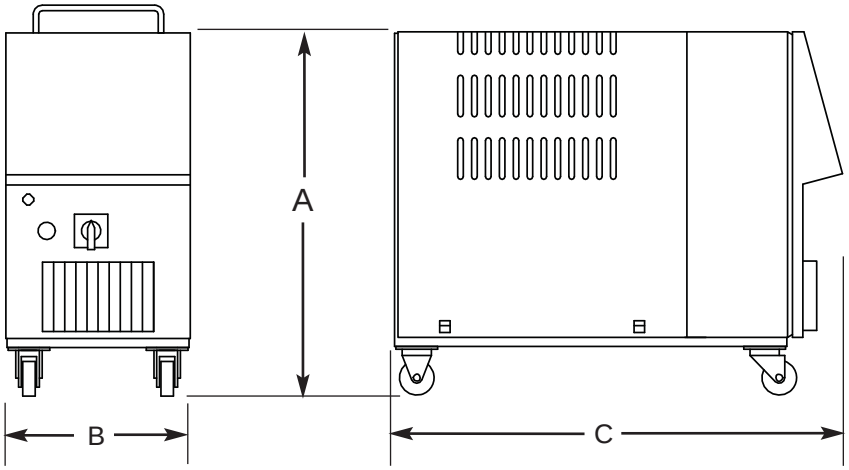
TW-HTM Thermolator control systems allow for open- and closed-loop control. Control include:

- Graphics capable text display
- Detailed operation and alarm messages as well as real-text parameter descriptions
- Graphic presentation of actual and set point values of all temperatures and flow rates
- Tool recipes (up to 20) text or graphic display with tool naming capability
- Programmable start-stop
- Maintenance scheduling and numerous other monitoring and alarm functions
- Digital interfaces for communication with a central computer

OPTIONS

- Remote control (with 49 foot {15m} cable)
- Stainless steel sheathed hoses (for process water to 437ºF {225ºC})
- Connection port for external temperature sensor
- Decalcification unit
- Special voltage/frequency
- UL/CSA coded electrical panels
- 24V control voltage
- Special paint

SPECIFICATIONS



Front view

Side view

MODEL	TW-HTM-1-HK
Performance characteristics	
Maximum temperature range °F {°C}	437 {225}
Maximum external volume gal {l}	0.93 {3.5}
Heating capacity heating circuit kW	6
Cooling capacity cooling circuit 176°F {80°C} flow and 59°F {15°C} cooling water - cooling tons	1
Dimensions inches {mm}	
A - Height	20.67 {525}
B - Width	10.44 {265}
C - Depth	25.4 {645}
Connections NPT inches (female)	
Process fluid (water)	0.50
Cooling fluid	0.375
Filling	0.375
Pump performance	
Maximum flow rate gpm {l/min}	7 {25}
Max. outlet pressure (typical) psi {bar}	66 {4.5}
Pump capacity Hp {kW}	0.737 {0.55}
Weight lb {kg}	
Installed	287 {130}
Shipping	587 {266}

SPECIFICATION NOTES:

Specifications may change without notice. Consult a Conair representative for the most current information.

TW-ALT Series

ALTERNATING TEMPERATURE MOLD CONTROL

TW-ALT mold temperature controllers cycle hot and cold fluid through mold heating/cooling channels. Mold surface temperature is held above the process material glass-transition temperature during fill and packing and then rapidly cooled to set the surface finish and cool the part. The result achieves exceptional surface detail and dimensional stability and reduces cycle times for applications including optical lens, CDs, automotive, appliances, electronics and packaging.

HOT AND COLD FOR EXCEPTIONAL PART FINISH

TW-ALT mold temperature control Thermolators are ideally suited to injection and composite processes where part finish and reduced cycle times are of critical importance. The technology benefits processes where cycle times can be reduced by alternating hot and cold heat transfer circuits. The systems use water for controlling temperatures up to 392°F {200°C}.

An external valve station, included with the system, alternately switches the two circuits from bypass mode to mold temperature control mode.

Upon reaching fluid temperature of 190°F {88°C}, a vent valve closes and seals the process loop. The pressure in the closed loop rises as a natural function of the continued increase in temperature, preventing boiling and phase change of the fluid to steam.

Blemish-free perfect part finish

Hotter initial cavity surfaces avoid forming a skin layer during the injection phase and eliminate unsightly weld lines during normal pack and hold times. The melt flows fluidly across all surfaces of the cavity including micro and nano-structures to replicate the mold in exacting detail.

Eliminate secondary operations

Rapid cooling instantly sets the part, giving a highly reflective, high gloss piano finish and ultra-smooth surface. In many cases, this reduces labor costs and manufacturing space by eliminating the need for secondary operations such as sanding, painting and annealing.

Higher quality parts reduce scrap

Rapid cycling improves melt flow into the mold and speeds cooling times. This effectively reduces injection pressures, clamping force and internal part stresses as well as warpage from shrinkage. Dimensional stability and strength characteristics are improved and more good parts can be produced.

Faster cycle times: more production

Cycle times are reduced by optimizing curing and cooling stages.

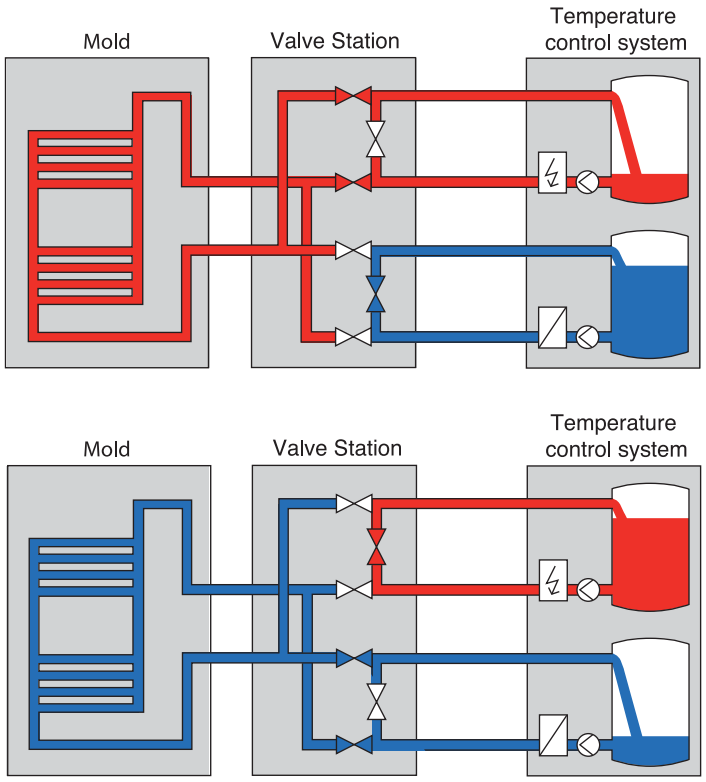
HOW IT WORKS

Superheated water flows in a closed loop through the mold, raising the surface temperature above the glass-transition temperature of the polymer or resin. This aids fill-time by delaying skinning as the melt flows over the cavity surface. At the same time, cooling water (in bypass mode) passes through the cooling circuit, giving up any temperature rise from the previous cycle.

Once the melt injection is complete and the part is fully packed, pneumatically actuated flow valves cycle and cooling media displaces the superheated water in the mold.

The process achieves transfer media circulating temperatures up to 392ºF {200ºC} and cooling to 59ºF {15ºC}. Alternating temperatures can cycle through a swing of 180ºF {100ºC} in critical areas or across the mold.

For optimal control, the mold must be supplied with thermocouples to monitor temperature. The heat/cooling cycle is initiated by a signal from the machine control that measures mold temperature against control points set by an operator.



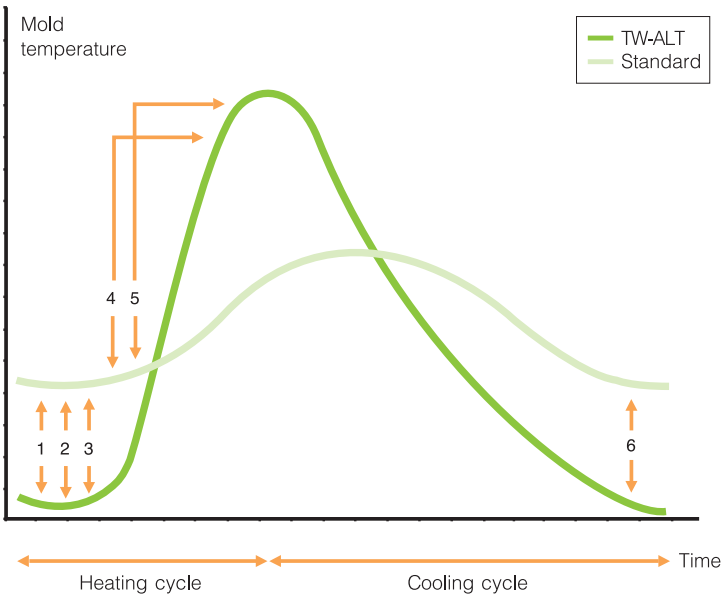
Warm fluid heats the mold during the filling phase while cold fluid cools it during the cooling phase.

CYCLE TIME

Alternating temperature technology systems work best with molds that have a low mass, provide good thermal conductivity and ensure effective heat transfer to the cavity.

Customer-supplied mold inserts with contour-aligned heating/cooling channels can be cost-effectively precision manufactured from stainless or hot-milled steel powder using an additive layer process.

1. Open mold
2. Remove part
3. Close mold
4. Injection
5. Holding pressure
6. Open mold (next cycle)



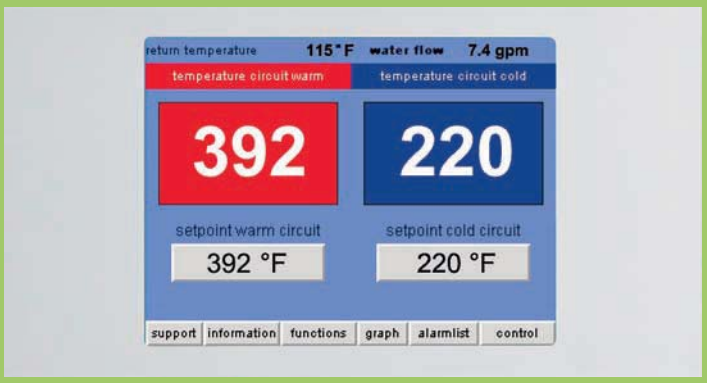
Cycle time of TW-ALT alternating temperature technology and cycle time of a standard system.

THERMOLATOR® TW-ALT

FEATURES

- Return and cooling water supply line strainers
- Stainless steel piping and vessels
- Incoloy tubular heaters
- Solid state heater control relay with fail-safe pilot contactor
- Hot/cold circuit pressure balance
- Cooling side heat-exchanger bypass to dissipate steam
- Control cabinet IP 54/NEMA-3 with fan ventilation
- TCU models through TW-ALT-H3 with casters; valve station without casters and ready for connection
- Heater element over-temperature safety cutout
- Leak detection sensor
- Plug connection on front door accepts machine signal for hot/cold temperature changeover
- Differential pressure flow meter
- Tubular-finned nickel alloy heat exchanger valve

CONTROLS



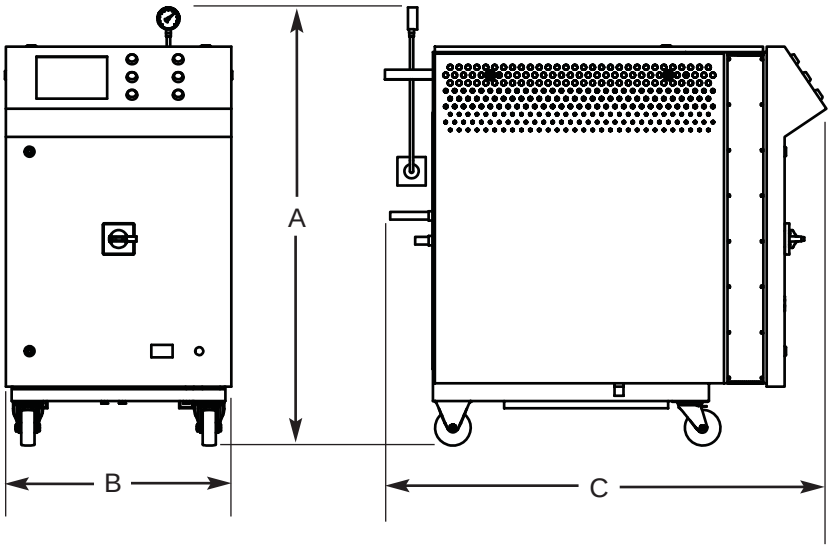
Controls are PLC based and feature a panel mounted touch screen HMI. The screen display shows actual and set point for hot and cold circuits as well as return temperature and water flow rate. Circuits are color-coded for fast, easy identification.

Controls feature quick access to:
- Support
- Information
- Functions
- Trending
- Alarms
- Control

OPTIONS

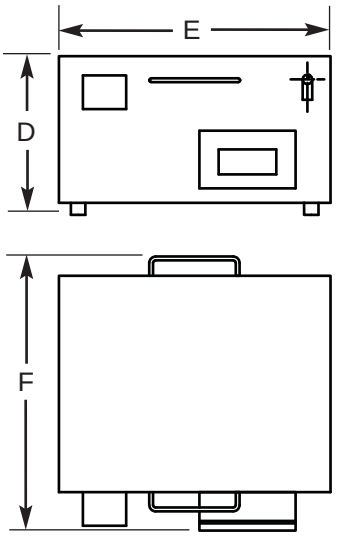
- Remote control (with 49 foot {15m} cable)
- Stainless steel sheathed hoses (for process water to 437ºF {225ºC})
- Casters - (TW-ALT-H4 only) TW-ALT-H4 model is supplied as standard without casters. All other units are supplied with casters. Casters can be added to the TW-ALT-H4 for mobility.
- Communications- An optional connection for a 20-mA loop (TTY) is available. A broad range of communicataions options are available including modbus, canbus, profibus and others. Contact your sales rep for specific applications.
- Booster pump for refilling
- Decalcification unit
- Hose connections between valve station and mold
- Connection port for external temperature sensor
- Special voltage/frequency
- UL/CSA coded electrical panels
- 24V control voltage
- Special paint

SPECIFICATIONS



Front view

Side view



Valve station

MODELS	TW-ALT-H0	TW-ALT-H2	TW-ALT-H3	TW-ALT-H4
Performance characteristics				
Maximum set point temperature °F {°C}	392 {200}	392 {200}	392 {200}	392 {200}
Maximum external volume gal. {liter}	1.06 {4}	2.65 {10}	5.29 {20}	7.93 {30}
Heating capacity heating circuit kW	36	48 - 72	96	144
Cooling capacity cooling circuit at 176°F {80°C} flow and 59°F {15°C} cooling water - cooling tons	10	14 - 20	27	41
Dimensions (cabinet) inches {mm}				
A - Height	42.13 {1070}	55.12 {1400}	66.93 {1700}	76.78 {1950}*
B - Width	26.78 {680}	39.37 {1000}	63.0 {1600}	64.18 {1630}
C - Depth	34.85 {885}	47.25 {1200}	74.80 {1900}	90.56 {2300}
D - Valve station height	12.00 {305}	12.00 {305}	12.00 {305}	12.00 {305}
E - Valve station width	22.24 {565}	22.24 {565}	22.24 {565}	22.24 {565}
F - Valve station depth	22.44 {570}	22.44 {570}	22.44 {570}	22.44 {570}
Pump performance				
Pump capacity Hp {kW}	1.4 {1}	5.4 {4}	5.4 {4}	10.1 {7.5}
Maximum flow rate gpm {l/min}	16 {60}	53 {200}	80 {300}	230 {870}
Maximum outlet pressure psi {bar}	88 {6}	117 {8}	69 {4.7}	61 {4.2}
Connections NPT inches (female)				
Valve station supply	0.75	1.25	1.50	2.50
Valve station outlets	0.75	1.25	1.50	2.50
Cooling water	0.75	0.75	1.25	1.50
Filling	0.50	0.50	0.50	0.50
Weight lbs {kg}				
Installed	530 {240}	1323 {600}	2205 {1000}	3748 {1700}
Shipping	980 {445}	1898 {861}	2825 {1281}	4473 {2029}

SPECIFICATION NOTES:

* Standard height without casters (TW-ALT-H4 model only)

Specifications may change without notice, consult with a Conair representative for the most current information.

Model ECM-0.75

SMALL CAPACITY COOLING; MINIMUM COST

Efficient and user-friendly, the EarthSmart™ ECM Series Air-cooled Chillers provide maximum cooling power at a valued price.

Economically designed for rugged, uninterrupted operation, these portable chillers can be rolled into position wherever you need process cooling water at temperatures ranging from 45° to 65°F {7° to 18°C}.

Integrated with R-134a non-ozone depleting refrigerant, the ECM Series functions with the environment in mind.

CHILLING CAPACITIES FROM 0.41 TO 0.70 TONS

Engineered to provide uninterrupted performance, Conair ECM Series Chillers have a small footprint, saving you valuable floor space.

Use the microprocessor controller that continuously displays the process temperature to set the process fluid output.

The ECM Series Chillers are equipped with a hermetic reciprocating compressor, expansion valve, refrigerant sight glass, and moisture indicator, as well as high and low pressure safety switches as standard.

The non-ferrous pump that circulates the process fluid includes motor overload protection.

The condenser is air-cooled (tube-fin style) with a direct-drive fan motor. In the event of a process blockage, the condenser is protected by a flow by-pass valve.

Environmentally-friendly refrigerant

All EarthSmart ECM Series Chillers use R-134a refrigerant. This refrigerant significantly reduces the potential amount of harmful chemicals released into the environment.

Simplified control

Easy-to-use, easy-to-read microprocessor control has digital temperature display, 25% hot-gas bypass capacity control, as well as a LED status light for power, alarm conditions and hot-gas bypass valve functionality.

Rust-free process surfaces

All wetted surfaces are non-ferrous; process fluid remains uncontaminated with rust. The chilled water reservoir is made of stainless steel with 0.5 inch {13 mm} thick insulation.

Quick temperature response

The stainless steel brazed plate evaporators are a convenient, small size to deliver rapid temperature response time.

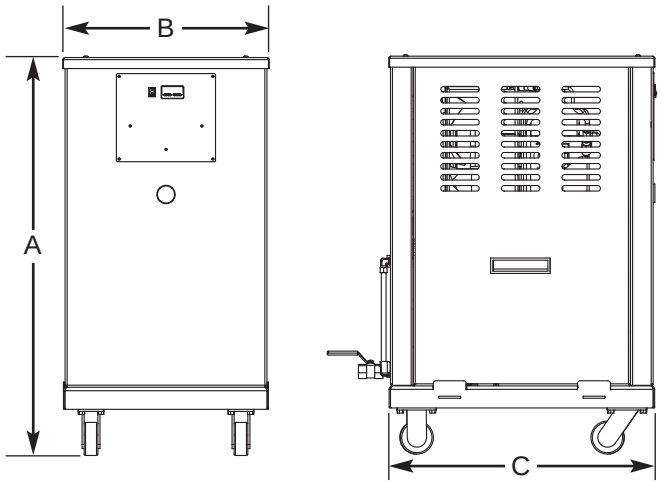
One year warranty

From the casters up, Conair offers you a one year warranty on parts and labor.

EARTHSMART® MINI ECM AIR-COOLED SERIES

SPECIFICATIONS

MODEL	ECM-0.5	ECM-0.75
Performance characteristics		
Capacity* tons	0.41	0.70
Compressor Hp {kW}†	0.5 {0.37}	0.75 {0.56}
Pump Hp {kW}	0.25 {0.19}	0.5 {0.37}
Chilled water flow‡ gpm {lpm}	0.9 {3.4}	1.7 {6.4}
Chilled water pressure‡ psi {bar}	60 {4.1}	60 {4.1}
Reservoir capacity gal {liters}	10 {37.8}	10 {37.8}
Dimensions inches {mm}		
A - Height	39.7 {1008}	39.7 {1008}
B - Width	18.7 {475}	18.7 {475}
C - Depth	24.2 {615}	24.2 {615}
Process connections inches {mm}		
Process (to and from)	0.5 {12.7}	0.5 {12.7}
Weight lb {kg}		
Installed	223 {101}	233 {106}
Shipping	170 {77}	180 {82}
Voltages full load amps**		
115V/1 phase/60Hz	14	NA
220V/1 phase/60Hz	NA	11
Refrigerant		
	R-134a	



SPECIFICATION NOTES:

* Ton capacity at 12,000 BTU/ton @ 50°F {10°C} leaving water temperature @ 115°F {46°C} condensing temperature. Capacities may be 5% as reserved by the compressor manufacturer. Capacity multipliers are: 50°F {10°C} - 1.00; 40°F {4.4°C} - 0.80.

† The ECM Series Chiller uses a hermetic reciprocating compressor.

‡ Contact Conair Service for exact characteristics relating to pump performances.

Chiller installed weight includes a completely filled reservoir.

** No allowance for inrush current. Ground fault interruption to be supplied by the customer. Full load amps must be used to size supply conductors. Consult a Conair representative for 50 Hz operation.

Specifications can change at any time. Contact your Conair representative for the most current information.

FEATURES

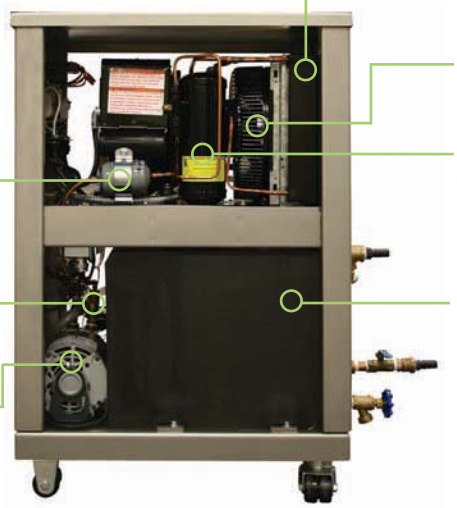
Microprocessor controller for simplified temperature setting.

On Off switch for fast starting and stopping.

Filter Dryer cleans and dries the refrigerant.

High Low pressure switch shuts down the system before damage can occur.

Process pump ensures optimum flow and pressure to the process.



Condenser condenses the refrigerant vapor into a high-temperature, high-pressure liquid.

Fan assembly circulates air for consistent cooling.

Receiver stores liquid refrigerant during pump down.

Reservoir stores process fluid.

Refrigerant sight glass gives visual status of refrigerant charge.

Model ECA-5

ECO-FRIENDLY REFRIGERANT; DURABLE CONSTRUCTION

Conair's EarthSmart™ ECA Series Portable Chillers are quality engineered for year-round, 24/7 operation under demanding industrial applications. Combining a compact design, durable construction and a new control platform, Conair's ECA Series Chillers provide maximum cooling for all your processing applications.

Integrated with R-410A non-ozone depleting refrigerant, the ECA Series functions with the environment in mind.

BROAD PRODUCT RANGE; INTUITIVE CONTROL

Choose the EarthSmart ECA Series Air-Cooled Chillers when portability is a necessity and an inexpensive water source is not available. Nine ECA Series Chillers have cooling capacities of 1.5 to 30 tons with operating temperature ranges of 20º to 70ºF {-7º to 21ºC} in ambient air temperatures of up to 95ºF {35ºC}.

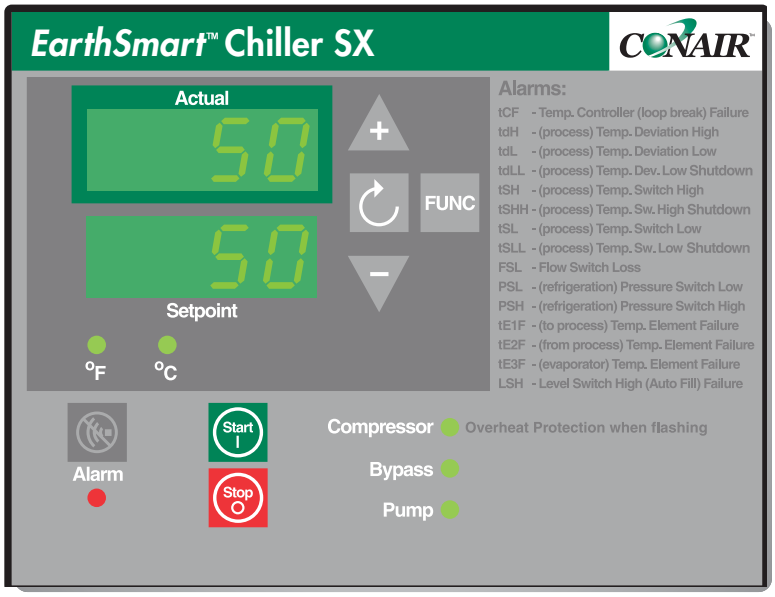
Every model is equipped with a new multi-function microprocessor control. The control features dual, 4-digit LED displays for temperature and alarm code readouts. Additional indicator lights on the control inform you when the compressor, hot-gas bypass valve or pump is activated.

Tool-free access panels and a neatly organized internal component layout provide easy access and service. Simply remove the panels to gain access to the entire cabinet of the chiller.

- **Accurate temperature control**
  Multi-function microprocessor controller includes dual, 4-digit LED displays that readout alpha-numeric alarm codes and temperatures. The control panel also has additional indicator lights that show the status of the pump, compressor, hot-gas bypass valve, alarms and temperature units selection.
- **Environmentally-friendly refrigerant**
  All EarthSmart ECA Series Chillers use R-410A refrigerant. This refrigerant significantly reduces the potential amount of harmful chemicals released into the environment.
- **Non-ferrous construction**
  All chilled water contact surfaces are non-ferrous for protection against corrosion. Pumps and reservoirs are stainless steel. All other wetted surfaces are brass, copper or other non-ferrous materials.
- **Reliable, long-life design**
  Proven component suppliers like Copeland, Scot Pump, Sporlan, Johnson Controls and Cutler-Hammer have been chosen for ultimate reliability and availability of parts. Each chiller is factory tested under load prior to shipment and is provided with a functionality test report when it is shipped.
- **Reduced fan noise**
  Standard fan location on top of the ECA chiller redirects all hot exhaust air up away from personnel and processes.

FEATURES

EARTHSMART™ ECA AIR-COOLED SERIES



Control Features

- Large, dual 4-digit LED displays for process data, alarms and operation.
- Scroll and Function buttons allow you to navigate the chiller's control parameters.
- Selectable temperature control point; choose between To Process, From Process or Average.
- Five status lights that show pump, hot-gas bypass, compressor, alarm and temperature units selection status.
- Autotune capabilities allow to you optimize your chiller to achieve maximum efficiency.

- **Brazed Plate Evaporator –** High-surface area, rapid response.
- **Hot-Gas Bypass Valve –** Capacity control down to 25%.
- **Condenser Fan Cycling –** Regulates chiller capacity when the ambient air temperature is below the normal design point of 95ºF {35ºC}.
- **Standard Warranty –** One year parts and labor warranty from the casters up.
- **Evaporator Strainer –** Protects the evaporator from solid contaminants in the process water stream (example: pellets in an open extrusion cooling tank). Bronze construction. Pre-piped.
- **Process Pump Pressure Gauge –** Provides a mechanical readout of the process pump discharge pressure for roughly estimating flow and detecting pump problems.

OPTIONS

Process Water Bypass with Valves – Includes process water valves and a pre-piped, external bypass line with bypass valve for low flow/high delta T processes which would limit flow through the chiller.

Alarm Kit – Highly visible strobe light and beacon indicate any chiller fault that may occur.

Autofill – Reservoir level sensor and solenoid to allow connection to city water for automatic water make-up. (Not recommended when chiller is charged with Glycol.)

Condenser Fan Variable Frequency Drive (VFD) – Variable frequency condenser fan motor drive matches energy consumption with chiller operating conditions. Recommended when ambient conditions will fall below 75º F {24º C}.

Dual Water Pumps – Includes a second pump dedicated to recirculating coolant through the evaporator for increased heat transfer.

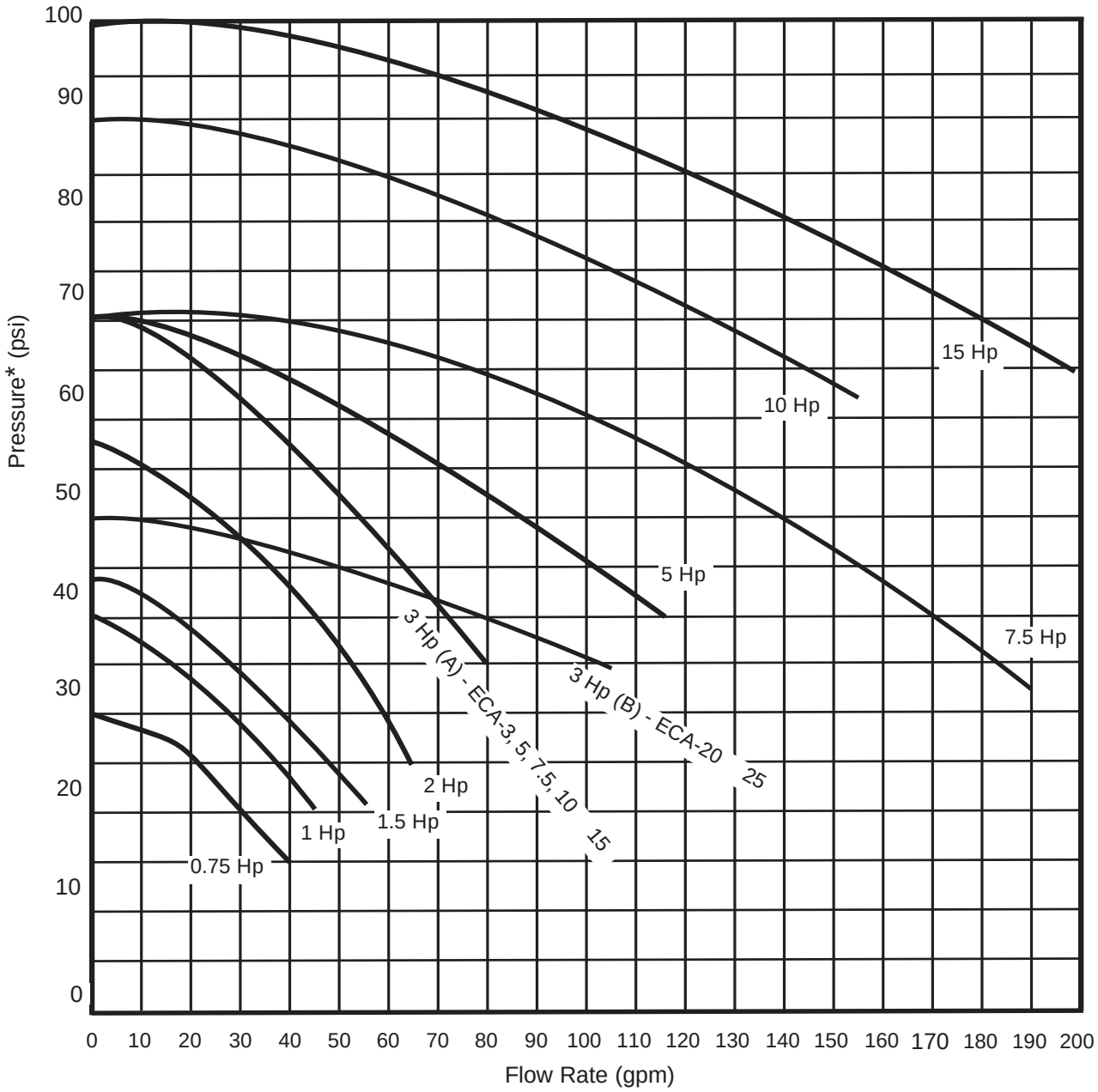
High-ambient Models – Oversized condenser surfaces and increased air flow for operation in ambient temperatures as high as 120ºF {49ºC}

Tankless/Pumpless Kits – EarthSmart chillers are available without a pump or without a tank and pump to meet the requirements of your system.

UL/CE Labeling – Includes UL or CE labeled electrical enclosure only.

Extended Compressor Warranty – Warranty extension covers the compressor(s) only for an additional (2) two years. Labor, refrigerant or any other chiller parts are not included during the extended warranty period.

SINGLE PUMP CURVES



SPECIFICATION NOTES

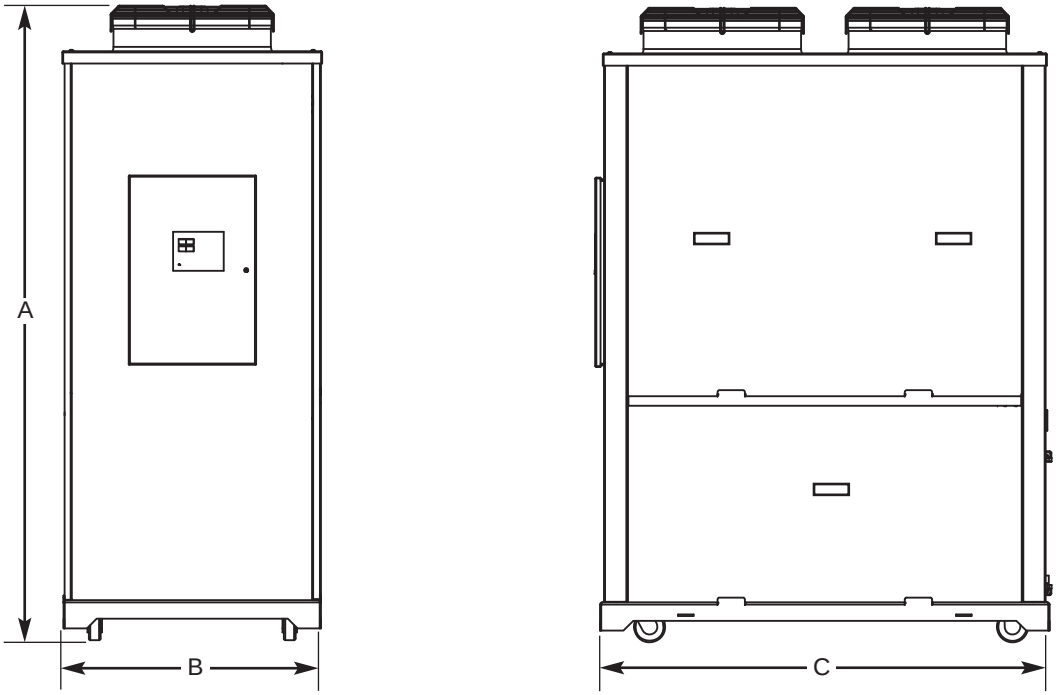
Pump availability: 0.75 Hp standard for 1.5 ton; 1 Hp standard for 3 ton; 1.5 Hp standard for 5, 7.5 and 10 ton and optional for 1.5 ton; 2 Hp standard for 15 ton and optional for 3 ton; 3 Hp (A) optional for 3, 5, 7.5 and 10 ton; 3 Hp (B) standard for 20 and 25 ton; 5 Hp standard for 30 ton and optional for 5 and 15 ton; 7.5 Hp optional for 7.5, 10, 20, 25 and 30 ton; 10 Hp optional for 15 ton; 15 Hp optional for 20, 25 and 30 ton.

* Pump curves do not reflect pressure drops due to internal piping.

These pump curves are non-overloading using the service factor of the motors.

Specifications may change without notice. Check with your Conair representative for the most current information.

SPECIFICATIONS



MODEL	ECA-1.5	ECA-3	ECA-5	ECA-7.5	ECA-10	ECA-15	ECA-20	ECA-25	ECA-30
Performance characteristics									
Nominal capacity* tons {kW}	1.5 {5.3}	3.0 {10.5}	5.0 {17.6}	8.0 {28.1}	10.4 {36.5}	14.1 {49.5}	22.6 {79.4}	24.8 {87.1}	29.4 {103.3}
Compressor qty/Hp {kW}	(1) 1.5 {1.12}	(1) 3 {2.24}	(1) 5 {3.73}	(1) 7.5 {5.59}	(1) 10 {7.46}	(1) 15 {11.19}	(1) 20 {14.91}	(1) 25 {18.64}	(1) 30 {22.37}
Standard process pump† Hp {kW}	0.75 {0.56}	1.0 {0.75}	1.5 {1.12}	1.5 {1.12}	1.5 {1.12}	2.0 {1.50}	3.0 {2.25}	3.0 {2.25}	5.0 {3.73}
Standard process flow gpm {l/min}	4.0 {15.1}	8.0 {30.3}	13.0 {49.2}	20.0 {75.7}	26.0 {98.4}	35.0 {132.5}	56.0 {212.0}	61.0 {230.9}	73.0 {276.3}
Standard process pressure psi {bar}‡	33.0 {2.28}	38.0 {2.62}	43.0 {2.96}	40.0 {2.76}	39.0 {2.69}	38.0 {2.62}	29.0 {2.00}	28.0 {1.93}	45.0 {3.10}
Reservoir capacity gal {l}	10 {37.9}	10 {37.9}	25 {94.6}	25 {94.6}	25 {94.6}	50 {189.3}	75 {283.9}	75 {283.9}	75 {283.9}
Condenser fan qty/fan Hp {kW} each	(1) 1.15 {0.86}	(1) 1.15 {0.86}	(1) 1.5 {1.10}	(2) 1.4 {1.05}	(2) 1.4 {1.05}	(1) 3.0 {2.25}	(2) 1.4 {1.05}	(2) 3.0 {2.25}	(2) 3.0 {2.25}
Dimensions inches {mm}									
A - Height	54.63 {1388}	54.63 {1388}	74.06 {1881}	81.34 {2066}	81.34 {2066}	86.41 {2195}	90.66 {2303}	88.56 {2250}	88.56 {2250}
B - Width	27.00 {686}	27.0 {686}	33.0 {838}	33.0 {838}	33.0 {838}	43.0 {1092}	45.50 {1156}	45.50 {1156}	45.50 {1156}
C - Depth	46.88 {1191}	46.91 {1192}	51.88 {1318}	63.50 {1613}	63.50 {1613}	63.50 {1613}	75.88 {1927}	76.09 {1933}	76.09 {1933}
Connections inches {mm}									
Process connections NPT	1.0 {25}	1.0 {25}	1.5 {38}	1.5 {38}	1.5 {38}	2.0 {51}	2.5 {64}	2.5 {64}	2.5 {64}
Approximate weight lb {kg}									
Installed	485 {220}	535 {243}	1050 {476}	1540 {699}	1680 {762}	1850 {839}	1905 {864}	2113 {958}	2320 {1052}
Shipped	535 {243}	580 {263}	1100 {499}	1590 {721}	1730 {785}	1900 {862}	2075 {941}	2313 {1049}	2550 {1157}
Voltages full load amps									
460/3 phase/60 Hz	7.6	11.4	17.2	23.6	27.5	38.1	54.8	75.2	76.7

SPECIFICATION NOTES:

* Based on 50°F {10°C} supply water (no antifreeze) to the process, standard single pump selections, a maximum of 95°F {35°C} ambient air and 60 Hz operation. Adjust capacities up 2% per degree for operation above 50°F {10°C} to a maximum of 65°F {18°C}. Adjust capacities down 2% per degree of operation below 50°F {10°C} to a minimum of 20°F {-7°C}. Capacities are /- 5% based on the compressor manufacturer s ratings and are subject to change without notice. Consult with a Conair representative for other conditions. Capacities change depending on selected options.

† Standard design based on 50°F {10°C} to process with 60°F {16°C} return from process.

‡ Standard pump pressure rating does not include internal chiller losses.

Specifications may change without notice. Check with your Conair representative for the most current information.

Model ECW-10

ECO-FRIENDLY REFRIGERANT; DURABLE CONSTRUCTION

Conair's EarthSmart™ ECW Series Portable Chillers are quality engineered for year-round, 24/7 operation under demanding industrial applications. Combining a compact design, durable construction and a new control platform, Conair's ECW Series Chillers provide maximum cooling for all your processing applications.

Integrated with R-410A non-ozone depleting refrigerant, the ECW Series functions with the environment in mind.

BROAD PRODUCT RANGE; INTUITIVE CONTROL

Choose the EarthSmart ECW Series Water-Cooled Chillers when an inexpensive water source is available. Nine ECW Series Chillers have cooling capacities that range from 1.5 to 30 tons with operating temperature ranges of 20º to 70ºF {-7º to 21ºC} with condenser temperature ratings up to 85ºF {29ºC}.

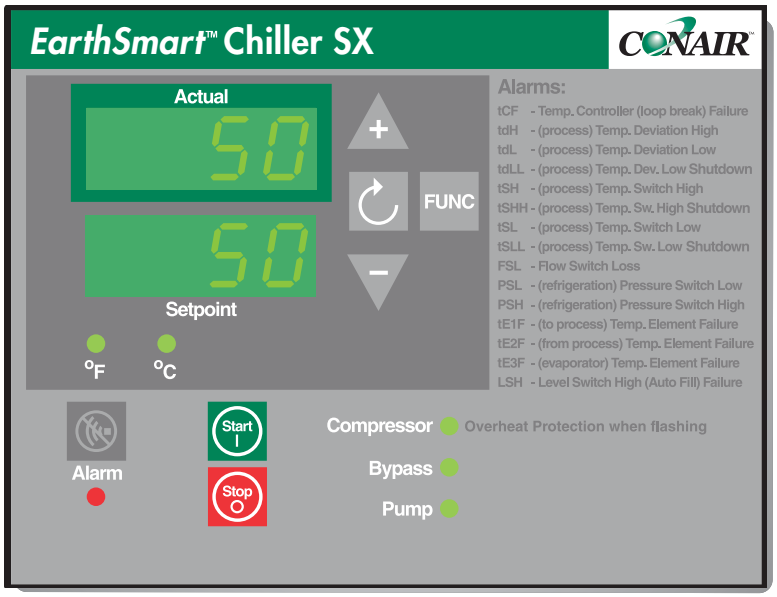
Every model is equipped with an improved multi-function microprocessor control. The control features dual, 4-digit LED displays for temperature and alarm code readouts. Additional indicator lights on the control inform you when the compressor, hot-gas bypass valve or pump is activated.

Tool-free access panels and a neatly organized internal component layout provide easy access and service. Simply remove the panels to gain access to the entire cabinet of the chiller.

- **Accurate temperature control**
  Multi-function microprocessor controller includes dual, 4-digit LED displays that readout alpha-numeric alarm codes and temperatures. The control panel also has additional indicator lights that show the status of the pump, compressor, hot-gas bypass valve, alarms and temperature unit selection.
- **Environmentally-friendly refrigerant**
  All EarthSmart ECW Series Chillers use R-410A refrigerant. This refrigerant significantly reduces the potential amount of harmful chemicals released into the environment.
- **Non-ferrous construction**
  All chilled water contact surfaces are non-ferrous for protection against corrosion. Pumps and reservoirs are stainless steel. All other wetted surfaces are brass, copper or other non-ferrous materials.
- **Reliable, long-life design**
  Proven component suppliers like Copeland, Scot Pump, Sporlan, Johnson Controls and Cutler-Hammer have been chosen for ultimate reliability and availability of parts. Each chiller is factory tested underload prior to shipment and is provided with a functionality test report when it is shipped.

FEATURES/OPTIONS

EARTHSMART™ ECW WATER-COOLED SERIES



Control Features

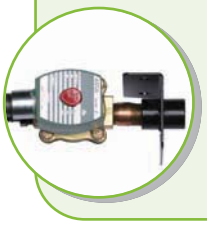
- Large, dual 4-digit LED displays for process data, alarms and operation.
- Scroll and Function buttons allow you to navigate the chiller's control parameters.
- Selectable temperature control point; choose between To Process, From Process or Average.
- Five status lights that show pump, hot-gas bypass, compressor, alarm and tem perature unit selection status.
- Auto-tune capabilities allow to you optimize your chiller to achieve maximum efficiency.

- **Evaporator Strainer –** Protects the evaporator from solid contaminants in the process water stream (example: pellets in an open extrusion cooling tank). Bronze construction. Pre-piped.
- **Hot-Gas Bypass Valve –** Capacity control down to 25%.
- **Process Pump Pressure Gauge –** Provides a mechanical read-out of the process pump discharge pressure for roughly estimating flow and detecting pump problems.
- **Brazed Plate Evaporators –** High surface area, rapid response.
- **Condenser Water Strainer –** Helps to protect the condenser from solid contaminants in the condenser water (example: dirty cooling tower water). Cast iron construction.
- **Standard Warranty –** One year parts and labor warranty from the casters up.

OPTIONS

Process Water Bypass with Valves – Includes process water valves and a pre-piped, external bypass line with bypass valve for low flow/high delta T processes which would limit flow through the chiller.

Alarm Kit – Highly visible strobe light and beacon indicate any chiller fault that may occur.



Autofill – Reservoir level sensor and solenoid to allow connection to city water for automatic water make-up. (Not recommended when chiller is charged with Glycol.)

Condenser Water Regulating Valve (WRV) – Modulating condenser water regulating valve matches cooling tower water flow with chiller operating conditions. Recommended when cooling tower water temperatures will fall below 75ºF {24ºC}.

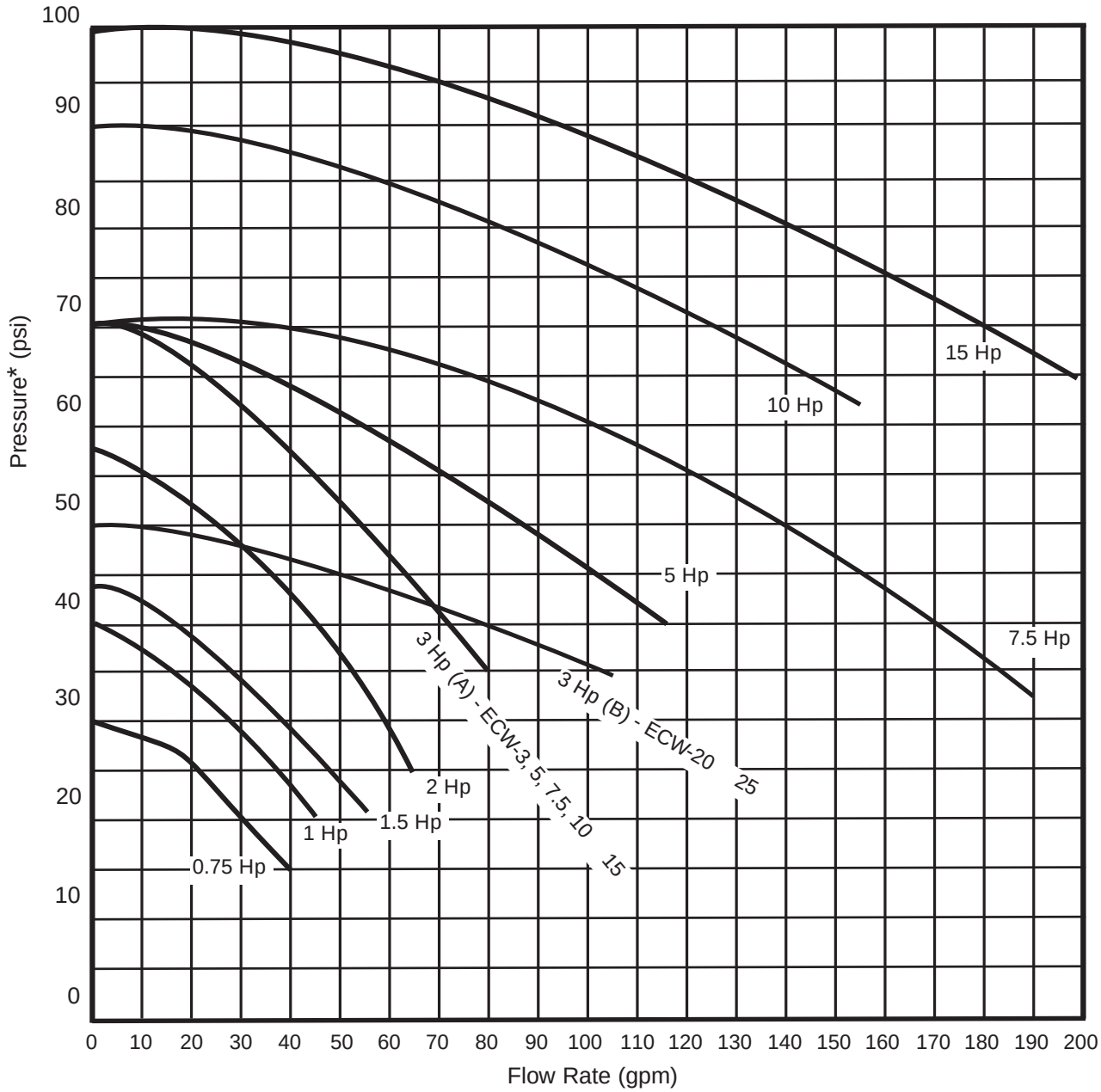
Dual Water Pumps – Includes a second pump dedicated to recirculating coolant through the evaporator for increased heat transfer.

Tankless/Pumpless Kits – EarthSmart chillers are available without a pump or without a tank and pump to meet the requirements of your system.

UL/CE Labeling – Includes UL or CE labeled electrical enclosure only.

Extended Compressor Warranty – Warranty extension covers the compressor(s) only for an additional (2) two years. Labor, refrigerant or any other chiller parts are not included during the extended warranty period.

SINGLE PUMP CURVES



SPECIFICATION NOTES

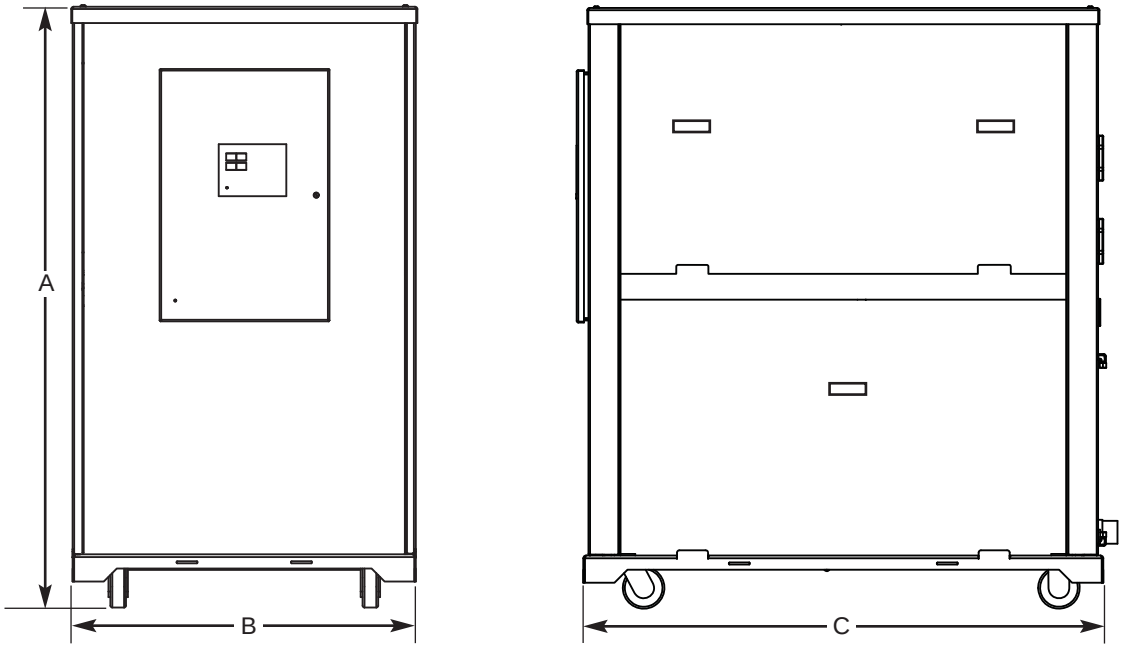
Pump availability: 0.75 Hp standard for 1.5 ton; 1 Hp standard for 3 ton; 1.5 Hp standard for 5, 7.5 and 10 ton and optional for 1.5 ton; 2 Hp standard for 15 ton and optional for 3 ton; 3 Hp (A) optional for 3, 5, 7.5 and 10 ton; 3 Hp (B) standard for 20 and 25 ton; 5 Hp standard for 30 ton and optional for 5 and 15 ton; 7.5 Hp optional for 7.5, 10, 20, 25 and 30 ton; 10 Hp optional for 15 ton; 15 Hp optional for 20, 25 and 30 ton.

* Pump curves do not reflect pressure drops due to internal piping.

These pump curves are non-overloading using the service factor of the motors.

Specifications may change without notice. Check with your Conair representative for the most current information.

SPECIFICATIONS



MODEL	ECW-1.5	ECW-3	ECW-5	ECW-7.5	ECW-10	ECW-15	ECW-20	ECW-25	ECW-30
Performance characteristics									
Nominal capacity* tons {kW}	1.6 {5.6}	2.9 {10.2}	5.4 {19.0}	7.3 {25.7}	10.3 {36.2}	15.2 {53.5}	19.4 {68.2}	24.4 {85.8}	31.9 {112.2}
Compressor qty/Hp {kW}	(1) 1.5 {1.12}	(1) 3 {2.24}	(1) 5 {3.73}	(1) 7.5 {5.59}	(1) 10 {7.46}	(1) 15 {11.19}	(1) 20 {14.91}	(1) 25 {18.64}	(1) 30 {22.37}
Standard process pump† Hp {kW}	0.75 {0.56}	1.0 {0.75}	1.5 {1.12}	1.5 {1.12}	1.5 {1.12}	2.0 {1.50}	3.0 {2.25}	3.0 {2.25}	5.0 {3.73}
Standard process flow gpm {l/min}	4.0 {15.1}	7.0 {26.5}	14.0 {53.0}	18.0 {68.1}	26.0 {98.4}	37.0 {140.0}	48.0 {181.7}	60.0 {227.1}	79.0 {299.0}
Standard process pressure PSI {bar}‡	33.0 {2.28}	38.0 {2.62}	42.0 {2.9}	41.0 {2.83}	39.0 {2.69}	37.0 {2.55}	33.0 {2.28}	27.0 {1.86}	43.0 {2.96}
Reservoir capacity gal {l}	10 {37.9}	10 {37.9}	25 {94.6}	25 {94.6}	25 {94.6}	50 {189.3}	75 {283.9}	75 {283.9}	75 {283.9}
Condenser water flow gpm {l/min}	5.3 {20.1}	9.3 {35.2}	17.1 {64.7}	22.9 {86.7}	30.8 {116.6}	46.1 {174.5}	59.4 {224.9}	69.5 {263.1}	97.4 {368.7}
Dimensions inches {mm}									
A - Height	40.00 {1016}	40.00 {1016}	56.41 {1433}	56.41 {1433}	57.78 {1468}	66.78 {1696}	76.19 {1935}	76.19 {1935}	76.19 {1935}
B - Width	27.0 {686}	27.0 {686}	33.0 {838}	33.0 {838}	33.0 {838}	43.0 {1092}	45.50 {1156}	45.50 {1156}	45.50 {1156}
C - Depth	45.0 {1143}	45.0 {1143}	51.88 {1318}	51.88 {1318}	55.88 {1419}	63.5 {1613}	72.94 {1853}	72.94 {1853}	73.03 {1855}
Approximate weight lb {kg}									
Installed	450 {204}	475 {216}	685 {311}	1130 {513}	1240 {563}	1480 {671}	1515 {687}	1750 {794}	1985 {900}
Shipping	500 {227}	525 {238}	735 {333}	1180 {535}	1290 {585}	1530 {694}	1685 {764}	1950 {885}	2215 {1005}
Connections inches {mm}									
Process connections NPT	1.0 {26}	1.0 {26}	1.5 {38}	1.5 {38}	1.5 {38}	1.5 {38}	2.5 {64}	2.5 {64}	2.5 {64}
Condenser connections NPT	1.0 {26}	1.0 {26}	1.0 {26}	1.5 {38}	1.5 {38}	1.5 {38}	2.0 {51}	2.0 {51}	2.0 {51}
Voltages full load amps									
460/3 phase/60 Hz	6.6	9.8	15.4	20.0	23.6	34.0	38.9	52.0	68.3

SPECIFICATION NOTES:

* Based on supplying 50°F {10°C} water (no antifreeze) to process, standard single pump selections, maximum of 95°F {35°C} ambient air and 60 Hz operation. Adjust capacities up 2% per degree for operation above 50°F {10°C} to a maximum of 65°F {18°C}. Adjust capacities down 2% per degree for operation below 50°F {10°C} to a minimum of 20°F {-7°C}. Capacities are /- 5% based on the compressor manufacturer s ratings and are subject to change without notice. Consult with a Conair representative for other conditions. Capacities change depending on selected options.

† Standard design based on 50°F {10°C} to process with 60°F {16°C} return from process. Condenser water based on 85°F {29°C} supply and 95°F {35°C} return.

‡ Standard pump pressure rating does not include internal chiller losses.

Specifications may change without notice. Check with your Conair representative for the most current information.

Model EP1A-01

PRECISE TEMPERATURE CONTROL; COMPACT FOOTPRINT

The Conair EP1 Series Portable Chillers are designed for 1 to 3 ton applications. Available as air-cooled or water-cooled, with pump sizes from 1/4 to 3 Hp {0.2 to 2.2 kW} for air-cooled units, and 1 to 3 Hp {0.7 to 2.2 kW} for water-cooled units, the EP1 Series boasts nonferrous construction (evaporator, pump, reservoir and piping) to resist corrosion, a compact footprint with easy-to-access interior, and a control that provides precise temperature control along with extensive diagnostics.

QUALITY CONSTRUCTION; RELIABLE OPERATION

With more standard features than the competition, the EP1 Series Portable Chillers are designed for indoor use in industrial manufacturing locations.

Both water-cooled and air-cooled units ship with a full refrigerant charge, eliminating the need for charging before operation. This saves time and money, right out of the box. Units with a remote air-cooled condenser ship with a nitrogen charge.

All EP1 Chillers are manufactured using painted, heavy-gauge steel to form a cabinet with tool-free access.

Conair's innovative microprocessor control system is designed specifically for portable chiller applications. The easy-to-use operator panel utilizes a four-plug wiring design which allows the entire control board to be replaced in minutes.

Dependable chiller performance

Designed with a comprehensive group of built-in protective features, the EP1 assures dependable performance with minimum downtime. A 2.5 minute anti-cycle timer prevents excessive compressor cycling. A low-load thermostat extends operating time at idle and low-load conditions and a non-cycling low pressure switch specifically designed for portable chillers helps protect the compressor from damage and unnecessary wear.

More standard features

The EP1 Series Portable Chillers come equipped with standard features that other manufacturers would offer as options. Features included to guarantee long-life, simple operation, and quality end results are included as standard with this series.

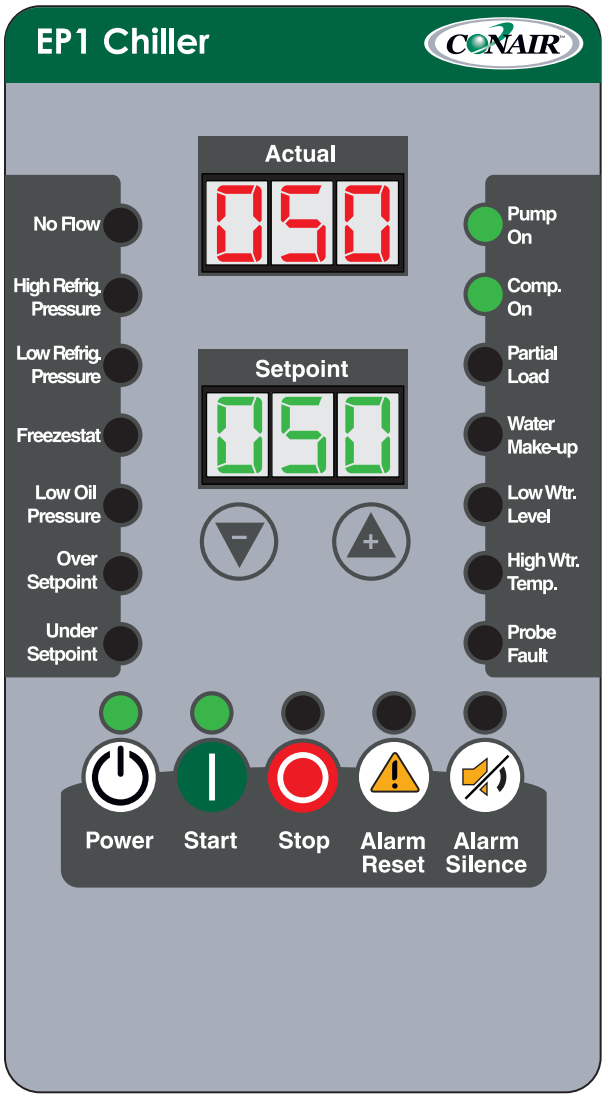
Energy efficient

Constructed with the energy efficient and reliable rotary compressor (1 ton unit) and the energy efficient and industrial scroll compressor (2 and 3 ton units), these compact chillers save you money by saving energy.

Extensive warranty

In addition to Conair's standard one year parts and labor warranty, the EP1 comes with a five year parts warranty for the microprocessor, and a lifetime $175 exchange policy after the initial five year warranty period.

CONTROL FEATURES



Standard control features:

- Two easy-to-read LED digital displays show “Actual” and “Setpoint” temperatures
- Manual reset of safeties from front panel eliminates need to open chiller cabinet
- Thirty minute deviation delay stops nuisance alarms during start-up and setpoint changes
- Compressor cycling delay prevents short cycling
- PID control program algorithm provides ± 1°F / °C accuracy
- High/low temperature deviation alarm
- Power failure indicator signals brown out
- Easily switches between °F and °C readouts
- Low-flow protection
- Diagnostic lights that indicate no flow, high and low refrigerant pressure, freezestat, over and under setpoint, pump on, compressor on, partial load, probe fault and optional low water level and water make-up on

Optional control features:

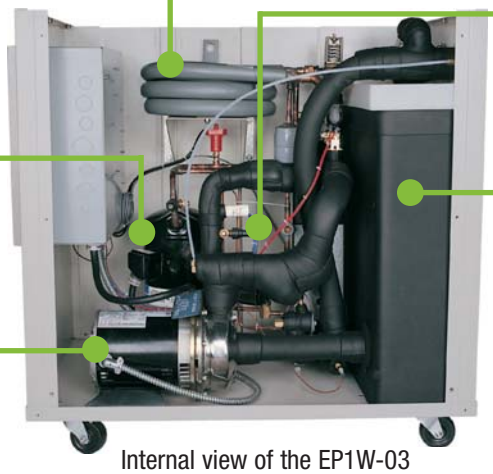
- Hand-held, remote control operator panel
- SPI communications
- Audible alarm
- “From Process” temperature readout
- Remote alarm contacts
- Remote on/off contacts

HIGH QUALITY ELECTRICAL COMPONENTS

All Conair EP1 Series Portable Chillers come standard with a NEMA 1 electrical enclosure to protect the microprocessor and chiller wiring. High quality electrical components meet IEC electrical standards and are fully tested before shipping. Disconnect switches, UL certification and NFPA-79 are affordable options.

FEATURES

- Water-cooled units have cleanable shell-and-tube condensers and a water regulating valve for head pressure control
- Efficient and reliable one ton rotary compressor or two and three ton scroll compressors
- Process pump with pressure gauge



- Stainless steel brazed plate evaporator provides high efficiency heat transfer
- Insulated polyethylene reservoir with removable cover

Internal view of the EP1W-03

Mechanical features

- Electronic hot gas bypass for stable capacity control
- Air-cooled units have copper tube / aluminum finned condensers and includes air inlet filter (optional on one-ton unit)
- Remote condenser units include a galvanized steel remote condenser with fans and copper tube / aluminum fin coils with a nitrogen holding charge

Electrical features

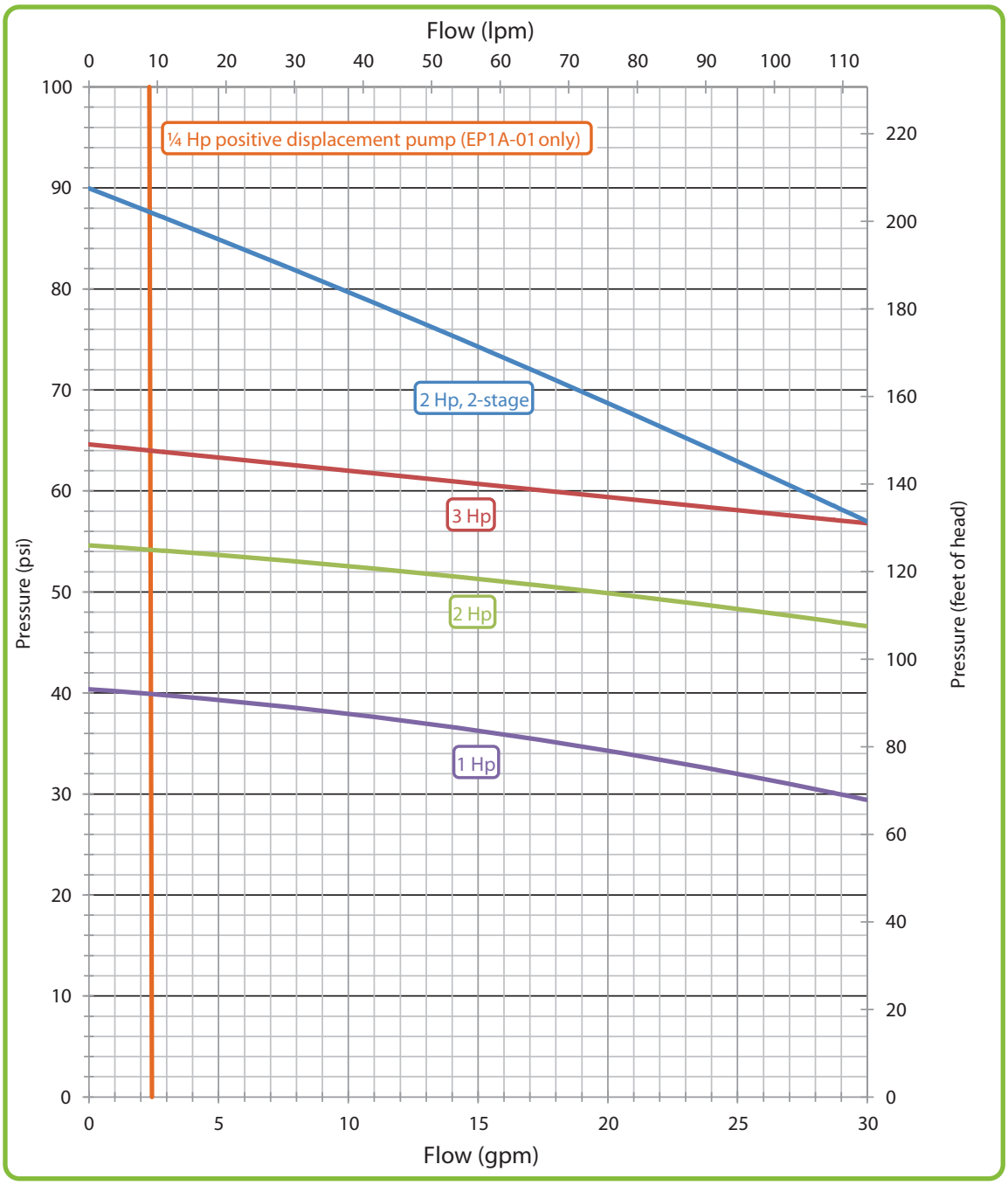
- Compressor, pump and condenser fan starters mounted and wired to motors
- Single-point main power block for simple wiring connection
- Freezestat safety switch with solid state sensor
- Encapsulated high and low refrigerant pressure safeties
- Pressure or flow switch interlocked with compressor

Other features

- Nonferrous construction of evaporator, pump, reservoir and piping to resist corrosion
- Microprocessor controller to provide diagnostic and accurate temperature control
- Air-cooled condenser is generously sized for ambient temperatures up to 115°F {46°C}
- Internal insulated polyethylene reservoir comes with large capacity and a removable top
- Condenser fan discharges air quietly through the top of the unit
- Hot gas bypass provides accurate capacity control and extends compressor life
- Process Y-strainer protects the evaporator from contaminants in the water
- External sight glass, fill connection and drain connection
- Smaller footprint that takes up less floor space
- Easily removable side panels allow quick access to interior components

PUMP CURVES

Water temperature at 50°F {10°C}



SPECIFICATION NOTES

Pump availability: 0.25 Hp standard for 1.0 ton; 1 Hp standard for 2 and 3 ton; 2 Hp, 2 Hp 2-stage and 3 Hp optional for 2 and 3 ton.

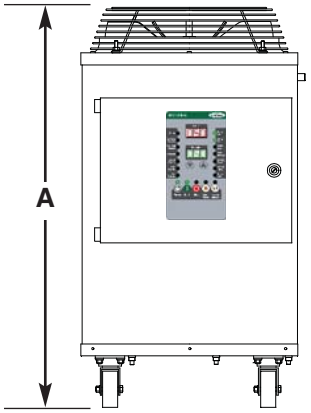
* Pump curves do not reflect pressure drops due to internal piping.

These pump curves are non-overloading using the service factor of the motors.

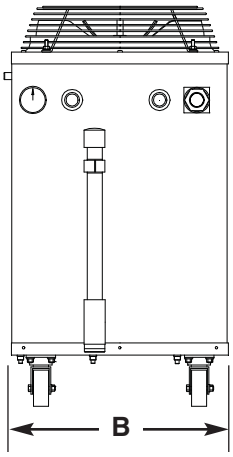
Specifications may change without notice. Check with your Conair representative for the most current information.

SPECIFICATIONS

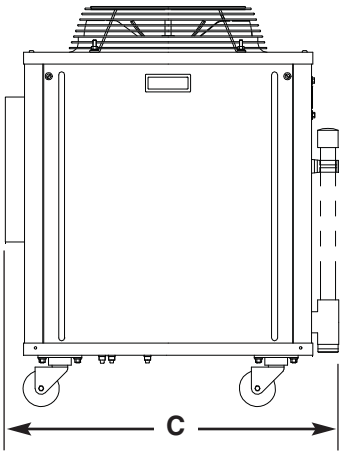
Air cooled



Front view
(EP1A)

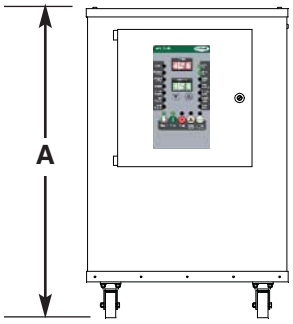


Rear view
(EP1A)

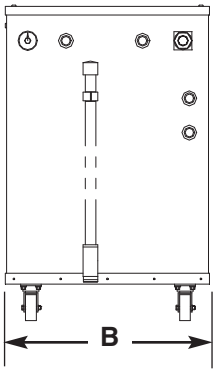


Side view
(EP1A)

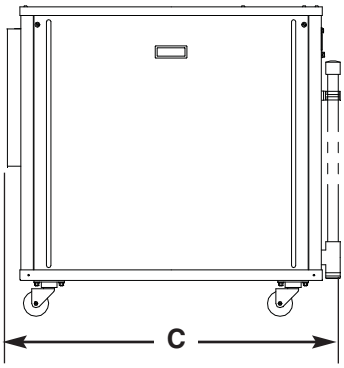
Water cooled / remote condenser indoor unit



Front view
(EP1W and EP1R)

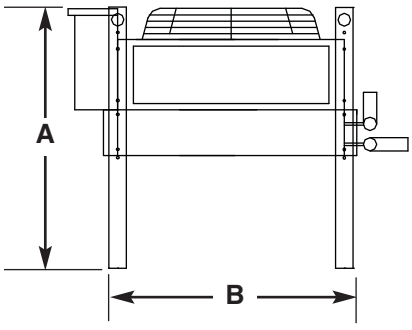


Rear view
(EP1W and EP1R)

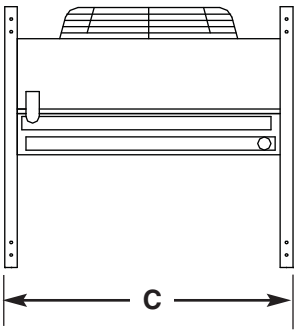


Side view
(EP1W and EP1R)

Remote condenser outdoor unit



Front view
(EP1R)



Side view
(EP1R)

SPECIFICATIONS

MODELS	EP1A-01	EP1A-02	EP1A-03	EP1W-02	EP1W-03
Condenser	Air cooled			Water cooled	
Performance characteristics					
Cooling capacity tons *	1.0	2.0	3.0	2.2	3.3
Setpoint range °F {°C} †	20 to 65 {-7 to 18}	20 to 65 {-7 to 18}	20 to 65 {-7 to 18}	20 to 65 {-7 to 18}	20 to 65 {-7 to 18}
Refrigerant	R407C	R407C	R407C	R407C	R407C
Air flow ft^3/min	1110	1585	2470	N/A	N/A
Condensed water flow gpm {l/min}	N/A	N/A	N/A	7 {27}	10 {38}
Pump performance					
Pump motor size Hp {kW}	0.25 {0.18}	1 {0.75}	1 {0.75}	1 {0.75}	1 {0.75}
Pump flow gpm {l/min}	2 {7.5}	5 {18.9}	7 {26.4}	5 {18.9}	8 {30.2}
Pump pressure psi {bar}	80 {5.5}	39 {2.68}	38 {2.62}	39 {2.68}	37 {2.55}
Dimensions inches {mm}					
A - Height	33.125 {841}	41.50 {1054}	41.50 {1054}	36.625 {930}	36.625 {930}
B - Width	18.625 {473}	24.00 {610}	24.00 {610}	24.00 {610}	24.00 {610}
C - Depth	27.625 {702}	39.625 {1006}	39.625 { 1006}	39.625 {1006}	39.625 {1006}
Voltages MCA					
230/1 phase/60 Hz	11.8	N/A	N/A	N/A	N/A
230/3 phase/60 Hz	N/A	17.0	21.5	15.4	18.9
460/3 phase/60 Hz	N/A	9.0	11.9	8.2	10.6
575/3 phase/60 Hz	N/A	7.2	9.6	6.6	8.5
Weight lb {kg}					
Shipping	255 {116}	420 {191}	430 {195}	420 {191}	430 {195}

MODELS	EP1R-03 (Indoor unit)‡
Condenser	Remote
Performance characteristics	
Cooling capacity tons	3.0
Setpoint range °F {°C}	20 to 65 {-7 to 18}
Refrigerant	R407C
Condensed water flow gpm	N/A
Pump performance	
Pump motor size Hp {kW}	1 {0.7}
Pump flow gpm {l/min}	7 {26.5}
Pump pressure psi {bar}	38 {2.6}
Dimensions inches {mm}	
A - Height	36.625 {930}
B - Width	24.00 {610}
C - Depth	39.625 {1006}
Voltages MCA	
230/3 phase/60 Hz	18.9
460/3 phase/60 Hz	10.6
575/3 phase/60 Hz	N/A
Weight lb {kg}	
Shipping	430 {195}

MODELS	EP1R-03 (Outdoor unit)‡
Condenser	Remote
Performance characteristics	
Refrigerant	R407C
Air flow ft^3/min	6750
Condenser fan Hp {kW}	0.50 {0.40}
Connections inches {mm}	
Inlet	1.125 {29}
Outlet	1.125 {29}
Dimensions inches {mm}	
A - Height	41.44 {1053}
B - Width	38.75 {984}
C - Depth	45.75 {1162}
Voltages MCA	
230/1 phase/60 Hz	3.0
Weight lb {kg}	
Shipping	565 {256}

SPECIFICATION NOTES:

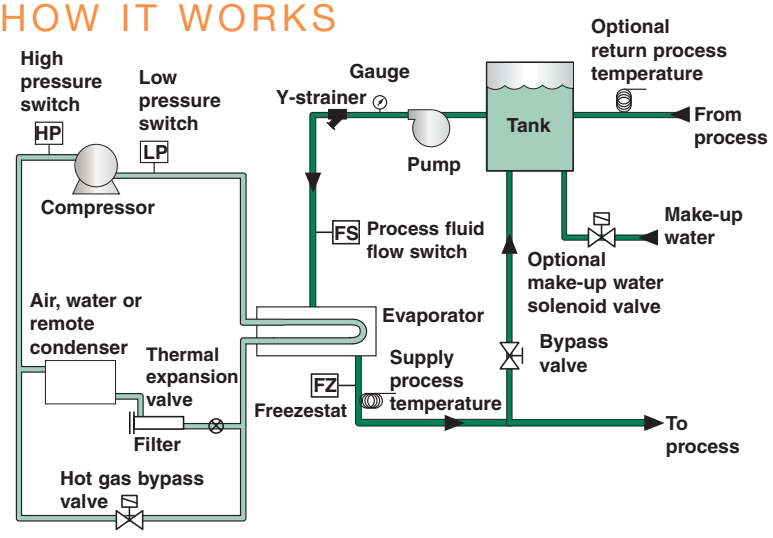
* Based on the 50°F {10°C} water to the process, single pump selections, a maximum of 95°F {35°C} ambient air and 60 Hz. Adjust capacities up 2% per degree above 50°F {10°C} to a maximum of 65°F {18°C}. Adjust capacities down 2% per degree below 50°F {10°C} to a minimum of 20°F {-7°C}. Capacities are ± 5% based on the compressor manufacturer's ratings and are subject to change without notice. Consult with a Conair representative for other conditions. Capacities change depending on selected options.

† Standard set point range is 20°F to 65°F {-7 to 18°C}. To extend range to 20°F to 80°F {-7 to 27°C} the CPR valve option is required.

‡ Remote condenser operation requires both indoor and outdoor unit.

Specifications may change without notice. Consult a Conair representative for the most current information.

HOW IT WORKS



Process circulation:

Process fluid enters through the "From process" connection to the reservoir tank. The pump draws water from the tank and moves it through the evaporator. Fluid is chilled and exits through the "To process" connection.

Refrigerant circulation:

The evaporator extracts heat from the process fluid. Vaporized refrigerant travels from the evaporator to the compressor, where it is compressed. The high-pressure vapor travels to the condenser. Air or water removes heat from the vapor, condensing it to liquid. This liquid is metered back to the evaporator by the expansion valve (TXV).

Model EP2A-10

OUTSTANDING PERFORMANCE; APPLICATION FLEXIBILITY

EP2 Series Portable Chillers are designed for 4 to 43 ton applications. Units are available in air-cooled, water-cooled and remote condensers models in a wide range of sizes.

Using quality components such as scroll compressors, micro-channel condensers, low noise fans, stainless steel brazed plate evaporators and sophisticated controls provide the best available technologies for unmatched performance and reliability in a chiller package. Integrated with R-410A non-ozone depleting refrigerant, the EP2 series functions with the environment in mind.

DEPENDABLE, EASY-TO-USE, WIDE SIZE RANGE

The EP2 Series offers superior performance and innovative technology in a dependable portable chiller package.

This series of chillers boasts the best components and technology available for the highest level of performance and flexibility to meet the needs of today's industrial manufacturing environment.

Designed for total efficiency, all air-cooled models have tools-free removable door panels for easy access to all components.

Conair's EP2 air-cooled units also feature high-efficiency, low noise fans with integral condensers for reduced operating noise and increased efficiency. Also included as standard are totally enclosed air over (TEAO) motors that contribute to the long life of the chiller.

Available with optional touch screen control

The EP2 Series Portable Chillers come with a standard controller, with 19 operational and diagnostic lights, or can be upgraded to include the new premium touch screen controller with operational and diagnostic screens for easier diagnosis of faults. Both controls are easy to operate and completely sealed to protect against contamination from dirt or fluids.

More standard features

The EP2 models come equipped standard with features that other manufacturers would offer as options, features that guarantee long-life, simple operation and quality end-results.

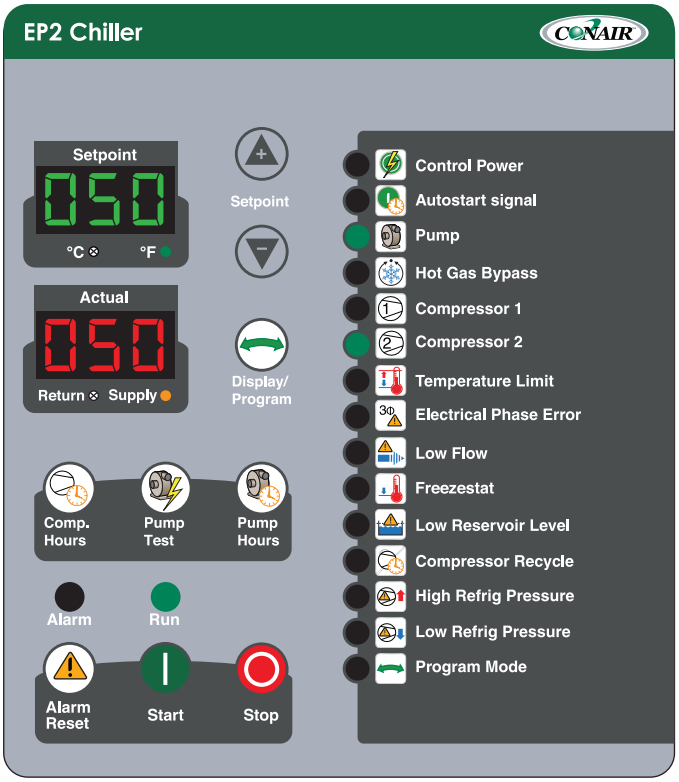
Energy efficient

Reliable and energy efficient scroll compressors are used in every EP2 chiller. Units over 20 tons utilize compressor staging for reduced energy use. These Conair chillers save you money by saving energy.

Extensive warranty

In addition to Conair's standard one year parts and labor warranty, the EP2 comes with a five year parts warranty for the PLC controller and interface, and a lifetime $175 exchange policy after the initial five year warranty period (on the standard board).

CONTROL FEATURES



Standard control features:

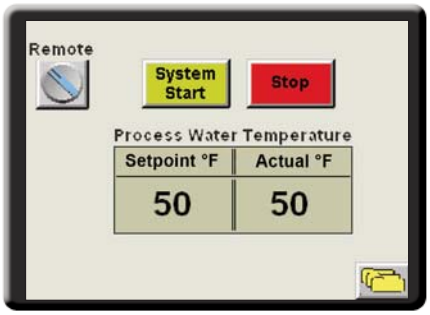
- Start-to-start anti-cycle timer prevents short-cycling of compressor while minimizing off periods
- Adjustable deviation alarm timer delay to prevent nuisance alarms during start-up
- Display temperatures easily switched from °F to °C
- Display of compressor and pump running hours helps with maintenance scheduling
- 3-phase monitor protects against unit damage due to phase reversal or loss of phase
- Master reset function to restore factory defaults

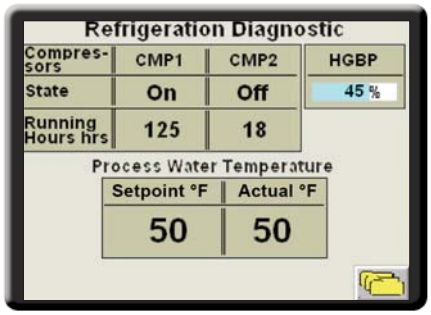
Optional control feature:

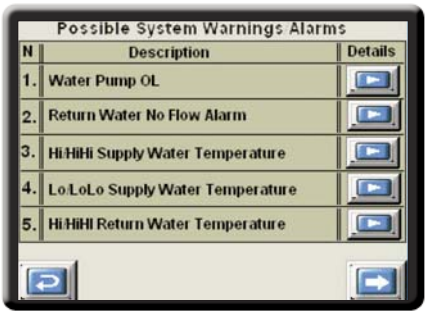
- Panasonic PLC with touch screen interface for enhanced diagnostic and operational display capabilities
- Refrigeration pressure transducers with sensor fault alarms (with PLC)
- Process flow meter
- Setpoint ambient tracking or remote control
- Hand-held, remote control operator panel
- SPI or ModBus RTU communication port

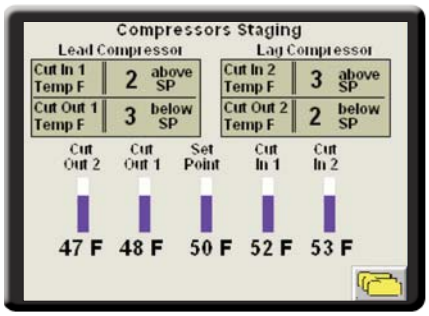
CONTROL FEATURES

Our most advanced controller option comes with a Panasonic PLC that features operational and diagnostic screens with a touch screen interface. Controller display screens are easy to read and easy to operate. This sophisticated controller option guarantees maximum chiller performance and reliability.



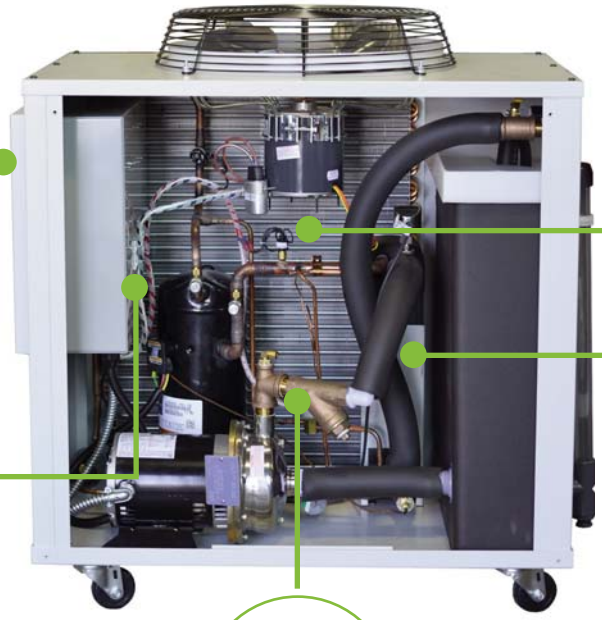






FEATURES

- Rotary non-fused disconnect switch



- Aluminum microchannel condensers for easier maintenance and improved reliability (air-cooled models)

- C-UL 508A industrial control panel (USA / Canada UL specification)

- Stainless steel brazed plate evaporator provides higher heat transfer coefficients due to reduced fouling

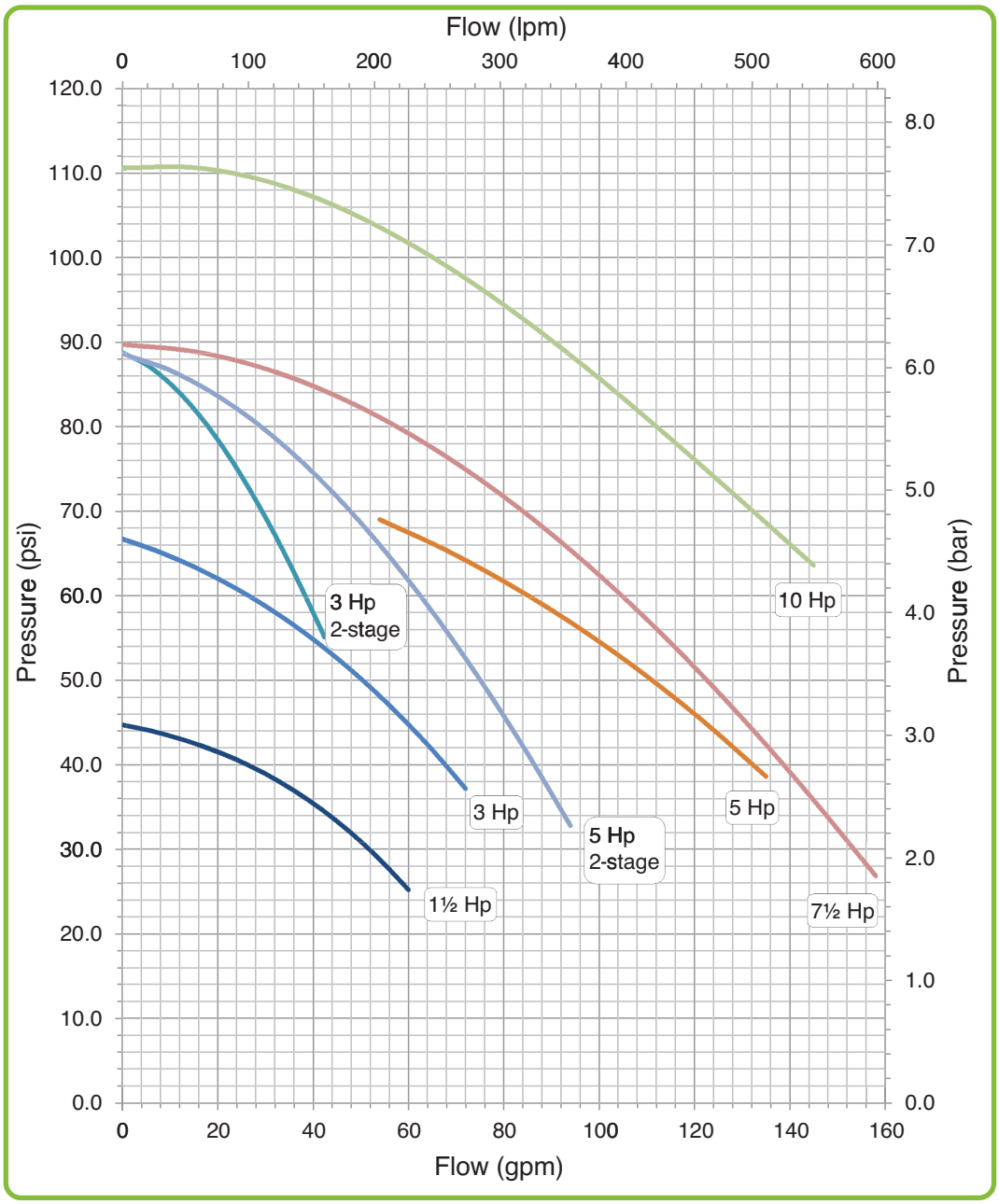
- Y-strainer to protect evaporator from contamination

Mechanical features

- Stepper motor driven hot gas bypass for reliable and precise temperature control.
- Air-cooled units with generously sized air-cooled condensers designed for industrial environments and tested to 700 PSIG. Includes air inlet filters. Condenser fan blade, motor, nozzle, and guard are a single piece assembly for improved reliability. The fan motors have a rugged external rotor design with totally enclosed air over construction.
- Water-cooled units use cleanable shell-and-tube water cooled condensers for industrial environments. Units are equipped with condenser water regulating valve to provide constant head pressure.
- Remote condenser units are designed with divided fan sections prevents “wind-milling” during fan cycling that includes galvanized steel fan sections and coil baffles, copper tube / aluminum fin coils tested to 650 PSIG, direct drive multi-blade propeller fans with venture orifices to optimize efficiency.
- External sight glass / fill connection / drain connection.
- Freezestat safety integrated into password protected menu to reduce risk of tampering provides evaporator freeze-up protection.
- Encapsulated high and low refrigerant pressure safeties.
- RTD temperature sensors yield higher precision and repeatability than thermocouples.
- Nonferrous water circuit construction.
- Stainless steel process pump with pressure gauge.
- Fail safe flow switch interlocked with compressor.
- Internal valved bypass line to protect pump and evaporator.
- Internal insulated polyethylene reservoir comes with large capacity and a removable top.
- Smaller footprint takes up less floor space than chiller units from other manufacturers.
- Easily removable side panel allows for quick access to internal components.

PUMP CURVES

Water temperature at 50°F {10°C}



SPECIFICATION NOTES

Pump availability: 1-1/2 Hp pump standard for 4, 5, 8, 10 and 13 ton units, 3 Hp pump standard for 15 and 20 ton units and optional for 4, 5, 8, 10 and 13 ton units, 3 Hp 2-stage pump optional for 4, 5, 8, 10, 13 and 15 ton units, 5 Hp pump standard for 25, 30, 35 and 40 ton units and optional for 8, 10, 13, 15 and 20 ton units, 5 Hp 2-stage pump optional for 4, 5, 8, 10, 13 and 15 ton units, 7-1/2 Hp pump optional for 8, 10, 13, 15, 20, 25, 30, 35 and 40 ton units, 10 Hp pump optional for 20, 25, 30, 35 and 40 ton units.

Pump curves do not reflect pressure drops due to internal piping.

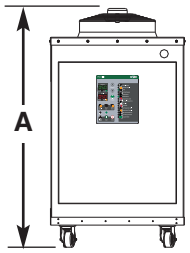
These pump curves are non-overloading using the service factor of the motors.

Specifications may change without notice. Check with your Conair representative for the most current information.

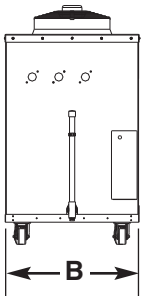
SPECIFICATIONS

Air cooled

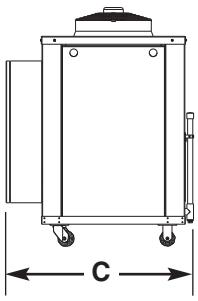
EP2A-04, EP2A-05, EP2A-08, EP2A-10 and EP2A-13



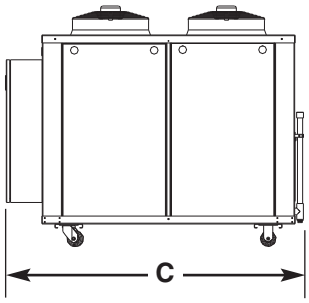
Front view



Rear view



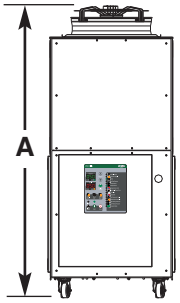
Side view
(EP2A-04 and EP2A-05)



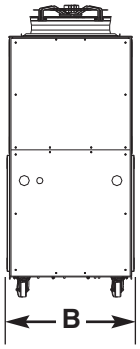
Side view
(EP2A-08, EP2A-10 and EP2A-13)

Air cooled

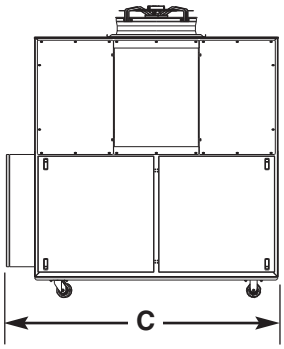
EP2A-15 and EP2A-20



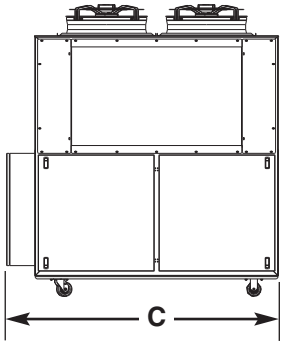
Front view



Rear view



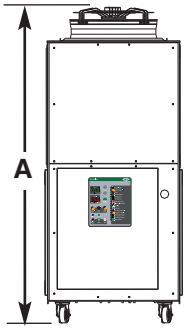
Side view
(EP2A-15)



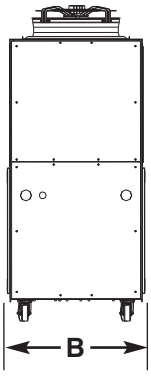
Side view
(EP2A-20)

Air cooled

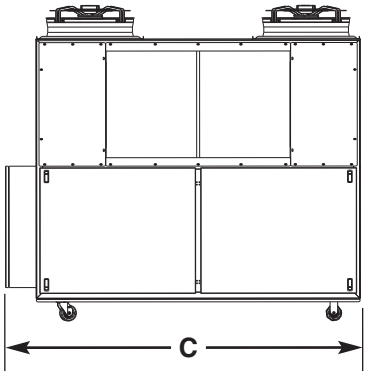
EP2A-25 and EP2A-30



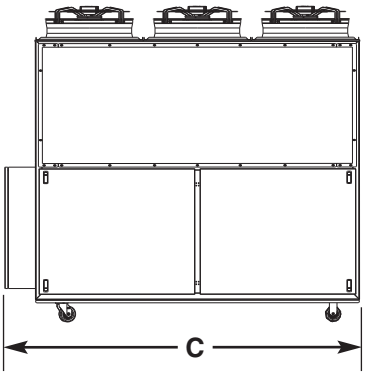
Front view



Rear view



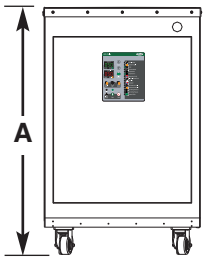
Side view
(EP2A-25)



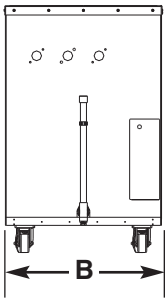
Side view
(EP2A-30)

SPECIFICATIONS

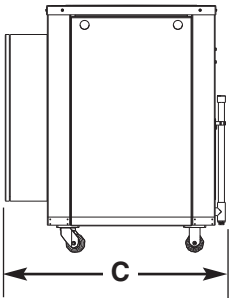
Water cooled
EP2W-05, EP2W-08, EP2W-10 and EP2W-15
Remote condenser (indoor unit)
EP2R-05, EP2R-08, EP2R-10 and EP2R-15



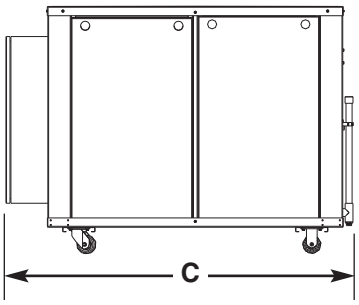
Front view



Rear view

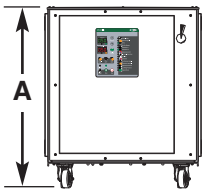


Side view
(EP2W-05 and EP2R-05)

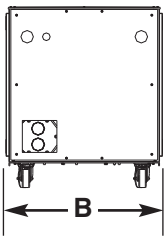


Side view
(EP2W-08, EP2W-10, EP2W-15, EP2R-08, EP2R-10 and EP2R-15)

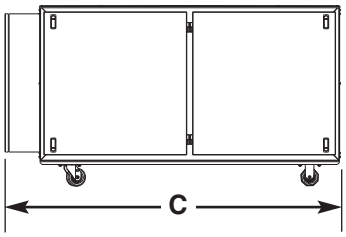
Water cooled
EP2W-20, EP2W-25, EP2W-30, EP2W-35 and EP2W-40
Remote condenser (indoor unit)
EP2R-20, EP2R-25, EP2R-30, EP2R-35 and EP2R-40



Front view

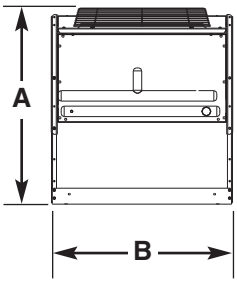


Rear view

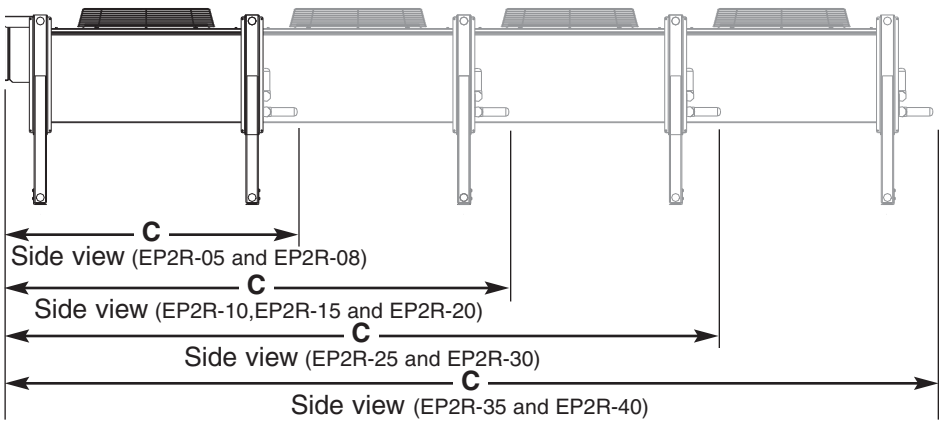


Side view

Remote condenser (outdoor unit)
Used with models EP2R-05, EP2R-08, EP2R-10,EP2R-15, EP2R-20, EP2R-25, EP2R-30, EP2R-35 and EP2R-40



Front view



SPECIFICATIONS

EP2 SERIES

MODELS	EP2A-04	EP2A-05	EP2A-A08	EP2A-10	EP2A-13	EP2A-15	EP2A-20	EP2A-25	EP2A-30
Condenser	Air cooled								
Performance characteristics									
Cooling capacity tons*	4.5	5.1	7.9	11.1	12.3	14.9	20.0	25.2	29.9
Setpoint range °F {°C}	20 to 80 {-7 to 27}	20 to 80 {-7 to 27}	20 to 80 {-7 to 27}	20 to 80 {-7 to 27}	20 to 80 {-7 to 27}	20 to 80 {-7 to 27}	20 to 80 {-7 to 27}	20 to 80 {-7 to 27}	20 to 80 {-7 to 27}
Refrigerant	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Condenser air flow ft^3/min	4500	4500	9000	9000	9000	10,500	19,000	20,000	27,000
Standard pump performance									
Pump motor size Hp {kW}	1.5 {1}	1.5 {1}	1.5 {1}	1.5 {1}	1.5 {1}	3 {2}	3 {2}	5 {4}	5 {4}
Pump flow gpm {l/min}	11 {42}	12 {45}	19 {72}	27 {102}	30 {114}	36 {136}	48 {182}	60 {227}	72 {273}
Pump pressure psi {bar}	42 {3}	42 {3}	41 {3}	39 {3}	39 {3}	57 {4}	52 {4}	60 {4}	56 {4}
Dimensions inches {mm}									
A - Height	60.75 {1543}	60.75 {1543}	60.75 {1543}	60.75 {1543}	60.75 {1543}	93.50 {2374}	93.50 {2374}	93.50 {2374}	93.50 {2374}
B - Width	34.50 {876}	34.50 {876}	34.50 {876}	34.50 {876}	34.50 {876}	41.00 {1041}	41.00 {1041}	41.00 {1041}	41.00 {1041}
C - Depth	47.50 {1206}	47.50 {1206}	75.00 {1905}	75.00 {1905}	75.00 {1905}	87.25 {2216}	87.25 {2216}	105.25 {2673}	105.25 {2673}
Voltages MCA									
230/3 phase/60 Hz	31.4	35.2	51.2	74.4	74.8	90.2	103.6	149.7	168.2
460/3 phase/60 Hz	20.0	20.0	26.1	30.9	36.5	44.3	55.5	70.0	83.1
575/3 phase/60 Hz	15.0	15.0	20.9	24.8	29.2	35.5	44.4	56.0	66.5
Water requirements									
Reservoir holding capacity gal {lt}	11 {42}	11 {42}	22 {83}	22 {83}	22 {83}	50 {189}	50 {189}	67 {254}	67 {254}
Process connections	1.5 {38.10}	1.5 {38.10}	1.5 {38.10}	1.5 {38.10}	2 {50.80}	2 {50.80}	2 {50.80}	2 {50.80}	2 {50.80}
Weight lb {kg}									
Shipping	720 {327}	720 {327}	1195 {542}	1195 {542}	1215 {542}	3200 {1451}	3300 {1497}	3800 {1724}	4150 {1882}

MODELS	EP2W-05	EP2W-08	EP2W-10	EP2W-15	EP2W-20	EP2W-25	EP2W-30	EP2W-35	EP2W-40
Condenser	Water cooled								
Performance characteristics									
Cooling capacity tons*	5.6	8.2	12.2	16.4	22.3	27.8	32.9	38.3	42.5
Setpoint range °F {°C}	20 to 80 {-7 to 27}	20 to 80 {-7 to 27}	20 to 80 {-7 to 27}	20 to 80 {-7 to 27}	20 to 80 {-7 to 27}	20 to 80 {-7 to 27}	20 to 80 {-7 to 27}	20 to 80 {-7 to 27}	20 to 80 {-7 to 27}
Refrigerant	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Condenser water flow gpm {l/min}	17 {64}	24 {91}	36 {136}	48 {182}	65 {246}	82 {310}	96 {363}	111 {420}	124 {469}
Standard pump performance									
Pump motor size Hp {kW}	1.5 {1}	1.5 {1}	1.5 {1}	3 {2}	3 {2}	5 {4}	5 {4}	5 {4}	5 {4}
Pump flow gpm {l/min}	13 {49}	20 {76}	29 {110}	39 {148}	54 {204}	67 {254}	79 {299}	92 {348}	102 {386}
Pump pressure psi {bar}	42 {3}	41 {3}	38 {3}	56 {4}	49 {4}	57 {4}	53 {4}	50 {3}	44 {3}
Dimensions inches {mm}									
A - Height	53.50 {1358}	53.50 {1358}	53.50 {1358}	53.50 {1358}	47.00 {1193}	47.00 {1193}	47.00 {1193}	47.00 {1193}	47.00 {1193}
B - Width	34.50 {876}	34.50 {876}	34.50 {876}	34.50 {876}	41.00 {1041}	41.00 {1041}	41.00 {1041}	41.00 {1041}	41.00 {1041}
C - Depth	47.50 {1206}	75.00 {1905}	75.00 {1905}	75.00 {1905}	87.25 {2216}	87.25 {2216}	105.25 {2673}	105.25 {2673}	105.25 {2673}
Voltages MCA									
230/3 phase/60 Hz	32.3	45.4	68.6	81.9	87.0	133.1	143.3	165.9	184.0
460/3 phase/60 Hz	20.0	22.6	27.4	39.7	46.3	60.8	69.3	73.7	77.2
575/3 phase/60 Hz	15.0	20.0	22.0	31.8	37.1	48.7	55.5	59.0	61.8
Water requirements									
Reservoir holding capacity gal {lt}	11 {42}	22 {83}	22 {83}	22 {83}	50 {189}	50 {189}	67 {254}	67 {254}	67 {254}
Process connections	1.5 {38.10}	1.5 {38.10}	1.5 {38.10}	1.5 {38.10}	2 {50.80}	2 {50.80}	2 {50.80}	2.5 {63.50}	2.5 {63.50}
Weight lb {kg}									
Shipping	720 {327}	1195 {542}	1195 {542}	1315 {596}	1900 {862}	2100 {953}	2250 {1021}	3400 {1542}	3900 {1769}

SPECIFICATION NOTES:

* Based on the 50°F {10°C} water to the process, single pump selections, a maximum of 95°F {35°C} ambient air or 85°F {30°C} entering condenser water and 60 Hz.

Specifications may change without notice. Consult a Conair representative for the most current information.

SPECIFICATIONS

EP2 SERIES

MODELS † (Indoor unit)	EP2R-05	EP2R-08	EP2R-10	EP2R-15	EP2R-20	EP2R-25	EP2R-30	EP2R-35	EP2R-40
Condenser	Remote								
Performance characteristics									
Cooling capacity tons*	5.3	7.6	11.2	15.1	20.3	25.6	30.3	34.4	38.4
Setpoint range °F {°C}	20 to 80 {-7 to 27}	20 to 80 {-7 to 27}	20 to 80 {-7 to 27}	20 to 80 {-7 to 27}	20 to 80 {-7 to 27}	20 to 80 {-7 to 27}	20 to 80 {-7 to 27}	20 to 80 {-7 to 27}	20 to 80 {-7 to 27}
Refrigerant	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Condenser air flow ft^3/min	4500	4500	9000	9000	9000	10,500	19,000	20,000	27,000
Standard pump performance									
Pump motor size Hp {kW}	1.5 {1}	1.5 {1}	1.5 {1}	3 {2}	3 {2}	5 {4}	5 {4}	5 {4}	5 {4}
Pump flow gpm {l/min}	13 {49}	18 {68}	27 {102}	36 {136}	48 {182}	61 {231}	73 {276}	83 {314}	92 {348}
Pump pressure psi {bar}	42 {3}	42 {3}	39 {3}	57 {4}	52 {4}	60 {4}	56 {4}	51 {4}	50 {3}
Dimensions inches {mm}									
A - Height	53.50 {1358}	53.50 {1358}	53.50 {1358}	53.50 {1358}	47.00 {1193}	47.00 {1193}	47.00 {1193}	47.00 {1193}	47.00 {1193}
B - Width	34.50 {876}	34.50 {876}	34.50 {876}	34.50 {876}	41.00 {1041}	41.00 {1041}	41.00 {1041}	41.00 {1041}	41.00 {1041}
C - Depth	47.50 {1206}	75.00 {1905}	75.00 {1905}	75.00 {1905}	87.25 {2216}	87.25 {2216}	105.25 {2673}	105.25 {2673}	105.25 {2673}
Voltages MCA									
230/3 phase/60 Hz	32.3	45.4	68.6	81.9	87.0	133.1	143.3	165.9	184.0
460/3 phase/60 Hz	20.0	22.6	27.4	39.7	46.3	60.8	69.3	73.7	77.2
575/3 phase/60 Hz	15.0	20.0	22.0	31.8	37.1	48.7	55.5	59.0	61.8
Water requirements									
Reservoir holding capacity gal {lt}	11 {42}	22 {83}	22 {83}	22 {83}	50 {189}	50 {189}	67 {254}	67 {254}	67 {254}
Process connections	1.5 {38.10}	1.5 {38.10}	1.5 {38.10}	1.5 {38.10}	2 {50.80}	2 {50.80}	2 {50.80}	2.5 {63.50}	2.5 {63.50}
Weight lb {kg}									
Shipping	720 {327}	1195 {542}	1195 {542}	1315 {596}	1900 {862}	2100 {953}	2250 {1021}	3400 {1542}	3900 {1769}

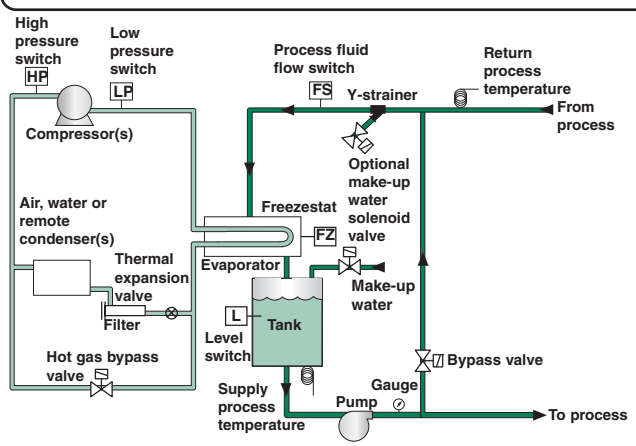
MODELS † (Outdoor unit)	EP2R-05	EP2R-08	EP2R-10	EP2R-15	EP2R-20	EP2R-25	EP2R-30	EP2R-35	EP2R-40
Condenser	Remote								
Performance characteristics									
Condenser air flow ft^3/min	5600	5375	11,400	15,500	14,875	25,400	24,375	27,950	28,775
Connections inches {mm}									
Inlet and outlet	1.375 {22}	1.375 {22}	1.375 {22}	1.375 {22}	1.375 {22}	2.125 {34}	2.125 {34}	2.125 {34}	2.125 {34}
Dimensions inches {mm}									
A - Height	49.25 {1251}	49.25 {1251}	49.25 {1251}	49.25 {1251}	49.25 {1251}	49.25 {1251}	49.25 {1251}	49.25 {1251}	49.25 {1251}
B - Width	45.50 {1156}	45.50 {1156}	45.50 {1156}	45.50 {1156}	45.50 {1156}	45.50 {1156}	45.50 {1156}	45.50 {1156}	45.50 {1156}
C - Depth	73.00 {1854}	73.00 {1854}	127.00 {3226}	127.00 {3226}	127.00 {3226}	180.00 {4572}	180.00 {4572}	233.00 {5918}	233.00 {5918}
Voltages MCA									
230/3 phase/60 Hz	15.0	15.0	15.0	20.0	20.0	22.8	22.8	20.4	28.1
460/3 phase/60 Hz	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
575/3 phase/60 Hz	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Weight lb {kg}									
Shipping	330 {150}	560 {254}	580 {263}	630 {286}	680 {308}	930 {422}	1000 {453}	1210 {549}	1310 {594}

SPECIFICATION NOTES:

* Based on the 50°F {10°C} water to the process, single pump selections, a maximum of 95°F {35°C} ambient air or 85°F {30°C} entering condenser water and 60 Hz.

† Remote condenser operation requires both indoor and outdoor unit.

Specifications may change without notice. Consult a Conair representative for the most current information.



Process circulation:

Process fluid enters through the “From process” and enters the evaporator. The process fluid is cooled in the evaporator and is returned to the tank. The pump draws water from the tank and delivers it to the “To Process” connection where it is distributed to the process load(s) and returned to the chiller.

Refrigerant circulation:

The evaporator extracts heat from the process fluid. Vaporized refrigerant travels from the evaporator to the compressor, where it is compressed. The high-pressure vapor travels to the condenser. Air or water removes heat from the vapor, condensing it to liquid. This liquid is metered back to the evaporator by the expansion valve (TXV).

E1 SERIES FORCED DRAFT MODELS
10 TO 75 TONS

Model E1-40

EFFICIENT COOLING IN A RUST-FREE DESIGN

Conair's E1 series forced draft, counterflow cooling towers are rust-proof, not just rust-protected. We're so confident the molded polyethylene shell will not rust, chip or crack, we back it with a 15-year warranty.

All water connections, the water distribution system and the wet decking are made of PVC to eliminate corrosion and resist rot, decay and biological attack.

The forward curved centrifugal belt-driven blowers are made of heavy-duty steel with a corrosion-resistant dipped and baked alkyd finish.

LESS WATER AND SEWER USAGE; SAVE MONEY

Conair cooling towers pay for themselves by recirculating process cooling water, which saves water costs and sewer taxes.

Hot water enters at the top and is sprayed over a continuous coil of angled-baffle PVC decking. Air flowing upward from the base removes the heat through evaporation. The spiral decking design extends the water's travel path and exposure to air, increasing the heat transfer area for efficient cooling.

Interchangeable, non-clogging nozzles and laterals permit increased flow without increasing inlet pressure.

Options include: a blower sound enclosure that also serves as a protective housing; two-speed blower motors to closely control temperature and save energy; and basin heaters.

Easy inlet/outlet connections

Single-point inlet water connection. Choose the optional side outlet with make-up float valve, or the standard bottom outlet for use with remote tanks and sumps. Also includes drain and overflow connections.

Seamless, rust-free design

Our one-piece MDPE tower shell will not rust, corrode, chip, crack or require protective coating or painting. There are no seams, panels or rivets to fail or compromise performance. All fasteners are 304 stainless steel.

Costs less to install

Towers are shipped factory complete, requiring little more than water and electrical connections to install. Lightweight design reduces rigging and structural roof support requirements.

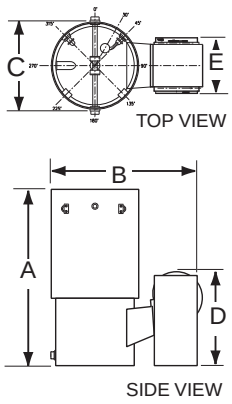
15-year warranty

Our cooling towers carry an unbeatable warranty package. We warrant the polyethylene shell against material defects and workmanship for 15 years. We also warrant the TEFC blower motor for five years and provide a one-year parts and labor warranty on the entire tower.

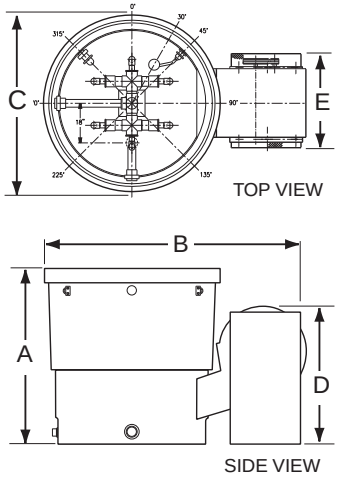
E1 SERIES FORCED DRAFT MODELS
10 TO 75 TONS

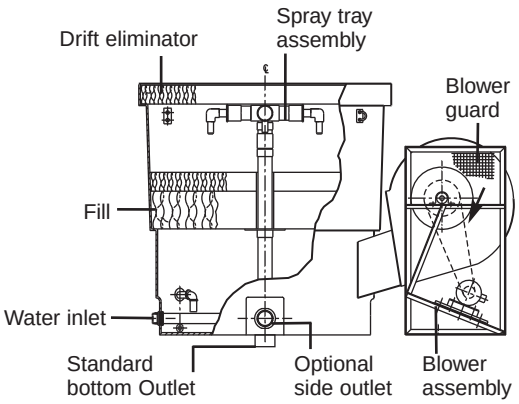
SPECIFICATIONS

MODELS E1-10 to E1-25



MODELS E1-30 to E1-100





MODEL	E1-10	E1-15	E1-20	E1-25	E1-30	E1-40	E1-50	E1-75
Performance characteristics								
Tower capacity Tons	10	15	20	25	30	40	50	75
Sump capacity Gallons {liters}	40 {151}	40 {151}	40 {151}	40 {151}	75 {284}	75 {284}	157 {594}	57 {594}
Blower motor Hp {kW}	1 {0.74}	1.5 {1.12}	2 {1.49}	3 {2.24}	5 {3.73}	5 {3.73}	5 {3.73}	7.5 {5.59}
Wet bulb temperature / Output tower tons {GPM}*								
70°F {21°C}	14 {44}	22 {67}	29 {89}	37 {111}	44 {134}	59 {179}	74 {223}	111 {335}
72°F {22°C}	13 {41}	20 {62}	27 {83}	34 {104}	41 {125}	55 {166}	69 {208}	104 {312}
75°F {24°C}	12 {36}	18 {54}	24 {72}	29 {90}	35 {107}	47 {143}	59 {179}	89 {269}
78°F {26°C}	10 {30}	15 {45}	20 {60}	25 {75}	30 {90}	40 {120}	50 {150}	75 {225}
80°F {27°C}	8 {25}	12 {37}	16 {50}	21 {63}	25 {76}	33 {100}	42 {126}	63 {189}
Dimensions inches {cm}								
A - Total height	78.5 {199}				76.0 {193}		80.0 {203}	
B - Total width	67.5 {171}				93.0 {236}		114.0 {290}	
C - Total depth	39.0 {99}				56.25 {143}		80.5 {204}	
D - Height, blower assembly	41.75 {106}				60.5 {154}		60.5 {154}	
E - Depth, blower assembly	24.75 {63}				32.0 {81}		38.75 {98}	
Weight lb {kg}								
Shipping (dry)	350 {159}	360 {163}	385 {175}	405 {184}	710 {322}	730 {331}	910 {413}	970 {440}
Operating	705 {320}	725 {329}	750 {340}	765 {347}	1500 {680}	1525 {692}	2610 {1184}	2675 {1213}
Operating with remote sump	425 {192}	445 {202}	470 {213}	485 {220}	970 {440}	995 {451}	1500 {680}	1565 {710}
Voltage Full Load Amps								
208v/3 phase/60 Hz	4.0	5.7	7.5	10.6	16.8	16.8	16.8	24.3
230v/3 phase/60 Hz	3.6	5.2	6.8	9.6	15.2	15.2	15.2	22.0
400v/3 phase/50 Hz	1.9	2.6	3.6	5.0	8.5	8.5	8.5	11.3
460v/3 phase/60 Hz	1.8	2.6	3.4	4.8	7.6	7.6	7.6	11.0
575v/3 phase/60 Hz	1.2	1.8	2.4	3.2	5.0	5.0	5.0	8.0
Connections inches NPT								
Water inlet and outlet†	2.0	2.0/3.0			3.0	3.0/4.0	4.0	4.0/6.0
Make-up water	0.75	0.75			1.0	1.0	1.0	1.0
Overflow and drain	1.0	1.0			2.0	2.0	2.0	2.0
Water requirements ‡								
Inlet pressure psi {bars}	5 - 7 {0.24 - 0.48}				5 - 7 {0.24 - 0.48}		5 - 7 {0.24 - 0.48}	
Maximum inlet temperature	150°F {66°C}				150°F {66°C}		150°F {66°C}	

SPECIFICATION NOTES

* Based on 95°F {35°C} inlet water and 85°F {29°C} outlet water. Consult factory for other conditions. 1 tower ton = 15,000 Btu/hr.

† Side outlet, shown, is optional. The standard bottom outlet is installed at the center of the tower bottom.

‡ Due to the unique interchangeable nozzle design of the E1 Series Cooling Towers, customer specifications must include design flow requirements.

Specifications may change without notice. Contact your Conair representative for the latest information.

E2 SERIES INDUCED DRAFT MODELS
55 TO 250 TONS

Model E2-150
(with optional access ladder and installation platform)

EFFICIENT COOLING WITH **MINIMUM MAINTENANCE**

Conair's E2 series induced draft, counterflow cooling towers offer more cooling, but require less space and less maintenance.

From the rust-proof molded polyethylene tower shell to the corrosion-resistant direct drive fan assembly, E2 towers contain fewer components that could fail and hamper performance.

All water connections, the water distribution system and the wet decking are made of PVC to resist rot, decay and biological attack.

LESS WATER AND SEWER USAGE; SAVE MONEY

Conair cooling towers recirculate process cooling water, paying for themselves in reduced water costs and sewer taxes.

A fixed PVC water distribution system sprays hot water over a continuous coil of angled-baffle PVC decking. The spiral decking design extends the water's travel path and exposure to air, increasing the heat transfer area for efficient cooling.

The fan draws air through inlet louver panels at the base, and then upward through the decking. Heat is removed when water evaporates from the multiple surfaces of the decking.

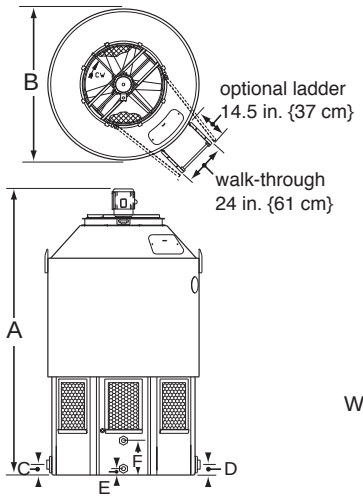
Options include: variable frequency drives on the fan motor to closely control temperature and save energy; an aluminum access ladder with safety cage; and installation platform.

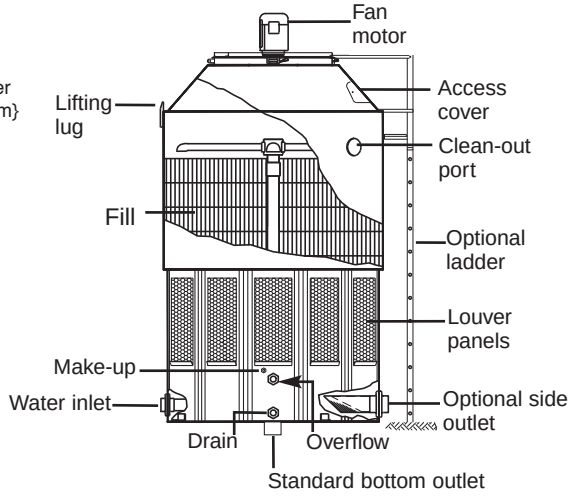
- **Easy inlet/outlet connections**
  Single-point inlet water connection. Choose the optional side outlet with make-up float valve, or the standard bottom outlet for use with remote tanks and sumps.
- **Seamless, rust-free design**
  Our one-piece MDPE tower shell will not rust, corrode, chip, crack or require protective coating or painting. There are no seams, panels or rivets to fail or compromise performance. All fasteners are 304 stainless steel.
- **Costs less to install**
  Lightweight design reduces rigging and structural roof support requirements. Everything is factory assembled for easy installation. Simply attach the fan assembly to the tower, and hook up the water and electricity.
- **15-year warranty**
  We're so confident our molded polyethylene shell will not rust, chip or crack, we back it with a 15-year warranty. We also warrant the totally enclosed, direct drive fan motor for five years and provide a one-year parts and labor warranty on the entire tower.

E2 SERIES INDUCED DRAFT MODELS
55 TO 250 TONS

SPECIFICATIONS

TOP VIEW





SPECIFICATION NOTES

* Based on 95°F {35°C} inlet water and 85°F {29°C} outlet water. Consult factory for other conditions. 1 tower ton = 15,000 Btu/hr.

† For the standard bottom outlet, the maximum opening in the support should be: E2-55 to E2-175, 14 x 14 inches; E2-200 to E2-250, 19 x 19 inches.

‡ Operating weights are based on the following water levels: E2-55 to E2-125, 14 inches; E2-150 to E2-175, 15 inches; E2-200 to E2-250, 16 inches.

Due to the unique design of the E2 Series Cooling Towers, customer specifications must include design flow requirements.

Specifications may change without notice. Contact your Conair representative for the latest information.

MODEL	E2-55	E2-70	E2-85	E2-100	E2-125	E2-150	E2-175	E2-200	E2-250
Performance characteristics									
Tower capacity Tons	55	70	85	100	125	150	175	200	250
Sump capacity Gallons {liters}	330 {1249}	330 {1249}	330 {1249}	330 {1249}	330 {1249}	468 {1772}	468 {1772}	718 {2718}	718 {2718}
Fan motor Hp {kW}	2 {1.49}	3 {2.24}	5 {3.73}	5 {3.73}	7.5 {5.59}	7.5 {5.59}	10 {7.45}	10 {7.45}	15 {11.18}
Wet bulb temperature / Output tower tons {GPM}*									
70°F {21°C}	82 {246}	104 {313}	126 {378}	149 {447}	186 {559}	223 {671}	261 {783}	298 {895}	373 {1119}
72°F {22°C}	76 {229}	97 {291}	118 {354}	138 {416}	173 {520}	208 {624}	243 {729}	277 {833}	347 {1041}
75°F {24°C}	65 {197}	83 {251}	101 {303}	119 {359}	149 {449}	179 {538}	209 {628}	239 {718}	299 {898}
78°F {26°C}	55 {165}	70 {210}	85 {255}	100 {300}	125 {375}	150 {450}	175 {525}	200 {600}	250 {750}
80°F {27°C}	46 {138}	58 {176}	71 {213}	84 {252}	105 {315}	126 {378}	147 {441}	168 {504}	210 {630}
Dimensions inches {cm}									
A - Total height	146 {371}	146 {371}	146 {371}	146 {371}	146 {371}	178 {452}	178 {452}	211 {535}	211 {535}
B - Diameter	84 {213}	84 {213}	84 {213}	84 {213}	84 {213}	95 {241}	95 {241}	114 {290}	114 {290}
C - Height to center of inlet	5.75 {14.6}	5.75 {14.6}	6.75 {17.1}	5.75 {14.6}	5.75 {14.6}	9.0 {22.9}	9.0 {22.9}	8.63 {21.9}	8.63 {21.9}
D - Height to center of outlet†	5.75 {14.6}	5.75 {14.6}	6.75 {17.1}	6.75 {17.1}	6.75 {17.1}	6.75 {17.1}	7.75 {19.6}	9.0 {22.9}	9.0 {22.9}
E - Height to center of drain	3.5 {8.9}	3.5 {8.9}	3.5 {8.9}	3.5 {8.9}	3.5 {8.9}	4.0 {10.2}	4.0 {10.2}	4.5 {11.4}	4.5 {11.4}
F - Height to center of overflow	19 {48.3}	19 {48.3}	19 {48.3}	19 {48.3}	19 {48.3}	20.5 {52.1}	20.5 {52.1}	22.0 {55.9}	22.0 {55.9}
G - Height to center of make-up	24.5 {62.2}	24.5 {62.2}	24.5 {62.2}	24.5 {62.2}	24.5 {62.2}	25 {63.5}	25 {63.5}	26.5 {67.3}	26.5 {67.3}
Weight lb {kg}									
Shipping (dry)	1180 {535}	1250 {567}	1270 {576}	1510 {684}	1585 {719}	1785 {810}	1925 {873}	3170 {1438}	3365 {1526}
Operating ‡	3980 {1805}	4050 {1837}	4070 {1846}	4235 {1921}	4310 {1955}	5570 {2527}	5810 {2635}	8440 {3838}	8640 {3919}
Operating with remote sump/tank	1385 {628}	1455 {660}	1475 {669}	1715 {778}	1790 {812}	2020 {916}	2260 {1025}	2945 {1336}	3090 {1402}
Voltage Total amps									
208v/3 phase/60 Hz	7.3	12.2	19.4	19.4	25.0	25.0	33.0	33.0	48.0
230v/3 phase/60 Hz	6.6	11.0	16.8	16.8	22.0	22.0	29.0	29.0	42.0
400v/3 phase/50 Hz	3.9	5.5	8.7	8.5	11.3	11.3	15.2	15.2	21.7
460v/3 phase/60 Hz	3.3	5.5	8.4	8.4	11.0	11.0	14.5	14.5	21.0
575v/3 phase/60 Hz	2.4	3.2	5.5	5.5	8.0	8.0	10.5	10.5	16.3
Connections inches									
Water inlet / outlet - Socket style	4.0	4.0	4.0 / 6.0	4.0 / 6.0	4.0 / 6.0	6.0	6.0 / 8.0	6.0 / 8.0	6.0 / 8.0
Make-up water - NPT	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Overflow and drain - NPT	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0
Water requirements									
Inlet pressure / temperature	7-10 psi {0.48-0.69 bars} / 140° F {60°C} maximum								

INSTALLATION NOTES

The tower should be located no less than 5 feet from a single solid wall, or not less than the diameter of the tower from two intersecting walls. The tower must be mounted on a flat rigid surface that is properly supported. All external piping must be independently supported. The fan ring, where air is discharged, should be level or higher than the wall or roof line.

E3 SERIES INDUCED DRAFT MODELS
250 TO 500 TONS

Model E3-300

EFFICIENT COOLING WITH **MINIMUM MAINTENANCE**

Conair's E3 series induced draft, counterflow cooling towers offer more cooling, but require less space and less maintenance.

From the rust-proof molded polyethylene tower shell to the corrosion-resistant direct drive fan assembly, E3 towers contain fewer components that could fail and hamper performance.

All water connections, the water distribution system and the cellular fill are made of PVC to resist rot, decay and biological attack.

LESS WATER AND SEWER USAGE; SAVE MONEY

Conair cooling towers recirculate process cooling water, paying for themselves in reduced water costs and sewer taxes.

A fixed PVC water distribution system sprays hot water over high-efficiency angled-baffle PVC cellular fill. The spiral fill design extends the water's travel path and exposure to air, increasing the heat transfer area for efficient cooling.

The fans draw air through inlet louver panels at the base, and then upward through the fill. Heat is removed when water on the multiple surfaces of the fill evaporates.

Options include: variable frequency drives on the fan motor to closely control temperature and save energy; an aluminum access ladder with safety cage.

Easy inlet/outlet connections

Single-point inlet water connection. Choose the optional side outlet with make-up float valve, or the standard bottom outlet for use with remote tanks and sumps.

Seamless, rust-free design

Our one-piece MDPE tower shell will not rust, corrode, chip, crack or require protective coating or painting. There are no seams, panels or rivets to fail and compromise performance. All fasteners are 304 stainless steel.

Costs less to install

The lightweight design reduces rigging and structural roof support requirements. Everything, including the tower mounted base structure, is factory assembled for easy installation. Just lift the tower into place and hook up water and electricity.

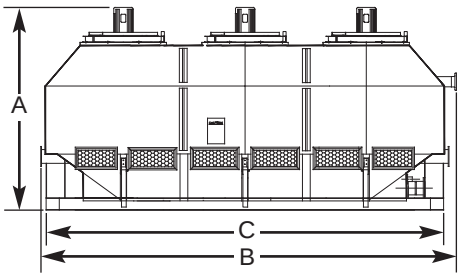
15-year warranty

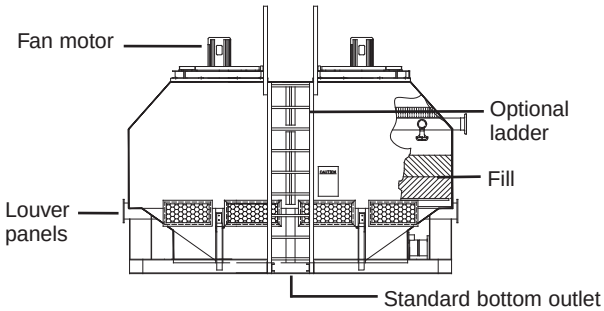
We're so confident our molded polyethylene shell will not rust, chip or crack, we back it with a 15-year warranty. We also warrant the totally enclosed, direct drive fan motors for five years and provide a one-year parts and labor warranty on the entire tower.

E3 SERIES INDUCED DRAFT MODELS
250 TO 500 TONS

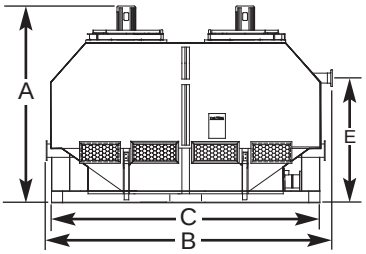
SPECIFICATIONS

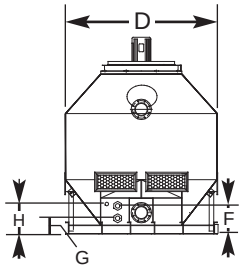
MODELS E3-410 to E3-500

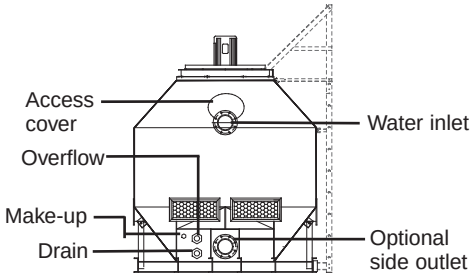




MODELS E3-250 to E3-320







MODEL	E3-250	E3-290	E3-320	E3-410	E3-460	E3-500
Performance characteristics						
Tower capacity Tons	254	292	319	408	460	502
Sump capacity Gallons {liters}	450 {1703}	450 {1703}	450 {1703}	720 {2725}	720 {2725}	720 {2725}
Fan motor number x Hp {kW}	2x5 {3.73}	2x7.5 {5.59}	2x10 {7.45}	3x5 {3.73}	3x7.5 {5.59}	3x10 {7.45}
Wet bulb temperature / Output tower tons {GPM}*						
70°F {21°C}	376 {1129}	433 {1298}	473 {1418}	604 {1813}	681 {2044}	744 {2231}
72°F {22°C}	353 {1058}	406 {1217}	443 {1329}	567 {1700}	639 {1917}	697 {2092}
75°F {24°C}	306 {918}	352 {1055}	384 {1153}	492 {1475}	554 {1663}	605 {1814}
78°F {26°C}	254 {762}	292 {876}	319 {957}	408 {1224}	460 {1380}	502 {1506}
80°F {27°C}	215 {646}	247 {742}	270 {811}	346 {1037}	390 {1169}	425 {1276}
Dimensions inches {cm}						
A - Total height	131 {333}			131 {333}		
B - Total length	186 {472}			264 {671}		
C - Mounting base length	140 {356}			219 {556}		
D - Total width	101 {257}			101 {257}		
E - Height to inlet	83.0 {211.0}			83.0 {211.0}		
F - Height to center of overflow	18.75 {48.0}			18.75 {48.0}		
G - Height to center of drain	10.5 {27.0}			10.5 {27.0}		
H - Height to center of make-up	20.0 {51.0}			20.0 {51.0}		
Weight lb {kg}						
Shipping (dry)	3900 {1769}	4000 {1814}	4100 {1860}	6050 {2744}	6160 {2764}	6350 {2880}
Operating	8100 {3674}	8200 {3720}	8300 {3765}	12130 {5502}	12240 {5552}	12430 {5638}
Operating with remote sump/tank	5100 {2313}	5200 {2359}	5300 {2404}	7330 {3325}	7440 {3375}	7630 {3461}
Voltage Full Load Amps						
208v/3 phase/60 Hz	35.4	47.3	62.8	53.1	71.0	94.2
230v/3 phase/60 Hz	32.0	42.8	56.8	48.0	64.2	85.2
400v/3 phase/50 Hz	18.4	24.6	32.7	27.6	36.9	49.0
460v/3 phase/60 Hz	16.0	21.4	28.4	24.0	32.1	42.6
575v/3 phase/60 Hz	12.8	17.1	22.7	19.2	25.1	34.1
Connections inches						
Water inlet / outlet - Flanged	6.0 / 8.0			6.0 / 10.0		
Make-up water - NPT	1.0			1.0		
Overflow and drain - NPT	3.0			3.0		
Water requirements †						
Inlet pressure psi {bars}	5 - 7 {0.34 - 0.48}			5 - 7 {0.34 - 0.48}		
Max. inlet temperature °F {°C}	140 {60}			140 {60}		

SPECIFICATION NOTES

* Based on 95°F {35°C} inlet water and 85°F {29°C} outlet water. Consult factory for other conditions.
1 tower ton = 15,000 Btu/hr.

† Due to the unique design of E3 Series Cooling Towers, customer specifications must include design flow requirements.

Specifications may change without notice. Contact your Conair representative for the latest information.

INSTALLATION NOTES

For best performance, the tower must be installed in a location free from obstructions that may restrict airflow through the intake louvers or induce recirculation of discharge air.

All external piping must be independently supported. The fan ring, where air is discharged, should be level with or higher than the wall or roof line.

E4 SERIES INDUCED DRAFT MODELS
300 TO 810 TONS

Model E4-300 (with optional top platform with hand rails)

EFFICIENT COOLING WITH **MINIMUM MAINTENANCE**

Conair's E4 series induced draft, counterflow cooling towers offer modular cooling and require less space and less maintenance.

From the rust-proof molded polyethylene tower shell to the corrosion-resistant direct drive fan assembly, E4 towers contain fewer components that could fail and hamper performance.

All water connections, the water distribution system and the cellular fill are made of PVC to resist rot, decay and biological attack.

LESS WATER AND SEWER USAGE; SAVE MONEY

Conair cooling towers recirculate process cooling water, paying for themselves in reduced water costs and sewer taxes.

A fixed PVC water distribution system sprays hot water over high-efficiency angled-baffle PVC cellular fill. The spiral fill design extends the water's travel path and exposure to air, increasing the heat transfer area for efficient cooling.

The fans draw air through inlet louver panels at the base, and then upward through the fill. Heat is removed when water on the multiple surfaces of the fill evaporates.

Options include: variable frequency drives on the fan motor to closely control temperature and save energy; an aluminum access ladder with safety cage.

Easy inlet/outlet connections

Single-point inlet water connection. Choose the optional side outlet with make-up float valve, or the standard bottom outlet for use with remote tanks and sumps.

Seamless, rust-free design

Our one-piece MDPE tower shell will not rust, corrode, chip, crack or require protective coating or painting. There are no seams, panels or rivets to fail and compromise performance. All fasteners are 304 stainless steel.

Costs less to install

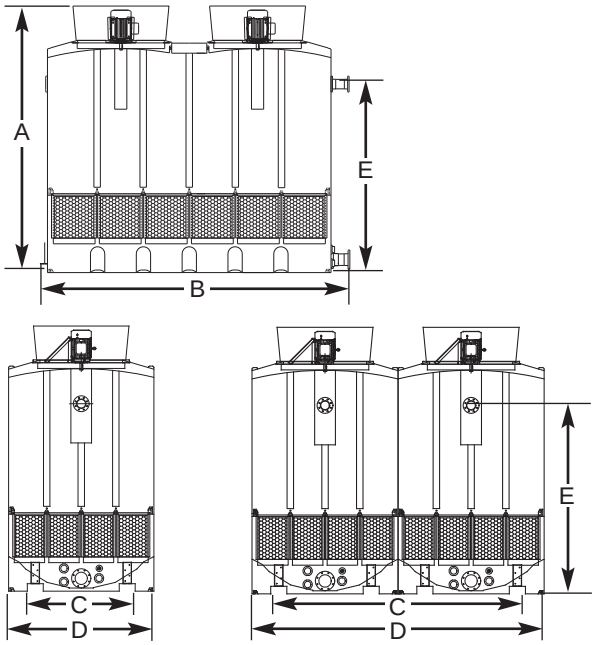
The lightweight design reduces rigging and structural roof support requirements. Everything is factory assembled. The tower features integrally molded I-beam pockets for easy installation. Just lift the tower into place and hook up water and electricity.

15-year warranty

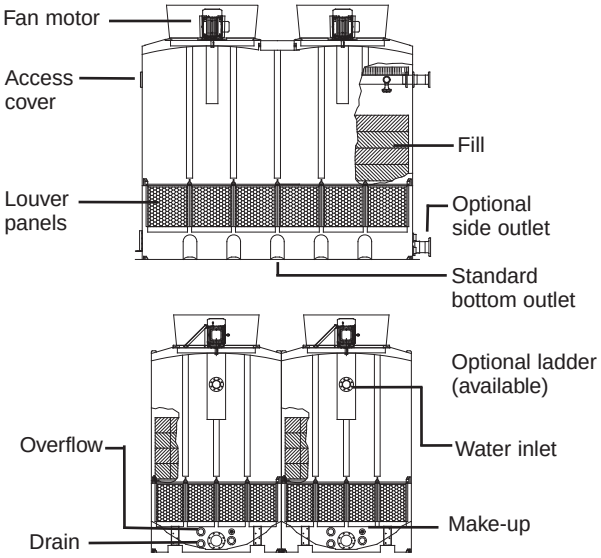
We're so confident our molded polyethylene shell will not rust, chip or crack, we back it with a 15-year warranty. We also warrant the totally enclosed, direct drive fan motors for five years and provide a one-year parts and labor warranty on the entire tower.

SPECIFICATIONS

E4 SERIES INDUCED DRAFT MODELS
300 TO 810 TONS



MODELS E4-300 to E4-415 MODELS E4-585 to E4-810



MODEL*	E4-300	E4-335	E4-365	E4-415	E4-585	E4-660	E4-715	E4-810*
Performance characteristics								
Tower capacity Tons	300	335	365	415	585	660	715	810
Sump capacity Gallons {liters}	480 {1817}	480 {1817}	480 {1817}	480 {1817}	960 {3596}	960 {3596}	960 {3596}	960 {3596}
Fan motor number x Hp {kW}	2x5 {3.73}	2x7.5 {5.59}	2x10 {7.45}	2x15 {11.2}	4x5 {3.7}	4x7.5 {5.6}	4x10 {7.5}	4x15 {11.2}
Wet bulb temperature / Output tower tons {GPM}†								
70°F {21°C}	444 {1333}	496 {1489}	541 {1622}	615 {1844}	867 {2600}	978 {2933}	1059 {3178}	1200 {3600}
72°F {22°C}	417 {1250}	465 {1396}	507 {1521	576 {1729	813 {2438}	917 {2750}	993 {2979}	1125 {3375}
75°F {24°C}	361 {1084}	404 {1211}	440 {1319}	500 {1500}	705 {2114}	795 {2386}	861 {2584}	976 {2928}
78°F {26°C}	300 {900}	335 {1005}	365 {1095}	415 {1245}	585 {1755}	660 {1980}	715 {2145}	810 {2430}
80°F {27°C}	254 {763}	284 {852}	309 {928}	352 {1055}	496 {1487}	559 {1678}	606 {1818}	686 {2059}
Dimensions inches {cm}								
A - Total height	186.0 {472}				186.0 {472}			
B - Total length	208.0 {528}				208.0 {528}			
C - Mounting pocket width	64.56 {164}				2 x 64.56 {164}			
D - Total width	102.0 {259}				204.0 {518}			
E - Height to inlet	131.5 {334}				131.5 {334}			
Height to center of overflow	16.0 {41}				16.0 {41}			
Height to center of drain	5.25 {13}				5.25 {13}			
Height to center of make-up	28.0 {71}				16.0 {41}			
Weight lb {kg}								
Shipping (dry)	6400 {2903}	6500 {2948}	6600 {2994}	6700 {3039}	13000 {5897}	13100{5942}	13200 {5988}	13300 {6033}
Operating with side outlet	12100 {5489}	12200 {5534}	12300 {5579}	12400 {5625}	24400 {11068}	24500 {11113}	24600 {11159}	24700 {11204}
Operating with remote sump/tank	8350 {3788}	8450 {3833}	8550 {3878}	8650 {3924}	16900 {7666}	17000 {7711}	17100 {7757}	17200 {7802}
Voltage Full Load Amps								
208v/3 phase/60 Hz	33.2	48.7	70.8	97.3	66.3	97.3	141.5	194.6
230v/3 phase/60 Hz	30.0	44.0	64.0	88.0	60.0	88.0	128.0	176.0
400v/3 phase/50 Hz	17.3	25.3	36.8	50.6	34.5	50.6	73.6	101.2
460v/3 phase/60 Hz	15.0	22.0	32.0	44.0	30.0	44.0	64.0	88.0
575v/3 phase/60 Hz	15.0	22.0	32.0	44.0	30.0	44.0	64.0	88.0
Connections inches								
Water inlet / outlet - Flanged	6.0 / 10.0				2 x 6.0 / 2 x 10.0			
Make-up water - NPT	1.0				2 x 1.0			
Overflow and drain - NPT	4.0				2 x 4.0			
Water requirements‡								
Inlet pressure psi {bars}	4.0 - 5.5 {0.28 - 0.38}				4.0 - 5.5 {0.28 - 0.38}			
Max. inlet temperature °F {°C}	140 {60}				140 {60}			

SPECIFICATION NOTES

* Larger and other sizes of towers in this series are available, consult factory.

† Based on 95°F {35°C} inlet water and 85°F {29°C} outlet water. Consult factory for other conditions. 1 tower ton = 15,000 Btu/hr

‡ Due to the unique design of E4 Series Cooling Towers, customer specifications must include design flow requirements.

Specifications may change without notice. Contact your Conair representative for the latest information.

INSTALLATION NOTES

For best performance, the tower must be installed in a location free from obstructions that may restrict airflow through the intake louvers or induce recirculation of discharge air.

All external piping must be independently supported. The fan ring, where air is discharged, should be level with or higher than the wall or roof line.

E1F SERIES INDUCED DRAFT MODELS
38 TO 120 TONS

Model E1F-060
with optional ladder

HIGH-EFFICIENCY, BUDGET-FRIENDLY COOLING

Conair's E1F Series Cooling Towers are lightweight fiberglass towers designed for corrosion resistance, low maintenance, and efficient operation at a competitive price.

These towers are carefully engineered and manufactured with the optimum combination of heat transfer media, uniform air flow, and even water distribution to minimize operating costs.

Conair's E1F Series induced draft, counterflow towers are rust-proof, not just rust-protected.

RUGGED, CONSISTENT, EFFICIENT OPERATION

Conair cooling towers pay for themselves by recirculating process cooling water saving water costs and sewer taxes.

Hot water enters at the top and is sprayed over a continuous coil of angle-baffle PVC decking. Air flowing upward from the base removes the heat through evaporation. The decking design maximizes the water's travel path and exposure to air, providing maximum heat transfer area for efficient cooling.

All water connections, the water distribution system and the wet decking are made of PVC to eliminate corrosion and resist rot, decay and biological attack.

The adjustable pitch cast aluminum fan blades allow for energy-efficient operation.

Options include: basin heater, fan thermostat, mechanical float make-up valve, vibration switch, structural steel mounting base and mounting legs.

Rust-free design
Fiberglass tower casing, basin and air inlet louvers have a smooth exterior gel-coat with UV inhibitors. Galvanized steel supports and stainless steel fasteners prevent rust.

Costs less to install
The main casing and basin ship fully-assembled. To prevent shipping damage, the fan motor, fan blade and sprinkler head assembly ship uninstalled requiring only minor field assembly to complete tower installation.

Simple inlet/outlet connections
The E1F features single-point inlet water connections. Choose the optional side outlet with make-up float valve, or the standard bottom outlet for use with remote tanks and sumps. Drain and overflow connections are included.

Application specific options
Conair has a variety of options for your specific application. A structural steel base and legs can be purchased for quick installation. A mechanical float make-up valve maintains consistant water level for optimum performance. A basin heater is ideal for colder locations. An equalization connection for connecting several tower basins equalizes basin water levels by letting cooled water flow between basins. A stainless steel sprinkler head is available.

10-year shell warranty
We warrant the fiberglass shell and basin against material defects and workmanship for ten years. The remainder of the tower has a one year parts warranty.

E1F SERIES INDUCED DRAFT MODELS
38 TO 120 TONS

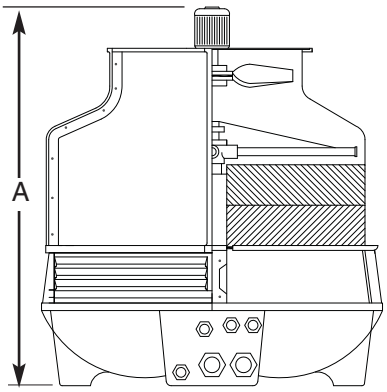
FEATURES

- Durable fiberglass shell resists corrosion and harsh weather conditions
- Convenient sight glass for inspection of internal features or for maintenance
- Optional ladder for easy access to the motor and fan
- Detachable fiberglass inlet louvers making it easy to clean and inspect the basin

- Totally enclosed fan motor
- Direct-drive cast aluminum or polypropylene fan, angled for optimal air movement
- Self-rotating, nonferrous water distribution system with no-clog openings
- PVC fill media maximizing air / water contact which optimizes heat transfer

SPECIFICATIONS

MODELS	E1F-038	E1F-060	E1F-080	E1F-100	E1F-120
Performance characteristics					
Tower capacity tons*	38	60	80	100	120
Sump capacity gallons {liters}	105 {397}	162 {613}	183 {693}	190 {719}	198 {750}
Blower motor Hp {kW}	2.0 {1.49}	2.0 {1.49}	3.0 {2.24}	3.0 {2.24}	5.0 {3.73}
Wet bulb temperature / Output tower tons {gpm}					
70°F {21°C}	55 {166}	93 {280}	123 {373}	148 {448}	175 {500}†
72°F {22°C}	51 {156}	85 {258}	114 {344}	138 {417}	164 {495}
75°F {24°C}	45 {137}	74 {222}	98 {296}	121 {364}	144 {435}
78°F {80°C}	38 {114}	60 {180}	80 {240}	100 {300}	120 {360}
80°F {27°C}	32 {97}	50 {150}	67 {201}	84 {254}	101 {306}
Dimensions inches {mm}					
A - Total height	84 {2134}	92 {2337}	109 {2769}	109 {2769}	115 {2921}
Diameter	75 {1905}	84 {2134}	95 {2413}	95 {2413}	95 {2413}
Weight lb {kg}					
Shipping (dry)	600 {272}	750 {340}	1250 {567}	1300 {590}	1400 {635}
Operating	1475 {669}	2100 {953}	2780 {1261}	2890 {1311}	3050 {1383}
Voltage Full Load Amps					
230v/3 phase/60 Hz	8.0	10.0	12.0	12.0	16.0
460v/3 phase/60 Hz	4.0	5.0	6.0	6.0	8.0
Connections inches NPT					
Water inlet / outlet	3.0	4.0	5.0	5.0	5.0
Drain	2.0	2.0	2.0	2.0	2.0
Make-up water	0.75	0.75	1.0	1.0	1.0
Overflow	1.0	1.0	1.0	1.0	1.0
Water requirements					
Minimum inlet pressure psi {bar}	3.0 {0.20}	5.0 {0.34}	5.0 {0.34}	5.0 {0.34}	5.0 {0.34}
Maximum flow rate gpm {l/min}	200 {750}	340 {1285}	500 {1890}	500 {1890}	500 {1890}
Maximum inlet temperature °F {°C}	110 {43}				



SPECIFICATION NOTES:

* Cooling tower tons are based on 15,000 BTU/Hr/ton with 95°F {35°C} entering water temperature, 78°F {27°C} ambient wet bulb temperature and 3.0 gpm/ton except note below.

† Maximum gpm for tower.

Specifications may change without notice. Consult a Conair representative for the most current information.

E2F SERIES
100 TO 240 TONS

Model E2F-100

LIGHT WEIGHT MAINTENANCE FREE FIBERGLASS CONSTRUCTION

An ideal and cost-efficient alternative to metal cooling towers, the fiberglass Conair E2F Series Cooling Tower is available for applications ranging from 100 to 240 tons. The E2F Series is designed for outdoor use in industrial manufacturing locations.

All water connections, the water distribution system, and the cellular fill are made to resist rot, decay, and biological attack.

No on-site construction or fabrication is necessary because the entire tower is delivered in one piece. The fan and motor are shipped separately to prevent shipping damage.

REMARKABLE FEATURES; CORROSION-RESISTANT

The E2F Series Cooling Towers were designed to be environmentally friendly and virtually maintenance free.

Evaporative cooling systems have historically been problematic due to corrosion, scale, heavy metals and acid feeds (used to control pH levels in cooling water) that damage system equipment and result in environmentally unacceptable discharge levels. In fact, any time galvanized metal comes in contact with cooling water, problems can arise.

The E2F Series cooling towers provide peace-of-mind because Conair has eliminated these problems by excluding galvanized metal from the system. All fasteners are made of high quality 304 stainless steel. The tower shell is fiber-reinforced plastic (FRP) with UV inhibitors. PVC is used for fill, drift eliminators, and inlet louvers. Schedule 40 PVC is used for the water distribution system.

Designed to perform and keep performing

Fiberglass tower casing, basin, and air inlet louvers have a smooth exterior gelcoat with UV inhibitors. E2F Series towers are built using totally non-ferrous materials. Large, non-clogging ABS nozzles are used to uniformly distribute water across all fill surfaces. Adjustable pitch, high efficiency, fiberglass reinforced polypropylene fan blades with a cast aluminum alloy fan hub and a heavy duty TEAO (Totally Enclosed Air Over Motor) fan motor with permanently lubricated motor bearings promise longevity and performance.

Further improve the performance

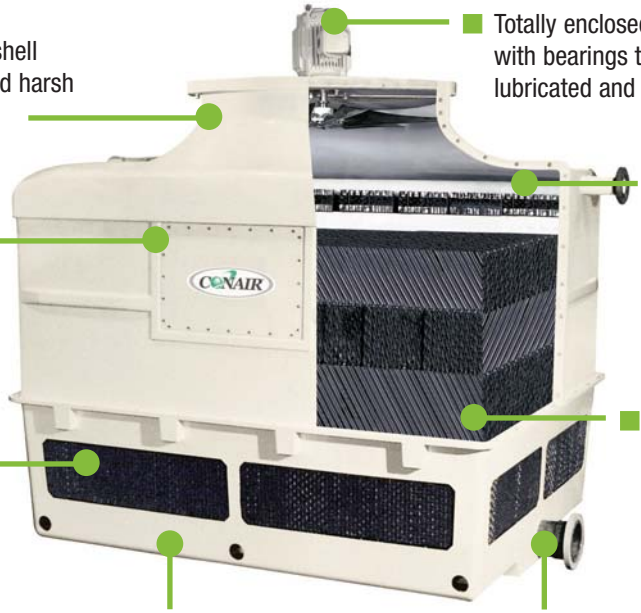
Pre-engineered options designed exclusively for this series further improve the performance of the tower for specific applications. The fan guard and outlet strainer can be upgraded to stainless steel. Inlet and outlet flanges can be added for quick connections. A structural steel base and legs can be purchased for quick installation. An optional thermostat will save energy and provide a constant, stable water temperature. A water make-up float valve assembly maintains consistant water level for maximum performance. A basin heater package is ideal for colder locations. An equalization connection for connecting several tower basins equalizes basin water levels by letting cooled water flow between basins.

10-year shell warranty

A Conair cooling tower installation assures peace-of-mind. We warrant the fiberglass shell and basin against material defects and workmanship for ten years. The remainder of the tower has one year parts warranty.

E2F SERIES
100 TO 240 TONS

FEATURES



- Durable fiberglass shell resists corrosion and harsh weather conditions.
- Totally enclosed fan motor with bearings that are permanently lubricated and require no maintenance.
- Access door to the tower interior with stainless steel fasteners.
- PVC water distribution system includes large non-clogging nozzles that efficiently and uniformly distribute water across all fill surfaces.
- PVC fill media maximizing air / water contact which optimizes heat transfer.
- Louvers made of durable PVC that are designed to eliminate possible back splash and are removable to allow full access to basin.
- Leak-proof, one piece basin that can be mounted on two I-beams or optional structural steel base.
- Optional inlet and outlet flanges.

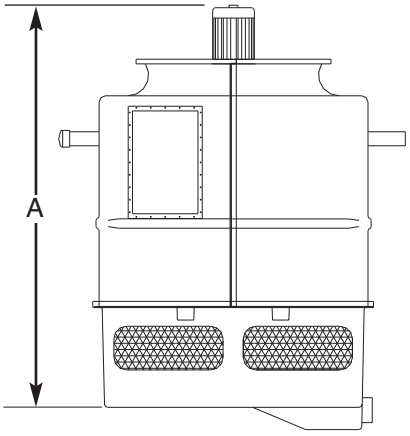
OPTIONS

- Stainless steel outlet strainer can be used to provide system filtration when the basin of the tower is used as a reservoir.
- A pre-assembled, painted structural steel base makes tower installation quick and easy. The base is designed to be mounted on four support points and available with legs up to 20 feet long and appropriate cross bracing.
- NEMA 3R thermostat saves energy and provides stable supply water temperature by shutting off power to the fan motor when the water in the basin drops below a set temperature.
- Water make-up float valve assembly can be used in applications where a tower basin acts as an integral reservoir. The float valve assembly monitors the water level in the basin, adding water when necessary to maintain a consistent level ensuring maximum system performance.
- Basin heater package prevents the water in the basin from freezing in applications where the basin is used as a reservoir.
- Equalization connection creates a system reservoir by connecting several tower basins. Piping equalizes basin water levels by letting cooled water flow between the basins.
- Flanges can be supplied on both inlet and outlet connections for quick mating with plant piping.
- A high temperature option allows for the tower to be operated at inlet water temperatures up to 150°F {66°C}.

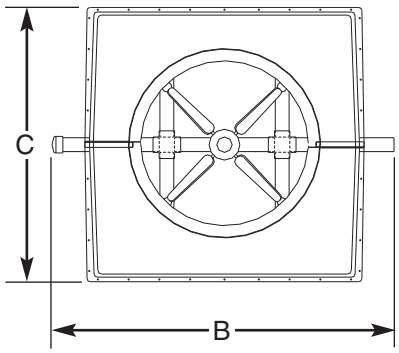
E2F SERIES
100 TO 240 TONS

SPECIFICATIONS

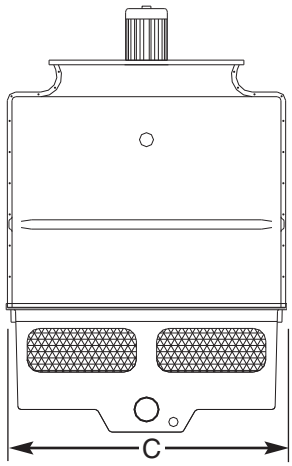
Models E2F-100, E2F-115, E2F-125 and E2F-140



Front view



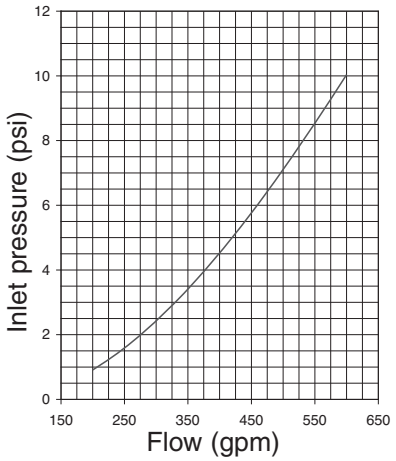
Top view



Side view

MODELS	E2F-100	E2F-115	E2F-125	E2F-140
Performance characteristics				
Tower capacity tons*	100	115	125	140
Sump capacity gallons {liters}	333 {1260}	333 {1260}	333 {1260}	333 {1260}
Blower motor Hp {kW}	3 {2.24}	5 {3.73}	5 {3.73}	7.5 {5.59}
Wet bulb temperature / Output tower tons {gpm}*				
70°F {21°C}	155 {467}	179 {540}	185 {560}	200 {600}†
72°F {22°C}	143 {430}	165 {497}	172 {520}	187 {565}
75°F {24°C}	123 {370}	141 {427}	150 {454}	165 {500}
78°F {26°C}	100 {300}	115 {345}	125 {375}	140 {420}
80°F {27°C}	83 {251}	95 {288}	106 {320}	120 {363}
Dimensions inches {mm}				
A - Height ‡	122.75 {3118}	125 {3175}	125 {3175}	128.25 {3258}
B - Width	114.5 {2908}	114.5 {2908}	114.5 {2908}	114.5 {2908}
C - Depth	90 {2286}	90 {2286}	90 {2286}	90 {2286}
Weight lb {kg}				
Shipping (dry)	1760 {799}	1910 {867}	1910 {867}	2150 {975}
Operating	4535 {2057}	4535 {2057}	4685 {2125}	4925 {2234}
Power Requirements Full Load Amps				
230v/3 phase/60 Hz	12.0	18.0	18.0	24.0
460v/3 phase/60 Hz	6.0	9.0	9.0	12.0
Connections inches {mm}				
Water inlet	4 PVC {120}			
Water outlet	8 PVC {203}			
Drain connection	2 FPT {51}			
Water Requirements				
Minimum inlet pressure psi {bar}	6.0 {0.41}	4.0 {0.28}	4.0 {0.28}	5.0 {0.34}
Maximum flow rate gpm {l/min}	600 {2270}			
Maximum inlet temperature §	110°F {43°C}			

WATER FLOW



SPECIFICATION NOTES:

* Cooling tower tons based on 15,000 BTU/Hr/ton with 95°F {35°C} entering water temperature, 78°F {27°C} ambient wet bulb temperature and 3.0 gpm/ton except note below.

† Maximum gpm for tower.

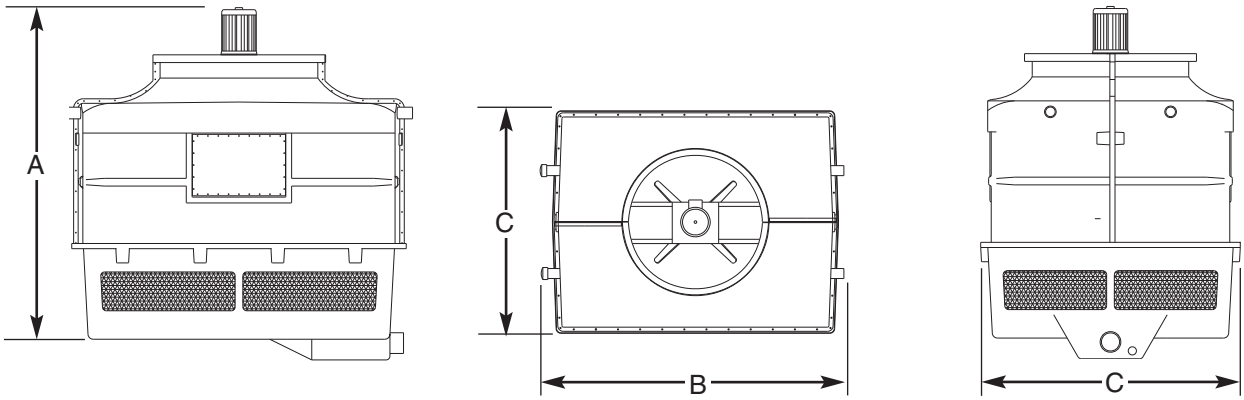
‡ Height does not include the portion of the basin that extends beyond the bottom of the basin

§ Optional high temperature maximum inlet temperature: 150°F {66°C}

Specifications may change without notice. Consult a Conair representative for the most current information.

SPECIFICATIONS

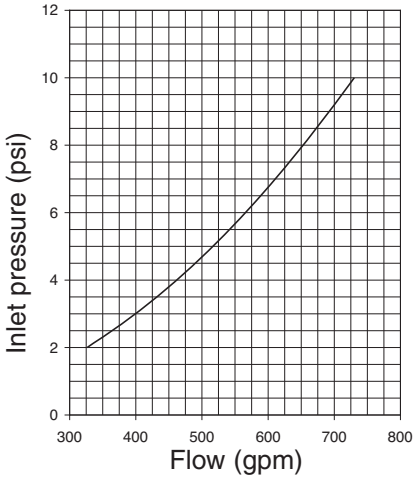
Models E2F-170, E2F-185, E2F-205 and E2F-240



Front view | Top view | Side view

MODELS	E2F-170	E2F-185	E2F-205	E2F-240
Performance characteristics				
Tower capacity tons*	170	185	205	240
Sump capacity gallons {liters}	340 {1285}	340 {1285}	340 {1285}	340 {1285}
Blower motor Hp {kW}	7.5 {5.59}	10 {7.45}	10 {7.45}	15 {11.18}
Wet bulb temperature / Output tower tons {gpm}*				
70°F {21°C}	256 {725}†	274 {725}†	290 {725}†	325 {725}†
72°F {22°C}	241 {725}†	257 {725}†	272 {725}†	305 {725}†
75°F {24°C}	208 {630}	228 {688}	245 {725}†	273 {725}†
78°F {26°C}	170 {510}	185 {555}	205 {615}	240 {720}
80°F {27°C}	141 {426}	153 {463}	174 {525}	204 {616}
Dimensions inches {mm}				
A - Height ‡	124.5 {3162}	127.5 {3239}	127.5 {3239}	127.5 {3239}
B - Width	139.5 {3543}	139.5 {3543}	139.5 {3543}	139.5 {3543}
C - Depth	100.5 {2553}	100.5 {2553}	100.5 {2553}	100.5 {2553}
Weight lb {kg}				
Shipping (dry)	2660 {1207}	2700 {1225}	2700 {1225}	2750 {1248}
Operating	5230 {2373}	5530 {2509}	5570 {2527}	5570 {2527}
Power Requirements Full Load Amps				
230v/3 phase/60 Hz	24.0	34.0	34.0	48.0
460v/3 phase/60 Hz	12.0	17.0	17.0	24.0
Connections inches {mm}				
Water inlet	Two - 4 PVC {102}			
Water outlet	8 PVC {203}			
Drain connection	2 FPT {51}			
Water Requirements				
Minimum inlet pressure psi {bar}	5.0 {0.34}	6.0 {0.41}	7.0 {0.48}	10.0 {0.69}
Maximum flow rate gpm {l/min}	725 {2740}			
Maximum inlet temperature§	110°F {43°C}			

WATER FLOW



SPECIFICATION NOTES:

* Cooling tower tons based on 15,000 BTU/Hr/ton with 95°F {35°C} entering water temperature, 78°F {27°C} ambient wet bulb temperature and 3.0 gpm/ton except note below.

† Maximum gpm for tower.

‡ Height does not include the portion of the basin that extends beyond the bottom of the basin

§ Optional high temperature maximum inlet temperature: 150°F {66°C}

Specifications may change without notice. Consult a Conair representative for the most current information.

YEAR-ROUND CHILLING WITH PRECISE CONTROL

Engineered to meet the most demanding job schedules, these chillers are ideal for plastic processors. Units are self-contained and easy to install and maintain. The modular microprocessor control coordinates the actions of the chillers and provides stand-alone operation of the unit. The small size, convenient lifting and complete wiring allow fast, easy integration into your central cooling system.

NOMINAL CAPACITY FROM 22 TONS TO 136 TONS

The Conair air-cooled central chillers are totally self-contained for easy, economical installation and use. These chillers are designed for year-round applications in ambient conditions from 0°F to 125°F {-18°C to 52°C}.

Made of high strength cast iron, the scroll compressor is designed for less thermal distortion, less leakage, and higher efficiencies.

The air-cooled chillers automatically shut down during a loss of flow to protect the evaporator from freezing.

All units are factory tested with water running through the evaporator to confirm proper operation.

- **State-of-the-art precision control**
  The up-front, easy-to-use control is the brain of the chiller. PLC displays process status information as well as lets you make quick setting changes. Control uses common English language interface and no symbols or codes.
- **Customized to fit your needs**
  Choose sizes, capacities and horsepower; Conair has the chiller to match your process. Pick capacities from 22 tons up to 136 tons.
- **Simple compressor design**
  The scroll compressor has 70% fewer parts than an equal capacity reciprocating compressor, eliminating the need for pistons, connecting rods, wrist pins and valves. Fewer moving parts mean less internal friction and greater efficiency.
- **“Smart” auto lead/lag**
  The chiller is designed for even compressor starts and even run times to decrease wear on the compressors.

FEATURES

- **Top air discharge**
  Direct-drive condenser fans release air away from personnel, building.
- **Evaporator**
  Brazed plate evaporator is designed with seamless internally finned copper tubes, roller-expanded into tube sheets.
- **Factory tested**
  All chillers are factory tested at typical ambient air and water conditions to confirm proper operation.
- **Condenser**
  Air-cooled condenser coils have aluminum fins mechanically bonded to seamless copper tubing.
- **Flow Switch**
  Factory installed to positively detect flow loss of evaporator solution.

- **Refrigerant circuit**
  Larger chillers have dual refrigerant circuits with two compressors. Passive oil management maintains proper oil levels within compressor.
- **3-D Scroll compressor**
  The compressor has simple mechanical design with minimal moving parts, inherently low vibration for increased efficiency.
- **Heavy gauge galvanized steel panels**
  Fourteen and Sixteen gauge panels and access doors for support and strength. All are finished with heavy-duty paint.
- **Weather protected control**
  The control has automatic compressor and condenser fan sequencing, load limiting, and anti-recycle functions.

CONTROL

File Tabs
Advanced interface allowing the user to access setpoints, active temperatures, modes, electrical data, pressures and diagnostics.

LCD Display
Easy-to-read screen provides system information.

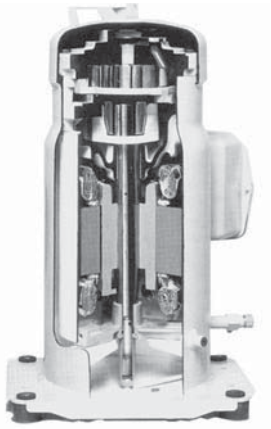
Microprocessor Control with Human Interface Panel (HMI)

- Designed to take corrective action to prevent unit shutdown.
- Limit compressor operation with smart safety controls, avoiding compressor or evaporator failures.
- Built-in chiller flow protection automatically detects no-water flow condition.
- Improved chiller start-up, load limiting, compressor anti-recycle timing, and lead/lag functions.
- Alarm diagnostic displays specific information for quick action.
- Service menu offers easy troubleshooting by controlling all outputs individually.
- Chiller capacity algorithm optimizes setpoint control and provides evaporator freeze protection.
- Failure protections include loss of chilled solution flow, chiller freeze protection, chilled solution flow interlock, head pressure control, pump down control, and low ambient lockout.

AIR-COOLED MODELS ESA-22 TO ESA-136

SCROLL COMPRESSOR

- 70% fewer parts - When compared to an equal capacity reciprocating compressor. Fewer moving parts means greater efficiency.
- Single orbiting scroll - eliminates the need for pistons, connecting rods, wrist pins and valves.
- Non-ozone depleting refrigerant - HFC-410A.
- Smooth compression cycle - with torque variations only 30% of that produced by a reciprocating compressor, stress on the motor is very low; noise and vibration are reduced.
- Matched scroll plates - touch in all three dimensions, forming a completely enclosed compression chamber for higher efficiency.
- Suction gas-cooled motor - keeps the motor cooler for longer life and better efficiency.



OPTIONS

Different LWT Ranges

Standard leaving water temperature ranges from 42°F to 65°F {5.6°C to 18.3°C} and optional temperature range from 20°F to 65°F {-6.7°C to -18.3°C}.

Remote Setpoint

Input for integration into the control system. Choose 0-5VDC or 0-10VDC.

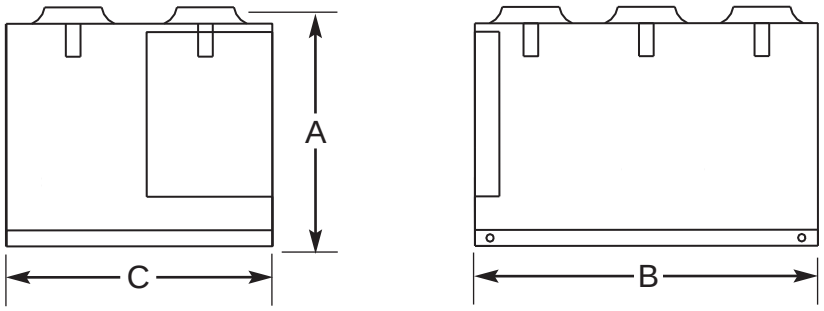
Compressor Warranty

Choose a two- to five-year compressor replacement warranty.

Disconnect

External handle allows local power shutoff to control center.

SPECIFICATIONS



SPECIFICATION NOTES

* Capacity data based on ambient air temperature of 95°F {35°C}, leaving water temperature as shown, 10°F {5.6°C} water temperature drop through evaporator, and 60 Hz electrical supply unless noted. Capacity ratings are /- 5% based on compressor manufacturer s ratings and are subject to change without notice.

† Leaving water temperature setpoints lower than 42°F {5.6°C} require the optional Low Temperature Processing" package and the use of Glycol. Capacities shown are with 30% Propylene Glycol.

‡ Chilled water flow is based on nominal capacity at 50°F {10.0°C} leaving water temperature and 10°F {5.6°C} water temperature drop through the evaporator.

Differential pressure (drop) through evaporator is for listed nominal design flow of 100% water.

** GRV: Grooved pipe connections.

†† MCA: Minimum circuit ampacity. MOP: Maximum overcurrent protection. An additional 120/1/60, 15 amp customer provided power connection is required to power evaporator heaters. Rated voltage usage range: 200/30/60 (180-220), 230/3/60 (208-254), 460/3/60 (414-506), 575/3/60 (516-633).

Specifications may change without notice. Check with a Conair representative for the most current information.

SPECIFICATIONS

AIR-COOLED MODELS ESA-22 TO ESA-136

MODEL	ESA-22		ESA-27		ESA-31		ESA-37		ESA-42		ESA-54		ESA-63	
Capacity* in tons {kcal} at 95°F {35°C} ambient and leaving water temperature														
20°F {-6.7°C} †	12.1 {36,590}		15.7 {47,476}		17.2 {52,012}		20.4 {61,689}		22.9 {69,248}		30.2 {91,323}		33.9 {102,512}	
25°F {-3.9°C} †	13.4 {40,521}		17.3 {52,314}		19.1 {57,757}		22.7 {68,644}		25.1 {75,901}		33.5 {101,302}		37.9 {114,608}	
30°F {-1.1°C} †	14.9 {45,057}		19.1 {57,757}		21.2 {64,108}		25.1 {75,901}		28.0 {84,671}		37.1 {112,189}		42.1 {127,308}	
35°F {1.7°C} †	16.3 {49,290}		21.0 {63,503}		23.4 {70.760}		27.6 {83,461}		31.0 {93,742}		40.8 {123,377}		46.6 {140,916}	
40°F {4.4°C} †	17.9 {54,129}		22.9 {69,248}		25.6 {77,413}		30.2 {91,323}		34.3 {103,721}		44.6 {134,868}		51.3 {155,129}	
45°F {7.2°C}	19.9 {60,177}		25.4 {76,808}		28.7 {86,787}		33.7 {101,907}		38.9 {117,632}		49.8 {150,593}		57.6 {174,179}	
50°F {10.0°C}	21.6 {65,317}		27.4 {82,856}		31.1 {94,045}		36.5 {110,374}		42.3 {127,913}		53.9 {162,991}		62.7 {189,602}	
55°F {12.8°C}	23.3 {70,458}		29.5 {89,207}		33.6 {101,605}		39.3 {118,841}		45.9 {138,799}		58.0 {175,389}		67.9 {205,326}	
60°F {15.5°C}	25.0 {75,599}		31.6 {95,557}		36.2 {109,467}		42.2 {127,611}		49.7 {150,290}		62.3 {188,392}		73.2 {221,353}	
65°F {18.3°C}	26.8 {81,042}		33.7 {101,907}		38.8 {117,329}		45.2 {136,683}		53.4 {161,479}		66.6 {201,395}		78.7 {237,985}	
Performance characteristics														
Qty of refrigerant circuits/ compressors	1 / 2		1 / 2		1 / 2		1 / 2		2 / 4		2 / 4		2 / 4	
Unloading steps, %	50-100		50-100		50-100		43-100		25-50-75-100		25-50-75-100		25-50-75-100	
Chilled water flow gpm {lpm} ‡	51.6 {195}		65.6 {248}		74.5 {282}		87.3 {330}		101.4 {384}		128.9 {488}		150.0 {568}	
Evaporator pressure drop psi {bar}	7.2 {0.50}		6.5 {0.45}		8.3 {0.57}		6.4 {0.44}		9.5 {0.66}		8.7 {0.60}		8.7 {0.60}	
Evaporator volume, gal {l}	1.4 {5.3}		1.8 {6.8}		2.2 {8.3}		2.8 {10.6}		2.5 {9.5}		3.9 {14.8}		5.0 {18.9}	
Dimensions in {mm}														
A - Height	84.7 {2151}		84.7 {2151}		84.7 {2151}		84.7 {2151}		84.8 {2154}		84.8 {2154}		84.8 {2154}	
B - Width	50.6 {1285}		50.6 {1285}		50.6 {1285}		50.6 {1285}		88.6 {2250}		88.6 {2250}		88.6 {2250}	
C - Length	114.0 {2896}		114.0 {2896}		150.0 {3810}		150.0 {3810}		114.0 {2896}		114.0 {2896}		150.0 {3810}	
Connections GRV **	2.00 {51}		2.50 {64}		2.50 {64		2.50 {64		3.00 {76}		3.00 {76}		3.00 {76}	
Weight lb {kg}														
Shipping	1967 {892}		1995 {905}		2561 {1162}		2580 {1170}		3507 {1591}		3584 {1626}		4640 {2105}	
Installed	2030 {921}		2060 {934}		2629 {1192}		2654 {1204}		3578 {1623}		3666 {1663}		4730 {2145}	
Utility requirements														
Power consumption amps ††	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP
200V/3 phase/60hz	105.1	125	120.6	150	154.6	200	183.6	225	197.3	225	246.2	250	287.9	300
230V/3 phase/60hz	92.3	125	115.6	150	135.5	175	168.3	200	197.7	225	219.8	250	259.2	300
460V/3 phase/60hz	49.2	60	57.7	80	68.3	90	77.3	110	94.6	110	105.7	125	131.6	150
575V/3 phase/60hz	41.0	50	48.2	60	54.1	70	61.7	80	79.4	90	93.0	110	106.8	125
Performance characteristics 50 Hz electrical service														
Capacity* in tons {kcal} at 95°F {35°C} ambient and leaving water temperature:														
50°F {10°C}	18.4 {55,641}		23.3 {70,458}		26.6 {80,437}		30.7 {92,835}		35.9 {108,560}		45.3 {136,985}		53.3 {161,177}	
Power consumption amps ††	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP
400V/3 phase/50hz	48.6	60	57.1	70	66.6	90	77.0	110	84.8	100	101.8	110	132.5	150

MODEL	ESA-73		ESA-84		ESA-94		ESA-106		ESA-115		ESA-125		ESA-136	
Capacity* in tons {kcal} at 95°F {35°C} ambient and leaving water temperature														
20°F {-6.7°C} †	40.5 {122,470}		46.0 {139,102}		52.2 {157,850}		58.2 {175,994}		63.8 {192,928}		70.0 {211,676}		75.5 {228,097}	
25°F {-3.9°C} †	45.1{136,380}		51.3 {155,129}		58.2 {175,994}		64.9 {196,254}		71.0 {214,700}		77.9 {235,566}		84.0 {253,776}	
30°F {-1.1°C} †	50.0 {151,197}		56.9 {172,063}		64.4 {194,742}		72.0 {217,724}		78.6 {237,682}		86.1 {260,362}		93.0 {280,967}	
35°F {1.7°C} †	55.1 {166,620}		62.7 {189,602}		71.0 {214,700}		79.4 {240,102}		86.7 {262,176}		94.8 {286,670}		102.4 {309,366}	
40°F {4.4°C} †	60.4 {182,647}		68.8 {208,048}		77.8 {235,263}		87.2 {263,688}		95.0 {287,275}		103.8 {313,886}		112.2 {338,973}	
45°F {7.2°C}	67.4 {203,814}		77.1 {233,147}		86.8 {262,479}		97.6 {295,137}		106.1 {320,841}		115.8 {350,173}		125.4 {378,852}	
50°F {10.0°C}	73.1 {221,051}		83.6 {252,802}		94.0 {284,251}		106.0 {320,539}		115.1 {348,057}		125.3 {378,901}		135.9 {410,574}	
55°F {12.8°C}	78.9 {238,590}		90.4 {273,365}		101.5 {306,931}		114.5 {346,242}		124.2 {375,575}		135.1 {408,536}		146.7 {443,202}	
60°F {15.5°C}	84.9 {256,733}		97.2 {293,928}		109.0 {329,611}		123.3 {372,853}		133.5 {403,697}		145.0 {438,473}		157.7 {476,435}	
65°F {18.3°C}	91.0 {275,179}		104.2 {315,096}		116.7 {352,895}		132.2 {399,766}		143.0 {432,425}		155.1 {469,015}		169.0 {510,574}	
Performance characteristics														
Qty of refrigerant circuits/ compressors	2 / 4		2 / 4		2 / 4		2 / 4		2 / 4		2 / 4		2 / 6	
Unloading steps, %	21-43-71-100		25-50-75-100		22-44-72-100		25-50-75-100		23-45-73-100		25-50-75-100		15-31-46-62-81-100	
Chilled water flow gpm {lpm} ‡	174.9 {662}		200.0 {757}		225.0 {852}		253.5 {960}		275.3 {1,042}		300.0 {1,136}		325.0 {1230}	
Evaporator pressure drop psi {bar}	6.9 {0.48}		7.7 {0.53}		6.7 {0.46}		7.0 {0.48}		7.3 {0.50}		8.6 {0.59}		7.6 {0.53}	
Evaporator volume, gal {l}	5.7 {21.6}		7.0 {26.5}		7.5 {28.4}		8.6 {32.6}		10.3 {39.0}		10.3 {39.0}		12.3 {46.6}	
Dimensions in {mm}														
A - Height	84.8 {2154}		92.4 {2347}		92.4 {2347}		92.5 {2350}		92.5 {2350}		92.5 {2350}		92.5 {2350}	
B - Width	88.6 {2250}		89.0 {2261}		89.0 {2261}		89.0 {2261}		89.0 {2261}		89.0 {2261}		89.0 {2261}	
C - Length	150.0 {3810}		143.1 {3635}		143.1 {3635}		165.9 {4214}		165.9 {4214}		165.9 {4214}		201.9 {5128}	
Connections GRV **	3.0 {76}		4.0 {102}		4.0 {102}		4.0 {102}		4.0 {102}		4.0 {102}		4.0 {102}	
Weight lb {kg}														
Shipping	4656 {2112}		5278 {2394}		5637 {2557}		6283 {2850}		6328 {2870}		6328 {2870}		7511 {3407}	
Installed	4751 {2155}		5384 {2442}		5746 {2606}		6401 {2903}		6461 {2931}		6461 {2931}		7618 {3455}	
Utility requirements														
Power consumption amps ††	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP
200V/3 phase/60hz	354.5	400	413.7	500	441.4	500	478.4	500	523.4	600	563.4	600	569.3	600
230V/3 phase/60hz	317.2	350	368.8	400	392.9	450	427.5	500	477.4	500	521.6	600	531.3	600
460V/3 phase/60hz	147.8	175	162.2	175	182.3	200	206.5	225	226.1	250	243.6	250	261.1	300
575V/3 phase/60hz	119.8	125	131.4	150	148.5	175	168.9	200	179.3	200	188.5	225	211.7	225
Performance characteristics 50 Hz electrical service														
Capacity* in tons {kcal} at 95°F {35°C} ambient and leaving water temperature:														
50°F {10°C}	61.4 {185,671}		71.3 {215,608}		80.6 {243,730}		89.8 {271,551}		98.4 {297,557}		104.7 {316,608}		NA	
Power consumption amps ††	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP
400V/3 phase/50hz	147.2	175	160.2	175	181.1	200	199.7	225	214.4	250	223.2	250	NA	NA

SPECIFICATION NOTES (see previous page)

Model A-296SK

DESIGNED TO PERFORM YEAR-ROUND

The Conair Air-Cooled A-SK series Central Chillers are engineered to meet the most demanding needs of plastic processors. The modular microprocessor control coordinates the actions of the chiller and provides stand-alone operation of the unit. These chillers are space conscious – they can be positioned as close as 4 ft. {1.2 m} from a vertical wall.

CHILLING CAPACITIES FROM 156 TO 527 TONS

The Conair A-SK series air-cooled central chillers provide better control of process temperature, better reliability and greater efficiency. These chillers are designed for year-round applications in ambient conditions from 30°F to 115°F {-1°C to 46°C}.

Made of high strength cast iron, the screw compressor is designed for less thermal distortion, less leakage, and higher efficiencies. The variable unloader valve provides stable temperature control under varying loads.

The air-cooled chillers automatically shut down during a loss of flow to protect the evaporator from freezing.

Options include low ambient operation, louvered air intake, remote temperature setpoint, and extended compressor warranty.

- **High-efficiency compressor**
  The helical rotary compressor is a direct drive, low speed design with only four moving parts for high reliability and low maintenance.
- **Customized to fit your needs**
  Conair has the central chiller to match your process. Pick nominal chilling capacities from 156 tons to 527 tons.
- **Suction gas-cooled motor**
  The motor operates at lower temperatures for a longer motor life.
- **Rugged compressor design**
  The screw compressor has only four moving parts eliminating the need for pistons, connecting rods, wrist pins and valves. Fewer moving parts means less internal friction and greater efficiency.

AIR-COOLED MODELS A-156SK TO A-527SK

FEATURES

- Top air discharge - Direct-drive condenser fans release air away from personnel, building.
- Evaporator - Tube-in-shell evaporator is designed with seamless internally finned copper tubes, roller-expanded into tube sheets.
- Condensor - Air-cooled condenser coils have aluminum fins mechanically bonded to seamless copper tubing.
- Suction gas-cooled motor - Motor operates at lower temperatures for longer motor life.
- Dual refrigerant circuits - Chillers have dual refrigerant circuits. Compressors are designed to handle liquid slugging.
- Helical rotary compressor - Compressor has only four moving parts; direct-drive, low-speed for high-efficiency and high-reliability.
- Heavy-gauge, galvanized steel panels - Fourteen and sixteen gauge panels and access doors for support and strength. All are finished with heavy-duty paint.
- Weather-protected control - Control has automatic compressor and condenser fan sequencing, load limiting, and anti-recycle functions.

CONTROL

File Tabs
Advanced interface allowing the user to access set-points, active temperatures, modes, electrical data, pressures and diagnostics.

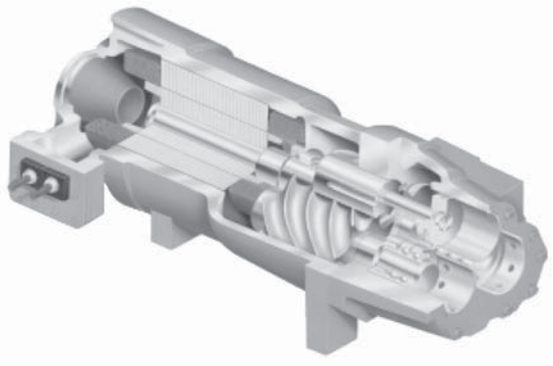
LCD Display
Easy-to-read screen provides system information.

Microprocessor Control with Human Interface Panel (HMI)

- Designed to take corrective action to prevent unit shutdown.
- Limit compressor operation with smart safety controls, avoiding compressor or evaporator failures.
- Built-in chiller flow protection automatically detects no-water flow condition.
- Improved chiller start-up, load limiting, compressor anti-recycle timing, and lead/lag functions.
- Alarm diagnostic displays specific information for quick action.
- Service menu offers easy troubleshooting by controlling all outputs individually.
- Chiller capacity algorithm optimizes setpoint control and provides evaporator freeze protection.
- Failure protections include loss of chilled solution flow, chiller freeze protection, chilled solution flow interlock, head pressure control, pump down control, and low ambient lockout.

HELICAL ROTARY SCREW COMPRESSOR

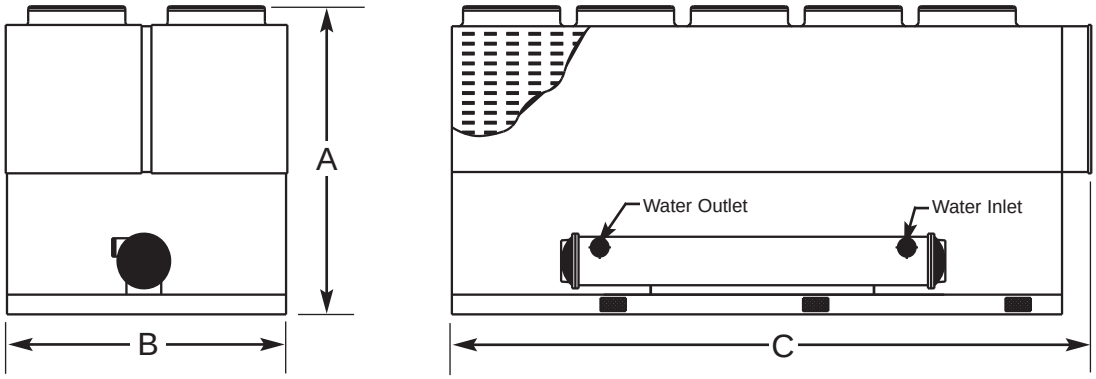
- Helical screw design results in part load performance far superior to single reciprocating compressors.
- Only four moving parts when compared to reciprocating compressors; there are no pistons, connecting rods, suction and discharge valves or mechanical oil pump.
- Latest heat transfer technology results in increased condenser and evaporator tube efficiency.



cutaway of helical rotary screw compressor

- Reduced rotor tip clearance results in reduced leakage between the high and low pressure cavities during compression.
- Resistant to liquid slugging this compressor design can handle amounts of liquid refrigerant that would severely damage a reciprocating compressor.

SPECIFICATIONS



SPECIFICATION NOTES (see next page for detailed specification information)

* Based on water temperature (100% water) leaving the chiller, 50°F {10°C} water temperature drop through the evaporator, standard pump selections, 95°F {35°C} ambient air temperature, for the 60 Hz units. Capacity ratings are (/-) 5% based on compressor manufacturer s ratings and are subject to change without notice.

† Leaving water temperature setpoints lower than 40°F {4.4°C} requires the Low Temperature Processing" option and the use of Glycol. Capacities shown are with 30% Propylene Glycol. Capacities with 6°F {3.3°C} temperature drop to meet minimum evaporator flow requirements.

‡ Chilled water flow is based on nominal capacity at 50°F {10°C} leaving water temperature and 10°F {5.6°C} water temperature drop through the evaporator.

Differential pressure (drop) through evaporator is for listed nominal design flow of 100% water.

** GRV: Grooved pipe connections.

†† MCA: Minimum circuit ampacity. MOP: Maximum overcurrent protection. Where two numbers are listed, dual power source is required. An additional 120/1/60, 15 amp customer provided power connection is required to power evaporator heaters. Rated Voltage Usage Range: 200/3/60 (180-220), 230/3/60 (208-254), 460/3/60 (414-506), 575/3/60 (516-633).

Specifications may change without notice. Check with a Conair representative for the most current information.

SPECIFICATIONS

AIR-COOLED MODELS A-156SK TO A-527SK

MODEL	A-156SK		A-171SK		A-187SK		A-204SK		A-222SK		A-244SK		A-266SK	
Capacity* in tons {kcal} at 95°F {35°C} ambient and leaving water temperature														
20°F {-6.7°C} †	79.3 {239,799}		87.5 {264,596}		97.6 {295,137}		107.0 {323,563}		116.5 {352,290}		120.6 {364,688}		131.9 {398,859}	
25°F {-3.9°C} †	80.6 {243,730}		88.6 {267,922}		102.7 {310,560}		112.9 {341,404}		122.7 {371,039}		141.2 {426,982}		154.5 {467,200}	
30°F {-1.1°C} †	97.0 {293,323}		106.6 {322,353}		119.5 {361,362}		130.9 {395,835}		142.5 {430,913}		160.2 {484,437}		175.4 {530,401}	
35°F {1.7°C} †	110.9 {335,356}		121.8 {368,317}		135.0 {408,233}		147.6 {446,335}		160.8 {486,251}		178.8 {540,682}		195.8 {592,089}	
40°F {4.4°C}	128.4 {388,275}		141.1 {426,679}		154.5 {467,200}		168.6 {509,838}		183.6 {555,197}		201.5 {609,326}		220.9 {667,990}	
45°F {7.2°C}	140.7 {425,470}		154.6 {467,503}		169.1 {511,350}		184.3 {557,314}		200.6 {606,604}		220.1 {665,571}		241.3 {729,679}	
50°F {10°C}	153.5 {464,176}		168.6 {509,838}		184.3 {557,314}		200.7 {606,907}		218.2 {659,826}		239.3 {723,631}		262.5 {793,787}	
55°F {12.8°C}	166.7 {504,092}		183.1 {553,685}		200.0 {604,790}		217.5 {657,709}		236.2 {714,257}		259.1 {783,505}		284.2 {859,406}	
60°F {15.5°C}	180.3 {545,218}		198.1 {599,044}		216.2 {653,778}		234.8 {710,023}		254.8 {770,502}		279.4 {844,892}		306.4 {926,538}	
Performance characteristics														
Qty. of refrigerant circuits/ compressors	2 / 2		2 / 2		2 / 2		2 / 2		2 / 2		2 / 2		2 / 2	
Modulating capacity range	15% to 100%		13.5% to 100%		15% to 100%		13.8% to 100%		15% to 100%		13.6% to 100%		15% to 100%	
Chilled water flow gpm {lpm} ‡	367.4 {1391}		403.6 {1528}		441.1 {1670}		480.2 {1818}		522.1 {1976}		572.7 {2168}		628.2 {2378}	
Evaporator pressure drop psi {bar}	5.5 {0.38}		5.7 {0.39}		5.9 {0.41}		6.1 {0.42}		6.0 {0.41}		9.1 {0.63}		9.0 {0.62}	
Evaporator volume gal {l}	29.0 {109.8}		32.0 {121.1}		33.0 {124.9}		35.0 {132.5}		39.0 {147.6}		38.0 {143.8}		42.0 {159.0}	
Dimensions in {mm}														
A - Height	93.0 {2362}		93.0 {2362}		93.0 {2362}		93.0 {2362}		93.0 {2362}		93.0 {2362}		93.0 {2362}	
B - Width	89.0 {2261}		89.0 {2261}		89.0 {2261}		89.0 {2261}		89.0 {2261}		89.0 {2261}		89.0 {2261}	
C - Length	196.0 {4978}		196.0 {4978}		196.0 {4978}		232.0 {5893}		232.0 {5893}		268.0 {6807}		268.0 {6807}	
Connections GRV **	4.0 {102}		4.0 {102}		6.0 {152}		6 .0{152}		6.0 {152}		6.0 {152}		6.0 {152}	
Weight lb {kg}														
Shipped	10,995 {4987}		11,034 {5005}		11,073 {5023}		12,685 {5754}		13,104 {5944}		14,687 {6662}		14,853 {6737}	
Installed	10,752 {4877}		10,769 {4885}		10,796 {4897}		12,391 {5620}		12,784 {5799}		14,370 {6518}		14,507 {6580}	
Utility requirements														
Power consumption, amps ††	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP
200V/3 phase/60hz	660	800	730	1000	785	1000	874	1200	947	1200	1045	1200	1124	1200
230V/3 phase/60hz	581	800	641	800	691	800	770	1000	843	1000	920	1200	898	1200
460V/3 phase/60hz	288	400	317	450	341	450	380	500	412	500	454	600	489	600
575V/3 phase/60hz	230	300	254	350	273	350	304	400	329	450	364	500	392	500
Performance characteristics @ 50 Hz electrical service														
Capacity* in tons {kcal} at 95°F {35°C} ambient and leaving water temperature														
50°F {10°C}	147.9 {447,242}		161.3 {487,763}		175.1 {529,494}		193.7 {585,739}		213.7 {646,218}		N/A {N/A}		256.5 {775,643}	
Chilled water flow gpm {lpm}	353.9 {1340}		386.0 {1461}		419.1 {1586}		463.5 {1755}		511.3 {1935}		N/A {N/A}		613.9 {2324}	
Evaporator pressure drop psi {bar} §	5.2 {0.36}		5.3 {0.36}		5.4 {0.37}		5.8 {0.40}		5.8 {0.40}		N/A {N/A}		6.9 {0.48}	
Power consumption, amps ††	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP
400V/3 phase/50hz	333	450	373	500	406	500	446	600	479	600	N/A	N/A	563	700

MODEL	A-296SK		A-332SK		A-375SK		A-440SK		A-484SK		A-527SK	
Performance characteristics												
Capacity*, tons at 95°F {35°C} ambient and leaving water temperature												
20°F {-6.7°C} †	140.4 {424,563}		159.3 {481,715}		183.2 {553,988}		226.9 {686,134}		252.8 {764,454}		277.1 {837,936}	
25°F {-3.9°C} †	170.5 {515,583}		191.9 {580,296}		218.7 {661,338}		264.4 {799,532}		292.4 {884,203}		320.0 {967,664}	
30°F {-1.1°C} †	195.6 {591,485}		219.5 {663,757}		249.5 {754,475}		299.1 {904,463}		329.7 {996,996}		360.6 {1,090,436}	
35°F {1.7°C} †	219.6 {664,059}		246.0 {743,892}		279.4 {844,892}		333.1 {1,007,278}		366.7 {1,108,882}		401.0 {1,212,604}	
40°F {4.4°C}	249.3 {753,871}		278.7 {842,775}		316.3 {956,475}		374.6 {1,132,772}		411.9 {1,245,565}		450.3 {1,361,685}	
45°F {7.2°C}	272.3 {823,421}		304.4 {920,490}		345.4 {1,044,472}		408.5 {1,235,283}		449.1 {1,358,056}		491.1 {1,485,062}	
50°F {10°C}	296.9 {897,811}		330.9 {1,000,625}		375.6 {1,135,795}		443.6 {1,341,424}		487.5 {1,474,175}		533.3 {1,612,672}	
55°F {12.8°C}	322.0 {973,712}		358.3 {1,083,481}		406.6 {1,229,538}		479.7 {1,450,589}		527.1 {1,593,924}		576.6 {1,743,609}	
60°F {15.5°C}	347.9 {1,052,032}		386.5 {1,168,757}		438.4 {1,325,700}		516.9 {1,563,080}		567.6 {1,716,394}		620.8 {1,877,268}	
Performance characteristics												
Qty of refrigerant circuits/ compressors	2 / 3		2 / 3		2 / 3		2 / 4		2 / 4		2 / 4	
Modulating capacity range	9.5% to 100%		10% to 100%		8.8% to 100%		7.5% to 100%		6.8% to 100%		7.5% to 100%	
Chilled water flow gpm {lpm} ‡	710.8 {2691}		792.2 {2999}		899.1 {3403}		1061.8 {4019}		1167.0 {4418}		1276.4 {4832}	
Evaporator pressure drop psi {bar}	6.9 {0.47}		7.2 {0.50}		7.6 {0.53}		9.1 {0.63}		10.1 {0.70}		10.3 {0.71}	
Evaporator volume gal {l}	60.0 {227.1}		66.0 {249.8}		70.0 {265.0}		81.0 {306.6}		84.0 {318.0}		88.0 {333.1}	
Dimensions in {mm}												
A - Height	96.0 {2438}		96.0 {2438}		96.0 {2438}		96.0 {2438}		96.0 {2438}		96.0 {2438}	
B- Width	89.0 {2261}		89.0 {2261}		89.0 {2261}		89.0 {2261}		89.0 {2261}		89.0 {2261}	
C - Length	362.0 {9195}		434.0 {11,024}		434.0 {11,024}		470.0 {11,938}		542.0 {13,767}		542.0 {13,767}	
Connections GRV **	8.00 {203}		8.00 {203}		8.00 {203}		8.00 {203}		8.00 {203}		8.00 {203}	
Weight lb {kg}												
Shipped	19,536 {8861}		21,103 {9572}		21,904 {9935}		25,754 {11,682}		26,373 {11,963}		27,798 {12,609}	
Installed	18,876 {8562}		19,572 {8878}		21,450 {9730}		25,074 {11,373}		25,678 {11,647}		27,056 {12,272}	
Utility requirements												
Power consumption, amps ††	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP
200V/3 phase/60hz	785/522	1000/800	947/522	1200/800	1124/522	1200/800	947/947	1200/1200	1124/947	1200/1200	1124/1124	1200/1200
230V/3 phase/60hz	681/459	800/700	834/459	1000/700	989/459	1200/700	834/834	1000/1000	989/834	1200/1000	989/989	1200/1200
460V/3 phase/60hz	536	700	600	700	678	800	786	800	864	1000	934	1000
575V/3 phase/60hz	430	500	481	600	544	700	628	700	693	1000	750	1000
Performance characteristics @ 50 Hz electrical service												
Capacity* in tons {kcal} at 95°F {35°C} ambient and leaving water temperature												
50°F {10°C}	284.8 {861,221}		323.8 {979,155}		352.6 {1,077,131}		433.7 {1,311,487}		N/A {N/A}		N/A {N/A}	
Chilled water flow gpm {lpm}	681.8 {2581}		775.1 {2934}		852.5 {3227}		1038.1 {3930}		N/A {N/A}		N/A {N/A}	
Evaporator pressure drop psi {bar} §	6.4 {0.44}		6.9 {0.47}		7.8 {0.54}		8.7 {0.60}		N/A {N/A}		N/A {N/A}	
Power consumption, amps ††	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP
200V/3 phase/60hz	629	800	694	800	770	800	909	1000	N/A	N/A	N/A	N/A

SPECIFICATION NOTES (see previous page)

WATER-COOLED MODELS W-86SK TO W-268SK

Model W-127SK

ENERGY EFFICIENT CENTRAL CHILLING

Provide chilled fluid for industrial applications from a central location with the Conair Water-Cooled W-SK Series Central Chillers.

The simple design of the screw compressor provides both full load and part load efficiencies unmatched in the industry, and results in lower energy costs when compared to reciprocating compressors.

COOLING CAPACITIES FROM 86 TONS TO 268 TONS

The Conair Water-Cooled W-SK Series Central Chillers are engineered for improved efficiency and better reliability. The screw compressor is the most advanced compressor in the industry. The unit protects against starting and running overload, under and over voltages, phase loss, phase reversals, high winding temperature and rapid recycling.

The microprocessor control maintains chilled water temperature more accurately, resulting in less temperature drift.

The microprocessor monitors temperature and the rate of change over time, effectively controlling compressor loading for efficient chiller operation.

The screw compressor's positive displacement design along with staging dual refrigerant circuits result in lower energy costs.

Eco-friendly and energy efficient

All models use environmentally-friendly HCFC-free R-134a refrigerant and have ASHRAE 90.1 compliant energy efficiency ratings for improved energy-savings.

Rugged compressor design

The screw compressor has only four moving parts eliminating the need for pistons, connecting rods, wrist pins and valves. Fewer moving parts means less internal friction and greater efficiency.

Trouble-free operation

Smart safety features and over 40 diagnostic displays for easy and virtually trouble-free operation that includes one year warranty on parts and labor.

Easy setup

Small unit size, factory wiring, easy lifting procedures and startup control logic result in quick and easy installation. And includes one day of startup services by a factory-trained technician.

WATER-COOLED MODELS W-86SK TO W-268SK

FEATURES

Easy access controls
Control has automatic compressor and condenser fan sequencing, load limiting, and anti-recycle functions.

Water Regulating Valves
for condenser water lower than 85°F {29.4°C}.

Helical rotary compressor
Compressor has only four moving parts; direct-drive, low speed for high efficiency and high reliability.

Operator interface
Monitors temperature and rate of change over time, effectively controlling compressor loading.

Evaporator
Shell-and-tube evaporator is designed with seamless internally finned copper tubes, roller-expanded into tube sheets.

Dual refrigerant circuits
Chillers have dual refrigerant circuits. Compressors are designed to handle liquid slugging.

Flow Switch
Field installed to positively detect flow loss of evaporator fluid flow.

Energy efficient
Results in lower energy costs when compared with reciprocating compressor designs.

CONTROL

File Tabs
Advanced interface allowing the user to access setpoints, active temperatures, modes, electrical data, pressures and diagnostics.

LCD Touch Screen with LED Backlight
Easy-to-read screen provides system information.

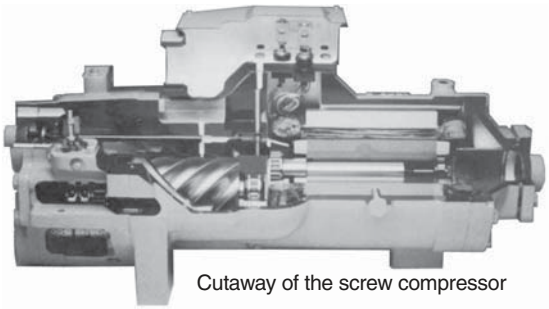
Microprocessor Control with Human Interface Panel

- Designed to take corrective action to prevent unit shutdown.
- Limit compressor operation with smart safety controls, avoiding compressor or evaporator failures.
- Built-in chiller flow protection automatically detects no-water flow condition.
- Improved chiller start-up, load limiting, compressor anti-recycle timing, and lead/lag functions.
- Alarm diagnostic displays specific information for quick action.
- Service menu offers easy troubleshooting by controlling all outputs individually.
- Chiller capacity algorithm optimizes setpoint control and provides evaporator freeze protection.
- Failure protections include loss of chilled solution flow, chiller freeze protection, chilled solution flow interlock, head pressure control, pump down control, and low ambient lockout.

WATER-COOLED MODELS W-86SK TO W-268SK

HELICAL ROTARY SCREW COMPRESSOR

- **Only four moving parts**
  when compared to reciprocating compressors; there are no pistons, connecting rods, suction and discharge valves or mechanical oil pump.
- **Reduced rotor tip clearance**
  results in reduced leakage between the high and low pressure cavities during compression.
- **Latest heat transfer technology**
  results in increased condenser and evaporator tube efficiency.
- **Resistant to liquid slugging**
  this compressor design can handle amounts of liquid refrigerant that would severely damage a reciprocating compressor.



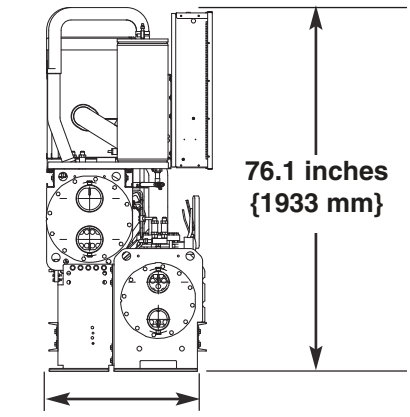
Cutaway of the screw compressor

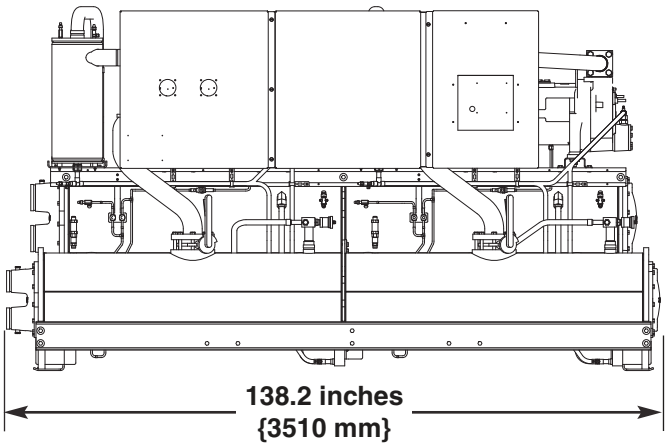
- **Helical screw design**
  results in part load performance far superior to single reciprocating compressors.

OPTIONS

- **Different LWT Ranges**
  Standard leaving water temperature ranges from 40°F to 65°F {4.4°C to 18.3°C} and optional temperature ranges from 0°F to 39°F {-17.8°C to 3.9°C}.
- **Remote Setpoint**
  Input for integration into the control system. Choose 0-5 VDC or 0-10 VDC.
- **Disconnect**
  External handle allows local power shutoff to control center.
- **Compressor Warranty**
  Choose an additional two- to five-year compressor component replacement warranty.
- **Wye-delta starter**
  Reduces energy surges during chiller start-up.
- **Remote condenser**
  Air-cooled remote condenser option to replace water cooled condenser on chiller. Refrigerant piping on site is required.

SPECIFICATIONS





SPECIFICATION NOTES (see next page for detailed specification information)

* Based on entering condenser water temperature of 85°F {29.4°C}, leaving condenser water temperature of 95°F {35°C}, leaving chilled water temperature as shown and 10°F {5.56°C} water temperature drop through the evaporator. Capacity ratings are (+/-) 5% and are subject to change without notice.

† Leaving water temperature setpoints lower than 45°F {4.4°C} may require low temperature processing, 3-pass evaporator, or high efficiency performance option in order to operate properly. Consult factory for pricing. Not available for W-163SK models with remote condenser option. Capacities shown have been selected with low temperature processing.

‡ Chilled water flow is based on nominal capacity at 50°F {10°C} leaving water temperature and 10°F {5.6°C} water temperature drop through the evaporator.

§ Differential pressure (drop) is for listed nominal design flow of 100% water.

** Tower water flow based on nominal capacity with 85°F {29.4°C} entering water temperature and 10°F {5.6°C} water temperature drop through the evaporator.

†† GRV: Grooved pipe connections.

‡‡ MCA: Minimum circuit ampacity. MOP: Maximum overcurrent protection. Rated voltage usage range: 200/3/60 (180-220), 230/3/60 (208-254), 400/3/50 (364-440), 460/3/60 (414-506), 575/3/60 (516-633). Starters for 400/3/50, 460/3/60 and 575/3/60 standard will be Across-the-Line; starters for 200/3/60 and 230/3/60 will be Wye-Delta.

Specifications may change without notice. Check with a Conair representative for the most current information.

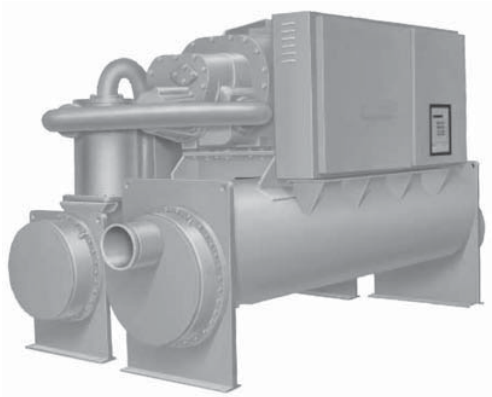
WATER-COOLED MODELS W-86SK TO W-268SK

SPECIFICATIONS

MODEL	W-86SK		W-98SK		W-112SK		W-127SK		W-140SK		W-149SK		W-163SK	
Performance characteristics														
Capacity in tons {kcal} at leaving water temperature shown*														
35°F {1.7°C} †	61.4 {185,671}		72.8 {220,144}		83.3 {251,895}		92.5 {279,715}		98.2 {296,952}		104.5 {316,003}		N/A	
40°F {4.4°C} †	71.1 {215,003}		84.9 {256,733}		96.6 {292,114}		107.5 {325,075}		114.5 {346,242}		121.7 {368,015}		N/A	
45°F {7.2°C}	78.1 {236,170}		89.4 {270,341}		102.2 {309,048}		115.7 {349,871}		127.1 {384,344}		135.2 {408,838}		147.8 {446,940}	
50°F {10°C}	85.9 {259,757}		98.1 {296,649}		112.2 {339,287}		127.0 {384,042}		139.7 {422,446}		148.7 {449,661}		162.6 {491,694}	
55°F {12.8°C}	94.1 {284,554}		107.3 {324,470}		122.7 {371,039}		138.8 {419,724}		153.2 {463,269}		163.0 {492,904}		178.3 {539,170}	
60°F {15.5°C}	102.9 {311,164}		117.0 {353,802}		133.8 {404,604}		151.4 {457,826}		167.5 {506,512}		178.2 {538,868}		194.9 {589,368}	
65°F {15.5°C}	112.2 {339,287}		127.4 {385,251}		145.7 {440,589}		164.7 {498,044}		182.6 {552,173}		194.3 {587,553}		212.6 {642,892}	
Qty. of refrigerant circuits/ compressors	2 / 2		2 / 2		2 / 2		2 / 2		2 / 2		2 / 2		2 / 2	
Minimum operating tons at 50°F {10°C}	15.5		17.7		20.2		22.9		25.1		26.8		29.3	
Chilled water flow gpm {lpm} ‡	205.7 {779}		234.7 {888}		268.5 {1016}		303.9 {1150}		334.4 {1266}		355.8 {1347}		389.0 {1473}	
Evaporator pressure drop psi {bar} §	7.4 {0.51}		9.4 {0.65}		9.4 {0.65}		9.6 {0.66}		10.7 {0.74}		10.4 {0.72}		10.3 {0.71}	
Tower water flow gpm {lpm} **	244.0 {924}		278.00 {1052}		318.1 {1204}		359.8 {1362}		394.6 {1494}		419.8 {1589}		459.6 {1740}	
Condenser pressure drop psi {bar} §	8.7 {0.60}		7.9 {0.55}		7.7 {0.53}		8.6 {0.59}		8.8 {0.61}		9.9 {0.68}		9.0 {0.62}	
Dimensions in {mm} (See previous page for height, width, and length.)														
Evaporator connections GRV ††	4.0 {102}		4.0 {102}		4.0 {102}		4 .0{102}		5.0 {127}		5.0 {127}		5.0 {127}	
Condenser connections GRV ††	5.0 {127}		5.0 {127}		5.0 {127}		5 .0{127}		5.0 {127}		5.0 {127}		5.0 {127}	
Weight lb {kg}														
Shipped	5705 {2588}		5721 {2595}		5902 {2677}		6074 {2755}		6248 {2834}		6244 {2832}		6649 {3016}	
Installed	5900 {2676}		5933 {2691}		6140 {2785}		6332 {2872}		6530 {2962}		6535 {2964}		6971 {3162}	
Utility requirements														
Power consumption, amps ‡‡	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP
200V/3 phase/60hz	216	300	249	350	291	400	324	450	356	500	382	500	425	600
230V/3 phase/60hz	188	250	217	300	252	350	280	400	309	450	332	450	368	500
460V/3 phase/60hz	94	125	110	150	127	175	141	200	155	225	166	225	185	250
575V/3 phase/60hz	76	100	87	110	102	150	114	150	125	175	134	175	148	200
Performance characteristics @ 50 Hz electrical service														
Capacity in tons {kcal} at leaving water temperature shown*														
50°F {10°C}	94.5 {285,763}		107.3 {324,470}		114.2 {345,335}		121.1 {366,200}		134.6 {407,024}		148.2 {448,149}		159.9 {483,530}	
Chilled water flow gpm {lpm}	226.1 {856}		256.8 {972}		273.3 {1035}		289.8 {1097}		326.4 {1236}		354.6 {1342}		382.7 {1449}	
Evaporator pressure drop psi {bar} §	7.0 {0.48}		7.1 {0.49}		7.9 {0.55}		8.8 {0.61}		9.0 {0.62}		8.7 {0.60}		10.0 {0.69}	
Tower water flow gpm {lpm} **	267.6 {1013}		303.6 {1149}		322.6 {1221}		341.9 {1294}		384.0 {1454}		415.9 {1574}		450.5 {1705}	
Condenser pressure drop psi {bar} §	7.4 {0.51}		7.1 {0.49}		7.0 {0.48}		7.8 {0.54}		8.4 {0.58}		7.4 {0.51}		8.7 {0.60}	
Power consumption, amps ‡‡	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP
400V/3 phase/50hz	123	175	137	175	152	200	164	225	180	250	193	250	211	300

MODEL	W-174K		W-188SK		W-204SK		W-222SK		W-243SK		W-268SK	
Performance characteristics												
Capacity in tons {kcal} at leaving water temperature shown*												
35°F {1.7°C} †	112.9 {341,404}		122.0 {368,922}		133.5 {403,697}		145.7 {440,589}		156.5 {473,248}		167.1 {505,302}	
40°F {4.4°C} †	131.6 {397,952}		142.3 {430,308}		156.1 {472,039}		170.3 {514,979}		184.2 {557,012}		199.0 {601,766}	
45°F {7.2°C}	156.3 {472,643}		170.6 {515,886}		186.2 {563,059}		202.3 {611,745}		221.4 {669,502}		243.5 {736,332}	
50°F {10°C}	172.0 {520,119}		187.7 {567,595}		204.8 {619,305}		222.5 {672,829}		243.3 {735,727}		267.8 {809,814}	
55°F {12.8°C}	188.7 {570,619}		205.9 {622,631}		224.6 {679,179}		244.0 {737,844}		266.5 {805,883}		293.5 {887,529}	
60°F {15.5°C}	206.4 {624,143}		225.1 {680,691}		245.6 {742,682}		266.9 {807,092}		290.8 {879,365}		320.7 {969,781}	
65°F {18.3°C}	225.1 {680,691}		245.5 {742,380}		267.8 {809,814}		290.9 {879,667}		316.4 {956,778}		349.3 {1,056,266}	
Qty of refrigerant circuits/ compressors	2 / 2		2/ 2		2/ 2		2/ 2		2 / 2		2 / 2	
Minimum Operating tons at 50°F {10°C}	31.0		33.8		36.9		40.1		43.8		48.2	
Chilled water flow gpm {lpm} ‡	411.8 {1559}		449.5 {1702}		490.4 {1856}		532.8 {2017}		582.6 {2205}		641.3 {2428}	
Evaporator pressure drop psi {bar} §	11.0 {0.76}		11.4 {0.78}		11.0 {0.76}		11.0 {0.76}		10.0 {0.69}		9.6 {0.66}	
Tower water flow gpm {lpm}	479.6 {1815}		523.7 {1982}		570.2 {2158}		618.1 {2340}		678.6 {2569}		746.6 {2826}	
Condenser pressure drop psi {bar} §	10.0 {0.69}		10.2 {0.70}		10.2 {0.70}		10.2 {0.70}		9.0 {0.62}		6.8 {0.47}	
Dimensions in {mm} (See previous page for height, width, and length.)												
Evaporator connections GRV **	5.00 {127}		5.00 {127}		5.00 {127}		5.00 {127}		6.00 {152}		6.00 {152}	
Condenser connections GRV **	6.00 {152}		6.00 {152}		6.00 {152}		6.00 {152}		6.00 {152}		6.00 {152}	
Weight lb {kg}												
Shipped	7544 {3422}		8036 {3645}		8098 {3673}		8157 {3700}		8995 {4080}		9478 {4299}	
Installed	7884 {3576}		8395 {3808}		8490 {3851}		8578 {3891}		9493 {4306}		10,071 {4568}	
Utility requirements												
Power consumption, amps ††	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP
200V/3 phase/60hz	415	600	446	600	484	700	515	700	583	800	637	800
230V/3 phase/60hz	362	500	389	500	421	600	447	600	509	700	558	800
460V/3 phase/60hz	183	250	196	250	213	300	227	300	256	350	279	400
575V/3 phase/60hz	146	200	157	225	171	250	182	250	204	300	222	300
Performance characteristics @ 50 Hz electrical service												
Capacity in tons {kcal} at leaving water temperature shown*												
50°F {10°C}	174.1 {526,470}		184.6 {558,221}		203.4 {615,071}		223.0 {674,341}		243.5 {736,332}		265.8 {803,766}	
Chilled water flow gpm {lpm}	416.7 {1577}		442.0 {1673}		486.9 {1843}		534.0 {2021}		582.9 {2207}		636.5 {2409}	
Evaporator pressure drop psi {bar} §	10. 0 {0.69}		9.2 {0.64}		9.4 {0.65}		8.6 {0.59}		9.1 {0.63}		9.5 {0.65}	
Tower water flow gpm {lpm}	489.8 {1854}		512.4 {1940}		565.1 {2139}		619.3 {2344}		677.9 {2566}		739.9 {2801}	
Condenser pressure drop psi {bar} §	8.8 {0.61}		8.3 {0.57}		8.6 {0.59}		7.6 {0.53}		9.0 {0.62}		8.2 {0.56}	
Power consumption, amps ††	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP
400V/3 phase/50hz	225	300	223	300	247	350	266	350	296	400	320	450

SPECIFICATION NOTES (see previous page)



Model W-284SK

CENTRAL CHILLING **WITH LARGE CAPACITY**

Free up factory floor space with the Conair Water-Cooled W-SK Central Chillers. These large-capacity, heavy-duty chillers make the most of your energy dollars. Precise temperature control at the mold, die, screw or barrel results in faster cycle times and less warping and shrinking of the product.

Recirculating cooling water through a tower-chiller system also reduces water and sewer bills.

COOLING CAPACITIES FROM 205 TONS TO 481 TONS

The Conair Water-Cooled W-SK Series Central Chillers are engineered for improved efficiency and better reliability. The screw compressor is the most advanced compressor in the industry. The unit protects against starting and running overload, under and over voltages, phase loss, phase reversals, high winding temperature and rapid recycling.

The microprocessor control maintains chilled water temperature more accurately, resulting in less temperature drift.

The microprocessor monitors temperature and the rate of change over time, effectively controlling compressor loading for efficient chiller operation.

The screw compressor's positive displacement design results in lower energy costs.

Rugged compressor design

The screw compressor has only four moving parts eliminating the need for pistons, connecting rods, wrist pins and valves. Fewer moving parts means less internal friction and greater efficiency.

Customized to fit your needs

Conair has the central chiller to match your process. Pick nominal chilling capacities from 205 tons to 481 tons. Smaller capacities are available.

Easy setup

Small unit size, factory wiring, easy lifting procedures and startup control logic result in quick and easy installation. And includes one day of startup services by a factory-trained technician.

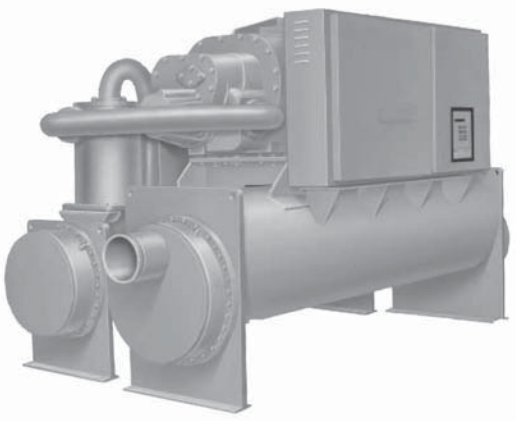
Trouble-free operation

Smart safety features and over 40 diagnostic displays for easy and virtually trouble-free operation.

WATER-COOLED MODELS W-205SK TO W-481SK

FEATURES

- **Easy access controls -** Controls have automatic compressor, load limiting, and anti-recycle functions.
- **Low flow switch -** Field installed to positively detect flow loss of evaporator solution.
- **Helical rotary compressor -** Compressor has only four moving parts; direct-drive, low speed for high efficiency and high reliability.



- **Operator interface -** Interface monitors temperature and rate of change over time, effectively controlling compressor loading.
- **Evaporator -** Shell-and-tube evaporator is designed with seam less internally finned copper tubes, roller-expanded into tube sheets.
- **Tolerates slugging -** Compressors are designed to handle liquid slugging.
- **Energy efficient -** Results in lower energy costs when compared with reciprocating compressor designs.
- **Water regulating valves -** for condenser water lower than 85°F {29.4°C}.

CONTROL

File Tabs

Advanced interface allowing the user to access set-points, active temperatures, modes, electrical data, pressures and diagnostics.

LCD Touch Screen with LED Backlight

Easy-to-read screen provides system information.

Microprocessor Control with Human Interface Panel

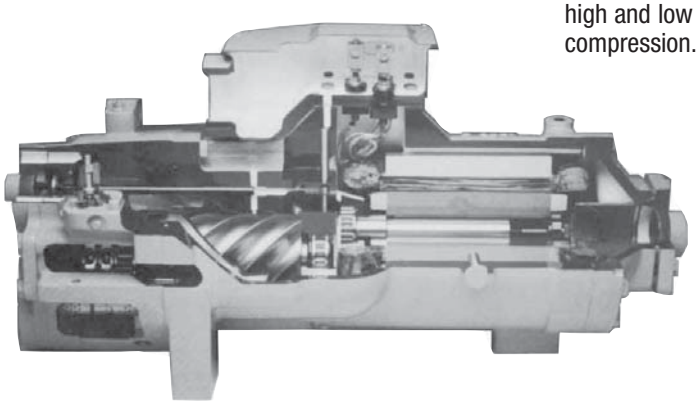
- Designed to take corrective action to prevent unit shutdown.
- Limit compressor operation with smart safety controls, avoiding compressor or evaporator failures.
- Built-in chiller flow protection automatically detects no-water flow condition.
- Improved chiller start-up, load limiting, compressor anti-recycle timing, and lead/lag functions.
- Alarm diagnostic displays specific information for quick action.
- Service menu offers easy troubleshooting by controlling all outputs individually.
- Chiller capacity algorithm optimizes setpoint control and provides evaporator freeze protection.
- Failure protections include loss of chilled solution flow, chiller freeze protection, chilled solution flow interlock, head pressure control, pump down control, and low ambient lockout.

WATER-COOLED MODELS W-205SK TO W-481SK

HELICAL ROTARY SCREW COMPRESSOR

Only four moving parts
when compared to reciprocating compressors; there are no pistons, connecting rods, suction and discharge valves or mechanical oil pump.

Reduced rotor tip clearance
results in reduced leakage between the high and low pressure cavities during compression.



Cutaway of the screw compressor

Latest heat transfer technology
results in increased condenser and evaporator tube efficiency.

Helical screw design
results in part load performance far superior to single reciprocating compressors.

Resistant to liquid slugging
this compressor design can handle amounts of liquid refrigerant that would severely damage a reciprocating compressor.

OPTIONS

Different LWT Ranges

Standard leaving water temperature ranges from 37°F to 65°F {2.8°C to 18.3°C} and optional temperature ranges from 10°F to 65°F {-12.2°C to 18.3°C}.

Disconnect

External handle allows local power shutoff to control center.

Remote Setpoint

Input for integration into the control system. Choose 0-5VDC or 0-10VDC.

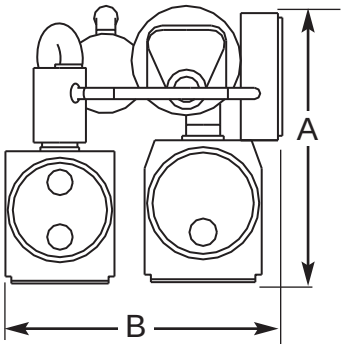
Compressor Warranty

Choose an additional two- to five-year compressor component replacement warranty.

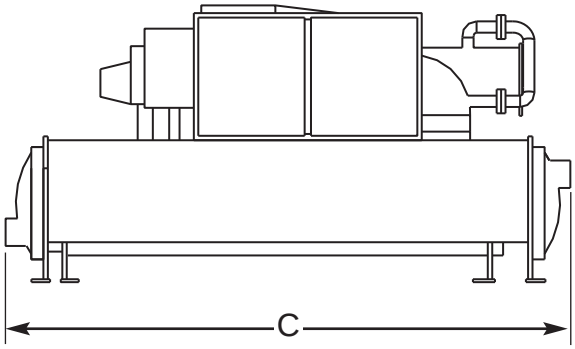
WATER-COOLED MODELS W-205SK TO W-481SK

SPECIFICATIONS

front



side



MODEL	W-205SK	W-224SK	W-284SK	W-326SK	W-394SK	W429SK	W-481SK
Performance characteristics							
Capacity* tons at 85°F condenser water inlet:							
40°F {4.4°C}	171.1	185.3	245.2	274.3	334.4	363.3	391.7
45°F {7.2°C}	190.6	200.2	272.4	304.6	370.7	402.0	434.3
50°F {10°C}	211.5	228.7	301.7	337.4	409.7	443.3	479.8
55°F {12.8°C}	233.9	252.9	333.1	372.7	451.4	487.4	528.2
60°F {15.5°C}	257.8	278.8	366.0	410.3	495.3	534.0	579.7
Evaporator flow† gpm {lpm}	506 {1915}	547 {2070}	722 {2733}	807 {3054}	980 {3709}	1060 {4012}	1147 {4341}
Pressure drop‡ psi {bar}	8.1 {0.55}	7.4 {0.51}	9.1 {0.62}	11.0 {0.75}	11.5 {0.79}	11.5 {0.79}	4.1 {0.28}
Condenser water flow gpm {lpm}	591 {2237}	638 {2415}	847 {3206}	950 {3596}	1156 {4375}	1248 {4724}	1324 {5011}
Condenser pressure drop psi {bar}	7.0 {0.48}	6.8 {0.46}	9.1 {0.67}	11.2 {0.77}	11.3 {0.77}	11.3 {0.77}	5.6 {0.38}
Dimensions in {cm}							
A-Height	71 {180}	71 {180}	72 {183}	72 {183}	76 {193}	76 {193}	80 {203}
B-Width	125 {318}	125 {318}	129 {328}	129 {328}	134 {340}	134 {340}	153 {389}
C-Length	65 {165}	65 {165}	68 {173}	68 {173}	68 {173}	68 {173}	70 {178}
Evaporator connections type	6-GRV	6-GRV	8-GRV	8-GRV	8-GRV	8-GRV	10-GRV
Condenser connections type	6-GRV	6-GRV	8-GRV	8-GRV	8-GRV	8-GRV	8-GRV
Weight lb {kg}							
Shipped	9700 {4400}	9800 {4445}	13,300 {6034}	13,500 {6125}	15,000 {6804}	15,000 {6804}	20,100 {9117}
Installed	10,250 {4649}	10,400 {4717}	13,900 {6307}	14,175 {6431}	15,850 {7189}	15,900 {7212}	22,100 {10,024}

Utility requirements														
Power consumption amps **	MCA	RLA	MCA	RLA	MCA	RLA	MCA	RLA	MCA	RLA	MCA	RLA	MCA	RLA
200V/3 phase/60hz	490	392	525	420	729	583	854	683	996	797	1071	857	1005	804
230V/3 phase/60hz	426	341	457	365	634	507	742	594	866	693	931	745	874	699
460V/3 phase/60hz	213	170	228	182	317	253	371	297	433	346	465	372	437	349
575V/3 phase/60hz	170	136	182	146	253	202	297	237	346	277	372	298	349	279

SPECIFICATION NOTES

* Based on 50°F {10°C} leaving water temperature with 2.4 gpm/ton flow rate and 85°F {27°C} condenser water supply @ 3 gpm/ton flow rate.

† Based on 50°F {10°C} leaving water temperature and 60°F {16°C} returning water temperature.

‡ Not including optional water regulating valves.

Evaporator pressure drop at respective nominal flow rate.

** MCA: Minimum circuit ampacity - 125% of the compressor RLA.
RLA: Running load amps. GRV: Groove. FLG: Flange.

Specifications may change without notice. Check with a Conair representative for the most current information.

Model PT450-2 shown with optional central electrical enclosure with main disconnect switch and pump variable frequency drive (VFD).

POLYETHYLENE RESERVOIRS **FOR RUST-FREE OPERATION**

Conair's durable Polymer Pump Tanks have thick-walled, rotationally molded, polyethylene reservoirs to provide corrosion-free operation. Use a reliable polymer pump tank to supply water to your processing machines.

CUSTOM DESIGNED FOR YOUR APPLICATION

Polymer Pump Systems are fully engineered for a complete range of tower and chiller applications.

Conair offers custom pump selection in any configuration to meet your flow and pressure needs.

Pumps are fully trimmed, including suction shutoff valves, increasers, spool pieces and compound liquid-filled pressure gauges. Triple duty valves replace old-style wafer check and butterfly valves.

The triple duty valve technology allows a soft seat, no-slam check function which helps to eliminate chatter and water hammer.

- **One piece construction**
  For reduced system installation costs and minimal contamination this unit is shipped in a one-piece assembly. The solid steel deck makes this unit sturdy and easy to move. Serviceability and safety are also improved.
- **Automatic float valve and drain**
  Float valves to maintain a constant water level. Drain for easy water evacuation.
- **Heavy-duty industrial pumps**
  Custom selected heavy-duty pumps with ODP motors, TEFC is optional. Pumps are mounted to steel support frame and are fully trimmed.
- **IEC-Rated motor starters**
  IEC-rated pump motor starters in individual wall-mount enclosures are available.
- **One-year warranty**
  Includes both parts and labor.

OPTIONS

Dual service standby pump with manual switchover. Eliminates costly downtime.

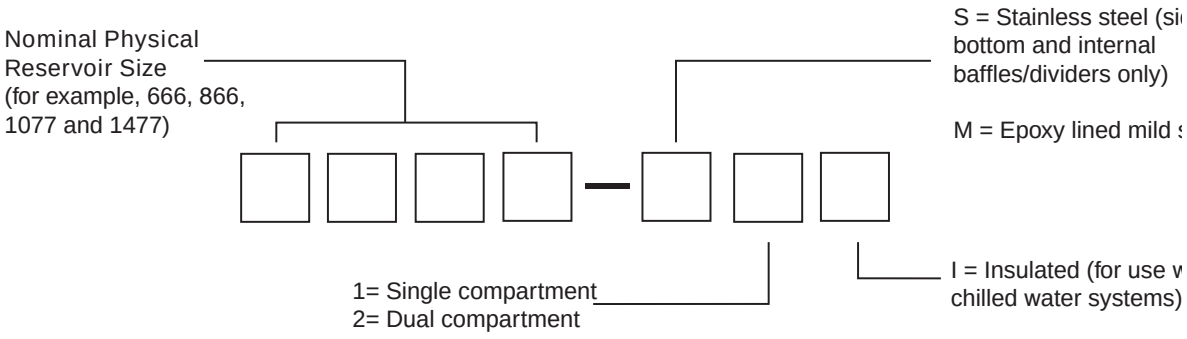
Dual compartment hot well cold well design for different flows and/or process cooling requirements.

Elevation and safety packages including solid metal pump decks, support legs, guardrails, toeboards, safety chains and access ladders.

Pump variable frequency drive (VFD) automatically regulates pump speed according to the discharge pressure for greater energy savings.

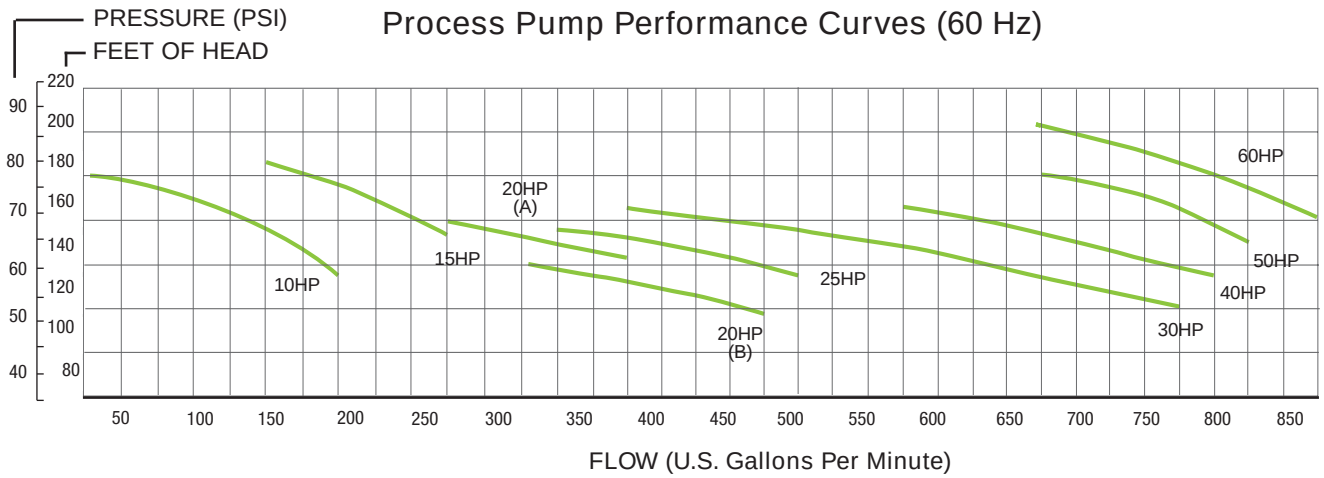
Tower fan variable frequency drive (VFD) automatically regulates tower fan speed according to water temperature for greater energy savings.

Central electrical enclosures are offered either free-standing or mounted to assembly frames and prewired to the pump motors, including branch circuit protection, prewired control circuit transformers and door mounted pilot lights and controls. (Main disconnect switches and alarms are available.)

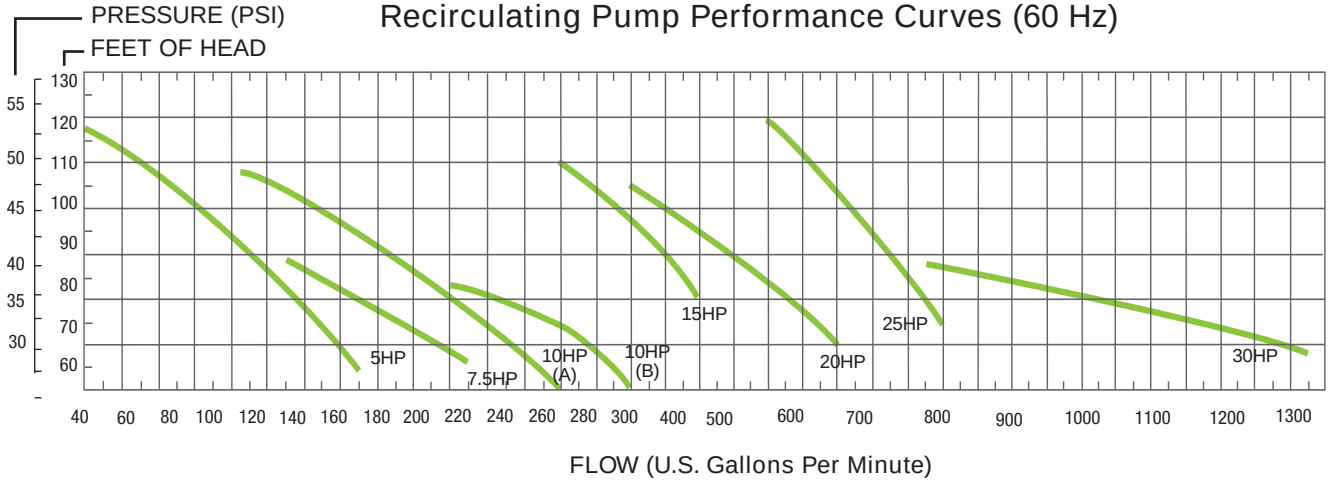


SPECIFICATIONS

Process Pump Performance Curves (60 Hz)



Recirculating Pump Performance Curves (60 Hz)



Process Pump Data

Process Pump (hp)	10	15	20(A)	20(B)	25	30	40	50	60
Maximum Flow (gpm)[1]	200	275	400	500	525	800	825	850	900
Discharge Pressure @ Max. Flow (psi)[1]	59	66	61	51	59	51	60	65	68
Standard Discharge Trim Size (in)	4	4	6	6	6	6	6	6	6
Full Load @ 460/3/60 (amps)[2]	14	21	27	27	34	40	52	65	77

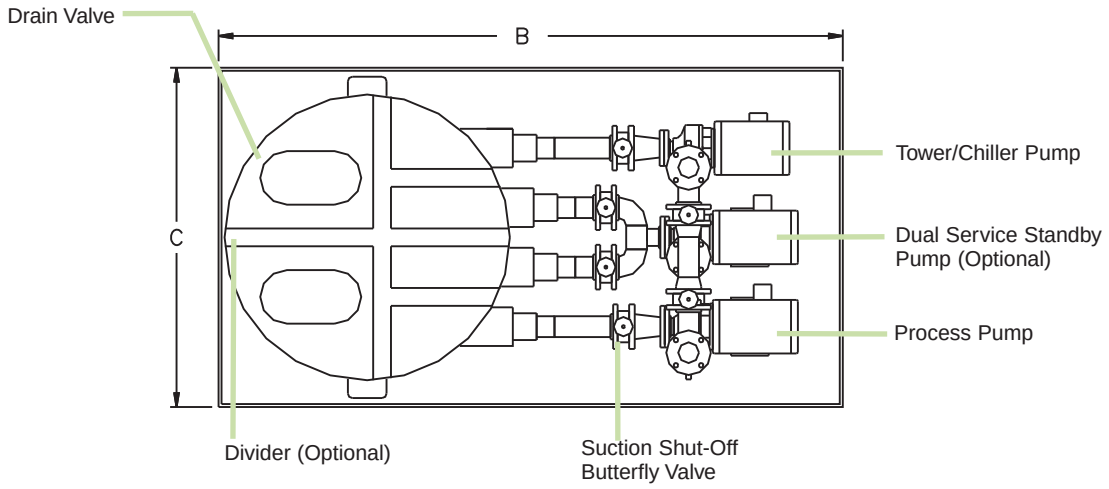
1 See pump curves above for performance characteristics at other operating points.
2 Multiply by 2 for 230/3/60 operation or by 2.21 for 208/3/60 operation. Consult a Conair representative for other requirements.

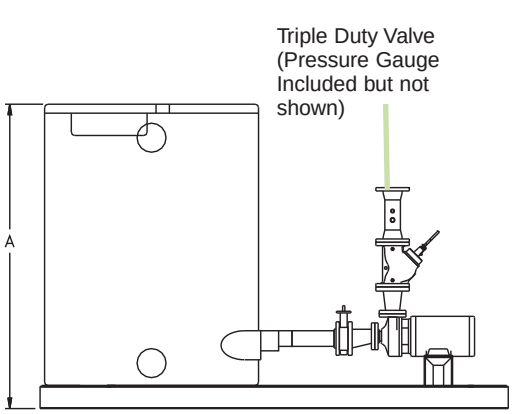
Recirculating Pump Data

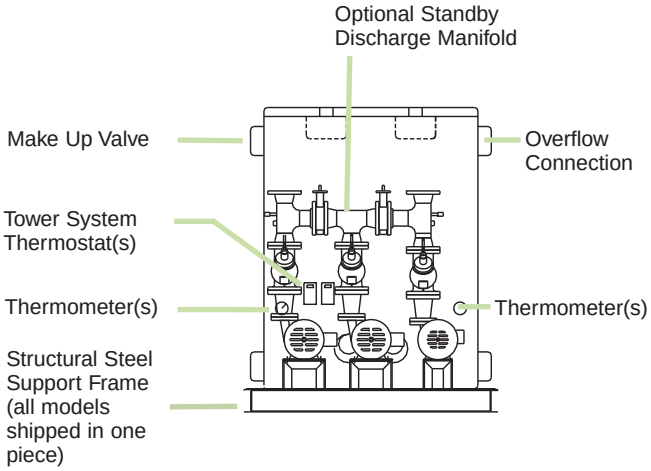
Tower/Chiller Pump (hp)	5	7.5	10(A)	10(B)	15	20	25	30
Maximum Flow (gpm)[1]	190	250	300	400	500	700	850	1,375
Discharge Pressure @ Max. Flow (psi)[1]	27	28	26	26	35	30	33	29
Standard Discharge Trim Size (in)	4	4	4	6	6	6	6	8
Full Load @ 460/3/60 (amps)[2]	7.6	11	14	14	21	27	34	40

1 See pump curves above for performance characteristics at other operating points.
2 Multiply by 2 for 230/3/60 operation or by 2.21 for 208/3/60 operation. Consult a Conair representative for other requirements.

SPECIFICATIONS







MODEL*	200	450	1400
Performance characteristics gallon {liter}			
Capacity to overflow	180 {681}	400 {1514}	1100 {4164}
Maximum recommended total flow	110 {416}	220 {833}	600 {2271}
Maximum number of pumps	3	3	3
Dimensions inches {mm}			
A - Height	55 {1397}	69 {1753}	76 {1930}
B - Length	83 {2108}	105 {2667}	132 {3353}
C - Width	43 {1092}	57 {1448}	82 {2083}
Weight lb {kg}†			
Shipping	700 {318}	1070 {485}	2300 {1043}
Operating	2200 {998}	4400 {1996}	11465 {5200}
Utility connections inches NPT (female)			
Overflow connection	4	4	6
Drain connection	1	1	0.5
Make-up connection	1	1	1

SPECIFICATION NOTES

* See model designation chart for complete model numbers.

† Weights vary, depending on pump selections and operating water level.

Specifications may change without notice. Check with a Conair representative for the most current information.

MODELS 666, 866, 1077 AND 1477

Model 666-S2 shown with optional central electrical enclosure and main disconnect switch.

CORROSION RESISTANT HEAVY DUTY RESERVOIRS

Steel pump tanks are custom designed and fully engineered for a complete range of tower or chiller industrial applications requiring 24-hour-a-day performance. Conair offers custom pump selections in any configuration to meet your flow and pressure needs.

Steel pump tanks are available in epoxy coated carbon steel or rust-proof stainless steel.

CUSTOM DESIGNED FOR YOUR APPLICATION

All Conair pumps are fitted with ITT Bell and Gosset Triple Duty Valves, replacing old-style wafer check and butterfly valves.

The triple duty valve technology features a soft seat, no-slam check function which helps to eliminate chatter and water hammer. Shutoff and throttling functions are similar to a butterfly valve.

Calibrated balancing valve function provides accurate indication of flow-to-process and flow balancing through chiller and cooling towers.

No more guesswork! Simply read the pressure drop across the valve (pressure gauge included) and refer to a simple chart to determine flow. A calibrated nameplate with memory button assures return to the balance setpoint after shutdown.

- **Double welded reservoirs**
  Leak-free operation. Insulated for chilled water applications.
- **Heavy-duty industrial pumps**
  Custom selected heavy-duty pumps with ODP motors, TEFC is optional. Pumps are mounted to steel support frame and are fully trimmed.
- **Structural steel support frame**
  Shipped in a one piece assembly (up to and including model 866). The solid steel deck makes this unit sturdy, easy to move and improves serviceability and safety.
- **Overflow weir**
  Maximizes reservoir holding capabilities.
- **IEC-rated motor starters**
  IEC-rated pump motor starters in individual wall-mount enclosures are field installed.
- **One-year warranty**
  Includes both parts and labor.

OPTIONS

Dual service standby pump with manual switchover, or dedicated standby pumps with either manual or automatic switchover. Eliminates costly downtime.

Dual compartment hot well/cold well design for different flow and/or process cooling requirements.

Stainless steel reservoir covers with hinged access sections provide lifetime service without rust, prevent debris from entering an open tank and allow access for observation and maintenance.

Elevation and safety packages including support legs, guardrails, toeboards, safety chains and access ladders.

Plugged or valved future pump openings can be provided to plan for future expansion.

Stainless Steel strainer baskets collect debris and prevent it from being sucked into the impeller and the pump and then forced through the system.

Pump variable frequency drive (VFD) automatically regulates pump speed according to the discharge pressure for greater energy savings.

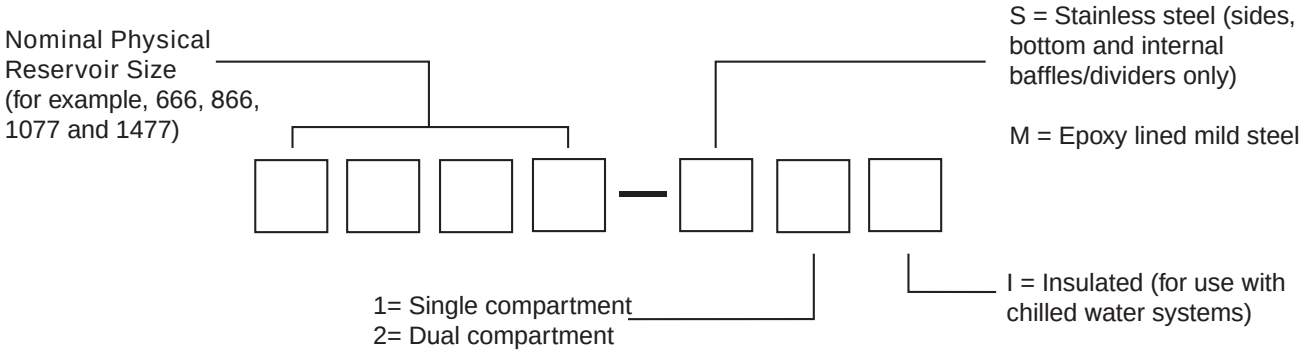
Tower fan variable frequency drive (VFD) automatically regulates tower fan speed according to water temperature for greater energy savings.

Central electrical enclosures are offered either free-standing or mounted to assembly frames and prewired to the pump motors, including branch circuit protection, prewired control circuit transformers and door mounted pilot lights and controls. (Main disconnect switches are available.)

Programmable logic control (PLC) panel that includes an Allen-Bradley PLC and an easy-to-read graphical color touchscreen interface for enhanced control and diagnostic capabilities.

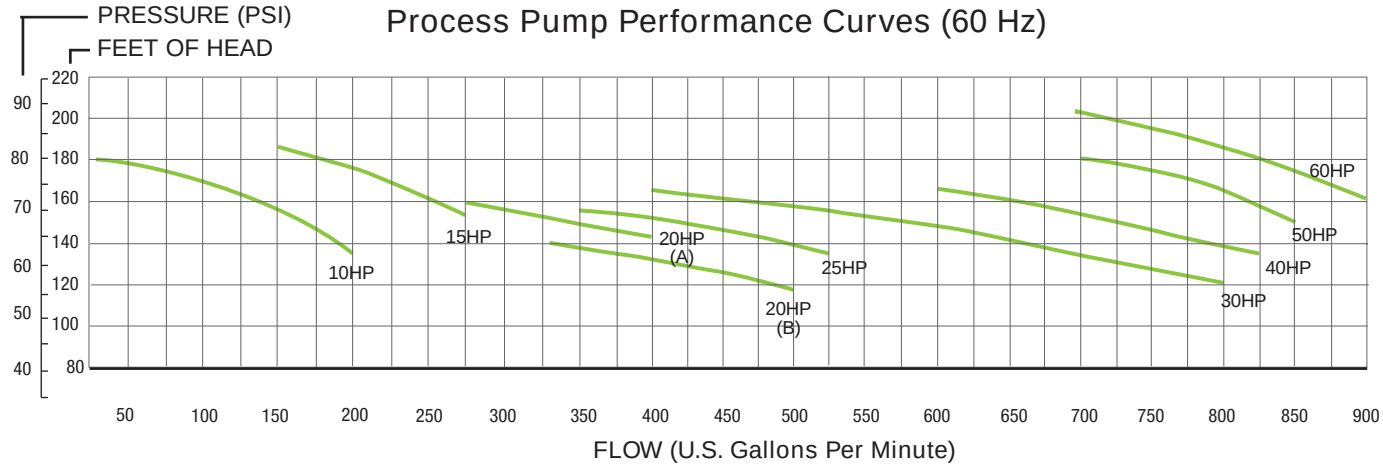
Pump discharge manifolds can be factory installed to reduce the on-site work.

MODEL DESIGNATIONS

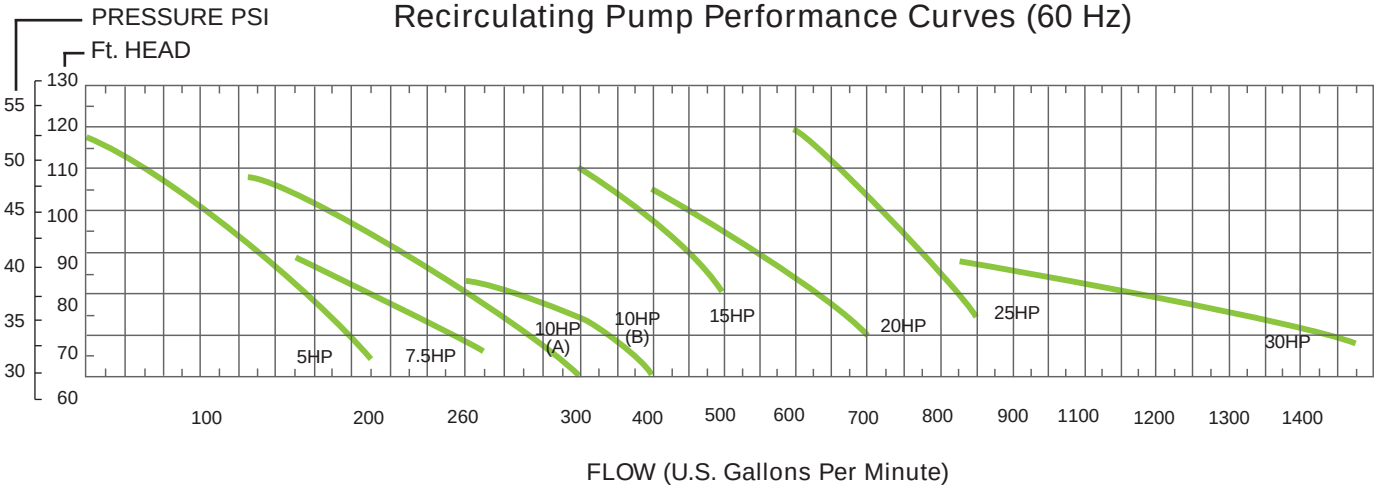


SPECIFICATIONS

Process Pump Performance Curves (60 Hz)



Recirculating Pump Performance Curves (60 Hz)



Process Pump Data

Process pump (Hp)	10	15	20(A)	20(B)	25	30	40	50	60
Maximum flow (gpm)[1]	200	275	400	500	525	800	825	850	900
Discharge pressure @ max. flow (psi)[1]	59	66	61	51	59	51	60	65	68
Standard discharge trim size (in)	4	4	6	6	6	6	6	6	6
Full load @ 460/3/60 (amps)[2]	14	21	27	27	34	40	52	65	77

1 See pump curves above for performance characteristics at other operating points.

2 Multiply by 2 for 230/3/60 operation or by 2.21 for 208/3/60 operation. Consult a Conair representative for other requirements.

Recirculating Pump Data

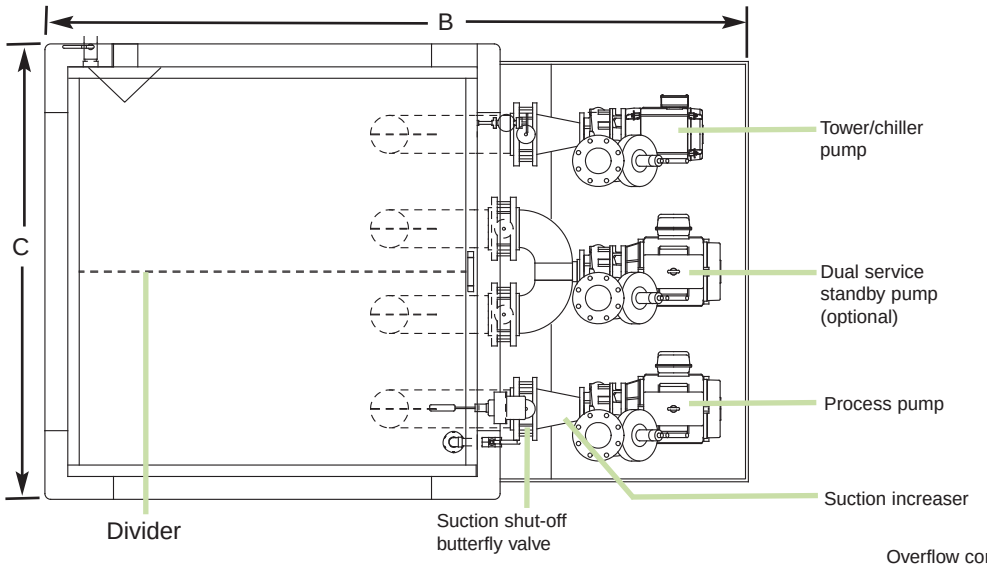
Tower/chiller pump (Hp)	5	7.5	10(A)	10(B)	15	20	25	30
Maximum flow (gpm)[1]	190	250	300	400	500	700	850	1,375
Discharge pressure @ max. flow (psi)[1]	27	28	26	26	35	30	33	29
Standard discharge trim size (in)	4	4	4	6	6	6	6	8
Full load @ 460/3/60 (amps)[2]	7.6	11	14	14	21	27	34	40

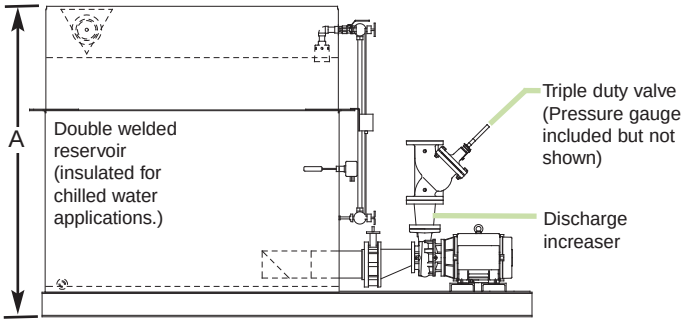
1 See pump curves above for performance characteristics at other operating points.

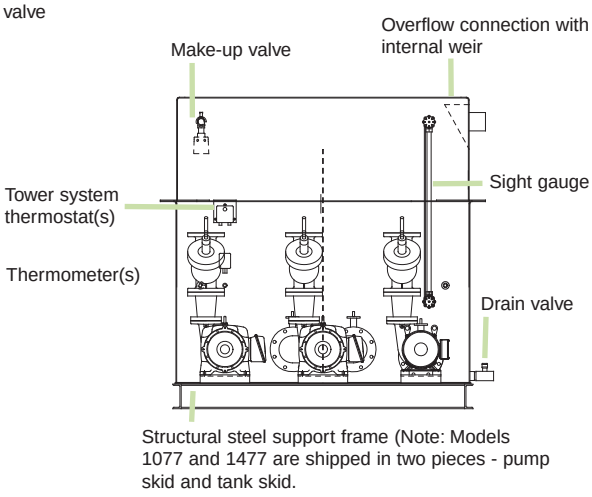
2 Multiply by 2 for 230/3/60 operation or by 2.21 for 208/3/60 operation. Consult a Conair representative for other requirements.

MODELS 666, 866, 1077 AND 1477

SPECIFICATIONS







MODEL*	666	866	1077	1477
Performance characteristics gallon {liter}				
Capacity to overflow	1525 {5773}	2035 {7703}	3580 {13552}	5010 {18965}
Minimum operating capacity†	1135 {4296}	1510 {5716}	2815 {10656}	3940 {14915}
Dimensions inches {mm}				
A - Height	76.5 {1944}	76.5 {1944}	90.5 {2299}	90.5 {2299}
B - Length‡	123.3 (3132}	135.3 {3437}	174.3 {4427}	174.3 {4427}
C - Width	79.6 {2022}	103.6 {2631}	127.6 {3241}	175.6 {4406}
Weight lb {kg}				
Shipping	4000 {1814}	4700 {2132}	8400 {3810}	10600 {4808}
Installed	16700 {7575}	21700 {9843}	38200 {17327}	52300 {23723}
Utility connections inches NPT (female)				
Overflow connection	4	4	6	6
Drain connection	1.5	1.5	2	2
Make-up connection	1	1	1	1

SPECIFICATION NOTES

* See model designation chart for complete model numbers.

† Based on water level 2 inches above bottom of make-up wave baffle (19.5" below top of tank.)

‡ For models 866, 1077 and 1477 if one or more of the pumps are larger than 30 Hp the length dimension will increase. Model 866 is 150 inches, models 1077 and1477 are 171 inches.

Weights vary, depending on pump selections and operating water level.

Specifications may change without notice. Check with a Conair representative for the most current information.

Model PTSS-0450

EFFICIENT OPERATION AND QUALITY CONSTRUCTION

Conair's PTCS (carbon steel), and PTSS (stainless steel) Series Pump Tanks are designed to meet and exceed the needs of your application. Fully engineered for a complete range of tower or chiller applications, Conair's tanks provide the highest quality design and construction features available.

This series of pump tanks promises years of trouble-free operation with the use of high quality components and NEMA 4 lights and switches as standard.

CHOOSE CARBON STEEL OR STAINLESS STEEL

Conair incorporates more value-added features into every pump/reservoir system than anyone else. Every PTCS and PTSS tank includes standard, full-size pump trim, extended pump suction legs, inside and outside welded seams, and solid steel decking under the pump.

High-efficiency, close-coupled, non-overloading centrifugal pumps are precisely matched to your application, providing optimum flow and pressure to the process with reduced electrical costs, and improving motor life by assuring the motor operates within its horsepower rating.

Conair's full-sized pump suction legs feature a 45° angle opening to prevent vortexing and pump cavitation. This also enables the tank to operate at a lower water level, saving water costs and reducing the use of valuable chemicals that may otherwise overflow to drain at shutdown.

Quality construction, safe operation and simple maintenance

All pumps are mounted on a solid deck for added strength, serviceability, and safety. Reservoirs are constructed of rugged plate steel for superior strength and reliability.

Leak-free construction

Steel reservoir seams are double welded, inside and out, for the ultimate protection from leaks and corrosion. Carbon steel reservoir interiors are carefully covered with a thick coat of marine duty coal tar epoxy to prevent water-to-metal contact and extend reservoir life.

Easy to operate

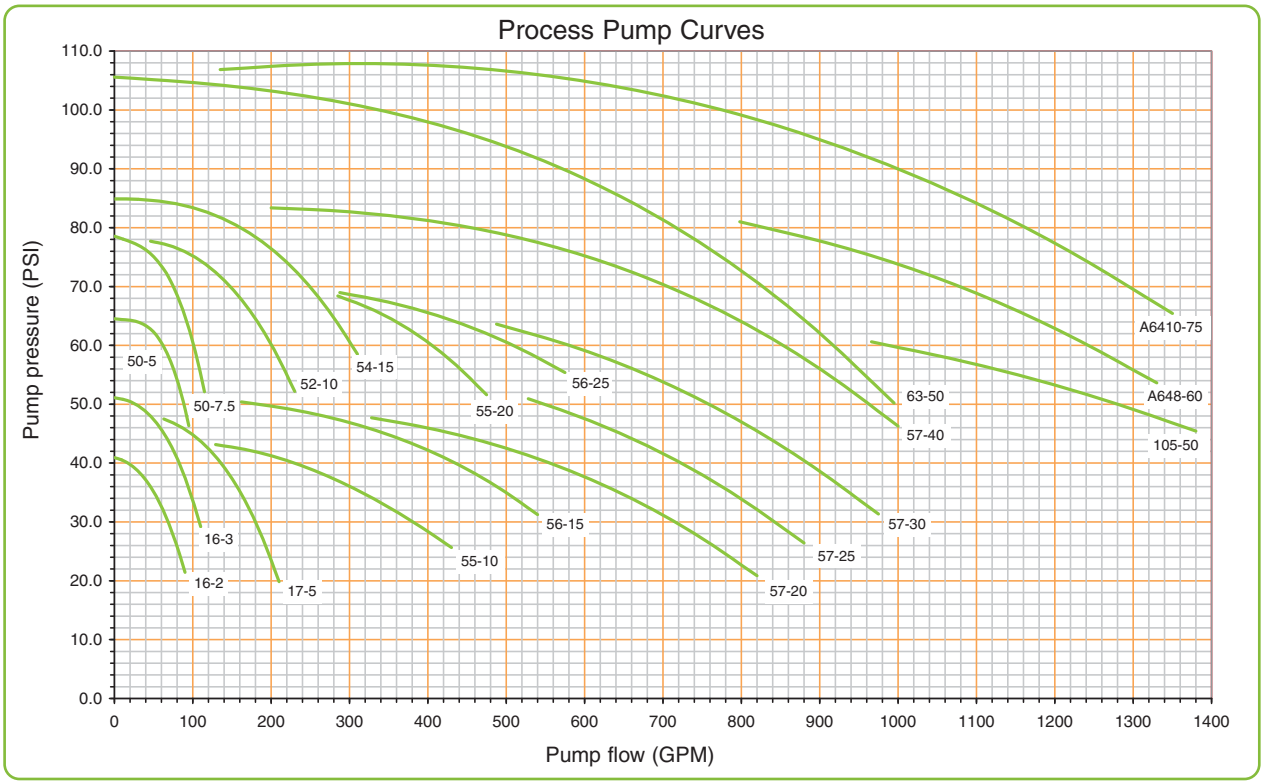
The Conair programmable controller comes with digital temperature display and RTD probe that controls temperature by cycling the tower fan and recirculating pump. The control includes a high temperature alarm with indicator light. Liquid-filled pressure guages enable accurate flow adjustment.

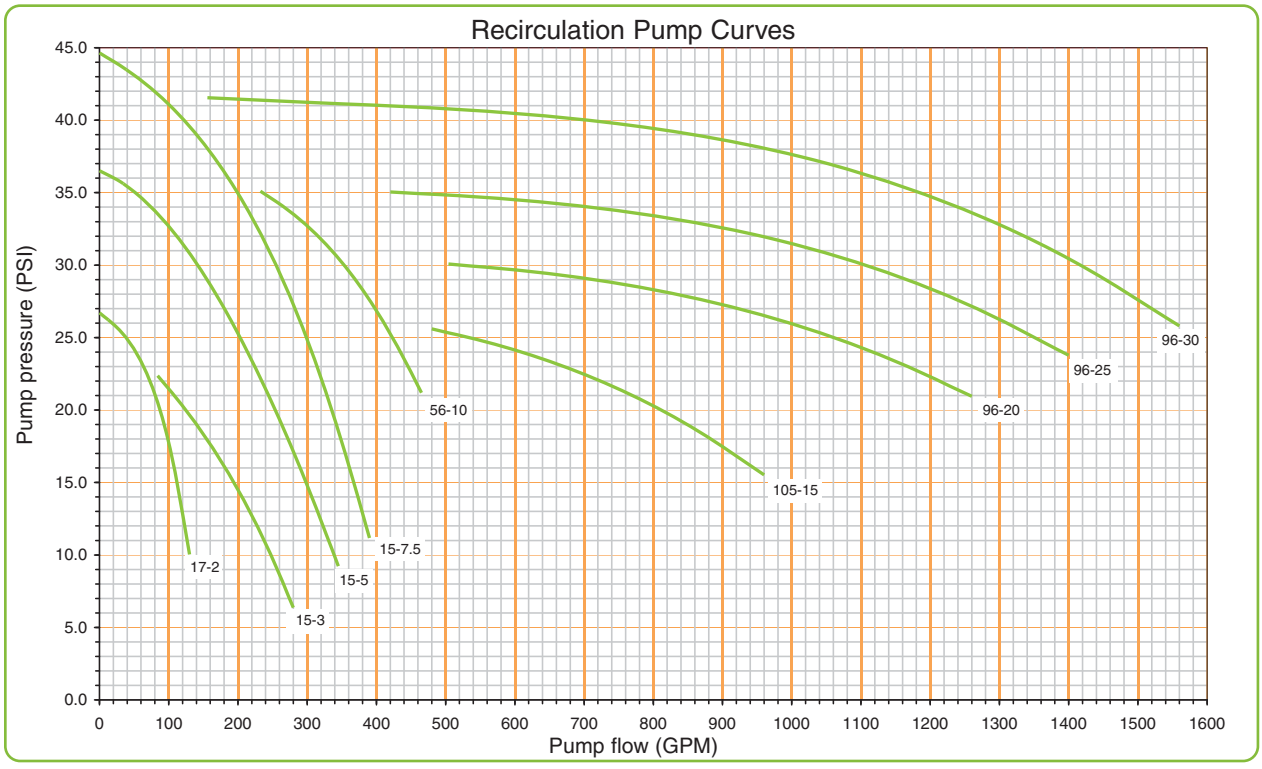
Quick installation

By using the grooved pipe connecting system, the need for flexible couplings is reduced, eliminating pipe stress at start-up. Grooved connections quickly assemble and disassemble for fast installation, maintenance, and reconfiguration when adding or changing pumps. Conair's prewired and mounted NEMA 4 control panel is hardwired to pump motors and all alarms, simplifying field installation and significantly reducing installation costs.

PUMP CURVES

Water temperature at 50°F {10°C}





SPECIFICATION NOTES

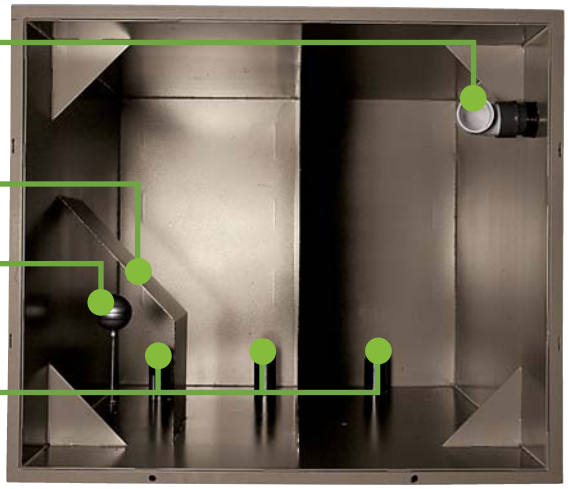
Pump curves do not reflect pressure drops due to internal piping.

These pump curves are non-overloading using the service factor of the motors.

Specifications may change without notice. Check with your Conair representative for the most current information.

RESERVOIR FEATURES

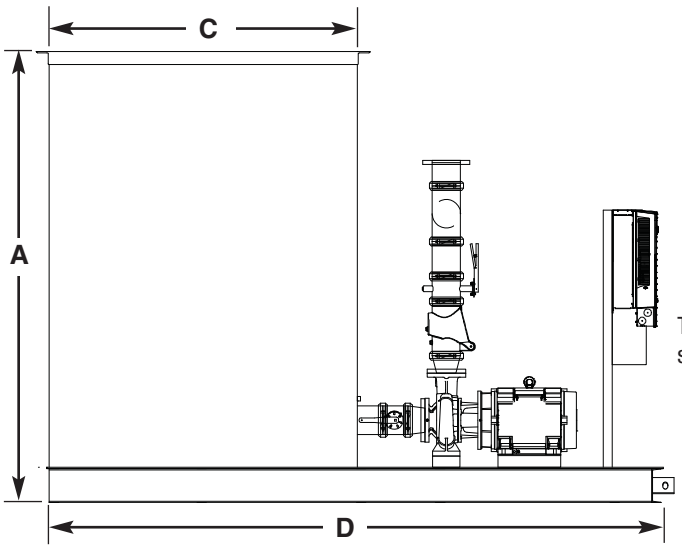
- PVC elbow at reservoir overflow increases holding capacity
- Water baffle reduces turbulence
- Make-up valve assembly guarantees constant water level
- PVC pump suction legs prevent vortexing and pump cavitation



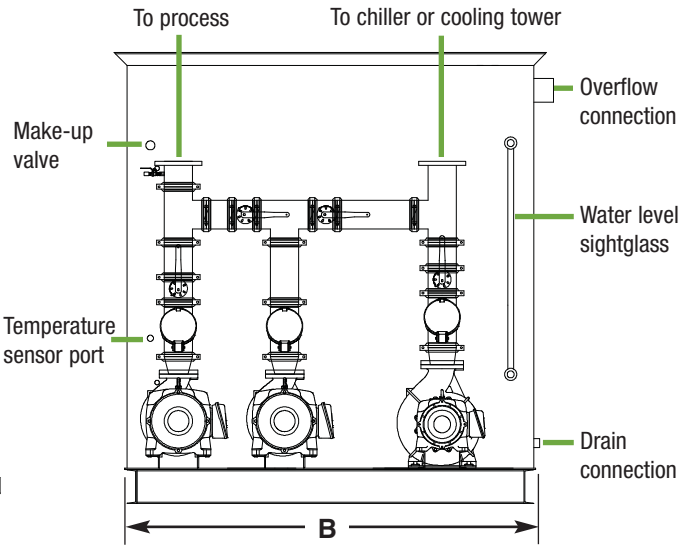
OPTIONS

- Single or dual standby pumps for process and recirculating eliminate downtime. Pumps are available with complete connecting trim, including discharge manifold and isolation valves.
- Automatic switching to standby pump protects against downtime due to pump failure.
- Full 0.75 inch {19 mm} insulation maintains reservoir water temperature and eliminates “sweating”.
- Premium efficiency motors cut electrical operating costs and offer rapid payback with utility rebate programs.
- Unbreakable sight glass features shutoff valves and brass safety rods; allows for a quick visual check of reservoir operating level.
- Tank cover prevents contamination and evaporation.
- Factory-installed and wired alarms with panel mounted indicator lights warn of low flow, low pressure, low level and high temperatures. Sonalert horn with silencer switch warns of system failure.
- Solid-state sensor with alarm provides trouble-free sensing of low water levels.
- For operator protection, a fused disconnect shuts off power before door is opened for maintenance or inspection.
- Panel-installed programmable logic controller (PLC) allows control sequences and alarm settings to be customized for individual process requirements.
- Reservoir support legs conserve valuable floor space, support a cooling tower to reduce roof loading and eliminate additional roof support costs.

SPECIFICATIONS



Side view



Front view

SPECIFICATIONS

Carbon Steel Models

Models	PTCS-2100	PTCS-2800	PTCS-3700	PTCS-4500*	PTCS-6000*
Performance characteristics gallon {liter}†					
Capacity to overflow	2075 {7855}	2775 {10,504}	3710 {14,044}	4700 {17,791}	5645 {21,369}
Operating capacity	1575 {5962}	2100 {7949}	2815 {10,652}	3560 {13,476}	4280 {16,202}
Operating chiller	1750 {6624}	2450 {9274}	3300 {12,491}	4155 {15,728}	4990 {18,889}
Dimensions inch {mm}‡					
A - Height	78 {1981}	102 {2591}	102 {2591}	107 {2718}	107 {2718}
B - Width	96 {2438}	96 {2438}	96 {2438}	127 {3226}	151 {3835}
C - Tank length	71 {1803}	71 {1803}	95 {2413}	105 {2667}	105 {2667}
D - Total length	156 {3962}	168 {4267}	168 {4267}	173 {4394}	173 {4394}
Connections inch NPT					
Overflow	4.0	4.0	4.0	4.0	4.0
Make-up	1.0	1.0	1.0	1.0	1.0
Drain	2.0	2.0	2.0	2.0	2.0
Weight lb {kg}					
Shipping	5000 {2268}	5500 {2495}	7500 {3402}	10,500 {4763}	16,000 {7257}
Operating	22,500 {10,206}	29,500 {13,381}	39,000 {17,690}	50,000 {22,680}	63,000 {28576}

Stainless Steel Models

Models	PTSS-0275	PTSS-0450	PTSS-0700	PTSS-1000	PTSS-1000XL	PTSS-1300	PTSS-1300XL
Performance characteristics gallon {liter}†							
Capacity to overflow	265 {1003}	430 {1628}	695 {2630}	1025 {3880}	1000 {3785}	1290 {4883}	1250 {4731}
Operating capacity	185 {700}	305 {1154}	485 {1836}	720 {2725}	700 {2650}	905 {3426}	880 {3331}
Operating chiller	225 {852}	370 {1400}	590 {2233}	875 {3312}	850 {3218}	1090 {4126}	1060 {4012}
Dimensions inch {mm}‡							
A - Height	49 {1244}	52 {1321}	52 {1321}	52 {1321}	52 {1321}	64 {1626}	52 {1321}
B - Width	60 {1524}	60 {1524}	72 {1829}	72 {1829}	84 {2133}	72 {1829}	84 {2133}
C - Tank length	23 {584}	36 {914}	48 {1219}	71 {1803}	59 {1498}	71 {1803}	59 {1498}
D - Total length	60 {1524}	72 {1829}	96 {2438}	144 {3657}	144 {3657}	144 {3657}	144 {3657}
Connections inch NPT							
Overflow	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Make-up	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Drain	1.0	1.0	1.0	1.5	1.5	1.5	1.5
Weight lb {kg}‡							
Shipping	2000 {907}	2500 {1134}	3000 {1361}	3400 {4763}	3400 {1542}	3600 {1633}	3600 {1633}
Operating	4500 {2041}	6500 {2948}	9000 {4082}	12,500 {5670}	12,500 {5670}	14,500 {6577}	14,500 {6577}

Models	PTSS-1600	PTSS-1600XL	PTSS-1700	PTSS-2100	PTSS-2800	PTSS-3700	PTSS-4500*	PTSS-6000*
Performance characteristics gallon {liter}†								
Capacity to overflow	1570 {5943}	1525 {5773}	1725 {6530}	2075 {7855}	2775 {10,504}	3710 {14,043}	4700 {17,791}	5645 {21,368}
Operating capacity	1105 {4183}	1060 {4013}	1210 {4580}	1575 {5962}	2100 {7949}	2815 {10,655}	3560 {13,476}	4280 {16201}
Operating chiller	1330 {5035}	1270 {4807}	1460 {5527}	1750 {6624}	2450 {9274}	3300 {12492}	4155 {15,728}	4990 {18,889}
Dimensions inch {mm}‡								
A - Height	76 {1930}	76 {1930}	66 {1676}	78 {1981}	102 {2591}	102 {2591}	107 {2718}	107 {2718}
B - Width	72 {1829}	84 {2133}	96 {2438}	96 {2438}	96 {2438}	96 {2438}	127 {3226}	151{3835}
C - Tank length	71 {1803}	59 {1498}	71 {1803}	71 {1803}	71 {1803}	95 {2413}	105 {2667}	105 {2667}
D - Total length	144 {3657}	144 {3657}	144 {3657}	156 {3962}	168 {4267}	168 {4267}	173 {4394}	173 {4394}
Connections inch NPT								
Overflow	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Make-up	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Drain	1.5	1.5	2.0	2.0	2.0	2.0	2.0	2.0
Weight lb {kg}‡								
Shipping	4000 {1814}	4000 {1814}	4500 {2041}	5000 {2268}	5500 {2495}	7500 {2495}	10,500 {4763}	16,000 {7257}
Operating	17,000 {7711}	17,000 {7711}	19,500 {8845}	22,500 {10,205}	29,500 {13,380}	39,000 {17,690}	50,000 {22,679}	63,000 {28,576}

SPECIFICATION NOTES

* Pump deck shipped separately, field connection required.

† Operating level based upon allowing for 30 ft {9144 mm} of vertical riser drain down and for tower systems the typical cooling tower drain down.

‡ Dimensions and weights shown are for a typical 3-pump arrangement. Actual weights and dimensions will vary depending on pump and option selections.

Specifications may change without notice. Check with your Conair representative for the most current information.

Model PTFG-0500

RUST-FREE OPERATION FOR YEARS OF RELIABLE SERVICE

Conair's PTFG (fiberglass) Series Pump Tanks are designed to meet and exceed the needs of your application. Fully engineered for a complete range of tower or chiller applications, Conair's tanks provide the highest quality design and construction features available.

This series of pump tanks promises years of trouble-free operation with the use of high quality components and NEMA 4 lights and switches as standard.

TO ELIMINATE CORROSION ISSUES—CHOOSE FIBERGLASS

Conair incorporates more value-added features into every pump/reservoir system than anyone else. Every PTFG tank includes standard, full-size pump trim, extended pump suction legs and solid steel decking under the pump.

High-efficiency, close-coupled, non-overloading centrifugal pumps are precisely matched to your application, providing optimum flow and pressure to the process with reduced electrical costs, and improving motor life by assuring the motor operates within its horsepower rating.

Conair's full-sized pump suction legs feature a 45° angle opening to prevent vortexing and pump cavitation. This also enables the tank to operate at a lower water level, saving water costs and reducing the use of valuable chemicals that may otherwise overflow to drain at shutdown.

Quality construction, safe operation and easy maintenance

All pumps are mounted on a solid deck for added strength, serviceability, and safety. Reservoirs are constructed of thick fibre-reinforced plastic (FRP) for superior strength and reliability. Horizontal stiffeners are used for extra strength. Interiors are coated with a smooth white gelcoat lining.

Economic alternative to stainless steel

The PTFG Series fiberglass reservoirs offer a significantly less expensive alternative to stainless steel reservoirs in applications where corrosion can be problematic.

Easy to operate

The Conair programmable controller comes with digital temperature display and a RTD probe that controls temperature by cycling the tower fan and recirculating pump. The control includes a high temperature alarm with indicator light. Liquid-filled pressure guages enable accurate flow adjustment. Isolation cocks prevent gauge pressure fluctuation and extend gauge life.

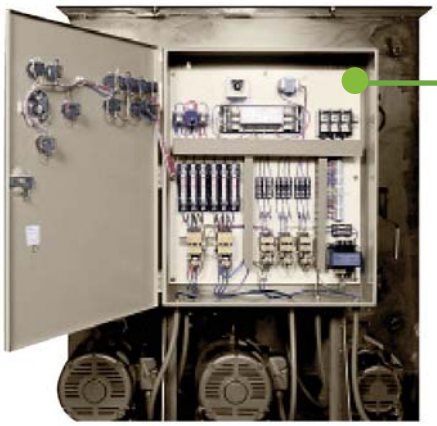
Quick installation

By using the grooved pipe connecting system, the need for flexible couplings is reduced, eliminating pipe stress at start-up. Grooved connections quickly assemble and disassemble for fast installation, maintenance, and reconfiguration when adding or changing pumps. Conair's prewired and mounted NEMA 4 control panel is hardwired to pump motors and all alarms, simplifying field installation and significantly reducing installation costs.

RESERVOIR FEATURES

- Fiberglass tank divider
- PVC pump suction legs prevent vortexing and pump cavitation
- Make-up valve assembly guarantees constant water level

CONTROL PANEL



All Conair PTFG Series control panels are of NEMA 4 construction, come completely prewired and use only high quality components.

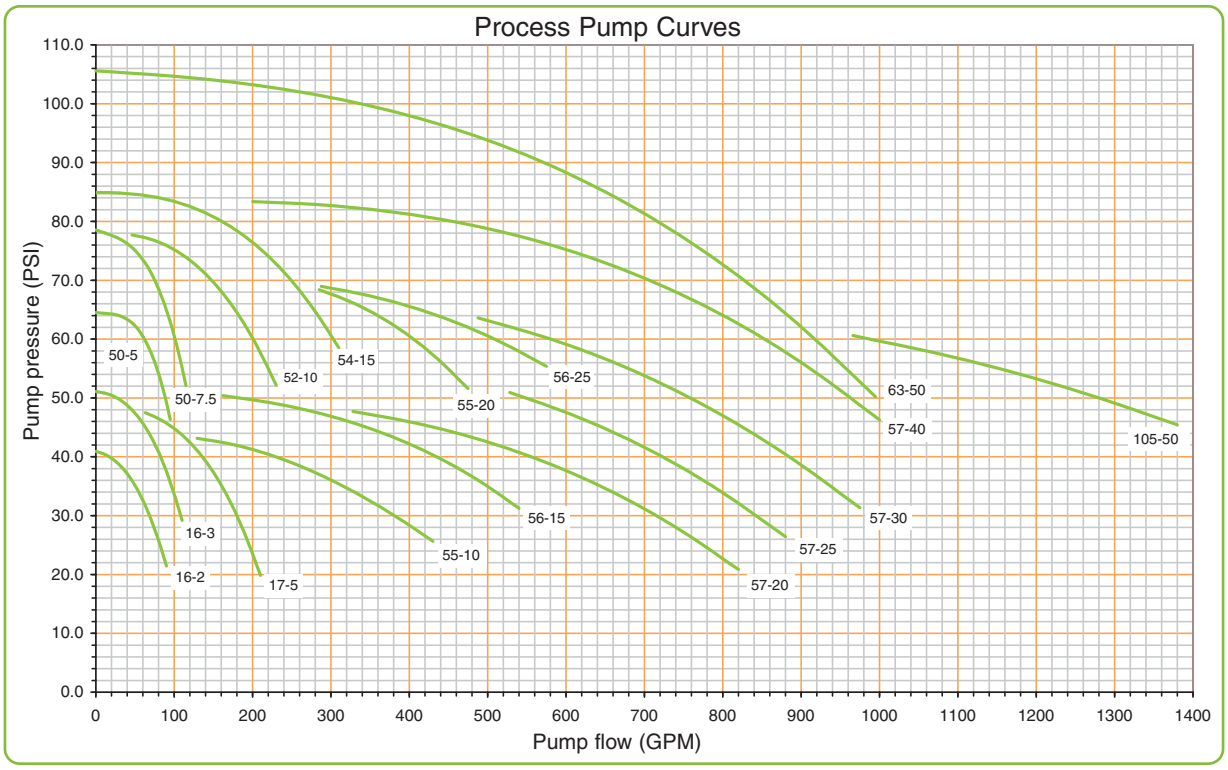
OPTIONS

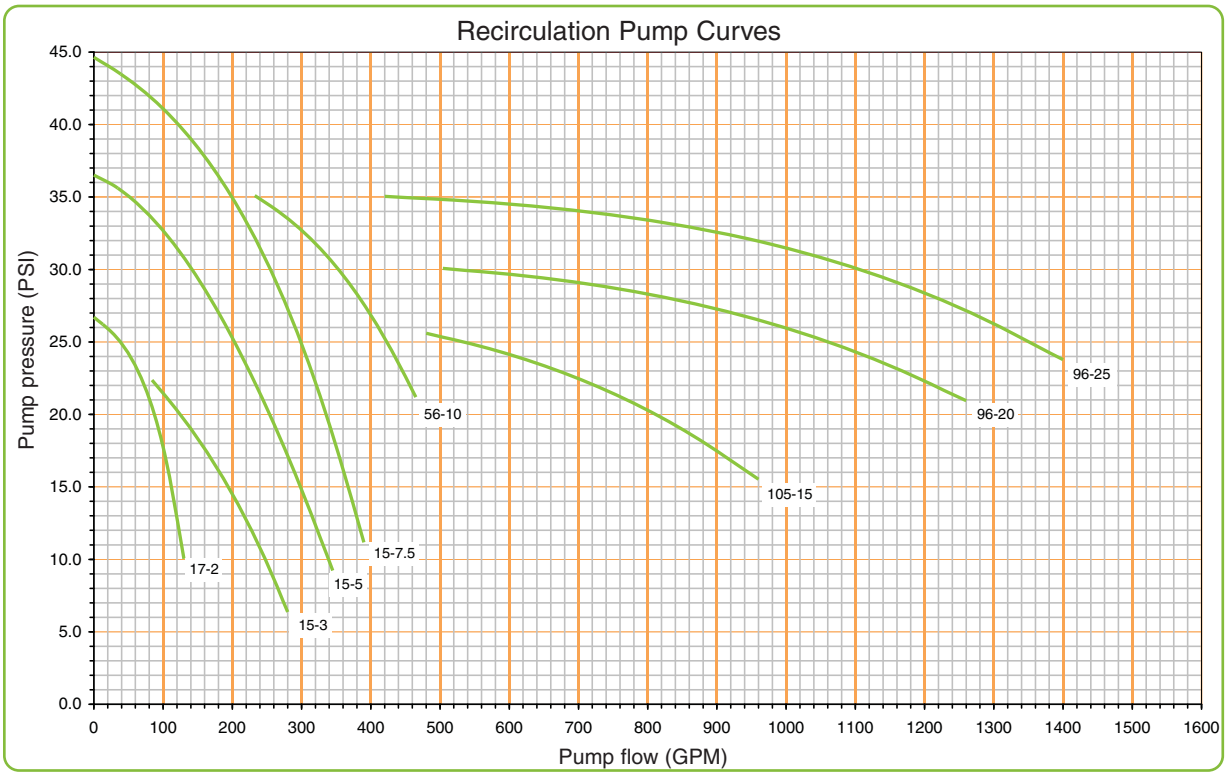
- Single or dual standby pumps for process and recirculating eliminate downtime. Pumps are available with complete connecting trim, including discharge manifold and isolation valves.
- Automatic switching to standby pump protects against downtime due to pump failure.
- Full 0.75 inch {19mm} insulation maintains reservoir water temperature and eliminates “sweating”.
- Premium efficiency motors cut electrical operating costs and offer rapid payback with utility rebate programs.
- Unbreakable sight glass features shutoff valves and brass safety rods; allows for a quick visual check of reservoir operating level.
- Tank cover prevents contamination and evaporation.
- Factory-installed and wired alarms with panel mounted indicator lights warn of low flow, low pressure, low level and high temperatures. Sonalert horn with silencer switch warns of system failure.
- Solid-state sensor with alarm provides trouble-free sensing of low water levels.
- For operator protection, a fused disconnect shuts off power before door is opened for maintenance or inspection.
- Panel-installed programmable logic controller (PLC) allows control sequences and alarm settings to be customized for individual process requirements.
- Reservoir support legs conserve valuable floor space, support a cooling tower to reduce roof loading and eliminate additional roof support costs.

PUMP CURVES

PTFG SERIES

Water temperature at 50°F {10°C}





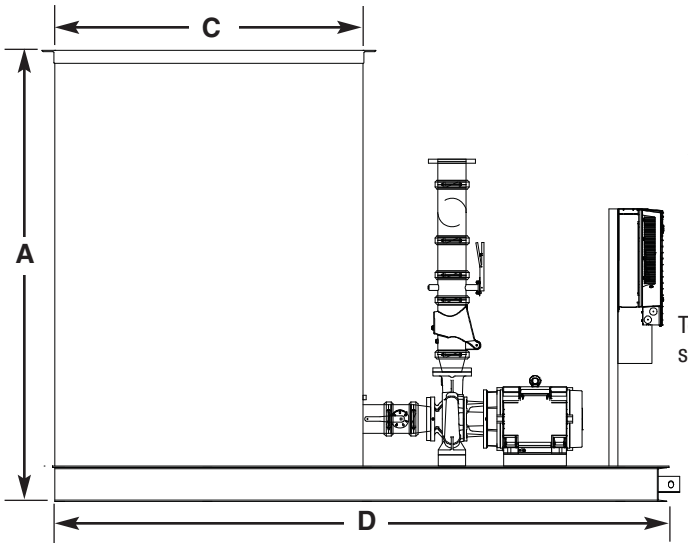
SPECIFICATION NOTES

Pump curves do not reflect pressure drops due to internal piping.

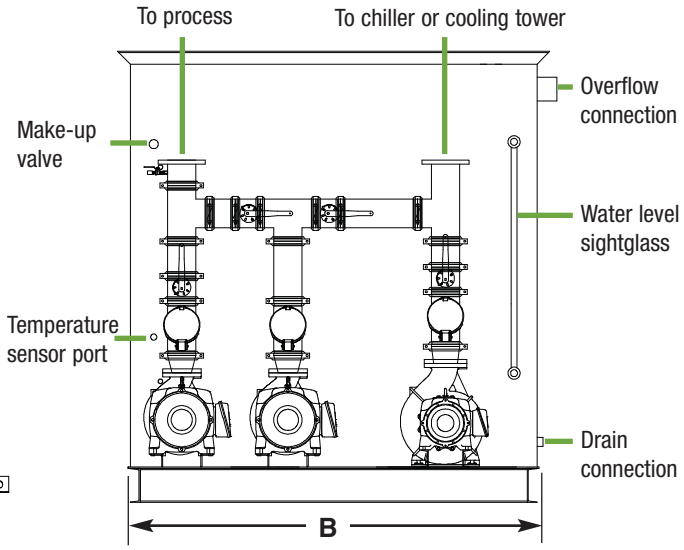
These pump curves are non-overloading using the service factor of the motors.

Specifications may change without notice. Check with your Conair representative for the most current information.

SPECIFICATIONS



Side view



Front view

(Electrical control panel and VFDs not shown in this view for clarity.)

Models	PTFG-0250	PTFG-0500	PTFG-0700	PTFG-1100	PTFG-1550	PTFG-2200
Performance characteristics gallon {liter}*						
Capacity to overflow	275 {1041}	470 {1779}	705 {2669}	1105 {4183}	1615 {6113}	2200 {8328}
Operating capacity	160 {606}	335 {1268}	480 {1817}	710 {2688}	1165 {4410}	1600 {6057}
Operating chiller	200 {757}	355 {1344}	540 {2044}	850 {3218}	1345 {5091}	1790 {6776}
Dimensions inch {mm}†						
A - Height	52 {1321}	55 {1397}	55 {1397}	84 {2133}	84 {2133}	86 {2184}
B - Width	70 {1778}	57 {1448}	81 {2057}	74 {1880}	81 {2057}	98 {2489}
C - Tank length	33 {838}	57 {1448}	57 {1448}	59 {1498}	82 {2083}	84 {2134}
D - Total length	62 {1575}	98 {2489}	98 {2489}	122 {3099}	146 {3708}	146 {3708}
Connections inch NPT						
Overflow	4.0	4.0	4.0	4.0	4.0	4.0
Make-up	1.0	1.0	1.0	1.0	1.0	1.0
Drain	1.0	1.0	1.0	1.0	2.0	2.0
Weight lb {kg}†						
Shipping	2000 {907}	2500 {1134}	3000 {1361}	3500 {1588}	4000 {1814}	4500 {2041}
Operating	4200 {2041}	6400 {2903}	9000 {4082}	14,200 {6441}	17,300 {7847}	24,100 {10,932}

SPECIFICATION NOTES

* Operating level based upon allowing for 30 ft {9144mm} of vertical riser drain down and for tower systems the typical cooling tower drain down.

† Dimensions and weights shown are for a typical 3-pump arrangement. Actual weights and dimensions will vary depending on pump and option selections.

Specifications may change without notice. Check with your Conair representative for the most current information.

SIMPLE AND EFFICIENT **SPACE-SAVING DESIGN**

Conair's stainless steel CFS Series strainers provide an economical solution for your full-flow cooling water filtration needs.

The CFS Series strainers significantly reduce particulate and debris in cooling water, maximizing cooling system efficiency. As water enters the bottom of the strainer and flows upward, heavier sediment and debris is deflected and accelerated downward into the large debris reservoir in the base of the strainer. Sediment and debris are then purged from the reservoir through the debris flush port.

MINIMAL MAINTENANCE; NO MOVING PARTS

The CFS Series Strainers are all constructed of T304 stainless steel, including the housing and the screen frames.

The patented conical strainer screen allows the larger debris to fall into the reservoir while sealing the clean water in the upper chamber. All models have 1/4 inch stainless steel inlet and outlet gauges as standard.

To monitor the system pressure at inlet and outlet, add the optional pressure differential alarm (PDA) package. When the filter screen becomes clogged, the audible/visual alarm alerts personnel that the strainer screen needs servicing.

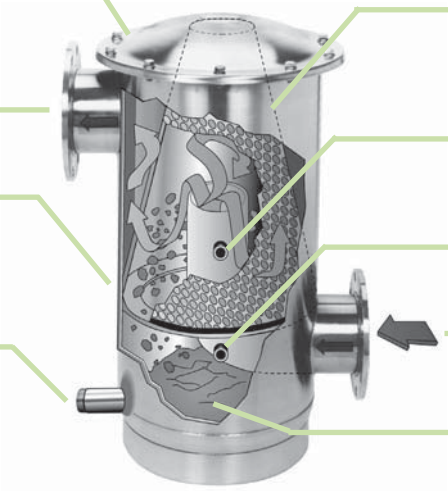
The optional automatic timer flush (ATF) package uses a time-based valve controller to flush the debris reservoir.

- **Stainless steel construction**
  Strainer housing and screen filter element are constructed of T304 stainless steel.
- **Compact space-saving design**
  Reduces floor space requirements.
- **Low pressure loss**
  All models operate with less than 1 PSI pressure loss at maximum flow when clean.
- **Large debris reservoir**
  Heavier debris and particulate fall down, away from the filter screen into the debris reservoir, and can be flushed while the strainer is in service. Backflushing is not required when purging the reservoir.
- **No minimum flow rates**
  Each model accommodates a wide range of flow rates with minimum flow requirements.
- **Choose mesh options**
  Available screen meshes include 16, 30, 40, 50, 60, 80, 100, 120, 150, and 200, as well as 1/4 inch and 1/8 inch perforated sheet.

STAINLESS STEEL CFS SERIES

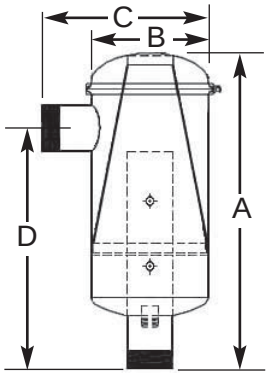
FEATURES

- **Removable strainer lid -** with stainless steel bolts and brass nuts on larger models, clamped lids on smaller models.
- **Clean water outlet -** exits to process.
- **Clean water separation seal -** seals strainer and separates water from debris.
- **Debris flush port -** for cleaning reservoir. (1.5 inches {38.1 mm} male NPT drain port on all sizes.)

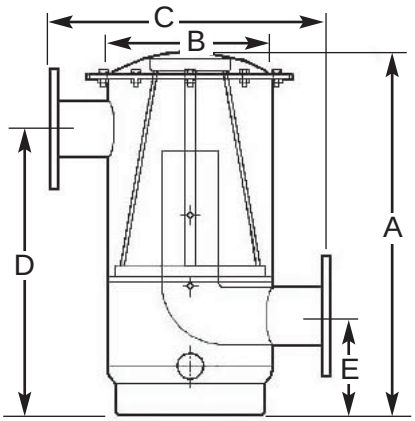


- **Conical strainer screen -** patented design separates water from large debris.
- **Outlet pressure gauge -** measures water pressure on outlet side of screen.
- **Inlet pressure gauge -** monitors inlet side of screen.
- **Inlet -** dirty water enters strainer.
- **Large debris reservoir -** captures and collects sediment.

SPECIFICATIONS



CFS-2, CFS-3



CFS-4, CFS-6, CFS-8, CFS-10

MODEL	CFS-2	CFS-3	CFS-4C	CFS-4B	CFS-6	CFS-8	CFS-10
Performance characteristics							
Max. flow* gal/min {m³/min}	100 {0.38}	200 {0.76}	350 {1.32}	350 {1.32}	750 {2.84}	1300 {4.9}	2000 {7.6}
Max. pressure rating PSI	125	125	125	150	150	150	150
Dimensions inches {cm}							
A - Height	16.4 {41.5}	24.9 {63.2}	27.2 {69.2}	25.9 {65.7}	38.0 {96.5}	49.0 {124.5}	60.2 {153.0}
B - Width	6.7 {16.7}	9.0 {22.9}	11.5 {29.2}	11.5 {29.2}	17.0 {43.2}	23.0 {58.4}	30.0 {76.2}
C - Depth	9.3 {23.7}	12.7 {32.2}	19.2 {48.9}	19.2 {48.9}	24.5 {62.2}	31.4 {79.7}	39.7 {101.0}
D - Height to outlet port	11.7 {29.7}	18.6 {47.3}	18.2 {46.2}	18.2 {46.2}	29.1 {73.9}	35.3 {89.7}	45.6 {115.7}
E - Height to inlet port	NA	NA	6.8 {17.3}	6.8 {17.3}	10.2 {26.0}	11.8 {30.1}	13.2 {33.5}
Inlet size, type inches {mm}	2 {51} NPT	3 {76} NPT	4 {102} flanged	4 {102} flanged	6 {152} flanged	8 {203} flanged	10 {254} flanged
Outlet size type inches {mm}	2 {51} NPT	3 {76} NPT	4 {102} flanged	4 {102} flanged	6 {152} flanged	8 {203} flanged	10 {254} flanged
Weight installed† lb {kg}	15 {7}	30 {14}	65 {29}	65 {29}	125 {57}	230 {104}	400 {181}
Lid closure type	clamp	clamp	clamp	bolt	bolt	bolt	bolt
Screen mesh sizes	16, 30, 40, 50, 60, 80, 100, 120, 150, 200, 1/4 inch {6.35 mm} perforated sheet, 1/8 inch {3.18 mm} perforated sheet						
Gasket type	EDPM						

SPECIFICATION NOTES:

* Maximum flow varies depending on solids loading and viscosity.

† With no options installed.

Specifications may change without notice. Check with a Conair representative for the most current information.

Model SMF-20

REMOVES SOLIDS FROM THE COOLING SYSTEM

This uniquely designed media filter is ideal for removing suspended solids in the cooling system.

The special media removes solids down to 0.5 microns. As particulates are removed from the process water, the unit will automatically backflush to self-clean based on time or increasing pressure drop.

UNIT REDUCES INSTALLATION AND DOWNTIME

The SMF Series media filter systems are delivered to you preassembled on a skid mounted package. Only filter inlet and filter outlet connections and electrical hookup is required on tower water backwash systems.

The systems include a centrifugal self-priming pump, pre-strainer, fiberglass vessel, bronze three-way valves and control center.

Pre-plumbed and factory tested this unit will provide years of service with only minor maintenance. Your process cooling water will be clean and efficient allowing you to achieve maximum profits.

Units can be specified in either city water backflush, which requires an extra hook-up or process (tower) water backflush.

Will not corrode

Strong, light modeled fiberglass is rated to 50 psig and will not corrode. Choose your model from a range of sizes. The exclusive distribution system minimizes backwash time.

Pre-assembled piping system

All interconnecting pipe is sturdy schedule 80 PVC. None of the ferrous components are wetted. The pump is bronze with a self priming prestrainer. The pump motor is totally enclosed and fan cooled. The prestrainer can be separately maintained.

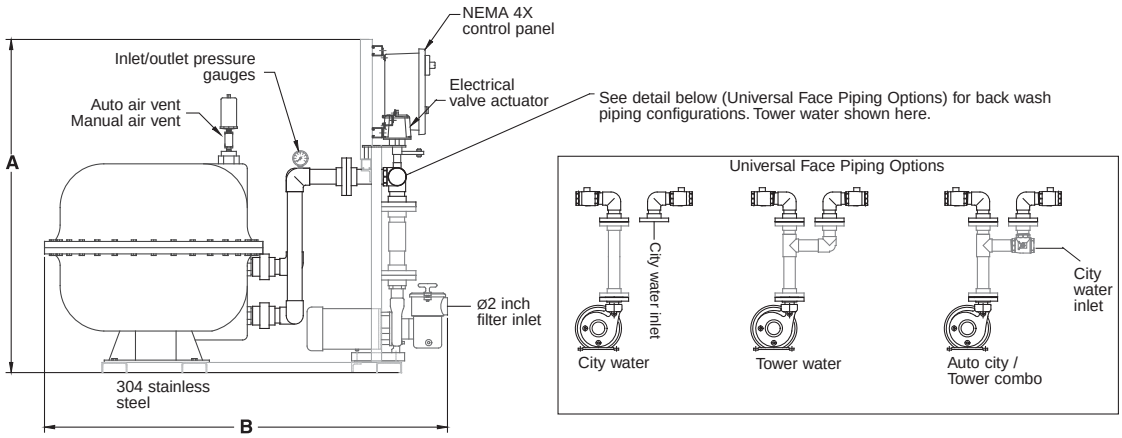
Automatic backwashing

Standard flow is from down to up in the media vessel. When the media is clogged the system changes the flow to upward in the media, fluidizing the bed which washes the trapped debris down the drain.

Outdoor duty controls

Epoxy coated NEMA 3R control center contains disconnect, motor starter with thermal overload, control circuit transformer, solid state time, NEMA 4 differential pressure switch and manual backwash button.

SPECIFICATIONS



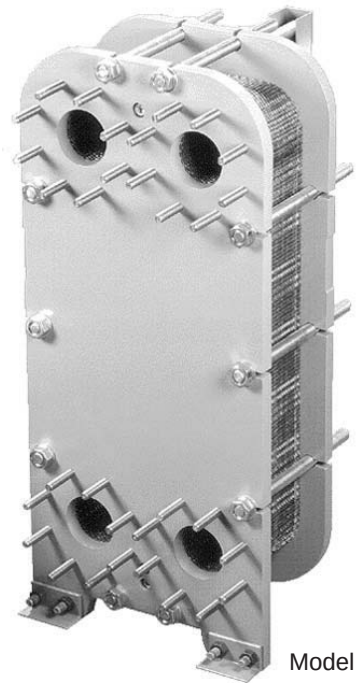
MODELS	SMF-20	SMF-24	SMF-30	SMF-36	SMF-42	SMF-48
Performance characteristics						
Cooling tower (tons) maximum*						
Harsh environment (lots of dirt in the air)	to 230	to 360	to 520	to 750	to 1000	to 1280
Clean environment (mild amount of dirt)	to 280	to 460	to 650	to 940	to 1280	to 1590
Pump Hp {kW}	1 {.75}	2 {1.5}	3 {2.3}	3 {2.3}	5 {3.8}	5 {3.8}
Flow rate GPM {l/min}	43 {162.8}	63 {238.5}	98 {370.9}	142 {537.5}	192 {726.8}	251 {950.1}
Filter area ft^2 {m^2}	2.2 {0.2}	3.14 {0.29}	4.91 {0.46}	7.10 {0.66}	9.60 {0.89}	12.05 {1.12}
Media volume ft^3	2 {0.06}	2.5 {0.07}	4 {0.11}	4.5 {0.41}	13.5 {0.38}	17 {.48}
Pipe connection sizes NPT inches						
Inlet	2	2	2	3	3	3
Outlet	2	2	2	3	3	3
City	2 FLG	2 FLG	2 FLG	3 FLG	3 FLG	3 FLG
Waste	2	2	2	3	3	3
Dimensions inches {mm}						
A - Height	54 {1371}	54 {1371}	54 {1371}	65 {1651}	65 {1651}	65 {1651}
B - Width	66 {1676}	69 {1752}	72 {1828}	77 {1955}	77 {1955}	83 {2108}
Depth	30 {762}	30 {762}	35 {889}	48 {1219}	48 {1219}	48 {1219}
Water requirements						
Backflush volume in two minutes gal. {l}	86 {325.5}	126 {477.0}	196 {742.0}	284 {1075.1}	384 {1453.6}	502 {1900.2}
City water required @40 psi gpm {l/min}†	43 {162.8}	63 {238.5}	98 {370.9}	142 {537.5}	192 {726.8}	251 {950.1}
Weight lb {kg}						
Installed	445 {202}	597 {271}	992 {450}	2041 {926}	2970 {1347}	4995 {2266}
Shipping	350 {159}	470 {213}	740 {336}	1550 {703}	2265 {1027}	3875 {1758}
Voltages Total amps based on motor size						
230V/3 phase/60 Hz	4.2	6.8	6.8	9.6	15.2	15.2
480V/3 phase/60 Hz	2.1	3.4	3.9	3.9	6.9	6.9
575 V/3 phase/60 Hz	1.7	2.7	3.9	3.9	6.1	6.1

SPECIFICATION NOTES:

* Designed for all water to be filtered. Clean environment once in 60 minutes, harsh environment once in 48 minutes.

† City water backflush option only.

Specifications may change without notice. Check with a Conair representative for the most current information.



Model PF 3-60

ELIMINATE FOULING ON COOLING SURFACES

Plate and frame type heat exchangers offer more heat transfer in less space. The Conair Tower Isolation PF Series perform with one third to one fifth the surface area of conventional shell and tube heat exchangers for the same application. By isolating the tower water from the plant cooling passages the reduction in preventative maintenance reduces staffing and quickly pays for itself.

MAINTENANCE SAVING TOWER WATER ISOLATION

Cooling towers, while very efficient in cooling processes, also collect debris and grow dangerous biologicals in the water. The Conair Tower Isolation Heat Exchangers PF Series isolate the contaminated water to the tower, tower pump, filter and heat exchanger only.

These components, while still requiring the consistent preventative maintenance for peak performance, isolate any biologicals from the rest of the facility. The biocide in the evaporative towers does not flow freely throughout the plant.

The PF Series Heat Exchangers are available in 3-degree and 5-degree approach models. The process water can get to within 3°F or 5°F {1.6° or 2.8°C} of the tower temperature at a designated day. The 10°F {5.6°C} standard range (difference of inlet and outlet temperatures) works with standard tower designs.

- **Superior heat transfer**
  Get the most heat transfer with the least temperature difference. And keep tower process water to within 3° or 5°F {1.6° or 2.8°C} of the actual tower water at design heat load.
- **True countercurrent flow**
  All heat exchangers perform most efficiently and output the smallest approach with countercurrent flow. Multipass shell and tube types lose some of this effectiveness.
- **Expandable design**
  Many models are expandable to meet increasing loads just by adding plates. The unit can be backflushed to clean, and disassembled to restore original performance after long periods of use.
- **Low pressure drop**
  Pressure drops of 10 psi or less at design keeps pump power losses to a minimum and energy costs low.
- **Reduced mineralization**
  Since plant process water is not continuously concentrated plating of minerals on heat transfer surfaces is significantly reduced and preventative maintenance nearly eliminated.

SPECIFICATIONS

3F° Approach Models	Duty, Tower Tons (15,000 BTU/hr)	Duty BTU/hr	Hot/Cold Flow Rate GPM	△P Both Sides*	Connections	Length in.	Width in.	Height in.	Weight, lb	
									dry	wet
PF3-20	19.88	298200	60	4	2" FPT	31.42	12.13	47	464	504
PF3-30	29.82	447300	90	4.23	2" FPT	31.42	12.13	47	509	569
PF3-40	39.76	596400	120	4.52	2" FPT	47.26	12.13	47	592	672
PF3-50	49.70	745500	150	5.00	2" FPT	47.26	12.13	47	630	727
PF3-60	59.6	894700	180	10	4" 150#	34.49	20.5	72.1	1497	1637
PF3-75	74.6	1118300	225	10	4" 150#	34.49	20.5	72.1	1541	1680
PF3-85	84.5	1267400	255	10	4" 150#	34.49	20.5	72.1	1581	1743
PF3-100	99.4	1491100	300	10	4" 150#	50.21	20.5	72.1	1678	1859
PF3-115	114.3	1714800	345	9.8	4" 150#	50.21	20.5	72.1	1727	1937
PF3-125	124.26	1863900	375	9.9	4" 150#	50.21	20.5	72.1	1766	1999
PF3-170	169	2534900	510	10	4" 150#	50.21	20.5	72.1	1916	2236
PF3-175	174	2609500	525	10	4" 150#	50.21	20.5	72.1	1934	2264
PF3-185	184	2758600	555	10	4" 150#	50.21	20.5	72.1	1969	2318
PF3-210	208.7	3131400	630	10	4" 150#	62.09	20.5	72.1	2117	2525
PF3-240	238.6	3578800	720	10	4" 150#	62.09	20.5	72.1	2240	2719
PF3-270	268.4	4026100	810	10	4" 150#	69.89	20.5	72.1	2412	2972
PF3-300	298.2	4473500	900	10.2	4" 150#	89.57	20.5	72.1	2587	3203
PF3-340	338	5069900	1020	10	6" 150#	90.31	25.7	77.6	2849	3714
PF3-370	367.8	5517300	1110	9.9	6" 150#	90.31	25.7	77.6	2944	3887
PF3-475	477.2	7157600	1440	10	6" 150#	110.00	25.7	77.6	3430	4693
PF3-500	497	7455800	1500	10	6" 150#	110.00	25.7	77.6	3508	4836
PF3-600	596.5	8947000	1800	10	6" 150#	110.00	25.7	77.6	3820	5393
PF3-630	628.3	9424200	1896	10	8" 150#	95.01	31.5	87.3	6078	7882

5F° Approach Models	Duty, Tower Tons (15,000 BTU/hr)	Duty BTU/hr	Hot/Cold Flow Rate GPM	△P Both Sides*	Connections	Length in.	Width in.	Height in.	Weight, lb	
									dry	wet
PF5-20	19.87	298100	60	9.8	2" FPT	23.62	12.13	47	408	432
PF5-30	29.81	447100	90	9.9	2" FPT	31.42	12.13	47	453	489
PF5-40	39.74	596200	120	10	2" FPT	31.42	12.13	47	480	527
PF5-50	49.68	745200	150	9.9	4" 150#	34.53	20.5	46.63	900	958
PF5-60	59.62	894300	180	9.3	4" 150#	34.53	20.5	46.63	950	1018
PF5-75	74.53	1117800	225	10	4" 150#	50.21	20.5	46.63	1004	1091
PF5-85	84.46	1266900	255	9.9	4" 150#	49.49	20.5	46.63	1033	1133
PF5-100	99.36	1490500	300	9.9	4" 150#	50.21	20.5	46.63	1062	1182
PF5-115	114.27	1714000	345	9.9	4" 150#	50.21	20.5	46.63	1096	1233
PF5-125	124.21	1863100	375	10	4" 150#	50.21	20.5	46.63	1116	1264
PF5-170	168.92	2533800	510	10	4" 150#	62.09	20.5	46.63	1253	1455
PF5-175	173.90	2608400	525	10	4" 150#	62.09	20.5	46.63	1260	1465
PF5-185	183.83	2757400	555	10	4" 150#	62.09	20.5	46.63	1287	1508
PF5-210	208.67	3130000	630	10	4" 150#	69.89	20.5	46.63	1380	1638
PF5-240	238.48	3577200	720	10	4" 150#	89.57	20.5	46.63	1530	1835
PF5-270	268.29	4024300	810	10	4" 150#	89.57	20.5	46.63	1617	1970
PF5-300	298.10	4471500	900	9.9	6" 150#	62.71	25.7	77.6	2338	2791
PF5-340	337.85	5067700	1020	9.9	6" 150#	62.71	25.7	77.6	2282	2796
PF5-370	367.66	5514900	1110	10	6" 150#	62.71	25.7	77.6	2344	2908
PF5-475	476.96	7154400	1440	10	6" 150#	70.63	25.7	77.6	2613	3367
PF5-500	496.84	7452500	1500	10	6" 150#	70.63	25.7	77.6	2657	3447
PF5-600	596.21	8943000	1800	10	6" 150#	90.31	25.7	77.6	2998	3970
PF5-630	628.00	9420000	1896	10	6" 150#	90.31	25.7	77.6	3125	4152

**Pressure drops are measured on new, clean equipment at design flow rates.*

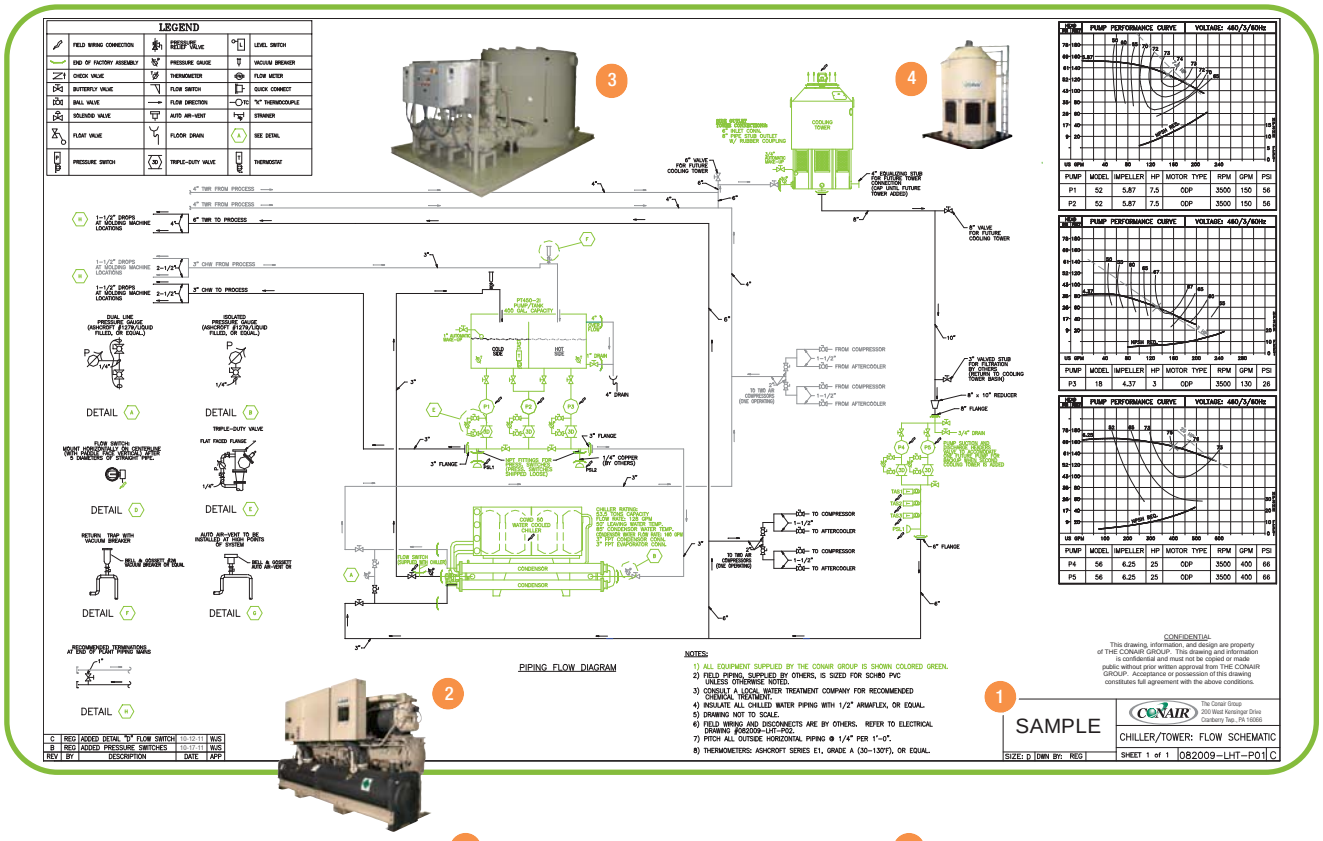
IMPROVE PRODUCTIVITY AND PROFITS WITH PRECISE, ENERGY-EFFICIENT CONTROL OF PROCESS TEMPERATURES

Conair's central cooling systems can put money back in your pocket by supplying precise process water temperature and pressure for your application. If you need more than 20 tons capacity to cool dies, molds, screws, barrels or machine hydraulics, a central system could be the solution.

AIR- OR WATER-COOLED SYSTEMS, FROM 20 TO OVER 1000 TONS

- **Conserve energy and water**
  Replacing portable chillers with a central cooling system can cut energy costs by as much as a third. Recirculating cooling water through a tower-chiller system also reduces water and sewer bills. Optional pressure-controlled variable frequency drives (VFD's) provide optimal performance at reduced energy costs.
- **Reduce scrap and production time**
  Precise temperature control at the mold, die, screw or barrel results in faster cycle times and less warping and shrinkage in the product.
- **Increase manufacturing floor space**
  Central cooling systems free machine cell space taken by portable cooling equipment, and can save on expansion/construction costs.

LET US DESIGN THE MOST EFFECTIVE, EFFICIENT SYSTEM FOR YOUR APPLICATION



We want our central cooling systems to be easy to use, easy to service and easy to expand. So we design and install these systems with maximum efficiency and optimum performance in mind.

Just tell us about the materials you process and what you want to cool. We'll help you determine what kind of system is the best choice for your facility and application.

1 Installation Drawings

- Complete, color-coded flow schematic drawings show pump curves, electrical connections and pipe sizes
- Plan view layout drawings with equipment and piping are available

2 Central Chillers

- Air-cooled or water-cooled models
- Capacities ranging from 20 to more than 500 tons
- Single, dual or multiple circuit evaporators
- State-of-the-art scroll and helical rotary screw compressors
- Factory-assembled refrigeration components, including piping, sight glasses, filter/dryers and expansion valves
- Complete indicator and fault light packages
- Oil, high refrigerant and low refrigerant pressure switches
- Flow and pumpdown switches
- Microprocessor controls for reliable, long-term operation

3 Pump Tank Assemblies

- Choose one-piece molded polymer or rugged stainless steel tank construction
- Single and dual compartment tank designs
- Automatic float valve and drain for constant water level
- Heavy-duty industrial pumps
- IEC-rated motor starters
- Triple-duty valve performs shut off, check and balancing functions
- Simple push button to high-end PLC with touchscreen controls
- Variable frequency drives

4 Cooling Towers

- Seamless, rust-free design
- Capacities from 10 to 500 tons
- Single-point inlet water connections
- Bottom or side outlet connections
- Lightweight molded polyethylene tower is as strong as steel, but costs less to install
- 15-year warranty on tower shell
- 5-year warranty on fan/blower motors

Granulation

BESIDE-THE-MACHINE GRANULATORS

NCM Series G-1
NC-69S, 614S, 617S G-3
NCR-69, 614, 617 ..... G-5
CF-814S G-7
CHS-810, 814, 819 and 824 ..... G-9
CBW-1012, 1018 and 1024 ..... G-11
CGW-1418, 1424 and 1436 ..... G-13

CENTRAL GRANULATORS

CW-1824, 1836 and 1848 ..... G-15
CKW-2436, 2448 and 2460 ..... G-17

SHREDDER

CGS-2129, 4229 and 6440 ..... G-19

FILM SCRAP GRANULATOR

FSG Series G-21

Granulation Quick Reference

MODELS

Product Group	Model	Cutting Chamber in.	Access to Cutting Chamber	Rotor Configuration	Motor HP	Throughput lb/hr	Applications: Sprues Runners	Small Parts	Medium Parts	Large Parts	Thin-Walled Parts	Thick-Walled Parts	Purgings	Pipe Profile	Film/Sheet	Web Scrap
Beside-the-Press																
NCM	NCM-2	9 x 10.4	Split/Hinged Chamber	Multi-Toothed	3 - Very Low RPM	0 – 20	•	•								
(Screenless)	NCM -3	9 x 14.1	Split/Hinged Chamber	Multi-Toothed	3 - Very Low RPM	0 – 30										
	NCM -4	9 x 17.8	Split/Hinged Chamber	Multi-Toothed	3 - Very Low RPM	0 – 40	•	•								
NCR	NCR-69	6 x 9	Drop-Down Cradle	Staggered	3, 5 - Low RPM	0 – 80	•	•								
	NCR-69S	6 x 9	Drop-Down Cradle	Staggered	3 - Low RPM	0 – 80	•	•								
	NCR-614	6 x 14	Drop-Down Cradle	Staggered	3, 5 - Low RPM	0 – 120	•	•								
	NCR-617	6 x 17	Drop-Down Cradle	Staggered	3, 5 - Low RPM	0 – 140	•	•								
	NCR -614S	6 x 14	Drop-Down Cradle	Staggered	3 - Low RPM	0 – 120	•	•								
	NCR-617S	6 x 17	Drop-Down Cradle	Staggered	3 - Low RPM	0 – 140	•	•								
CF	CF-814 S	8 x 14	Drop-Down Cradle	Staggered	7.5 - Low RPM	0 – 200	•	•	•		•	•				
CHS	CHS-810	8 x 10	Drop-Down Cradle	Staggered / Open	5, 7.5, 10, 15 - Low RPM	0 – 200	•	•	•		•	•		•	•	
	CHS-814	8 x 14	Drop-Down Cradle	Staggered / Open	5, 7.5, 10, 15 - Low RPM	0 – 250	•	•	•		•	•		•	•	
	CHS-819	8 x 19	Drop-Down Cradle	Staggered / Open	5, 7.5, 10, 15 - Low RPM	0 – 330	•	•	•		•	•		•	•	
	CHS-824	8 x 24	Drop-Down Cradle	Staggered / Open	5, 7.5, 10, 15 - Low RPM	0 – 400	•	•	•		•	•		•	•	
CBW	CBW 1012	10 x 12	Pivot Chamber	Open 3BL / 5BL	5, 7.5, 10, 15	0 – 200	•	•	•	•	•	•		•	•	•
	CBW 1018	10 x 18	Pivot Chamber	Open 3BL / 5BL	5, 7.5, 10, 15	0 – 300	•	•	•	•	•	•		•	•	•
	CBW 1024	10 x 24	Pivot Chamber	Open 3BL / 5BL	5, 7.5, 10, 15	0 – 500	•	•	•	•	•	•		•	•	•
CGW	CGW 1418	14 x 18	Pivot Chamber	Open 3BL / 5BL	10, 15, 25, 40, 50	0 – 450	•	•	•	•	•	•		•	•	•
	CGW 1424	14 x 24	Pivot Chamber	Open 3BL / 5BL	10, 15, 25, 40, 50	0 – 600	•	•	•	•	•	•		•	•	•
	CGW 1436	14 x 36	Pivot Chamber	Open 3BL / 5BL	10, 15, 25, 40, 50	0 – 1,000	•	•	•	•	•	•		•	•	•
Central/Large Part																
CW	CW 1824	18 x 24	Pivot Chamber	Open 3BL / 5BL	25, 40, 50	0 – 1,350	•	•	•	•	•	•		•	•	•
	CW 1836	18 x 36	Pivot Chamber	Open 3BL / 5BL	40, 50, 75, 100	0 – 2,000	•	•	•	•	•	•		•	•	•
	CW 1848	18 x 48	Pivot Chamber	Open 3BL / 5BL	40, 50, 75, 100	0 – 2,800	•	•	•	•	•	•		•	•	•
CKW	CKW 2436	24 x 36	Pivot Chamber	Open 3BL / 5BL/7 BL	100, 125, 150, 200	0 – 5,500	•	•	•	•	•	•	•	•	•	•
	CKW 2448	24 x 48	Pivot Chamber	Open 3BL / 5BL/7 BL	100, 125, 150, 200	0 – 6,600	•	•	•	•	•	•	•	•	•	•
	CKW 2480	24 x 60	Pivot Chamber	Open 3BL / 5BL/7 BL	100, 125, 150, 200	0 – 8,800	•	•	•	•	•	•	•	•	•	•
Film Scrap Granulators																
FSG	FSG-100	10 x 12	Pivot Chamber	3BL	7.5	0 – 100									•	
	FSG-150	10 x 12	Pivot Chamber	3BL	10	0 – 150									•	
	FSG-300	10 x 18	Pivot Chamber	3BL	15	0 – 300									•	
	FSG-400	10 x 24	Pivot Chamber	3BL	15	0 – 400									•	
	FSG-500	14 x 18	Pivot Chamber	5BL	25	0 – 500									•	
	FSG-750	14 x 24	Pivot Chamber	5BL	40	0 – 700									•	
	FSG-1000	14 x 36	Pivot Chamber	5BL	48	0 – 1000									•	
	FSG-1250	18 x 36	Pivot Chamber	5BL	50	0 – 1250									•	
	FSG-1600	18 x 48	Pivot Chamber	5BL	75	0 – 1600									•	
Shredders																
CGS	CGS 2129	22 x 30	Removable Door	Solid 11.25" Diameter	15	0 – 1,050	•	•	•	•	•	•	•	•	•	•
	CGS 4229	43 x 30	Removable Door	Solid 11.25" Diameter	30	0 – 2,000	•	•	•	•	•	•	•	•	•	•
	CGS 6440	64 x 40	Removable Door	Solid 17.25" Diameter	75	0 – 3,300	•	•	•	•	•	•	•	•	•	•

Thermoform, Edge Trim, Roll Stock

18, 24, 36, 48 inch wide feed rolls available for use with appropriate size granulators for thermoform applications

12 inch wide feed rolls available for edge trim applications

Guillotine Cutters available for heavy gauge (0.250 inch and greater) edge trim applications

Accessories

Fines Separation, Rollfeeds, Conveyors, Metal Detectors, Blower Evacuation Systems (negative & positive pressure)

° = option

• = feature

Model NCM-2

SCREENLESS SLOW SPEED BESIDE-THE-PRESS RECYCLING

Compact NCM Series Granulators are ideally suited for metered robot or conveyor feed beside small injection molding machines.

This quiet, energy efficient granulator features a screenless cutter housing and ultra-low rotor speed to reduce sprues and runners to consistently sized granules, virtually free of fines and longs.

ULTRA-LOW RPM FOR CLEAN REGRIND

The NCM Series screenless granulators turn sprues and runners into extremely uniform granulate with low energy consumption and very little noise.

Available in three sizes for throughputs of up to 40 lb/hr, the NCM Series granulators are built around a single, low-speed rotor. As the rotor turns, large crusher blades slide through blind slots in the cutting chamber, breaking up scrap parts into smaller pieces that are further reduced by a series of teeth machined into the rotor. These teeth mesh with small open slots, through which properly sized regrind fall into a catch bin. No screen is needed.

The resulting regrind is uniform in size and contains very little dust or fines, so it can be metered evenly back into the process providing consistent melt homogeneity for higher-quality molding.

Multi-tooth rotor

Multi-tooth rotor cleanly reduces sprues and runners to consistent sized particles. Rotors with D2 teeth and cutting wheels can be re-sharpened. The automatic reversing option helps to clear obstructed material.

Easy portability

Lightweight and caster mounted; the NCM conveniently services multiple presses. The small footprint accommodates tight spaces and the wide-mouth, flared in-feed hopper easily handles a range of robot or conveyor drops and sprue/runner sizes.

Quiet operation

The NCM low-speed rotor decreases noise levels with some materials to as low as 70 dbA and in most cases as low as 80 dbA, eliminating the need for sound enclosures.

No tools access

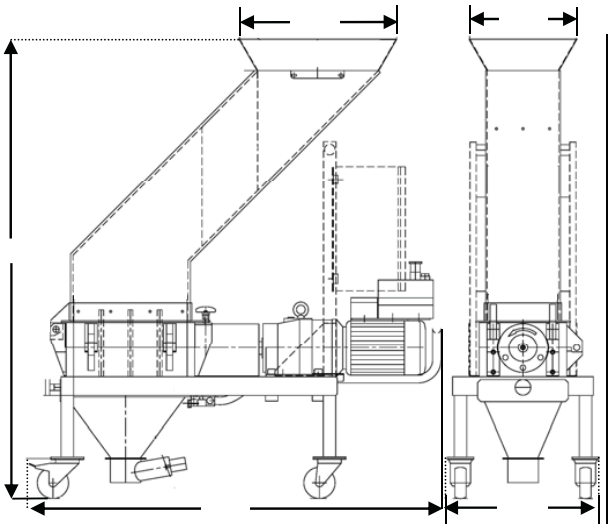
Hand knobs for the hopper and bin provide fast convenient access to the rotor and swing-open cutter housing cover. Thorough clean out and material changeover is easily accomplished in minutes.

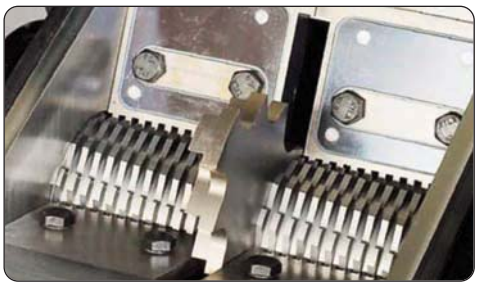
Reduce machine wear; preserve material

When the automatic reversing option is included, the granulator will reverse rotor rotation up to three times to clear any thick material from the cutting circle before automatically shutting down. This option eliminates potential damage to your granulator and cutting blades.

CONAIR

SPECIFICATIONS





Cutter wheel (multi-toothed) and large crusher blades

MODELS	NCM-2	NCM-3	NCM-4
Performance characteristics			
Maximum throughput* lb/hr {kg/hr}	up to 20 {9}	up to 30 {14}	up to 40 {18}
Cutting chamber opening in. {mm}	9 x 10.4 {228 x 265}	9 x 14.1 {228 x 359}	9 x 17.8 {228 x 453}
Motor power Hp {kW}	3 {2.2}	3 {2.2}	3 {2.2}
Crusher blades	2	3	4
Cutter wheel segments	3	4	5
Dimensions in. {mm}			
A - Hopper opening width	13.5 {342}	13.5 {342}	13.5 {342}
B - Hopper opening depth	17.6 {448}	19.8 {502}	27.0 {691}
C - Height	52.1 {1,325}	58.0 {1,473}	57.7 {1,466}
D - Overall depth	50.2 {1,276}	54.0 {1,370}	57.6 {1,466}
E - Width	19.0 {485}	19.0 {485}	19.0 {485}

SPECIFICATION NOTES:

* Throughputs are provided as a capacity guideline only. Throughput will be greater or lesser than the values shown according to the shape, size, thickness and properties of the material to be cut.

Consult Conair for a material test or help determining the correct granulator model for your application.

Specifications may change without notice. Check with a Conair representative for the most current information.

OPTIONS

- Integrated metal detection - protects machine from damage or metal contamination
- Automatic reversing system is available for reversing the rotation of the rotor to easily clear any material obstruction

FEATURES

- Infeed hopper specifically designed for beside-the-press manual or robot-fed loading
- No sizing screen (screenless)
- Clear-view hopper design allows the operator to see the material being processed
- Emergency stop button
- Quiet operation (70 to 80 dB)
- Energy saving low horsepower
- Uniform granule size
- Heavy-duty construction
- No special tools are required to open the granulator
- D2 crusher blades and cutting wheels
- Re-sharpenable blades and cutting wheels
- Multiple safety interlocks prevent injury by restricting access to the granulator while operating
- Compact and mobile, caster mounted base saves valuable floor space and provides greater versatility

Model NC614S

LOW-COST FAST DELIVERY, COMPACT DESIGN

The NC model granulators are ideal for the processor who has small injection molding machines and wants a lot of value without spending a lot of money.

These quiet, energy efficient granulators conserve valuable floor space while producing quality regrind from robot-fed sprues, runners and small parts. These models feature tangential feed cutting chambers; low-speed motors; and staggered rotors with replaceable cassette knives.

OFF-THE-SHELF, QUICK-SHIP GRANULATORS

Designed for fast delivery and loaded with standard features; the NC models offer extraordinary value at rock bottom prices. Stock configuration includes our highly efficient staggered rotor that provides powerful cutting force by concentrating total granulation energy in one short knife at a time. Also included are gap-free throwaway knives, tangential cutting chamber, rotating end discs, and low-speed motor.

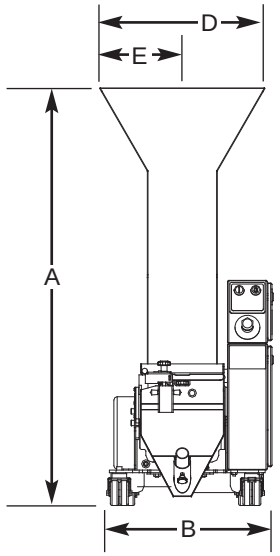
NC models feature throughput rates from 80 to 140 lbs/hr {36 to 64 kg/hr} in a compact package designed to accommodate tight spaces and conveyor or robot drops. The NC granulators are painted soft white only.

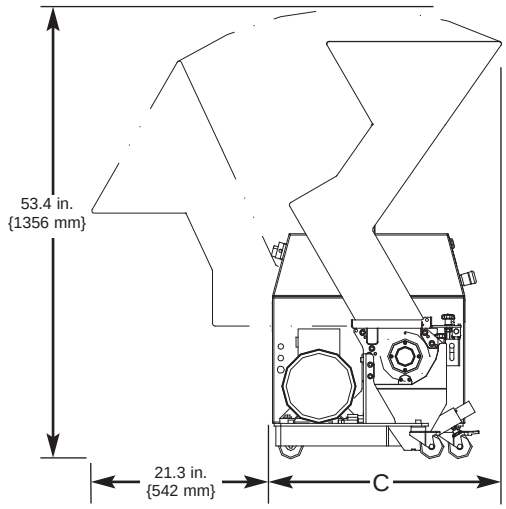
Standard options are limited to a choice of screen size, vacuum tube size and motor voltage.

- **Low-speed rotor**
  The low-speed rotor decreases noise and flyback during operation and provides a better quality, consistent regrind.
- **Higher throughput, less dust**
  The tangential feed chamber, combined with scissor-cutting, slant-knife technology, and staggered rotor results in faster processing, high-quality regrind and less dust.
- **No knife resharpening needed**
  Eliminate the costly and time-consuming task of resharpening and resetting knives. These granulators use cassette knives that are so economical they can be replaced when worn.
- **Safe, tool-less, full-front access**
  Hinged components and a drop-down screen cradle provide easy access to the cutting chamber and screen area for adjustment and quick cleaning. A single integral limit switch prevents accidental operation during servicing or clean-out.
- **Reversible screen**
  Convenient lift-out screens are reversible for extended life.
- **Sealed hopper and vacuum bin design**
  The sealed design of the hopper chamber and bin prevents material leakage.

NC69S, NC614S, NC617S MODELS

SPECIFICATIONS





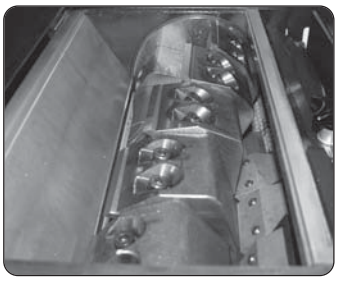
MODELS	NC69S	NC614S	NC617S
Performance characteristics			
Maximum throughput* lb {kg}	up to 80 {36}	up to 120 {54}	up to 140 {64}
Cutting chamber in. {mm}	6 x 9 {150 x 230}	6 x 14 {150 x 335}	6 x 17 {150 x 432}
Rotor speed rpm	190	190	190
Motor power Hp {kW}	3 {2.2}	3 {2.2}	3 {2.2}
Screen hole sizes in. {mm}	5/32 - 3/16 - 1/4 - 5/16 {4 - 5 - 6 - 8 mm}	5/32 - 3/16 - 1/4 - 5/16 {4 - 5 - 6 - 8 mm}	5/32 - 3/16 - 1/4 - 5/16 {4 - 5 - 6 - 8 mm}
Drive type	Belt	Belt	Belt
Hopper type	Robot/ hand feed	Robot/ hand feed	Robot/ hand feed
Vacuum discharge side	Front	Front	Front
Rotor			
Rotor type	Staggered rotor	Staggered rotor	Staggered rotor
Cutting circle in. {mm}	5.9 {150}	5.9 {150}	5.9 {150}
Knives			
Number of rotating knives	9 (3 x 3)	15 (3 x 5)	18 (3 x 6)
Dimensions in. {mm}			
A - Height	49.5 {1260}	49.5 {1260}	49.5 {1260}
B - Width	20.0 {508}	25.0 {635}	28.0 {712}
C - Depth	24.5 {623}	24.5 {623}	24.5 {623}
D x E - Hopper opening	19.5 x 20 {580 x 495}	19.5 x 25 {580 x 635}	19.5 x 28 {580 x 712}
Approximate weight lb {kg}			
Installed	353 {160}	441 {200}	485 {220}
Shipping	428 {194}	516 {234}	560 {254}
Voltages Approx. full load amps (refer to motor nameplate)			
208/3 phase/60 Hz	5	5	5
230/3 phase/60 Hz	4.4	4.4	4.4
400/3 phase/50 Hz	5.2	5.2	5.2
460/3 phase/60 Hz	2.2	2.2	2.2
575/3 phase/60 Hz	1.8	1.8	1.8

SPECIFICATION NOTES:

* Throughputs are provided as a capacity guideline only. Throughput will be greater or lesser than the values shown according to the selected screen size and the shape, size, thickness and properties of the material to be cut.

Consult Conair for a material test or help determining the correct granulator model for your application.

Specifications may change without notice. Check with a Conair representative for the most current information.



Staggered rotor with cassette knives

FEATURES

- No-tools access
- D2 tool steel knives
- No knife adjustment
- Safety interlock and emergency stop
- Low infeed height
- Scissor-cut action knives
- Caster mounted
- Low RPM motor
- Removable flaps
- Tilt-back hopper
- Drop-down screen cradle

Model NCR69

EXCEPTIONAL VALUE IN A COMPACT, QUIET DESIGN

NCR Series granulators are ideal for the processor who has small injection molding machines and wants a lot of value in a small package.

This quiet, energy efficient granulator conserves valuable floor space while producing quality regrind from robot-fed sprues, runners and small parts. All models feature tangential feed, case-hardened cutting chambers; low-speed motors; and staggered rotors with replaceable cassette knives.

STAGGERED ROTOR FOR EFFICIENT CUTTING ACTION

The staggered rotor, combined with a low-speed motor, offers cleaner, quieter cutting and uses less energy.

A staggered rotor design produces more cuts per revolution, resulting in higher throughput. Smaller bites reduce the chance of jamming or shearing. The scissor-cutting action of slanted cassette rotor knives produces superior quality regrind.

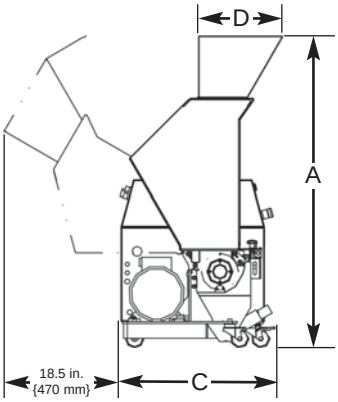
NCR models feature rotor speeds of 190 to 225 rpm and throughput rates up to 140 lb/hr {64 kg/hr} in a compact package.

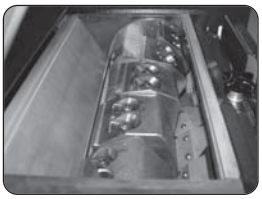
The NCR models standard features include: a constant cutting circle, staggered rotor, a case-hardened cutting chamber, cassette knives, rotating end disc, dust tight construction, neoprene casters and a soundproof hopper.

- **Low-speed rotor**
  The low-speed rotor decreases noise and flyback produced during operation and provides a better quality, consistent regrind.
- **Soundproofed hopper**
  The sound-proof hopper greatly reduces noise levels of the machine.
- **No knife resharpening needed**
  Eliminate the costly and time-consuming task of resharpening and resetting knives. NCR granulators use cassette knives that are so economical they can be replaced when worn.
- **Safe, tool-less, full-front access**
  Hinged components and a drop-down screen cradle provide easy access to the cutting chamber and screen area for adjustment and quick cleaning. A single integral limit switch prevents accidental operation during service or clean out.
- **Hardened cutting chamber**
  The hardened cutting chamber provides greater resistance to wear.
- **Reversible screen**
  Get extended life with reversible screens.
- **Sealed hopper and vacuum bin design**
  The sealed design of the hopper chamber and bin prevents material leakage.

SPECIFICATIONS

NCR BESIDE-THE-PRESS MODELS





Standard staggered rotor with cassette knives and case-hardened chamber.

FEATURES

- Soundproofed hopper
- Hardened cutting chamber
- Solid rotor pulley
- No-tools access
- D2 tool steel knives
- No knife adjustment
- Safety interlock and emergency stop
- Low infeed height
- Scissor-cut action knives
- Caster mounted
- Low RPM motor
- Removable flaps
- Tilt-back hopper
- Drop-down screen cradle

MODEL	NCR69		NCR614		NCR617	
Performance characteristics						
Maximum throughput* lb {kg}	up to 80 {36}		up to 120 {54}		up to 140 {64}	
Cutting chamber in. {mm}	6 x 9 {150 x 230}		6 x 14 {150 x 335}		6 x 17 {150 x 432}	
Rotor speed rpm	190		190		190	
Motor power† Hp {kW}	3 {2.2}		3 {2.2}		3 {2.2}	
Screen hole sizes in. {mm}	5/32 - 3/16 - 1/4 - 5/16 {4 - 5 - 6 - 8 mm}		5/32 - 3/16 - 1/4 - 5/16 {4 - 5 - 6 - 8 mm}		5/32 - 3/16 - 1/4 - 5/16 {4 - 5 - 6 - 8 mm}	
Drive type	Belt		Belt		Belt	
Hopper type	Robot/ hand feed		Robot/ hand feed		Robot/ hand feed	
Vacuum discharge side	Front		Front		Front	
Rotor and knives						
Rotor type	staggered		staggered		staggered	
Number of rotating knives	9 (3 x 3)		15 (3 x 5)		18 (3 x 6)	
Number of fixed knives	2		2		2	
Dimensions in. {mm}						
A - Height	49.5 {1257}		49.5 {1257}		49.5 {1257}	
B - Width	20.0 {508}		25.0 {635}		28.0 {711}	
C - Depth	24.5 {622}		24.5 {622}		24.5 {622}	
D x E - Hopper opening	13 x 19.5 {330 x 495}		13 x 25 {330 x 635}		13 x 28 {330 x 711}	
Weight lb {kg}						
Installed	350 {131}		440 {164}		485 {181}	
Shipping	425 {193}		515 {234}		560 {254}	
Voltages Total amps based on motor size†						
	3 Hp	5 Hp	3 Hp	5 Hp	3 Hp	5 Hp
208V/3 phase/60 Hz	5	7.3	5	7.3	5	7.3
230V/3 phase/60 Hz	4.4	6.6	4.4	6.6	4.4	6.6
400V/3 phase/50 Hz	5.2	8.2	5.2	8.2	5.2	8.2
460V/3 phase/60 Hz	2.2	3.3	2.2	3.3	2.2	3.3
575V/3 phase/60 Hz	1.8	2.6	1.8	2.6	1.8	2.6

SPECIFICATION NOTES:

* Throughput rates are provided as a capacity guideline only. Throughput will vary according to size, shape, thickness and properties of the material to be cut, as well as the desired size of the granulate. Consult Conair for a material test or help determining the correct granulator model for your application.

† The 3 Hp motor is standard on all three models, an optional 5 Hp motor is available.

Specifications may change without notice. Check with a Conair representative for the most current information.

OPTIONS

- High-level visual alarm
- Evacuation systems
- 208/575V controls
- High base for larger capacity bin
- "Z" hopper for lower feed height
- Manual bin

200 West Kensinger Drive • Cranberry Township, PA 16066 • 724-584-5500 • fax 724-584-5299 • www.conairgroup.com

Model CF814S

LOW-COST, FAST DELIVERY, COMPACT DESIGN

The CF814S granulator is ideal for the processor who has small injection molding machines and wants a lot of value without spending a lot of money.

This quiet, energy efficient granulator conserves valuable floor space while producing quality regrind from robot-fed sprues, runners and small parts. This model features a tangential feed cutting chamber; a low-speed motor; and a staggered rotor with replaceable cassette knives.

OFF-THE-SHELF, QUICK-SHIP GRANULATOR

Designed for fast delivery and loaded with standard features; the CF814S model offers extraordinary value at a rock bottom price. Stock configuration includes our highly efficient staggered rotor that provides powerful cutting force by concentrating total granulation energy in one short knife at a time. Also included are cassette knives, tangential cutting chamber, rotating end discs, and low-speed motor.

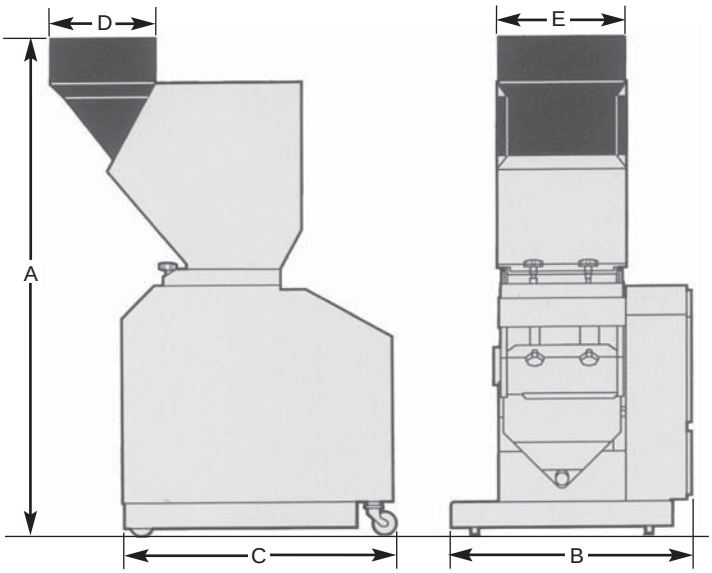
The CF814S model features throughput rates up to 200 lbs/hr {90 kg/hr} in a compact package designed to accommodate tight spaces and conveyor or robot drops. The CF814S granulator is painted Conair beige only.

Standard options are limited to a choice of screen size, vacuum tube size and motor voltage.

- **Low-speed rotor**
  The low-speed rotor decreases noise and flyback produced during operation and provides a better quality, consistent regrind.
- **Higher throughput, less dust**
  The tangential feed chamber, combined with scissor-cutting, slant-knife technology, and staggered rotor results in faster processing, high-quality regrind and less dust.
- **No knife resharpening needed**
  Eliminate the costly and time-consuming task of resharpening and resetting knives. This granulator uses cassette knives that are so economical they can be replaced when worn.
- **Safe, full-front access**
  Hinged components and a drop-down screen cradle provide easy access to the cutting chamber and screen area for adjustment and quick cleaning. Integral limit switches prevent accidental operation during service or clean out.
- **Reversible screen**
  Convenient lift-out screens are reversible for extended life.

CF814S MODEL

SPECIFICATIONS



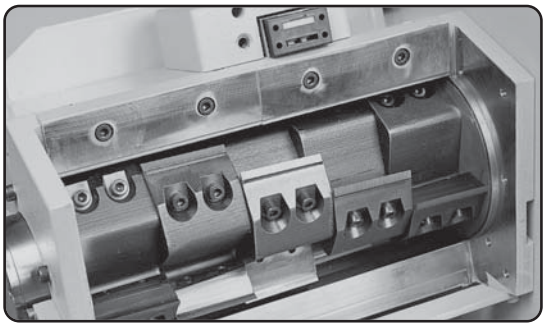
MODELS	CF814S
Performance characteristics	
Maximum throughput* lb {kg}	up to 200 {90}
Cutting chamber in. {mm}	8 x 14 {200 x 355}
Rotor speed rpm	356
Motor power Hp {kW}	7.5 {5.6}
Screen hole sizes in. {mm}	5/32 - 3/16 - 1/4 - 5/16 {4 - 5 - 6 -8 mm}
Drive type	Belt
Hopper type	Robot feed
Vacuum discharge side	Front
Rotor	
Rotor type	Staggered rotor
Cutting circle in. {mm}	7.88 {200}
Knives	
Number of rotating knives	9 (3 x 3)
Dimensions in. {mm}	
A - Height	64.5 {1640}
B - Width	31.75 {800}
C - Depth	44.5 {1130}
D x E - Hopper opening	14.25 x 13.5 {360 x 340}
Approximate weight lb {kg}	
Installed (approximate)	917 {416}
Shipping (approximate)	960 {435}
Voltages Approx. full load amps (Refer to motor nameplate)	
208/3 phase/60 Hz	24
230/3 phase/60 Hz	22
460/3 phase/60 Hz	11
575/3 phase/60 Hz	9

SPECIFICATION NOTES:

* Throughputs are provided as a capacity guideline only. Throughput will be greater or lesser than the values shown according to the selected screen size and the shape, size, thickness and properties of the material to be cut.

Consult Conair for a material test or help determining the correct granulator model for your application.

Specifications may change without notice. Check with a Conair representative for the most current information.



Staggered rotor with cassette knives

FEATURES

- No-tools access
- D2 tool steel knives
- No knife adjustment
- Multiple safety interlocks
- Low infeed height
- Scissor-cut action knives
- Solid rotor pulley
- Caster mounted
- Low RPM motor
- Removable flaps
- Tilt-back hopper
- Drop-down screen cradle

Model NCF 819

LESS FLOOR-SPACE; GREATER VERSATILITY

Conair's NCF Series super-tangential granulators have footprint dimensions at least 30% smaller than many other granulators with similar capabilities. The cutting chamber configuration is ideal for handling lightweight bulky parts such as bottles, but also produces clean uniform granulate from runners and small parts. Different hopper designs and rotor/knife choices are available to maximize performance with a wide variety of scrap types.

A tilt-back hopper and drop down screen cradle provide easy access to the cutting chamber for maintenance and cleaning. These features contribute to increased productivity and reduced downtime. An optional sound attenuation package also makes the NCF Series quieter than other small granulators.

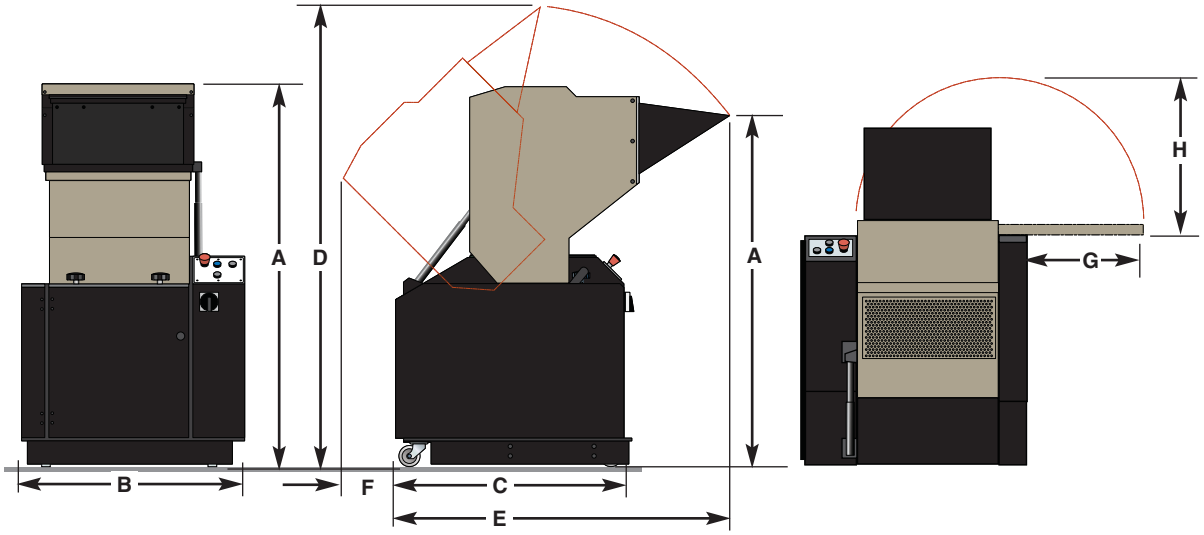
EASY MAINTENANCE; EXCELLENT PRODUCTIVITY

The super-tangential chamber design ensures that the rotor grips bulky scrap on the downward stroke, drawing it into the knives and preventing it from bouncing on the rotor. Standard tangential and straight-drop infeed configurations are also available. The rotor itself can be open with three rows of double-angled knives for a clean scissor cut with minimum heat generation.

For tougher materials, a solid rotor can be equipped with three rows of up to five cassette knives in a staggered array. Cassette knives allow for quick and easy knife changes and minimize downtime for service and maintenance. The knives require no adjusting to maintain a consistent knife gap for improved cutting quality.

- **Reduced energy costs**
  The rotor blade configuration and low speed rotation significantly minimize energy consumption.
- **Quality regrind**
  The unique cutting action produces consistent quality regrind.
- **Constant cutting circle**
  The unique, integrated rotating shaft end-plates of the cutter assembly eliminate frictional heat and minimize dust and fines. Rotor knives adjust outward to the stationary bed knives and screen, eliminating screen clogging, even with the toughest applications.
- **Simplified clean out and maintenance**
  Conair's innovative NCF cutting chamber features a drop-down cradle. Rotor access is straight-in versus from underneath, greatly simplifying clean out and blade maintenance, saving you time and money.
- **Highly-effective gripping and cutting of bulky parts**
  An improved super-tangential cutter housing design is ideal for lightweight bulky items such as bottles, and containers.
- **Extended screen life**
  The convenient lift-out screens are reversible for extended life.

SPECIFICATIONS



Front view | Side view | Top view

MODELS	NCF-810	NCF-814	NCF-819	NCF-824
Performance characteristics				
Rotor diameter inches {cm}	8.0 {20.3}			
Cutterhouse configuration	super-tangential/ tangential 3-blade with 3rd bed knife/ tangential 3-blade			
Rotor type	staggered (standard), open (optional)			
Rotor speed rpm	260 (optional 400, 840)			
Rotating knives				
Staggered configuration	3 x 2	3 x 3	3 x 4	3 x 5
Open configuration	3 x 2	3 x 2	3 x 2	3 x 2
Hopper inlet inches {cm}	9.5 x 8.0 {24.1 x 20.3}	14.0 x 8.0 {35.6 x 20.3}	19.0 x 8.0 {48.3 x 20.3}	24.0 x 8.0 {61.0 x 20.3}
Motor standard Hp {kW}*	5 {3.7}	7.5 {5.6}	7.5 {5.6}	7.5 {5.6}
Maximum throughput capacity† lbs {kg}	165 {75}	220 {100}	325 {147}	450 {204}
Dimensions inches {cm}				
A - Height	58.00 {147.32}	58.00 {147.32}	58.00 {147.32}	58.00 {147.32}
B - Width	26.00 {66.04}	30.00 {76.20}	35.00 {88.90}	43.00 {109.22}
C - Depth	35.50 {90.17}	35.50 {90.17}	35.50 {90.17}	35.50 {90.17}
D - Clearance height	68.50 {173.99}	68.50 {173.99}	68.50 {173.99}	68.50 {173.99}
E - Overall depth	53.50 {135.89}	53.50 {135.89}	53.50 {135.89}	53.50 {135.89}
F - Rear clearance	10.00 {25.40}	10.00 {25.40}	10.00 {25.40}	10.00 {25.40}
G - Side clearance (door swing)	8.25 {20.96}	13.00 {33.02}	17.75 {45.09}	22.50 {57.15}
H - Front clearance (door swing)	13.00 {33.02}	17.75 {45.09}	22.50 {57.15}	27.00 {68.58}
Weight‡ lb {kg}				
Installed	1100 {499}	1200 {544}	1400 {635}	1650 {748}
Shipping	1300 {590}	1400 {635}	1650 {748}	1900 {862}

SPECIFICATION NOTES:

* Optional available motors are 5 Hp {3.7 kW}, 7.5 Hp {5.6 kW}, 10 Hp {7.5 kW}, and 15 Hp {11.2 kW}.

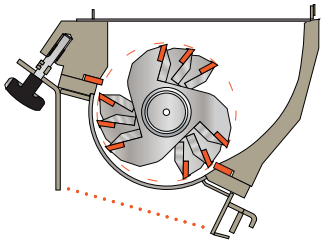
† Throughputs are provided as a capacity guideline only. Throughput will be greater or lesser than the values shown according to the selected screen size and the shape, size, thickness and properties of the material to be cut.

‡ Weight is estimated and will vary based on configuration.

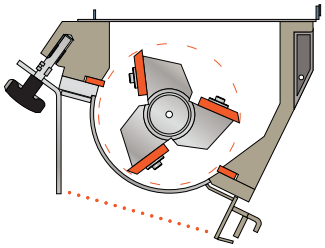
Consult Conair for a material test to help in determining the correct granulator model for your application.

Specifications may change without notice, consult with a Conair representative for the most current information.

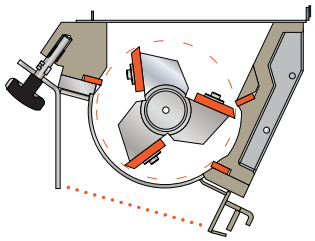
CUTTER HOUSING CONFIGURATIONS



Super-tangential with staggered rotor



Tangential with open 3-blade rotor



Tangential with open 3-blade rotor/ 3rd bed knife

Model CHS-814
Shown with optional base sound enclosure

COMPACT-SIZED FOR TOUGH BATCH FED JOBS

CHS Series of beside-the-machine granulators combine rugged, dependable performance with consistent, high-quality regrind.

The CHS is designed for batch fed parts and runners, and tough applications such as engineered materials and bulky or heavier cross section parts. These units are great for blow molded parts, sheet and film, small pipe, tubing and profile, as well as sprues and runners.

A high-inertia flywheel coupled with the staggered, cassette knife rotor provides higher throughput per hour at lower horsepower.

QUIET, EFFICIENT PERFORMANCE

The CHS Series granulators are designed for custom molders who don't always know part shape or material. The CHS comes standard with a tangential cutter housing that allows the staggered rotor knives to engage the part on the down stroke, assuring fast, clean and effective size reduction. For applications that require less aggressive feeding, the CHS can be fitted with an optional third bed knife.

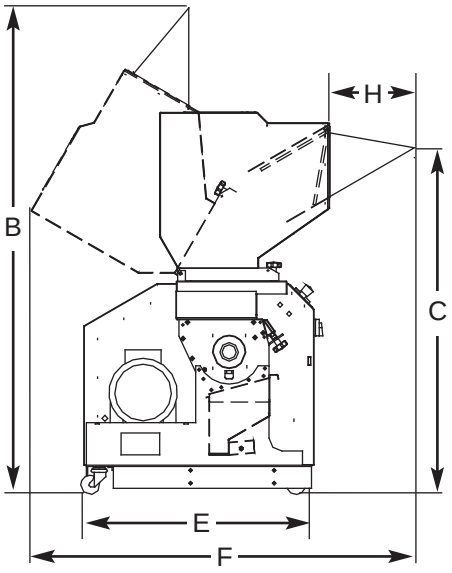
To further enhance versatility, the CHS comes with a front feed that accepts hand, robot or conveyor feeds and is available with an optional three-blade open rotor for lighter applications such as film, corrugated sheet and lightweight bottles.

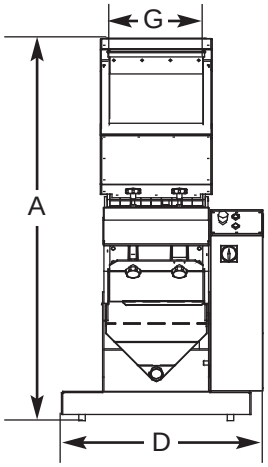
CHS Series options also include: custom hoppers to handle a wide range of batch fed parts, soundproofing, wear resistance packages, blower systems, high level sensors and larger horsepower motors.

- **Clean, uniform granules**
  Adjustment-free constant cutting circle produces clean, consistent sized granulate with virtually no oversize and minimal fines. Bulk densities can be maintained close to virgin resin allowing for trouble-free blending and feeding.
- **Economical, cassette knives**
  Staggered rotor provides more cuts per revolution and a better 'bite' as compared to a single slant-knife, which makes it ideal for hard-to-cut parts. This rotor is also less prone to stall since only a 4.5 inch {11.4 mm} cutting surface is applied to the part at any time. Replacement blades are far more economical than resharpening, and drop-in without any adjustment.
- **Easy, no-tools access**
  No-tools access to the cutting chamber and a drop down screen cradle means you can perform a material/color changeover in five minutes or less.
- **Extended screen life**
  Standard screen is reversible to extend to life of your screen.

CHS-810, CHS-814, CHS-819 AND CHS-824

SPECIFICATIONS





MODELS	CHS-810	CHS-814	CHS-819	CHS-824
Performance characteristics				
Throughput* lb/hr {kg/hr}	200 {90}	250 {115}	330 {150}	400 {180}
Cutter chamber opening in. {mm}	8.7 x 9.5 {220 x 240}	8.7 x 14.2 {220 x 360}	8.7 x 18.9 {220 x 480}	8.7 x 23.6 {220 x 600}
Standard motor rotor speed rpm	350	350	350	350
Cutting circle in. {mm}	7.88 {200}	7.88 {200}	7.88 {200}	7.88 {200}
Standard motor power Hp {kW}	5.0 {3.7}	7.5 {5.5 }	7.5 {5.5 }	7.5 {5.5 }
Drive type	belt drive			
Hopper type	hand, robot, conveyor - standard (sheet, roll, profile, side feed - optional)			
Vacuum discharge side	front †			
Screen mesh sizes	5/32, 3/16, 1/4, 5/16, 3/8 in. {4, 5, 6, 8, 10 mm}			
Rotor type	staggered rotor - open rotor optional			
Knives				
Number of rotating knives (knives x segments)	3 X 2	3 X 3	3 X 4	3 X 5
Number of bed knives	2 (optional 3rd)	2 (optional 3rd)	2 (optional 3rd)	2 (optional 3rd)
Dimensions inches {mm}				
A - Height - hopper closed	58 {1480}	58 {1480}	58 {1480}	58 {1480}
B - Height - hopper open	73 {1856}	73 {1856}	73 {1856}	73 {1856}
C - Infeed height - floor to feed tray	53 {1346}	53 {1346}	53 {1346}	53 {1346}
D - Width	26 {670}	31 {790}	36 {910}	41 {1030}
E - Base depth	35 {890}	35 {890}	35 {890}	35 {890}
F - Overall depth	58 {1482}	58 {1482}	58 {1482}	58 {1482}
G - Feed hopper opening - width	9.5 {240}	14.0 {360}	19.0 {480}	24.0 {600}
H - Feed hopper opening - depth	8.6 {218}	8.6 {218}	8.6 {218}	8.6 {218}
Weight lb {kg}				
Installed	926 {420}	1014 {460}	1157 {525}	1257 {570}
Shipping	983 {446}	1058 {480}	1202 {545}	1301 {590}
Voltages Total amps based on standard motor				
208V/3 phase/60 Hz	17.5	27.5	27.5	27.5
230V/3 phase/60 Hz	15.2	25	25	25
460V/3 phase/60 Hz	7.6	12.5	12.5	12.5
575V/3 phase/60 Hz	6.1	10	10	10
Noise level‡				
Standard with hopper soundproofing	85-90 dbA			
Optional with hopper and base soundproofing	80-85 dbA			
Optional with no soundproofing	90-95 dbA			

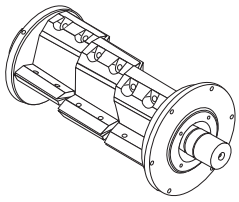
SPECIFICATION NOTES:

* Throughput is based on a 5/16 inch {8 mm} screen. Throughput rates are provided as a capacity guideline only. Throughput will vary according to size, shape, thickness and properties of the material to be cut, as well as the desired size of the granulate. Consult Conair sales for a material test or help determining the correct granulator model for your application.

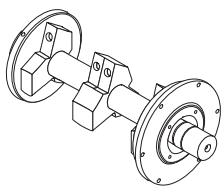
† CHS granulators ordered with the optional base sound enclosure will have a rear discharge.

‡ Noise level will vary according to material type being processed and the granulator configuration. These ranges are based on tests using SPI standards.

Specifications may change without notice. Check with a Conair representative for the most current information.



STANDARD STAGGERED ROTOR
with disposable, cassette knives



OPTIONAL OPEN ROTOR
with scissor-cutting, slant knives

OPTIONS

- Discharge: manual, vacuum (standard), blower
- Base sound enclosure
- Hardened cutter housing
- Third bed knife
- 3-blade open rotor
- Nitro-carburized screen

MOTOR OPTIONS ●=standard o=optional

	CHS-810	CHS-814	CHS-819	CHS-824
5 Hp {4 kW}	●	N/A	N/A	N/A
7.5 Hp {5.5 kW}	o	●	●	●
10 Hp {7.5 kW}	o	o	o	o
15 Hp {11 kW}	o	o	o	o

Model CBW-1018
Shown with optional base sound enclosure

ADAPTABLE 2-WAY CHAMBER FOR MULTIPLE APPLICATIONS

The innovative and adaptable cutting chamber on the CBW Series allows these granulators to provide exceptional regrind for a wider variety of blow molded, injection and extrusion parts than ever before.

These quiet, heavy-duty granulators feature exchangeable back plates that modify the feed opening from super tangential to tangential, accommodating virtually everything from large bulky parts to heavy-wall profiles to sprues and runners. The result is increased throughput and a more consistent and uniform regrind.

WIDE ACCESS FOR EASY CLEANING AND BLADE MAINTENANCE

The robust CBW Series offers a swing-open screen cradle for the industry's fastest rotor access and lowest in-feed height in its class. A three-blade, slant-knife open rotor provides scissor-cutting action for fast, efficient processing.

CBW Series also offer custom hoppers for front, side, rear and roll feed to accommodate most every type of feed system and a gas-assist hopper opening.

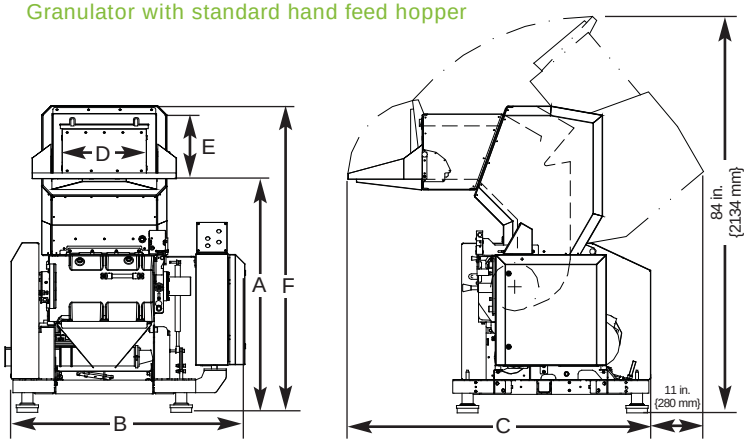
CBW options include: wear resistance packages, second flywheel for added inertia, blower systems, high level/high amp alarms, larger horsepower motors, base sound enclosure and incline conveyors with and without a metal detector, electric ball screw hopper lift, roll feeds and pre-adjustable knife fixtures.

- **Direct and easy access to machine core**
  Conair's innovative CBW cutting chamber features a swing-open removable screen, cradle and granule discharge bin for wide open access. Rotor access is straight-in versus from underneath, greatly simplifying clean out and blade maintenance saving you time and money.
- **High-quality regrind**
  Standard two and an optional third bed knife tailor the number and position of cuts to the type of part, optimizing the process and assuring the highest quality and level of production.
- **Constant cutting circle**
  Rotor knives adjust outward to the stationary bed knives to maintain an unchanging gap between the knives and screen, eliminating screen clogging, minimizing heat buildup and reducing dust and fines even with the toughest applications.
- **Quiet operation**
  CBW granulators have hinged feed trays; double-wall, sound-proofed hoppers; and optional integral base sound enclosures to reduce noise during granulation.

CBW-1012, CBW-1018 AND CBW-1024 MODELS

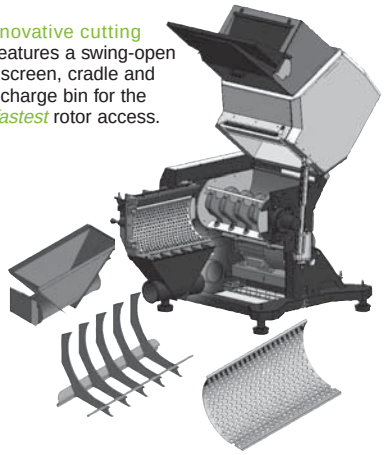
SPECIFICATIONS

Granulator with standard hand feed hopper



Wide open access

Conair s innovative cutting chamber features a swing-open removable screen, cradle and granule discharge bin for the industry s *fastest* rotor access.

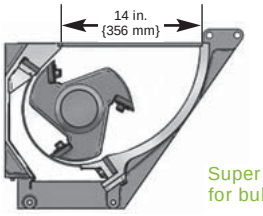


MODELS	CBW-1012	CBW-1018	CBW-1024
Performance characteristics			
Maximum throughput* lb/hr {kg/hr}	up to 200 {90}	up to 300 {135}	up to 500 {225}
Super tangential	14 x 12	14 x 18	14 x 24
cutter chamber opening in. {mm}	{356 x 305}	{356 x 457}	{356 x 610}
Tangential	10 x 12	10 x 18	10 x 24
cutter chamber opening in. {mm}	{254 x 305}	{254 x 457}	{254 x 610}
Rotor speed rpm	750	750	750
Cutting circle in. {mm}	10 {254}	10 {254}	10 {254}
Motor power Hp {kW}	7.5, 10, 15 {5.6, 7.5, 11.2}	7.5, 10, 15 {5.6, 7.5, 11.2}	7.5, 10, 15 {5.6, 7.5, 11.2}
Rotor type	3-blade rotor		
Screen hole sizes in. {mm}	1/8, 1/4, 5/16, 3/8, 1/2, 5/8, 1 {4, 6, 8, 10, 12, 17, 25}		
Knives			
Number of rotating knives	3		
Number of fixed knives	Super tangential 2 standard {3 optional}; Tangential 3 standard		
Dimensions inches {mm}			
A - Height to hopper infeed	50 {1270}	50 {1270}	50 {1270}
B - Width	45 {1143}	51 {1295}	57 {1448}
C - Depth	64 {1626}	64 {1626}	64 {1626}
D - Feed hopper opening - width	12 {305}	18 {457}	24 {610}
E - Feed hopper opening - height	10 {260}	10 {260}	10 {260}
F - Overall height	65 {1651}	65 {1651}	65 {1651}
Weight lb {kg}			
Installed	1764 {800}	1984 {900}	2205 {1000}
Shipping	2315 {1050}	2590 {1175}	2866 {1300}

Voltages Total amps based on motor size									
Motor power Hp	7.5	10	15	7.5	10	15	7.5	10	15
208V/3 phase/60 Hz	25	32	48	25	32	48	25	32	28
230V/3 phase/60 Hz	22	28	42	22	28	42	22	28	42
460V/3 phase/60 Hz	11	14	21	11	14	21	11	14	21
575V/3 phase/60 Hz	9	11	17	9	11	17	9	11	17

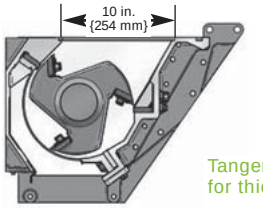
Noise level†	
With standard hopper soundproofing	90 to 95 dbA
With optional base soundproofing	80 to 85 dbA

Cutting chamber configurations



Super tangential for bulk waste

Standard configuration includes two fixed knives. Typical applications are bulky parts and scrap.



Tangential for thicker-walled parts

Three fixed knives are standard on tangential chambers for increased throughputs. Typical applications are thick-walled, heavy-cross section parts and scrap.

Motor options			
●=standard o=optional	CBW-1012	CBW-1018	CBW-1024
7.5 Hp {5.6 kW}	●	●	●
10.0 Hp {7.5 kW}	o	o	o
15.0 Hp {11.0 kW}	o	o	o

Evacuation blower options			
o=optional	CBW-1012	CBW-1018	CBW-1024
1.5 Hp {1.1 kW}	o	o	N/A
3.0 Hp {2.2 kW}	o	o	o
5.0 Hp {3.7 kW}	o	o	o

SPECIFICATION NOTES:

* Throughputs are provided as a capacity guideline only. Throughput will vary according to the size, shape, thickness and properties of the material to be cut, as well as the desired size of the granulate. Consult Conair for a material test or help determining the correct granulator model for your application.

† Noise level will vary according to material type being processed and the granulator configuration. These ranges are based on tests using SPI standards.

Specifications may change without notice. Check with a Conair representative for the most current information.

CGW-1418, CGW-1424 AND CGW-1436 MODELS

Model CGW-1424

ADAPTABLE 2-WAY CHAMBER FOR MULTIPLE APPLICATIONS

Versatile, rugged CGW Series Granulators are designed for central or machine-side recycling of tough, injection molded parts; bulky blow-molded containers; film; sheet; and extruded parts and scrap.

These heavy-duty granulators feature exchangeable back plates that modify the cutting chamber from super tangential feed to tangential feed, allowing you to process virtually any kind of scrap.

Easy adjustment of the gap between rotor and fixed bed knives ensures a constant cutting circle, resulting in increased throughputs and high-quality, uniform regrind.

OPEN ACCESS FOR EASY CLEANING AND MAINTENANCE

The robust CGW Series offers a swing-open screen cradle for the industry's fastest rotor access.

At throughputs ranging from 450 to 1,000 pounds per hour {204 to 454 kg/hr}, you can process batch-fed sprues and runners; bulky, thin-walled parts; sheet and film; profiles; smaller pipes; and hard-to-grab molded parts, such as pails, housings, drums and automotive moldings.

Hopper styles include hand feed, hand/sheet feed, sheet/profile feed and conveyor feed.

CGW options include: wear resistance packages, second flywheel for added inertia, blower systems for evacuation from the granulate bin, high level/high amp alarms, larger horsepower motors, base sound enclosure and incline conveyors with and without a metal detector, electric ball screw hopper lift, roll feeds and pre-adjustable knife fixtures.

Direct and easy access to machine core

Conair's innovative CGW cutting chamber features a swing-open removable screen, cradle and granule discharge bin for wide open access. Rotor access is straight-in versus from underneath, greatly simplifying clean out and blade maintenance saving you time and money.

High-quality regrind

The standard two or optional three bed knives tailor the number and position of cuts to the type of part, optimizing the process and assuring the highest quality and level of production.

Constant cutting circle

Rotor knives adjust outward to the stationary bed knives to maintain an unchanging gap between the knives and screen, eliminating screen clogging, minimizing heat buildup and reducing dust and fines even with the toughest applications.

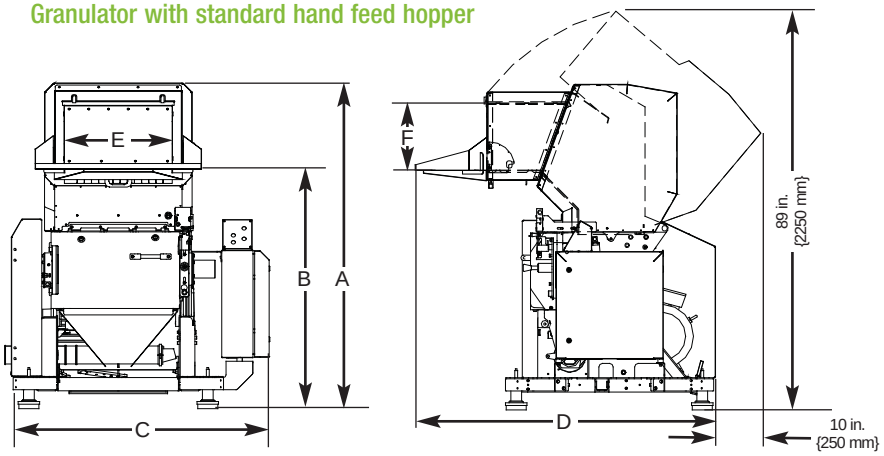
Quiet operation

CGW granulators have hinged feed trays; double-wall, sound-proofed hoppers; and optional integral sound enclosures to reduce noise during granulation.

SPECIFICATIONS

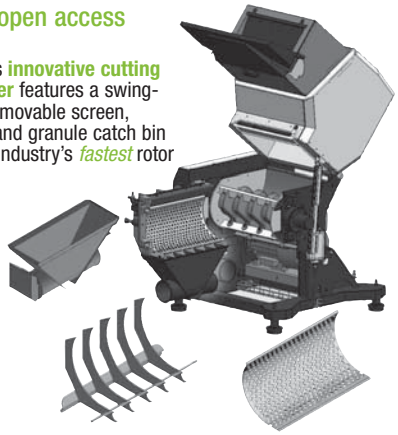
CGW-1418, CGW-1424 AND CGW-1436 MODELS

Granulator with standard hand feed hopper



Wide open access

Conair's **innovative cutting chamber** features a swing-open removable screen, cradle and granule catch bin for the industry's *fastest* rotor access.

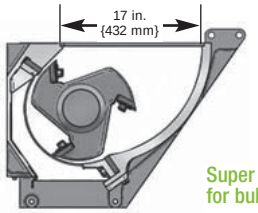


MODELS	CGW-1418	CGW-1424	CGW-1436
Performance characteristics			
Maximum throughput* lb/hr {kg/hr}	450 {204}	600 {272}	1000 {454}
Super tangential cutter chamber opening in. {mm}	17 x 18 {432 x 457}	17 x 24 {432 x 610}	17 X 36 {432 X 914}
Tangential cutter chamber opening in. {mm}	14 x 18 {356 x 457}	14 x 24 {356 x 610}	14 X 36 {356 X 914}
Rotor speed rpm	540	540	540
Cutting circle in. {mm}	14 {356}	14 {356}	14 {356}
Motor power† Hp {kW}	10 {7.5}	15 {11.0}	15 {11.0}
Rotor type	3-blade open rotor (5-blade open rotor, optional)		
Screen hole sizes	1/8, 1/4, 5/16, 3/8, 1/2, 5/8 and 1 in. {4, 6, 8, 10, 12, 17 and 25 mm}		
Knives			
Number of rotating knives	3		
Number of fixed knives	Super tangential 2 standard; Tangential 3 standard		
Dimensions inches {mm}			
A - Overall height	72 {1829}	72 {1829}	72 {1829}
B - Height to hopper infeed	53 {1346}	53 {1346}	53 {1346}
C - Width	51 {1295}	57 {1448}	69 {1753}
D - Depth	66 {1677}	66 {1677}	66 {1677}
E - Feed hopper opening - width	18 {457}	24 {610}	35 {889}
F - Feed hopper opening - height	14 {356}	14 {356}	14 {356}
Weight lb {kg}			
Installed	2094 {950}	2425 {1100}	3600 {1633}
Shipping	2315 {1050}	2646 {1200}	3850 {1746}

Voltages Total amps based on motor size	10 Hp	15 Hp	25 Hp	40 Hp	50 Hp
208V/3 phase/60 Hz	30.8	46.2	74.8	120.0	150.0‡
230V/3 phase/60 Hz	27.9	41.8	53.7	104.0	130.0
400V/3 phase/50 Hz	16.0	24.0	39.1	62.7	78.2
460V/3 phase/60 Hz	13.9	21.0	34.0	52.0	65.0
575V/3 phase/60 Hz	11.1	16.7	27.1	41.0	52.0

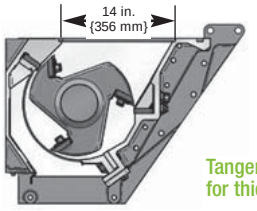
Noise level	
With no soundproofing	90 to 95 dbA
With optional soundproofing	80 to 85 dbA

Cutting chamber configurations



Super tangential for bulk waste

Standard configuration includes two fixed knives. Typical applications are bulky parts and scrap.



Tangential for thicker-walled parts

Three fixed knives are standard on tangential chambers for increased throughputs. Typical applications are thick-walled, heavy-cross section parts and scrap.

Motor options ●=standard o=optional	CGW-1418	CGW-1424	CGW-1436
10.0 Hp {7.5 kW}	●	N/A	N/A
15.0 Hp {11.0 kW}	o	●	●
25.0 Hp {18.7 kW}	o	o	o
40.0 Hp {29.8 kW}	N/A	o	o
50.0 Hp {37.3 kW}	N/A	o	o

Evacuation blower options o=optional	CGW-1418	CGW-1424	CGW-1436
1.5 Hp {1.1 kW}	o	N/A	N/A
3.0 Hp {2.2 kW}	o	o	o
5.0 Hp {3.7 kW}	o	o	o

SPECIFICATION NOTES:

* Throughputs are provided as a capacity guideline only. Throughput will vary according to the size, shape, thickness and properties of the material to be cut, as well as the desired size of the granulate. Consult Conair for a material test or help determining the correct granulator model for your application.

† The chart lists standard motor selections. Additional motor sizes are listed under Motor Options.

‡ Consult factory on availability.

Noise level will vary according to material type being processed and the granulator configuration. These ranges are based on tests using SPI standards.

Specifications may change without notice. Check with a Conair representative for the most current information.

Model CW-1836

ADAPTABLE 3-WAY CHAMBER FOR MULTIPLE APPLICATIONS

CW Series Granulators utilize an innovative, adaptable cutting chamber to provide exceptional and dedicated size reduction on blow molding, injection and extrusion parts.

These quiet, heavy-duty granulators feature exchangeable back plates that modify the feed from open tangential to conventional straight-drop, accommodating virtually everything from large bulky parts to heavy-wall profiles to sprues and runners. The result is increased throughput and a more consistent and uniform regrind.

DESIGN FLEXIBILITY OPTIMIZES REGRIND

Conair's CW Series is a robust, heavy-duty central granulator for reclaim of all types of plastic parts.

In addition to the uniquely adaptable cutter housing, the CW Series offers a swing-open screen cradle for the industry's fastest rotor access and lowest in-feed height in its class. A three-blade slant-knife open rotor provides scissor-cutting action for fast, efficient processing. An optional five-blade open rotor is available for more demanding applications.

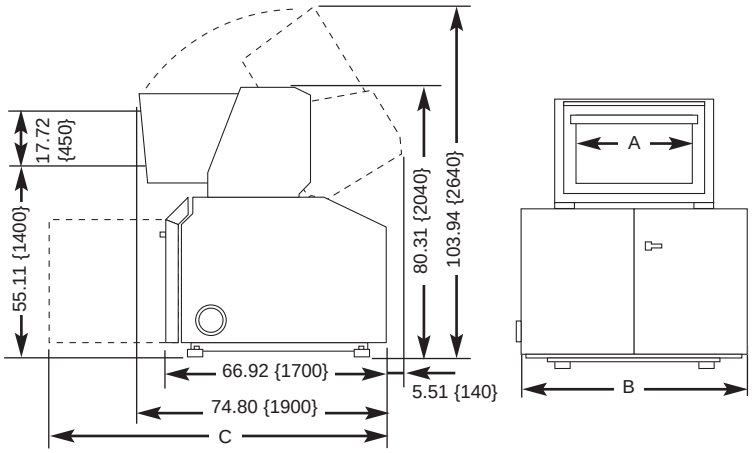
CW Series also offer custom hoppers for front, side, rear and roll feed to accommodate most every type of feed system and an electric ball screw hopper lift. CW options include: wear resistance packages, second flywheel for added inertia, blower systems, high level/high amp alarms, larger horse-power motors, base sound enclosure and incline conveyors.

- **Swing-open screen and bin**
  Conair's innovative CW cutting chamber features a swing-open removable screen, cradle and granule catch bin. Rotor access is straight-in versus from underneath, greatly simplifying clean out and blade maintenance.
- **Optional bed knife positions**
  Two, three or four bed knives tailor the number and position of cuts to the type of part, optimizing the process and assuring the highest quality and level of production.
- **Automatic rotary safety lock**
  The CW rotor automatically locks in place when the hopper is raised. This safety feature, which also has a manual release, protects the operator during blade maintenance by holding the rotor firmly in place.
- **Constant cutting circle**
  Rotor knives adjust outward to the stationary bed knives to maintain an unchanging gap between the knives and screen, eliminating screen clogging, minimizing heat buildup and reducing fines.
- **Extended screen life**
  Convenient lift-out screens are reversible for extended life.

CW-1824, CW-1836 AND CW-1848

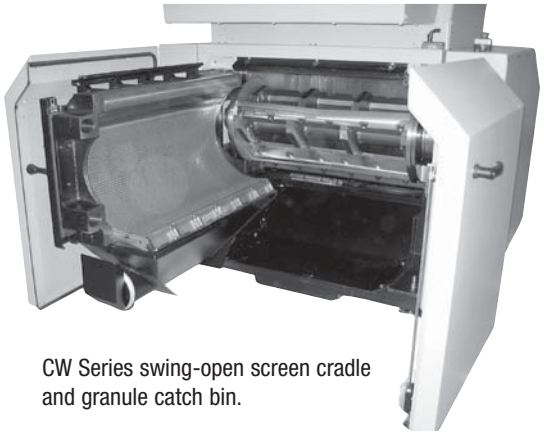
SPECIFICATIONS

Note: Dimensions shown in inches and {mm}



MODELS	CW-1824	CW-1836	CW-1848
Performance characteristics			
Throughput* lb/hr {kg/hr}	1350 {612}	2000 {907}	2800 {1270}
Cutter chamber opening in. {mm}	18 x 24 {450 x 600}	18 x 36 {450 x 900}	18 x 48 {450 x 1200}
Cutting circle in. {mm}	17.7 {450}	17.7 {450}	17.7 {450}
Rotor speed rpm	513	513	513
Standard motor power Hp {kW}†	25 {19}	40 {30}	40 {30}
Drive type	Belt drive		
Hopper type	Front hand feed		
Evacuation discharge	Side		
Screen hole sizes	1/4, 5/16, 3/8, 1/2, 5/8, 1 in. {6, 8, 10, 12, 17, 25 mm}		
Rotor type	Herringbone 3-blade open (optional 5-blade open)		
Knives			
Number of rotating knives	6 (optional 10)	6 (optional 10)	6 (optional 10)
Number of bed knives	2 (optional 3-4)	2 (optional 3-4)	2 (optional 3-4)
Dimensions inches {mm}			
A - Feed hopper opening - width	23.62 {600}	35.43 {900}	47.24 {1200}
B - Width	56.69 {1440}	68.50 {1740}	80.31 {2040}
C - Overall depth with door open	98.42 {2500}	102.36 {2600}	114.17 {2900}
Weight lb {kg}			
Installed	5400 {2450}	6500 {2950}	8100 {3675}
Shipping	5900 {2675}	7000 {3175}	8750 {3970}
Voltages Total amps based on standard motor ‡			
208V/3 phase/60 Hz	69	118	118
230V/3 phase/60 Hz	62	106	106
460V/3 phase/60 Hz	31	53	53
575V/3 phase/60 Hz	25	43	43
Noise level			
With full sound enclosure	85 dbA		

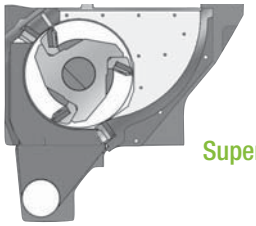
MOTOR OPTIONS ●=standard o=optional	CW-1824	CW-1836	CW-1848
25 Hp {19 kW}	●	n/a	n/a
40 Hp {30 kW}	o	●	●
50 Hp {37 kW}	o	o	o
75 Hp {56 kW}	n/a	o	o
100 Hp {75 kW}	n/a	o	o



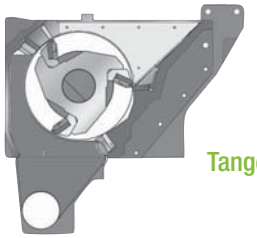
CW Series swing-open screen cradle and granule catch bin.

CW Cutter Housing Configurations

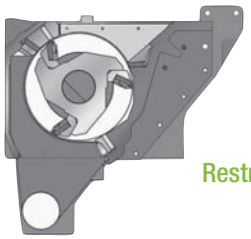
(shown with optional bed knife positions)



Super Tangential



Tangential



Restricted

SPECIFICATION NOTES:

* Throughput is based on a 1/2 inch {12.7 mm} screen. Throughput rates are provided as a capacity guideline only. Throughput will vary according to the selected screen size, the shape, thickness and properties of the material to be cut. Consult Conair for a material test or help determining the correct granulator model for your application.

† The chart lists standard motor selections. Additional motor sizes are listed under motor options.

‡ Refer to the motor nameplate for exact FLA and motor specifications.

Noise level will vary according to material type being processed and the granulator configuration. These ranges are based on tests using SPI standards.

Specifications may change without notice. Check with a Conair representative for the most current information.

Model CKW-2448

ADAPTABLE CHAMBER HEAVY-DUTY APPLICATIONS

An innovative and adaptable cutting chamber allows the CKW Series to accommodate a wider variety of blow molded, injection and extrusion parts than ever before.

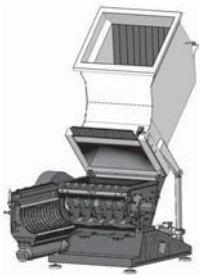
These heavy-duty granulators feature exchangeable back plates that modify the feed opening from super tangential to tangential or restricted, providing high-quality regrind from virtually everything including large bulky parts to heavy-wall profiles to sprues and runners. The result is increased throughput and a more consistent and uniform regrind.

HIGH THROUGHPUTS; WIDE-OPEN ROTOR ACCESS

The high-throughput CKW Series offers a swing-open screen cradle for the industry's fastest rotor access. A three-blade, slant-knife open rotor provides scissor-cutting action for fast, efficient processing of bulk materials.

Power-assisted opening and closing of the feeding hopper is standard on the CKW Series. An integrated safety switch prevents accidental powering of the granulator while the feed hopper is open.

CKW options include: wear resistance packages, second flywheel for added inertia, blower systems, high level/high amp alarms, larger horsepower motors, base sound enclosure and incline conveyors with and without a metal detector, roll feeds and adjustable knife fixtures.

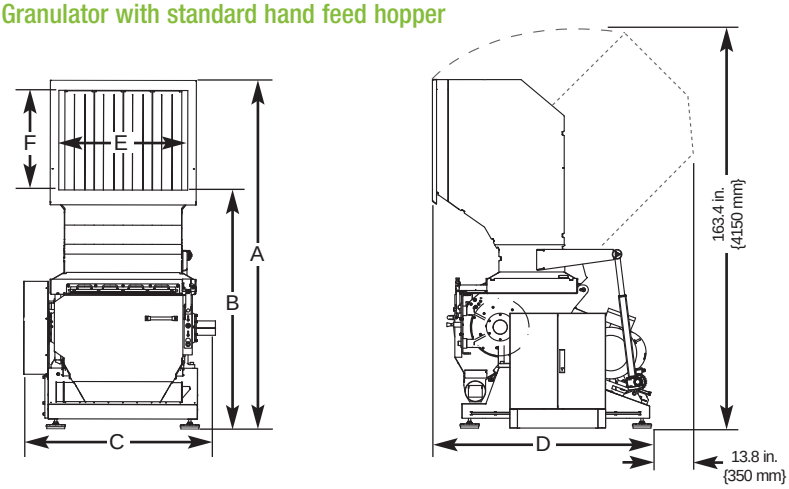


- **Direct and easy access to machine core**
  Conair's innovative CKW cutting chamber features a swing-open removable screen, cradle and granule discharge bin for wide-open access. Rotor access is straight-in versus from underneath, simplifying clean out and blade maintenance; saving you time and money.
- **Safe, easy access**
  Hinged components provide access to the cutting chamber and screen for knife adjustment and cleaning. An electrical lift opens the hopper while an integral limit switch ensures that the rotor is at rest and prevents the granulator from being switched on during maintenance.
- **High-quality regrind**
  Two (2) standard and up to an additional two (2) optional bed knifes are available, depending upon model. Adjust the number and position of cuts to your specific material, optimizing your process and assuring the highest quality and level of production.
- **Consistent cutting circle**
  Rotor knives adjust outward to the stationary bed knives to maintain an unchanging gap between the knives and screen, eliminating screen clogging, minimizing heat buildup and reducing dust and fines in the toughest applications.
- **Extended screen life**
  Convenient lift-out screens are reversible for extended life.

CKW-2436, CKW-2448 AND CKW-2460 MODELS

SPECIFICATIONS

Granulator with standard hand feed hopper



MODELS	CKW-2436	CKW-2448	CKW-2460
Performance characteristics			
Maximum throughput* lb/hr {kg/hr}	up to 5511 {2500}	up to 6614 {3000}	up to 8818 {4000}
Super tangential	35.4 x 31.5	47.2 x 31.5	59.0 x 31.5
cutter chamber opening in. {mm}	{900 x 800}	{1200 x 800}	{1500 x 800}
Tangential	35.4 x 24.8	47.2 x 24.8	59.0 x 24.8
cutter chamber opening in. {mm}	{900 x 630}	{1200 x 630}	{1500 x 630}
Pre-cut	35.4 x 23.6	47.2 x 23.6	59.0 x 23.6
cutter chamber opening in. {mm}	{900 x 600}	{1200 x 600}	{1500 x 600}
Rotor speed rpm	470	470	470
Cutting circle in. {mm}	23.6 {600}	23.6 {600}	23.6 {600}
Motor power Hp {kW}	100 {75}	100 {75}	100 {75}
Rotor type	3-blade standard		
Screen hole sizes in. {mm}	5/16 {8} (3/8, 1/2, 5/8, 1 {10,12,17, 25} - optional)		
Knives			
Number of rotating knives	3-blade open (3-blade beam, 5-, 7-blade optional)		
Number of fixed knives	Super tangential 2 standard {3 optional}; Tangential 3 standard {up to 4 optional} Restricted standard {up to 4 optional}		
Dimensions inches {mm}			
A - Overall height	143.3 {3640}	143.3 {3640}	143.3 {3640}
B - Height to hopper opening	98.4 {2500}	98.4 {2500}	98.4 {2500}
C - Width	77.2 {1960}	88.9 {2260}	100.8 {2560}
D - Depth	125.9 {3200}	137.8 {3500}	149.6 {3800}
E - Feed hopper opening - width	35.4 {900}	47.2 {1200}	59.0 {1500}
F - Feed hopper opening - height	35.4 {900}	35.4 {900}	35.4 {900}
Weight lb {kg}			
Installed	14330 {6500}	16534 {7500}	19841 {9000}
Shipping	14661 {6650}	16865 {7650}	20172 {9150}
Voltages Total amps based on motor size			
Motor power Hp {kW}	100 {75}	100 {75}	100 {75}
208V/3 phase/60 Hz	268	268	268
230V/3 phase/60 Hz	242	242	242
460V/3 phase/60 Hz	121	121	121
575V/3 phase/60 Hz	97	97	97
Noise level†			
With standard hopper	95 dbA		
With optional soundproofing	90 dbA		

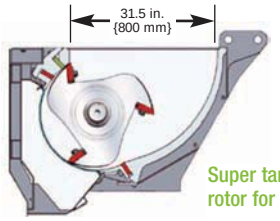
SPECIFICATION NOTES:

* Throughputs are provided as a capacity guideline only. Throughput will vary according to the size, shape, thickness and properties of the material to be cut, as well as the desired size of the granulate. Consult Conair for a material test or help determining the correct granulator model for your application.

† Noise level will vary according to material type being processed and the granulator configuration. These ranges are based on tests using SPI standards.

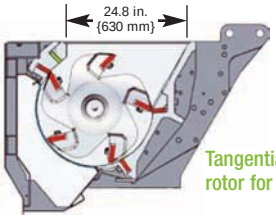
Specifications may change without notice. Check with a Conair representative for the most current information.

Cutting chamber configurations



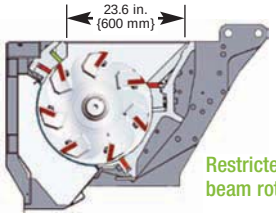
Super tangential with 3-blade open rotor for bulk waste

Standard configuration includes two (2) fixed knives. Typical applications are bulky parts and scrap.



Tangential with 5-blade beam rotor for thick bulk waste

Three (3) fixed knives are standard on tangential chambers for increased throughputs. Typical applications are thick-walled, heavy-cross section parts and scrap.



Restricted with 5- or 7-blade beam rotor for thick-walled waste

Three (3) fixed knives are standard on chambers for thorough material granulation. Typical applications are thick-walled, heavy-cross section parts and scrap.

Motor options ●=standard o=optional	CKW-2436	CKW-2448	CKW-2460
100 Hp {75 kW}	●	o	o
125 Hp {93 kW}	o	●	●
150 Hp {110 kW}	o	o	o
200 Hp {160 kW}	o	o	o

Evacuation blower options o=optional	CKW-2436	CKW-2448	CKW-2460
10 Hp {7.5 kW}	o	NA	NA
15 Hp {11.1 kW}	o	o	o
25 Hp {18.6 kW}	NA	o	o

CGS-2129, CGS-4229 AND CGS-6440 MODELS

Model CGS-4229

LOW RPM- LOW ENERGY HIGH OUTPUT SHREDDERS

Heavy-Duty CGS Series Shredders from Conair are designed to produce clean, quality shredded material by smoothly cutting even the hardest materials into uniform pieces.

All models feature low rotor rpm and specially designed cassette knives to consistently cut through thick material, making usable chips for further size reduction.

A staggered rotor design reduces bulky part "bounce" over conventional cutting chambers. The CGS-6440 model is available with an optional double-knife row rotor for even thicker material reclaim applications.

CHANGE PURGINGS AND LUMPS INTO UNIFORM CHIPS

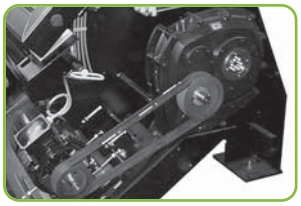
The CGS Series offers a removable front panel for quick rotor access and a staggered rotor with replaceable cassette knives. An optional second top material pusher is available as an option only with models CGS-4229 and CGS-6440.

Available in three sizes for throughputs of up to 3,300 lb/hr. The CGS Series uses low rotor speeds to allow the processing of large purgings, high-volume defects, sprues, bulky bottles or containers and extruded profiles and pipes.

A high-built stand is standard on all CGS Series models. This design simplifies the connection of band or auger conveyor material evacuation equipment.

On model CGS-6440, an optional double-knife row on the rotor is available for maximum cutting capacity.

Low rpm; less energy



Lower rotor speeds via a gear reducer on the CGS Series provide quality, consistently-sized chips, higher torque and less energy usage. Low rpms also reduces angel hair and dust generation for cleaner output.

No knife resharpening needed

Eliminate the costly and time-consuming task of resharpening and resetting knives. These shredders use cassette knives that are so economical they can be replaced when worn.

Quick rotor access

The CGS Series provides an easy access, removable panel for color changes, clean out and maintenance of both rotating and fixed knifes.

Screenless operation

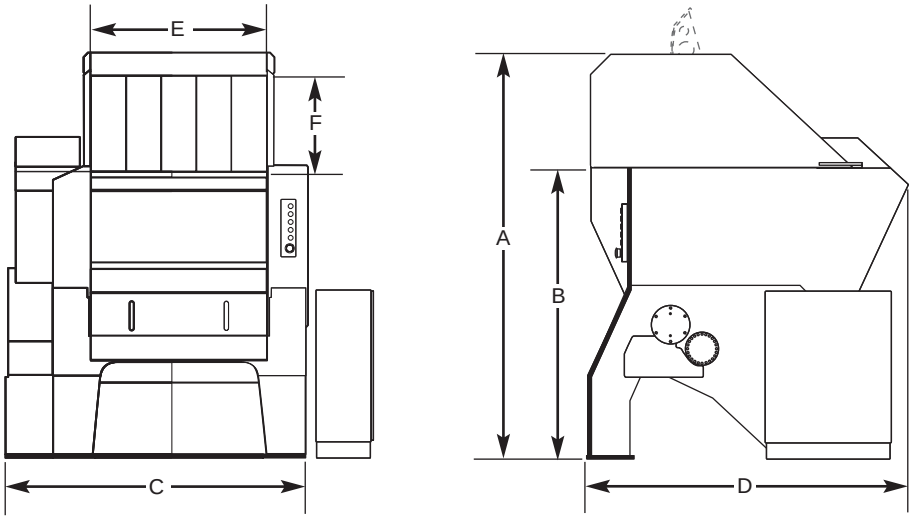
The CGS Series Shredder operates without a screen as standard. An optional screen is available when smaller particle sizes are required.

Flexible material feeding

Choose the material feeding method that works for you. The CGS Series can be configured to be hand- or conveyer-fed, depending on your application.

CGS-2129, CGS-4229 AND CGS-6440 MODELS

SPECIFICATIONS



MODELS	CGS-2129	CGS-4229	CGS-6440
Performance characteristics			
Maximum throughput* lb/hr {kg/hr}	1000 {450}	2000 {900}	3300 {1500}
Cutter chamber opening in. {mm}	21 x 29 {540 x 740}	42 x 29 {1080 x 740}	64 x 40 {1620 x 1020}
Rotor speed rpm	58	58	58
Cutting circle in. {mm}	11 {282}	11 {282}	17 {434}
Motor power Hp {kW}	15 {11}	30 {22}	75 {55}
Screen hole sizes †	13/16 and 2 in. {20 and 50 mm}		
Rotor			
Rotor type	drum-style closed rotor		
Number of rotating knives‡	14	28	42
Number of fixed knives	1	1	1
Dimensions inches {mm}			
A - Overall height	100.0 {2540}	105.0 {2667}	122.0 {3099}
B - Height to hopper infeed	71.0 {1803}	71.0 {1803}	71.0 {1803}
C - Width	52.0 {1321}	76.0 {1930}	115.0 {2921}
D - Depth	88.0 {2235}	88.0 {2235}	90.5 {2299}
E - Feed hopper opening - width	21.0 {533}	42.5 {1080}	64.0 {1626}
F - Feed hopper opening - height	20.5 {521}	24.5 {622}	39.5 {1003}
Weight lb {kg}			
Installed	6173 {2800}	10582 {4800}	14330 {6500}
Voltages Total amps			
230V/3 phase/60 Hz	42	80	192
400V/3 phase/50 Hz	21.5	41.5	99
460V/3 phase/60 Hz	21	40	96
575V/3 phase/60 Hz	17	32	77
Noise level**			
	85 dbA		

SPECIFICATION NOTES:

* Throughputs are provided as a capacity guideline only. Throughput will vary according to the size, shape, thickness and properties of the material to be cut, as well as the desired size of the granulate. Consult Conair for a material test or help determining the correct granulator model for your application.

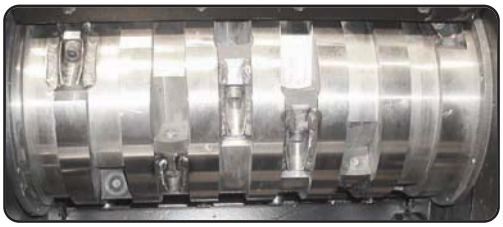
† Optional screens can be added for smaller particle sizes.

‡ CGS-6440 model shredder is available with an optional second row of rotating knives.

Overall height will increase to 142 inches {3600 mm} with the addition of the optional second material pusher (Models CGS-4229 and 6440 only).

** Noise level will vary according to material type being processed and the granulator configuration. These ranges are based on tests using SPI standards.

Specifications may change without notice. Check with a Conair representative for the most current information.



Staggered rotor design with cassette knifes

FEATURES

- Easy rotor access
- Hardened-steel cassette knives
- Screenless operation
- Low rpm motor
- Application specific configurations
- Self-cleaning pusher (ram)

OPTIONS

- Double knife rows (CGS-6440 only)
- Rotor cooling (CGS-6440 only)
- Screen operation
- Second material pusher (CGS-4229 and CGS-6440 only)

Model FSG-300
Shown with optional roll feed and relief head

SPECIALTY GRANULATOR FOR FILM EXTRUSION

FSG Series beside-the-line granulators provide efficient, uniform regrinding of thin guage film scrap.

The FSG granulators are designed to be used as part of a complete in-line automatic scrap recycling system for thin guage film extrusion processes. The three-way hopper design allows the granulator to accommodate edge and bleed trims, off-spec roll scrap and hand-fed scrap materials simultaneously.

UNIQUE CUTTING CHAMBER SIMPLIFIES CLEAN-OUT

Conair's FSG Series of film scrap granulators offer a slant-knife open rotor design, providing scissor cutting action for fast, efficient processing. This technique is used for maximum bulk density, higher throughputs and generates less noise and fines. The standard (2) fixed bed knife design along with either 3 or 5 rotating rotor knives assure a high quality of ground scrap consistency. The rotor knives are adjustable to maintain a fixed gap between the knives and the screen, eliminating screen clogging and minimizing heat build-up.

The innovative cutting chamber features a swing-open removable screen, cradle and scrap discharge bin. This design provides wide open access. Rotor access is straight-in versus accessing from underneath, greatly simplifying clean-out and blade maintenance. A design which saves both time and money.

Easy access for cleaning

FSG Series granulators offer a swing-open cradle screen for the industry's fastest rotor access and lowest in-feed height. A standard electric jack screw is included for ease of access for cleaning and maintenance of the cutting chamber.

Quiet operation

The FSG Series granulators come with standard double-wall sound proof hoppers. An optional integral sound enclosed base can be added to reduce noise as well.

Integral control panel

The control panel comes equipped with all starters and controls for the granulator, fluff outlet blower, electric jackscrew, optional roll feeder and trim inducer blower controls when purchased as part of a complete in-line scrap recycling system.

Optional roll feeder

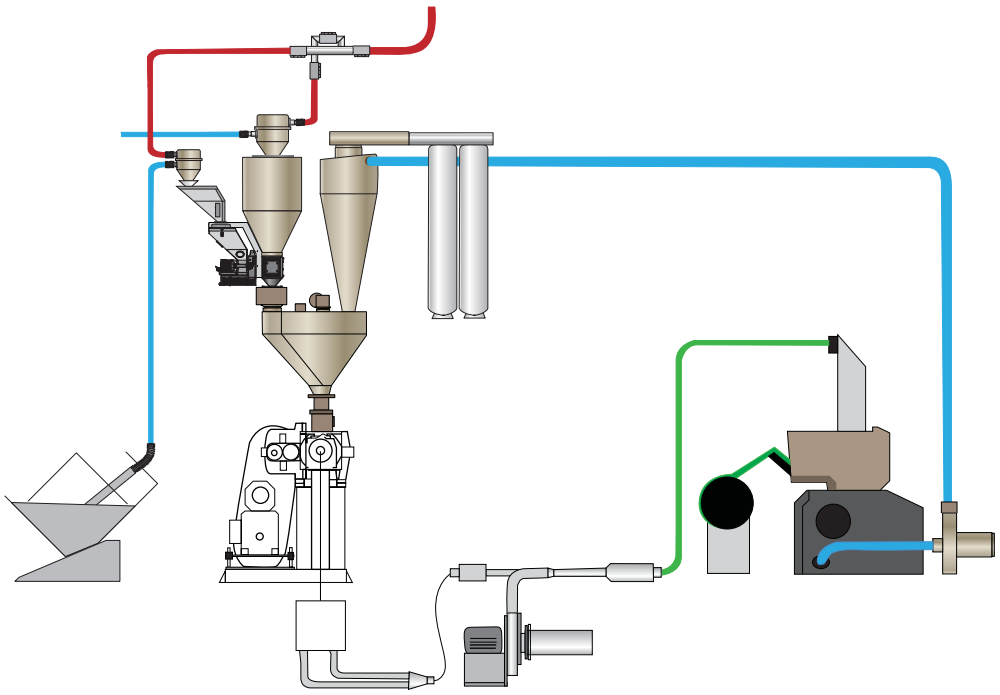
Reintroduction of roll scrap is achieved with the attachment of the optional RFL series roll feeders. The standard roll feeder is designed with application specific rolls that provide a strong pull on the film, without wrapping. They are available in several sizes with 1/2 Hp {0.37 kW} single drive variable speed motors that run 13-65 ft/min. {4-20 meters/min.}

Standard fluff conveying blowers

The ground scrap material is taken away from the granulator by the fluff conveying blower, available in four (4) different sizes to accommodate any rate and conveying distance required.

ACCESSORIES/OPTIONS

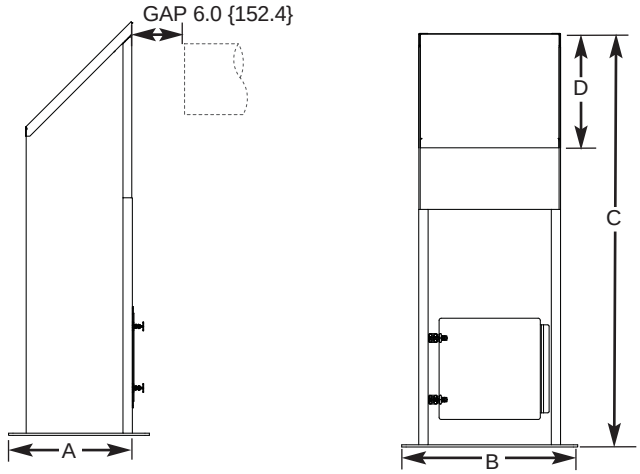
FSG SERIES MODELS



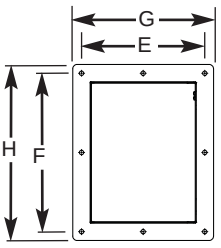
A new integrated film-scrap reclaim system, designed and built entirely by Conair, recovers edge trim and other scrap, grinds it, and then reintroduces it to the extruder without hang-ups, surging and clumping. It's an easy, efficient way to improve profitability. Conair trim systems handle all kinds of film and sheet waste and return it directly to the extruder at rates of 25% or more. System costs are lower than re-pelletizing or scrap densification, and the material is not subject to an additional heat history.

Relief Head

FSG MODELS	FSG-100	FSG-150	FSG-300	FSG-400	FSG-500	FSG-750	FSG-1000	FSG-1250	FSG-1600
Relief head selection									
RH-1	Standard	Standard	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RH-2	N/A	N/A	Standard	Standard	Standard	Standard	N/A	N/A	N/A
RH-3	N/A	N/A	N/A	N/A	N/A	N/A	Standard	Standard	Standard



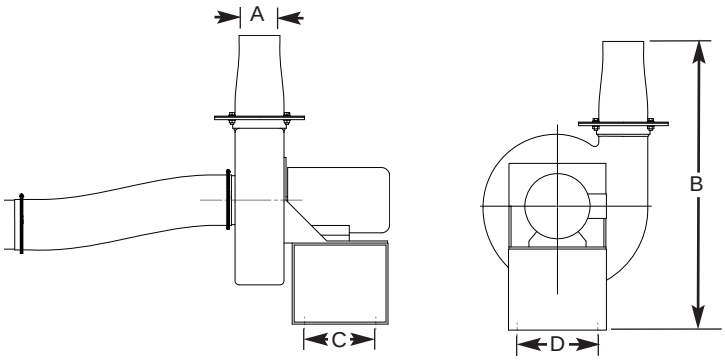
The relief head is designed to separate the trim scrap from the conveying air stream. This allows the trims to drop into the granulator feed hopper while the conveying air is dispersed.



RELIEF HEAD MODEL	RH-1	RH-2	RH-3
Dimensions inches {mm}			
A - Overall depth	10.0 {254}	12.0 {304.8}	18.0 {457.2}
B - Overall width	12.0 {304.8}	16.0 {406.4}	20.0 {508}
C - Overall height	45.0 {1143}	47.0 {1193.8}	47.0 {1193.8}
D - Opening height	20.0 {508}	20.0 {508}	20.0 {508}
E - Flange depth of mounting holes	12.0 {304.8}	14.0 {355.6}	20.0 {508}
F - Flange width of mounting holes	14.0 {355.6}	18.0 {457.2}	22.0 {558.8}
G - Flange plate depth	14.0 {355.6}	16.0 {406.9}	22.0 {558.8}
H - Flange plate width	16.0 {406.4}	20.0 {508}	24.0 {609.6}
Weight lbs {kg}			
Shipping	50 {22.7}	60 {27.2}	75 {34}

ACCESSORIES/OPTIONS

Fluff Blower



After the cutting chamber, material passes through a screen designed to provide maximum throughput and bulk density for the specific application and material. The ground scrap material is then taken away by the fluff conveying blower. Standard fluff conveying blowers on the outlet are available in four (4) different sizes to accommodate any rate and conveying distance required.

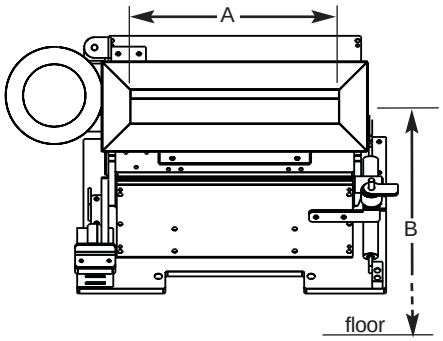
Fluff blower model	FB-1	FB-1.5	FB-3	FB-7.5
Performance characteristics				
Motor hp {kW}	1 {0.75}	1.5 {1.12}	3 {2.24}	7.5 {5.60}
Throughput lbs/hr {kg/hr}	200 {90.7}	325 {147.4}	500 {226.8}	1000 {453.6}
Dimensions inches {mm}				
A - Outlet diameter	4.0 {101.6}	5.0 {127}	6.0 {152.4}	8.0 {203.2}
B - Overall height	27.75 {704.85}	34.38 {873.1}	30.38 {771.5}	31.38 {796.9}
C - Mounting pattern width	5.0 {127}	8.75 {222.3}	8.75 {222.3}	8.75 {222.3}
D - Mounting pattern depth	7.5 {190.5}	9.875 {250.8}	9.875 {250.8}	9.875 {250.8}
Mounting hole diameter	(4) 0.438 {11.11}	(4) 0.438 {11.11}	(4) 0.438 {11.11}	(4) 0.438 {11.11}
Voltage				
460V/3ph/60Hz	Standard	Standard	Standard	Standard
575V/3ph/60Hz	Option	Option	Option	Option
400V/3ph/50Hz	Option	Option	Option	Option

MODELS	FSG-100	FSG-150	FSG-300	FSG-400	FSG-500	FSG-750	FSG-1000	FSG-1250	FSG-1600
Fluff blower selection									
FB-1	Standard	Standard	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FB-1.5	Option	Option	Standard	Standard	N/A	N/A	N/A	N/A	N/A
FB-3	N/A	N/A	Option	Option	Standard	N/A	N/A	N/A	N/A
FB-7.5	N/A	N/A	N/A	N/A	Option	Standard	Standard	Option	Option

Roll Feed

Conair roll feeds direct extruded plastic film into the cutter housing of a granulator. The roll feed is ideally suited for roll scrap 10 mil to 150 mil thick and for edge trims from 1 to 23 inches {25 to 584 mm} wide, fed at speeds from 15 to 300 FPM {4.5 to 91 meters/min.}. The roll feed features automatic take-up using friction slip to eliminate the dancer, frequency controlled motor, easy trim insertion, simple trim tensioning and pivoting, no-tools access.

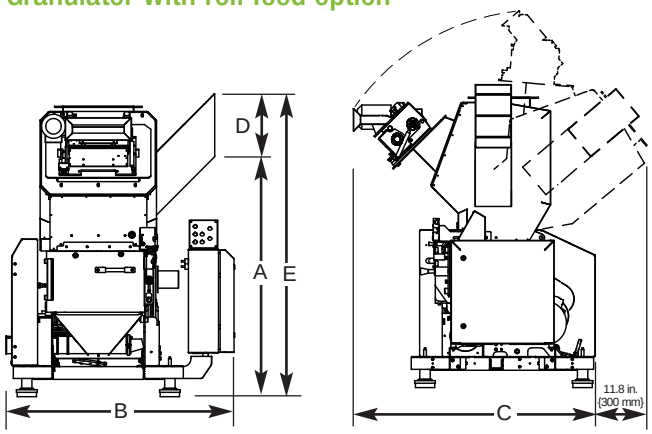
MODELS	FSG-100	FSG-150	FSG-300	FSG-400	FSG-500	FSG-750	FSG-1000	FSG-1250	FSG-1600
Roll feeder selection									
RFL-30	Option	Option	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFL-45	N/A	N/A	Option	Option	Option	N/A	N/A	N/A	N/A
RFL-60	N/A	N/A	N/A	N/A	N/A	Option	Option	Option	Option



MODEL	RFL - 30	RFL - 45	RFL - 60
Dimensions inches {mm}			
A - Inlet width	11.8 {300}	17.7 {450}	23.6 {600}
B - Inlet height (from floor)	61 {1549}	61 {1549} (FSG300,400) 67 {1702} (FSG500)	67 {1702} (FSG750-1000) 70 {1778} (FSG1250-1600)

SPECIFICATIONS

Granulator with roll feed option



STANDARD FEATURES

- Open rotor with scissor cutting slant knives
- TEFC motor
- Hopper soundproofing
- Two bed knives
- Hopper jackscrew device for opening cutting chamber
- Hand-feed port
- Mild steel construction
- Regrind conveying fan
- Electrical control panel

MODELS	FSG-100	FSG-150	FSG-300	FSG-400	FSG-500	FSG-750	FSG-1000	FSG-1250	FSG-1600
Performance characteristics									
Maximum throughput* lb/hr {kg/hr}	100 {45}	150 {68}	300 {136}	400 {181}	500 {227}	750 {340}	1000 {454}	1250 {567}	1600 {726}
Super tangential	10 x 12	10 x 12	10 x 18	10 x 24	14 x 18	14 x 24	14 x 36	18 x 36	18 x 48
cutter chamber opening in. {mm}	{254 x 305}	{254 x 305}	{254 x 457}	{254 x 610}	{356 x 457}	{356 x 610}	{254 x 914}	{457 x 914}	{457 x 1219}
Motor power† Hp {kW}	7.5 {5.6}	10 {7.5}	15 {11.2}	15 {11.2}	25 {18.6}	40 {29.8}	48 {35.8}	50 {37.3}	75 {55.9}
Screen hole sizes in. {mm}	3/16 {5}	3/16 {5}	3/16 {5}	3/16 {5}	3/16 {5}	3/16 {5}	3/16 {5}	3/16 {5}	3/16 {5}
Optional screen hole sizes in. {mm}	1/8 {4}	1/8 {4}	1/8 {4}	1/8 {4}	1/8 {4}	1/8 {4}	1/8 {4}	1/8 {4}	1/8 {4}
	1/4 {6}	1/4 {6}	1/4 {6}	1/4 {6}	1/4 {6}	1/4 {6}	1/4 {6}	1/4 {6}	1/4 {6}
Knives									
Standard number of bed knives	2	2	2	2	2	2	2	2	2
Standard number of rotor knives	3	3	3	3	5	5	5	5	5
Dimensions inches {mm}									
A - Height to hopper infeed	54.8 {1392}	54.8 {1392}	54.8 {1392}	54.8 {1392}	57.8 {1470}	57.8 {1470}	57.8 {1470}	58.7 {1490}	58.7 {1490}
B - Width	44.9 {1141}	44.9 {1141}	50.8 {1291}	56.7 {1441}	52.8 {1340}	58.7 {1490}	70.5 {1790}	64.6 {1640}	76.4 {1940}
C - Depth	67.1 {1704}	67.1 {1704}	67.1 {1704}	67.1 {1704}	76.0 {1930}	76.0 {1930}	76.0 {1930}	80.3 {2040}	80.3 {2040}
Feed hopper opening - width	10 {254}	10 {254}	10 {254}	10 {254}	10 {254}	10 {254}	10 {254}	10 {254}	10 {254}
D - Feed hopper opening - height	8 {203}	8 {203}	8 {203}	8 {203}	8 {203}	8 {203}	8 {203}	8 {203}	8 {203}
E - Overall height	66.3 {1685}	66.3 {1685}	66.3 {1685}	66.3 {1685}	73.6 {1870}	73.6 {1870}	73.6 {1870}	88.2 {2240}	88.2 {2240}
Weight lb {kg}									
Shipping	4167 {1890}	4167 {1890}	4398 {1995}	4839 {2195}	5556 {2520}	6327 {2870}	6878 {3120}	13889 {6300}	17130{7770}
Noise level†									
With standard hopper soundproofing	90 to 95 dbA								
With optional base soundproofing	80 to 85 dbA								

OPTIONS

- Special paint
- Special voltages
- Base soundproofing
- Inducer blower controls
- Air relief head
- RFL Series roll feeder
- Carbide coated knives
- Third bed knife

SPECIFICATION NOTES:

* Throughputs are provided as a capacity guideline only. Throughput will vary according to the size, shape, thickness and properties of the material to be cut, as well as the desired size of the granulate. Consult Conair for a material test or help determining the correct granulator model for your application.

† Noise level will vary according to material type being processed and the granulator configuration. These ranges are based on tests using SPI standards.

Specifications may change without notice. Check with a Conair representative for the most current information.

Upstream Extrusion

EXTRUSION CONTROL

TrueWeigh™ Control TWC1-12 ..... U-1
TrueWeigh™ TWH Models U-3

FILM SCRAP GRANULATORS

FSG Series Models U-5

FILM TRIM RECLAIM SYSTEMS

TRI Series Trim Inducers U-9
ScrapSaver™ SSM Models 2-5 ..... U-11

RELATED EQUIPMENT

Extrusion Control Blender TB EXT Models B-41
TWB Continuous Blender Models B-47

Upstream Extrusion Quick Reference

MODELS

Gravimetric Loss-In Weight Hoppers	Hopper Capacity ft³ {l}	Maximum Nbr. Extruders	Minimum Extruder Size inches {mm}	Maximum Extruder Size inches {mm}
TWC Control		12		
TWH-05 Hopper	0.5 {14}		2.5 {65}	4.5 {115}
TWH-27 Hopper	2.7 {76}		3 {75}	6 {150}
TWH-44 Hopper	4.4 {125}		3.5 {90}	8 {200}

Options:

Extruder Drive Control, Haul-off Drive Control, Bumpless Transfer, Throat Adapters

Film Scrap Granulators	Chamber Size inches {mm}	Rotor Configuration	Rotor Speed RPM	Motor Hp {kW}	Nominal Throughput lb/hr (kg/hr}
FSG-100	10 x 12 {254 x 305}	3BL	715	7.5 {5.6}	100 {45}
FSG-150	10 x 12 {254 x 305}	3BL	715	10 {7.5}	150 {68}
FSG-300	10 x 18 {254 x 457}	3BL	715	15 {11.2}	300 {136}
FSG-400	10 x 24 {254 x 610}	3BL	715	15 {11.2}	400 {181}
FSG-500	14 x 18 {356 x 457}	5BL	525	25 {18.6}	500 {227}
FSG-750	14 x 24 {356 x 610}	5BL	525	40 {29.8}	750 {340}
FSG-1000	14 x 36 {356 x 914}	5BL	525	48 {35.8}	1000 {454}
FSG-1250	18 x 36 {457 x 914}	5BL	420	50 {37.3}	1250 {567}
FSG-1600	18 x 48 {457 x 1219}	5BL	420	75 {55.9}	1600 {726}

Options:

Relief Head, Roll Feed, Fluff Blowers

Trim Inducers	Minimum Inlet Diameter inches {mm}	Maximum Outlet Diameter inches {mm}	Motor Hp {kW}
TRI-05	4 {102}	6.6 {168}	5 {3.7}
TRI-15	4 {102}	8 {203}	15 {11.2}

ScrapSavers	Minimum Extruder Size inches {mm}	Maximum Volumetric Scrap Rate ft³/hr {l/hr}	Motor Hp {kW}
SSM-2	2.0 {50.8}	10 {283}	1.5 {1.12}
SSM-3	3.0 {76.2}	30 {850}	1.5 {1.12}
SSM-4	4.0 {101.6}	75 {2124}	1.5 {1.12}
SSM-5	5.0 {127}	150 {4248}	1.5 {1.2}

Options:

Cyclone CFM Ratings from 375 to 1600

TWC Controller

ACCURATE, PRECISE EXTRUSION CONTROL

TrueWeigh™ Gravimetric Control System allows extrusion processors to put their equipment on "cruise control." It tracks material being fed to the extruder and automatically adjusts screw rpm and the haul-off device to maintain a consistent product output regardless of changes in raw materials, ambient conditions or processing variables.

The system offers functionality that suits both mono-layer and co-extrusion applications in film, sheet, extrusion coating, pipe, profile, tubing and wire & cable extrusion.

AUTOMATES EXTRUSION CONTROL BY WEIGHT

Varying process conditions, backpressure, material bulk density, and even operator skill sets can reduce extruder throughput and affect productivity and profitability. This easy-to-use extrusion control system gives processors complete visibility and control over throughput and finished product dimensions.

TrueWeigh coordinates operation of up to twelve (12) extruders, governing not only total product throughput and dimensions, but also the relative weight of different layers.

Processors realize increased yield through precise, consistent control over extruder output and weight per length to maintain consistent rate and product thickness. Product quality can be improved with precise layer-ratio control in co-extruded film or sheet, and through better dimensional stability in tubing, pipe and profile wall thickness.

Tightens tolerances, saves material costs

TrueWeigh allows processors to run products at minimum thicknesses (+/- 0.5% of set point). The extrusion control system synchronizes the extruder(s) and the haul-off device, optimizing stability of the production process and creating less start-up scrap by achieving production speeds quicker, and reducing or eliminating off-spec scrap.

Easy-to-use, intuitive touch screen

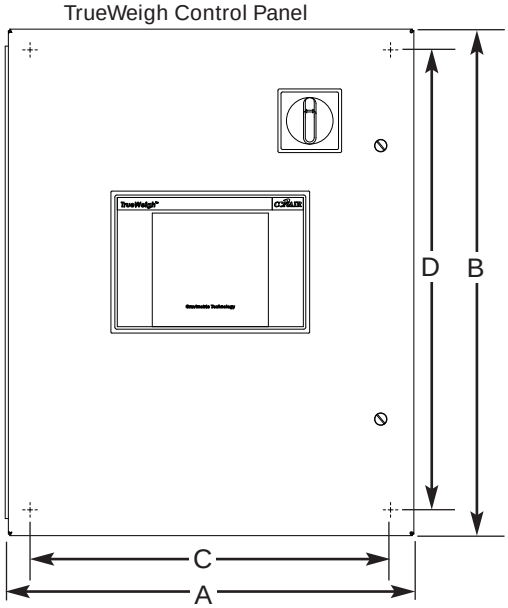
5.7 inch LCD touch screen controller with full color graphics allows quick and easy set-up. User-friendly screens are configurable to match each specific extrusion process type. Simple menu driven touch screens use a Q&A approach to guide the operator through set-up. The operator can monitor the extrusion control set points, the haul-off control data, current and past alarm status and complete management of material inventory data.

Quality maintained during transitions

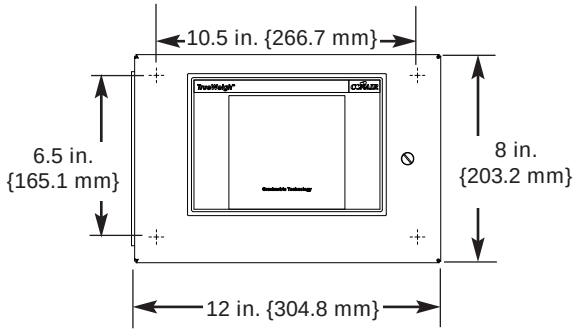
Advanced programming ramps extruder(s) and haul-off drives synchronously. This allows the system to make smooth transitions from one line output setting to a new target output while maintaining product quality.

SPECIFICATIONS

TrueWeigh Control Panel



Remote Touch Screen



MODEL	TWC-1	TWC-3	TWC-5	TWC-7	TWC-9	TWC-12
Performance characteristics						
Maximum number of extruders	1	3	5	7	9	12
Dimensions inches {mm}						
A - Overall width	16 {406}	18 {457}	23 {584}	30 {762}	30 {762}	30 {762}
B - Overall height	20 {508}	26 {660}	28 {711}	32 {813}	39 {991}	39 {991}
C - Mounting width	14.5 {368}	16.5 {419}	21.5 {546}	28.5 {724}	28.5 {724}	28.5 {724}
D - Mounting height	18.5 {470}	24.5 {622}	26.5 {673}	30.5 {775}	37.5 {953}	37.5 {953}

FEATURES

- 5.7 inch touch screen HMI with PLC based controls
- Monitor one to twelve extruders and one haul-off
- Recipe book (stores 500 recipes and 250 resins)
- Trending, diagnostics, alarms and built-in help screens
- USB output to flash drive or printer
- Reports (inventory, alarm and status)
- Virtual Network Client (VNC) Viewer
- Selectable languages: English, Spanish, Chinese, French and German

OPTIONS

- Extruder drive control
- Ramp drives simultaneously or independently
- Haul-off pulse encoder and drive control
- Remote mounted touch screen interface
- Audible/visual alarm
- Selectable remote communications protocols (OPC, Modbus TCP, Modbus Serial, Ethernet IP, Profibus (Siemens), Allen Bradley DH+, DeviceNet, ControlNet, Canbus)
- Bumpless transfer

SPECIFICATION NOTES:

Specifications may change without notice. Consult a Conair representative for the most current information.

Model TWH-27

PRECISE MEASUREMENT OF MATERIAL THROUGHPUT

Engineered as part of the Conair TrueWeigh Gravimetric Extrusion Control System, the TrueWeigh hopper measures the mass flow of material into the extrusion process and sends this loss-in-weight information to the TrueWeigh controller. The controller then accurately monitors or adjusts the extruder screw RPM and/or haul-off RPM to maintain a consistent yield control. This enables an operator to run a uniform product within the tightest tolerances at the lowest possible cost.

ACCURATELY MEASURES EXTRUDER RATE BY WEIGHT

Mounting directly to the extruder throat, the TrueWeigh hopper includes the weigh electronics and load cell required to precisely measure the extruder's material throughput. The "floating" weigh hopper is cantilevered off the load cell and is contained within a heavy-duty frame.

Three (3) hopper sizes are available for throughput rates from 10 to 5,000 lbs/hr {4.5 to 2268 kg/hr}. The hoppers include a 60 degree bottom cone for constant plug flow to optimize blend integrity through the weigh hopper. The steep wall hopper works well with any combination of free-flowing pellet, flake, regrind and free-flowing powder or granular materials. A clear polycarbonate inspection/clean-out door or sight glass allows at-a-glance visual inspection of the hopper contents.

Ease of installation

TrueWeigh hoppers are supplied with sub-plates for direct connection to the extruder feed throat. Supplied as a blank, the sub-plate eliminates the need for feed throat detailing prior to installation. Simply measure and drill the matching feed throat bolt pattern, fasten the sub-plate in place and mount the hopper. No additional support is needed. Optional custom mounting adaptors are also available.

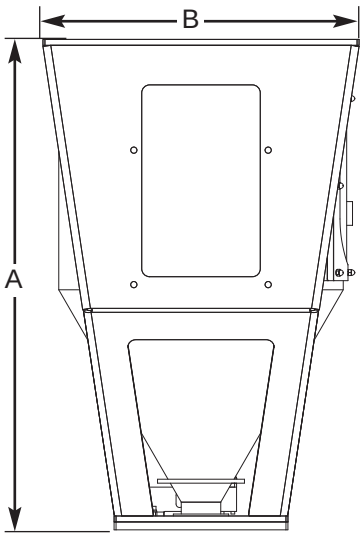
Integral loading support platform

TrueWeigh standard loading options accommodate Conair positive slide gates with vacuum receivers, surge hoppers, stub, or blending systems. Custom adapters are available to accommodate non-Conair loading equipment.

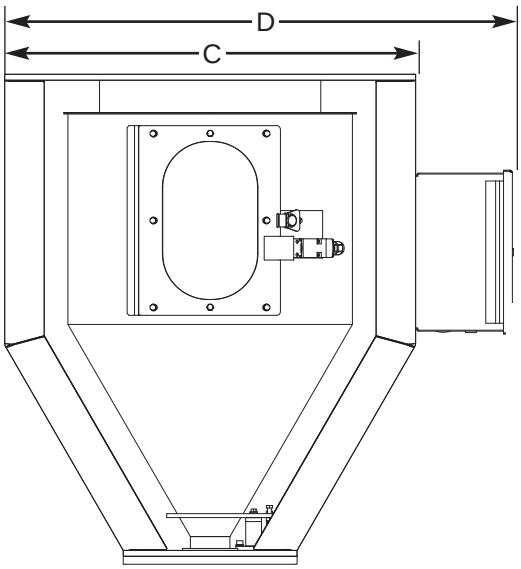
TrueBlend integration

The TrueWeigh hopper can be used in conjunction with a TrueBlend Gravimetric Batch Blending System. The largest hopper can support up to a TB900 with loaders with no additional support required.

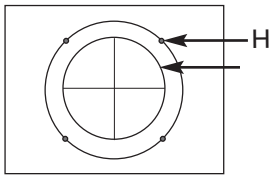
SPECIFICATIONS



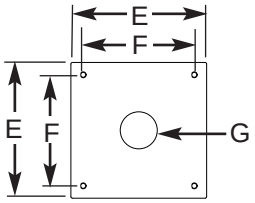
Side view



Front view



Top plate



Bottom plate

Note: Standard plate is supplied blank

MODEL	TWH-05	TWH-27	TWH-44
Performance Characteristics			
Hopper capacity ft^3 {l}	0.5 {14}	2.7 {76}	4.4 {125}
Dimensions inches {mm}			
A - Height	18.5 {469.9}	30.5 {774.7}	42 {1066.8}
B - Depth	12 {340.8}	20 {508}	20 {508}
C - Hopper width	18 {457.2}	26 {660.4}	28 {711.2}
D - Overall width	23.91 {607.36}	32.12 {815.9}	34.12 {866.7}
E - Mounting plate width	10.16 {257.96}	11 {279.4}	13 {330.2}
F - Hole diameter	8 {203.2}	9 {228.6}	11 {279.4}
G - Hole diameter	2.562 {65.07}	3 {76.2}	3.5 {88.9}
H - Hole diameter	0.375 {9.53}	0.415 {10.54}	0.415 {10.54}
J - Hole diameter	7 {177.8}	12.25 {311.15}	12.25 {311.15}
Approximate weight lb {kg}			
Shipping	75 {34}	125 {57}	250 {114}
Extruder size inches {mm}			
Minimum	2.5 {63.5}	3.0 {76.2}	3.5 {88.9}
Maximum	4.5 {114.3}	6.0 {152.4}	8.0 {203.2}

SPECIFICATION NOTES:

Specifications may change without notice. Consult a Conair representative for the most current information.

STANDARD FEATURES

- Mild steel construction
- High accuracy, precision cantilever load cell
- High resolution weighing electronics
- Integral loader/surge hopper support platform for Conair equipment
- Inspection sight glass (on TWH-05)
- Clear polycarbonate inspection cleanout door (on TWH-27 and TWH-44)
- Dust seals
- Extruder mounting sub-plate (drilled in the field)

OPTIONAL FEATURES

- Stainless steel construction
- High temperature design (up to 350° F {177° C})
- Dry air purge ports
- Dust tight seals
- Drain valve (on TWH-27 and TWH-44)
- Positive shut-off valve on inlet
- Custom mounting adapter
- Integration with TrueBlend Blender for mono-extrusion line control
- Special paint

Model FSG-300

SPECIALTY GRANULATOR FOR FILM EXTRUSION

FSG Series beside-the-line granulators provide efficient, uniform re-grinding of thin guage film scrap.

The FSG granulators are designed to be used as part of a complete in-line automatic scrap recycling system for thin guage film extrusion processes. The three-way hopper design allows the granulator to accommodate edge and bleed trims, off-spec roll scrap and hand-fed scrap materials simultaneously.

UNIQUE CUTTING CHAMBER SIMPLIFIES CLEAN-OUT

Conair's FSG Series of film scrap granulators offer a slant-knife open rotor design, providing scissor cutting action for fast, efficient processing. This technique is used for maximum bulk density, higher throughputs and generates less noise and fines. The standard (2) fixed bed knife design along with either 3 or 5 rotating rotor knives assure a high quality of ground scrap consistency. The rotor knives are adjustable to maintain a fixed gap between the knives and the screen, eliminating screen clogging and minimizing heat build-up.

The innovative cutting chamber features a swing-open removable screen, cradle and scrap discharge bin. This design provides wide open access. Rotor access is straight-in versus accessing from underneath, greatly simplifying clean-out and blade maintenance. A design which saves both time and money.

Easy access for cleaning

FSG Series granulators offer a swing-open cradle screen for the industry's fastest rotor access and lowest in-feed height. A standard electric jack screw is included for ease of access for cleaning and maintenance of the cutting chamber.

Quiet operation

The FSG Series granulators come with standard double-wall sound proof hoppers. An optional integral sound enclosed base can be added to reduce noise as well.

Integral control panel

A machine frame mounted control panel comes equipped with all starters and controls for the granulator, fluff outlet blower, electric jackscrew, optional roll feeder and trim inducer blower controls when purchased as part of a complete in-line scrap recycling system.

Optional roll feeder

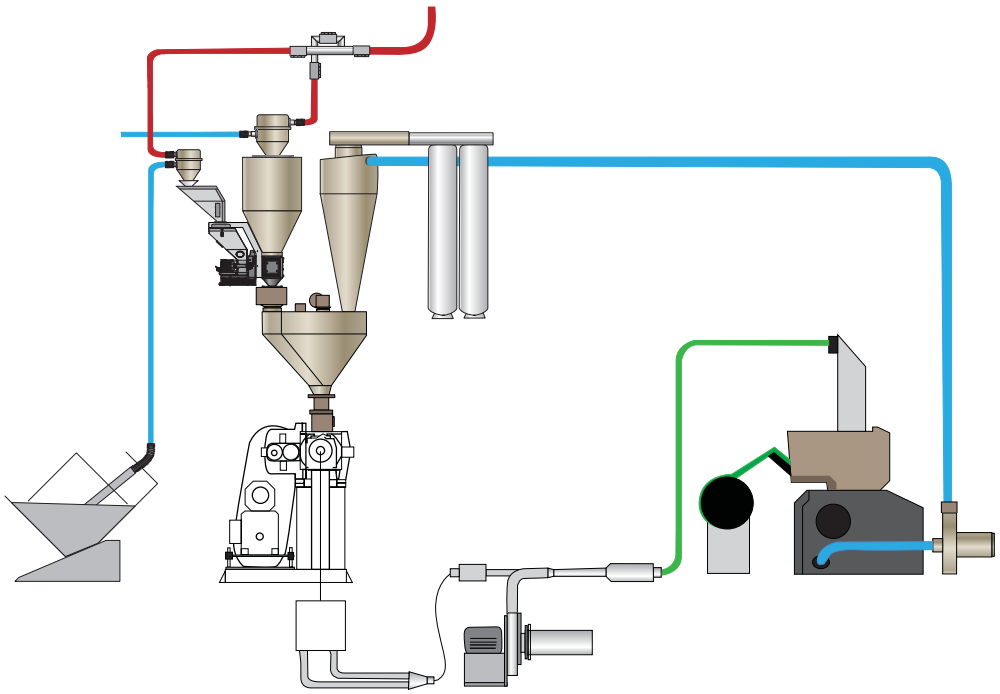
Reintroduction of roll scrap is achieved with the attachment of the optional RFL series roll feeders. The standard roll feeder is designed with knurled rolls that provide a strong pull on the film, without wrapping. They are available in several sizes with 1/2 Hp {0.37 kW} single drive variable speed motors that run 13-65 ft/min. {4-20 meters/min.}.

Standard fluff conveying blowers

The ground scrap material is taken away from the granulator by the fluff conveying blower, available in four (4) different sizes to accommodate any rate and conveying distance required.

ACCESSORIES/OPTIONS

FSG SERIES MODELS

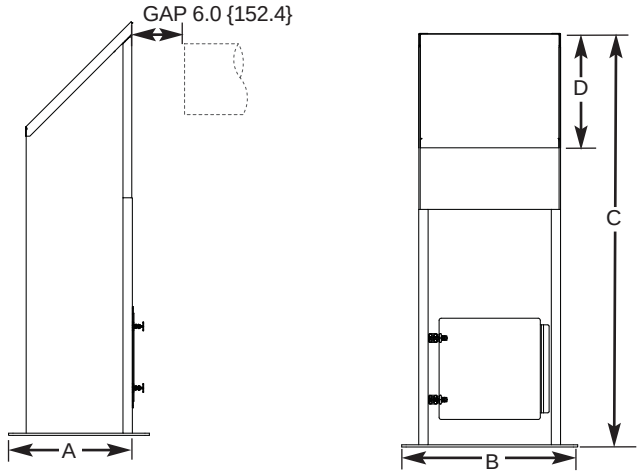


A new integrated film-scrap reclaim system, designed and built entirely by Conair, recovers edge trim and other scrap, grinds it, and then reintroduces it to the extruder without hang-ups, surging and clumping. It's an easy, efficient way to improve profitability.

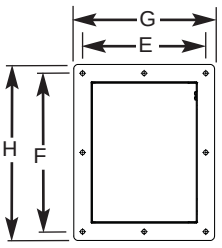
Conair trim systems handle all kinds of film and sheet waste and return it directly to the extruder at rates of 25% or more. System costs are lower than re-pelletizing or scrap densification, and the material is not subject to an additional heat history.

Relief Head

FSG MODELS	FSG-100	FSG-150	FSG-300	FSG-400	FSG-500	FSG-750	FSG-1000	FSG-1250	FSG-1600
Relief head selection									
RH-1	Standard	Standard	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RH-2	N/A	N/A	Standard	Standard	Standard	Standard	N/A	N/A	N/A
RH-3	N/A	N/A	N/A	N/A	N/A	N/A	Standard	Standard	Standard



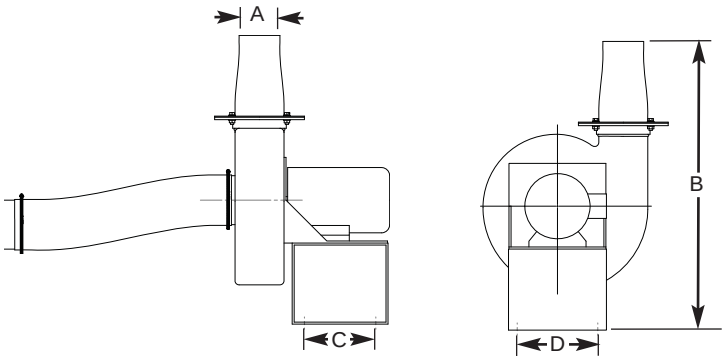
The relief head is designed to separate the trim scrap from the conveying air stream. This allows the trims to drop into the granulator feed hopper while the conveying air is dispersed.



RELIEF HEAD MODEL	RH-1	RH-2	RH-3
Dimensions inches {mm}			
A - Overall depth	10.0 {254}	12.0 {304.8}	18.0 {457.2}
B - Overall width	12.0 {304.8}	16.0 {406.4}	20.0 {508}
C - Overall height	45.0 {1143}	47.0 {1193.8}	47.0 {1193.8}
D - Opening height	20.0 {508}	20.0 {508}	20.0 {508}
E - Flange depth of mounting holes	12.0 {304.8}	14.0 {355.6}	20.0 {508}
F - Flange width of mounting holes	14.0 {355.6}	18.0 {457.2}	22.0 {558.8}
G - Flange plate depth	14.0 {355.6}	16.0 {406.9}	22.0 {558.8}
H - Flange plate width	16.0 {406.4}	20.0 {508}	24.0 {609.6}
Weight lbs {kg}			
Shipping	50 {22.7}	60 {27.2}	75 {34}

ACCESSORIES/OPTIONS

Fluff Blower



After the cutting chamber, material passes through a screen designed to provide maximum throughput and bulk density for the specific application and material. The ground scrap material is then taken away by the fluff conveying blower. Standard fluff conveying blowers on the outlet are available in four (4) different sizes to accommodate any rate and conveying distance required.

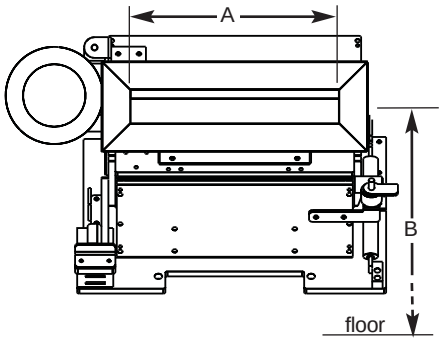
Fluff blower model	FB-1	FB-1.5	FB-3	FB-7.5
Performance characteristics				
Motor hp {kW}	1 {0.75}	1.5 {1.12}	3 {2.24}	7.5 {5.60}
Throughput lbs/hr {kg/hr}	200 {90.7}	325 {147.4}	500 {226.8}	1000 {453.6}
Dimensions inches {mm}				
A - Outlet diameter	4.0 {101.6}	5.0 {127}	6.0 {152.4}	8.0 {203.2}
B - Overall height	27.75 {704.85}	34.38 {873.1}	30.38 {771.5}	31.38 {796.9}
C - Mounting pattern width	5.0 {127}	8.75 {222.3}	8.75 {222.3}	8.75 {222.3}
D - Mounting pattern depth	7.5 {190.5}	9.875 {250.8}	9.875 {250.8}	9.875 {250.8}
Mounting hole diameter	(4) 0.438 {11.11}	(4) 0.438 {11.11}	(4) 0.438 {11.11}	(4) 0.438 {11.11}
Voltage				
460V/3ph/60Hz	Standard	Standard	Standard	Standard
575V/3ph/60Hz	Option	Option	Option	Option
400V/3ph/50Hz	Option	Option	Option	Option

MODELS	FSG-100	FSG-150	FSG-300	FSG-400	FSG-500	FSG-750	FSG-1000	FSG-1250	FSG-1600
Fluff blower selection									
FB-1	Standard	Standard	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FB-1.5	Option	Option	Standard	Standard	N/A	N/A	N/A	N/A	N/A
FB-3	N/A	N/A	Option	Option	Standard	N/A	N/A	N/A	N/A
FB-7.5	N/A	N/A	N/A	N/A	Option	Standard	Standard	Option	Option

Roll Feed

Conair roll feeds direct extruded plastic film into the cutter housing of a granulator. The roll feed is ideally suited for roll scrap 10 mil to 150 mil thick and for edge trims from 1 to 23 inches {25 to 584 mm} wide, fed at speeds from 15 to 300 FPM {4.5 to 91 meters/min.}. The roll feed features automatic take-up using friction slip to eliminate the dancer, frequency controlled motor, easy trim insertion, simple trim tensioning and pivoting, no-tools access.

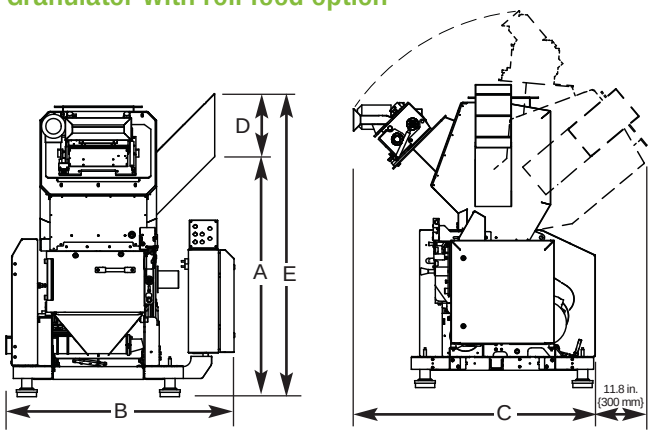
MODELS	FSG-100	FSG-150	FSG-300	FSG-400	FSG-500	FSG-750	FSG-1000	FSG-1250	FSG-1600
Roll feeder selection									
RFL-30	Option	Option	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFL-45	N/A	N/A	Option	Option	Option	N/A	N/A	N/A	N/A
RFL-60	N/A	N/A	N/A	N/A	N/A	Option	Option	Option	Option



MODEL	RFL - 30	RFL - 45	RFL - 60
Dimensions inches {mm}			
A - Inlet width	11.8 {300}	17.7 {450}	23.6 {600}
B - Inlet height (from floor)	61 {1549}	61 {1549} (FSG300,400) 67 {1702} (FSG500)	67 {1702} (FSG750-1000) 70 {1778} (FSG1250-1600)

SPECIFICATIONS

Granulator with roll feed option



STANDARD FEATURES

- Open rotor with scissor cutting slant knives
- TEFC motor
- Hopper soundproofing
- Two bed knives
- Hopper jackscrew device for opening cutting chamber
- Hand-feed port
- Mild steel construction
- Ground scrap conveying fan
- Machine mounted control panel

MODELS	FSG-100	FSG-150	FSG-300	FSG-400	FSG-500	FSG-750	FSG-1000	FSG-1250	FSG-1600
Performance characteristics									
Maximum throughput* lb/hr {kg/hr}	100 {45}	150 {68}	300 {136}	400 {181}	500 {227}	750 {340}	1000 {454}	1250 {567}	1600 {726}
Super tangential	10 x 12	10 x 12	10 x 18	10 x 24	14 x 18	14 x 24	14 x 36	18 x 36	18 x 48
cutter chamber opening in. {mm}	{254 x 305}	{254 x 305}	{254 x 457}	{254 x 610}	{356 x 457}	{356 x 610}	{254 x 914}	{457 x 914}	{457 x 1219}
Motor power† Hp {kW}	7.5 {5.6}	10 {7.5}	15 {11.2}	15 {11.2}	25 {18.6}	40 {29.8}	48 {35.8}	50 {37.3}	75 {55.9}
Screen hole sizes in. {mm}	3/16 {5}	3/16 {5}	3/16 {5}	3/16 {5}	3/16 {5}	3/16 {5}	3/16 {5}	3/16 {5}	3/16 {5}
Optional screen hole sizes in. {mm}	1/8 {4}	1/8 {4}	1/8 {4}	1/8 {4}	1/8 {4}	1/8 {4}	1/8 {4}	1/8 {4}	1/8 {4}
	1/4 {6}	1/4 {6}	1/4 {6}	1/4 {6}	1/4 {6}	1/4 {6}	1/4 {6}	1/4 {6}	1/4 {6}
Knives									
Standard number of bed knives	2	2	2	2	2	2	2	2	2
Standard number of rotor knives	3	3	3	3	5	5	5	5	5
Dimensions inches {mm}									
A - Height to hopper infeed	54.8 {1392}	54.8 {1392}	54.8 {1392}	54.8 {1392}	57.8 {1470}	57.8 {1470}	57.8 {1470}	58.7 {1490}	58.7 {1490}
B - Width	44.9 {1141}	44.9 {1141}	50.8 {1291}	56.7 {1441}	52.8 {1340}	58.7 {1490}	70.5 {1790}	64.6 {1640}	76.4 {1940}
C - Depth	67.1 {1704}	67.1 {1704}	67.1 {1704}	67.1 {1704}	76.0 {1930}	76.0 {1930}	76.0 {1930}	80.3 {2040}	80.3 {2040}
Feed hopper opening - width	10 {254}	10 {254}	10 {254}	10 {254}	10 {254}	10 {254}	10 {254}	10 {254}	10 {254}
D - Feed hopper opening - height	8 {203}	8 {203}	8 {203}	8 {203}	8 {203}	8 {203}	8 {203}	8 {203}	8 {203}
E - Overall height	66.3 {1685}	66.3 {1685}	66.3 {1685}	66.3 {1685}	73.6 {1870}	73.6 {1870}	73.6 {1870}	88.2 {2240}	88.2 {2240}
Weight lb {kg}									
Shipping	4167 {1890}	4167 {1890}	4398 {1995}	4839 {2195}	5556 {2520}	6327 {2870}	6878 {3120}	13889 {6300}	17130{7770}
Noise level†									
With standard hopper soundproofing	90 to 95 dbA								
With optional base soundproofing	80 to 85 dbA								

OPTIONS

- Special paint
- Special voltages
- Base soundproofing
- Inducer blower controls
- Air relief head
- RFL Series roll feeder
- Carbide coated knives
- Third bed knife

SPECIFICATION NOTES:

* Throughputs are provided as a capacity guideline only. Throughput will vary according to the size, shape, thickness and properties of the material to be cut, as well as the desired size of the granulate. Consult Conair for a material test or help determining the correct granulator model for your application.

† Noise level will vary according to material type being processed and the granulator configuration. These ranges are based on tests using SPI standards.

Specifications may change without notice. Check with a Conair representative for the most current information.

Model TRI-05 Trim Inducer

AUTOMATICALLY REMOVE **TRIM SCRAP**

Use this trim pick-up system with an induction blower for conveying thin-gauge edge and/or bleed trims generated in the production of film, foam, sheet or tape extrusion lines. Trims are picked up from the winder and conveyed in a continuous stream to an in-line granulator system or off-line storage bin.

Closed-loop reprocessing of the trim scrap reduces scrap handling costs and labor expenses and eliminates the risk of product contamination. Trim scrap is restored to its original feed stock value.

HIGH PERFORMANCE TRIM SCRAP CONVEYING

High induced-to-primary air ratio provides consistent and reliable trim pick-up and conveying. Blower operation on the trim removal inducer is maximized by a simple venturi nozzle adjustment that changes the induced air flow. This converts a specific volume of airflow on the vacuum side into a much greater induced airflow on the pressure side. The design achieves higher air volumes with less horsepower as compared to fixed designs and optimizes efficient system performance.

Conair TRI Series Inducers are available in three (3) sizes to handle any thin-gauge material trim convey application. The blower starter and controls are typically supplied in the granulator control panel when supplied with a complete Conair scrap recycling system or can be supplied as a stand-alone panel when used as a stand-alone trim conveying system.

Flexible installation

On the floor or in the air, the Conair Trim Inducer adapts easily to the installation requirement of any extrusion line. The unit is supplied with the venturi in a horizontal arrangement above the blower, but can easily be rotated to provide an optimal venturi orientation. The venturi may also be mounted remotely from the blower using additional tubing.

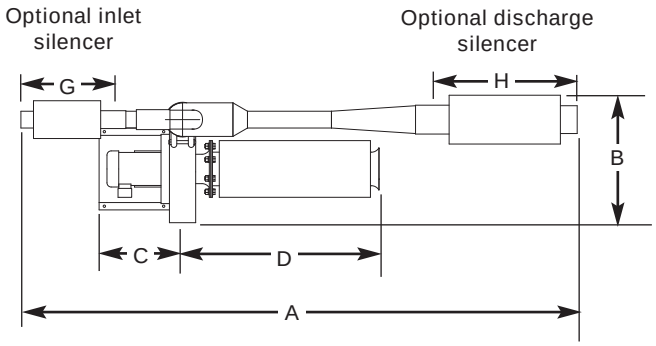
Efficient trim pick-ups

Spun metal bellmouth pick-up nozzles provide a steady material flow without clogging or snagging. Stainless lined metal flex hose allows movement of the pick-up nozzles to ensure smooth trim material flow and prevent plugging in the convey lines. Optional custom manifolds for edge, bleed and/or center trims are adjustable and designed to maintain constant material conveying velocity.

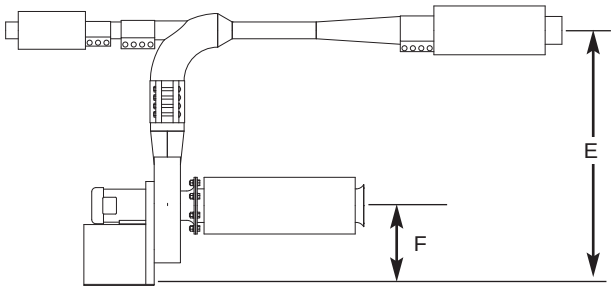
Quiet operation

The continuous Trim Inducer is much quieter than an in-line cutter blower or guillotine system. The blower is supplied with a silencer on the fan intake as standard. Optional silencers can be added to both the venturi inlet and/or the venturi outlet. A sound enclosure can be added to the blower as well.

SPECIFICATIONS

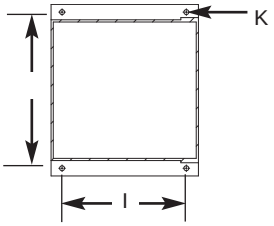


Top view



Side view

MODEL	TRI-05	TRI-15
Specifications inches {mm}		
Inlet minimum	4.0 {101.6}	4.0 {101.6}
Discharge maximum	6.625 {168.3}	8.0 {203.2}
Dimensions inches {mm}		
A - Overall length	162.0 {4115}	171.5 {4356}
B - Depth	30.3 {769.6}	42.5 {1079.5}
C - Blower length	20.1 {510.5}	25.0 {635.0}
D - Air intake length	46.8 {1189.0}	47.0 {1193.8}
E - Height of material outlet	61.3 {1557.0}	69.0 {1752.6}
F - Height to center of air intake	19 {482.6}	26 {660.4}
G - Optional silencer length	33 {838.2}	33 {838.2}
H - Optional silencer length	47.0 {1193.8}	54.0 {1371.6}
I - Blower mounting width	14.125 {358.8}	19.5 {495.3}
J - Blower mounting length	17.75 {450.9}	21.75 {552.5}
K - Hole diameter	0.563 {14.3}	0.563 {14.3}
Motor Hp {kw}	5 {3.7}	15 {11.2}
Voltage total amps		
460V/3 phase/60 Hz	5.9	17.0



Blower mounting pattern

STANDARD FEATURES

- Mild steel construction
- Adjustable venturi
- 230V/460V/3 phase/60Hz supply voltage
- Silencer on the blower inlet
- TEFC Motors

OPTIONS

- Various venturi inlet configurations
- Custom pick-up manifolds
- Silencers on the venturi inlet and/or outlet
- Sound enclosure for the blower
- Special voltages
- Stand-alone starter controls
- Special paint

SPECIFICATION NOTES:

Specifications may change without notice. Consult a Conair representative for the most current information.

Model SSM-3 with control panel

AUTOMATIC, CONSISTENT IN-LINE SCRAP REPROCESSING

The ScrapSaver volumetrically feeds ground light density film scrap to the extruder feed screw in a stable, consistent flow. Conair trim systems handle all kinds of film and sheet waste and return it directly to the extruder at rates of 25% or more.

Direct in-line reprocessing of scrap material eliminates scrap handling costs and the risk of cross-contamination. Scrap inventory and labor expenses are significantly reduced and additional heat histories associated with secondary re-pelletizing or densifying operations are eliminated.

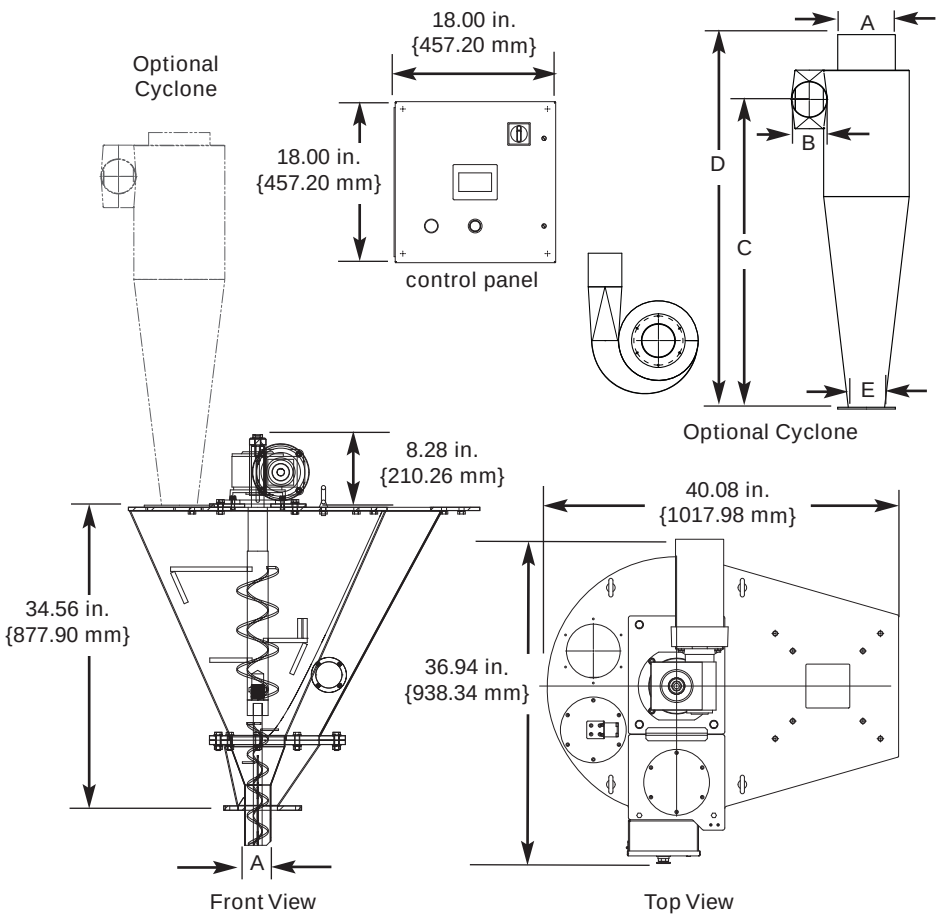
DIRECT CLOSED-LOOP RECLAIM INCREASES PROFITS

The ScrapSaver delivers a consistent ratio of ground scrap and virgin pellets. Two hoppers maintain component segregation until discharge approximately 1/2 - 1 inch {12-25 mm} above the screw flights. An agitator auger in the fluff hopper ensures reliable feeding of the scrap, while the virgin pellets are gravity fed. To optimize scrap re-feed rates and protect process stability, pellets enter the flights in an annular ring surrounding the fluff. This creates a consistent flight-to-flight mix ratio and provides a steady, and consistent flow of material.

Four different auger sizes are available to match extruder sizes up to eight (8) inch {200 mm}. Scrap re-feed rates are typically up to 25% of overall extruder throughput, but higher rates may be possible depending on the extruder feed section, screw design and the end-product being extruded.

- **Long life motor and gearboxes**
  The vertical scrap auger is driven with a reliable AC inverter motor. The drive system comes equipped with multi-level current overload protection with alarm status to protect against premature drive and gearbox failure.
- **Won't overfeed or underfeed the process**
  The ScrapSaver follows any change in the extruder throughput rate. The following circuit provides consistent feed, avoids "cramming" the flights and eliminates related extruder surging. A low speed cut-out and an internal level sensor with delay timer controls the scrap granulator roll feed to prevent overfeeding.
- **Agitation prevents bridging**
  Agitator arms on the auger are designed to prevent bridging in the ScrapSaver machine and keep a consistent flow of ground scrap into the extruder.
- **Inexpensive operation**
  Automated system virtually eliminates operator involvement and scrap handling costs.
- **Additive feeder side mount**
  A replaceable sight glass accommodates TrueFeed and other additive feeders for direct input to the ScrapSaver pellet feed chute.

SPECIFICATIONS



MODEL	SSM-2	SSM-3	SSM-4	SSM-5
Performance Characteristics				
A - Auger tube size at outlet inches {mm}	1.5 {38.1}	2.5 {63.5}	3.5 {88.9}	4.5 {114.3}
Maximum scrap rate ft^3/hr {l/hr}	10 {283}	30 {850}	75 {2124}	150 {4248}
Minimum extruder sizes inches {mm}	2.0 {50.8}	3.0 {76.2}	4.0 {101.6}	5.0 {127}
Capacity ft^3 {l}				
Virgin chamber	0.5 {14}	0.5 {14}	0.5 {14}	0.5 {14}
Scrap chamber	2.5 {70}	2.5 {70}	2.5 {70}	2.5 {70}
Auger motor Hp {kW}	1.5 {1.12}	1.5 {1.12}	1.5 {1.12}	1.5 {1.12}
Approximate Weight lb {kg}				
Shipping	600 {272}	600 {272}	600 {272}	600 {272}

Optional Cyclone

MODEL	CYC-4	CYC-5	CYC-6	CYC-8
Performance Characteristics				
Dimensions inches {mm}				
A - Exhaust outlet	7 {177.8}	8 {203.2}	10 {254}	14 {355.6}
B - Inlet	4 {101.6}	5 {127.0}	6 {152.4}	8 {203.2}
C - Inlet height	37.25 {946.2}	43 {1092.2}	53 {1346.2}	79.5 {2019.3}
D - Overall height	46.25 {1174.75}	52 {1320.8}	63 {1600.2}	91.5 {2324.1}
E - Material outlet	4.0 {101.6}	5.0 {127.0}	5.5 {139.7}	6.0 {152.4}
Maximum CFM rating	375	500	850	1600
Use with blower	FB-1	FB-1.5	FB-3	FB-7.5

STANDARD FEATURES

- Remote mounted touch screen operator interface displays motor load and speed
- Current overload protection with alarm
- Control panel: 18 in. {457.2 mm} wide x 18.3 in. {464.82 mm} high x 8 in. {203.2 mm} deep
- NEMA 12 enclosure
- Variable speed AC drive
- Extruder screw following circuit
- Internal level indicator
- Scrap chamber bridge breaker
- Mild steel material contact surfaces
- Custom designed machine mount flange
- Virgin pellet and scrap view ports
- Virgin pellet drain
- Safety interlocks

OPTIONS

- High efficiency cyclone with optional filter
- Pellet inlet adapter
- Additive feeder port
- Diverter valve (feeds two ScrapSaver™ machines from a single source)

SPECIFICATION NOTES:

Specifications may change without notice. Consult a Conair representative for the most current information.

Downstream Extrusion

VACUUM SIZING EQUIPMENT

MedVac Tanks E-1
HTMP Series E-5
MT Vacuum Sizing Tanks E-9

SPRAY VACUUM SIZING EQUIPMENT

MSBHI Series Water Spray Tanks E-13

COOLING TANKS

MCB Series E-15

BELT PULLERS

Precision Belt Pullers E-17
BP Series Belt Pullers E-19

CLEATED PULLERS

CP Series Cleated Puller E-21

CUTTERS AND SAWS

Combination Puller/Cutter, CSC Model E-25
Sure Cut Rotary Knife Cutter E-27
TS Up-Cut and TS Cross-Cut Saws E-29
Combination Puller/Cutter, Medline Models E-31
Combination Puller/Cutter, CPC Models E-35

COILERS

ATC Series E-39

TAKEAWAY CONVEYOR

TAC Series E-41

DUMP TABLES

DT Series E-43

Downstream Extrusion Quick Reference

MODELS

Vacuum Sizing Tanks	Tube/Profile Capacity inches	Pump Hp	Vacuum	Water Recirculation	Type	Vacuum Tank Length ft	Cooling Length ft	Medical Tubing	Thin-Wall Tube (Straws)	Flexible Hose	Rigid Tube/ Small Pipe	Flexible Trim/ Gasketing	Rigid Trim/ Small Profile	Window/ Door Lineals	Plastic Lumber/ Decking
MedVac Series	micro to 2 dia.	1.7	1 to 2		Single pass	5.0 to 23.0	NA	•		•					
HTMP Series	micro to 2 dia.	1.7	(2) 1 to 2		Multipass	6.0 to 18.0	12.0 to 24.0	•		•					
MT-104	up to 2 dia.	1.7	2		Single pass	7.0 to 22.0	NA	•	•	•	•				
MT-105	up to 4.5 dia.	1.7	2		Single pass	7.0 to 22.0	NA	•	•	•	•	•			
VC Series tanks are available for diameters greater than 4.5 inches															
PCT Calibration Tables are available for profiles to 30 inches wide and tabled lengths to 32 feet. Consult factory for quote.															
MSBHI Series	up to 12 wide	5	5		Hybrid	16.0 to 24.0	NA				•	•	•	•	•

Tube/Profile Cooling Tanks	Capacity inches	Pump Hp	Cooling Method	Tank/Table Length ft	Medical Tubing	Thin-Wall Tube (Straws)	Flexible Hose	Rigid Tube/ Small Pipe	Flexible Trim/ Gasketing	Rigid Trim/ Small Profile	Window/ Door Lineals	Plastic Lumber/ Decking
MCB Series	1 to 6 dia.	0.5 to 7.5	immersion	7 to 31.5	•	•	•	•	•	•	•	•
MSBHI Series	up to 12 dia.	5 to 15	spray	16 to 32				•	•	•	•	•

Pullers	Belt Length inches	Belt Width inches	Motor Hp	Max Belt Opening inches	Belt Type	Medical Tubing	Thin-Wall Tube (Straws)	Flexible Hose	Rigid Tube/ Small Pipe	Flexible Trim/ Gasketing	Rigid Trim/ Small Profile	Window/ Door Lineals	Plastic Lumber/ Decking
Precision Series	12 to 39	2 to 6	1.0 to 2.0	3 to 7	Poly-V/flat	•	•	•	•	•	•		
BP Series	36 to 48	6 to 12	3.0	7	Poly-V	•	•	•	•	•	•		
CP Series	52 to 113	8 to 18	4.0 to 6.0	6	Cleated						•	•	•

Cutters and Saws	Tube/Profile Capacity inches	Motor Hp	Drive Type	Cuts per minute	Medical Tubing	Thin-Wall Tube (Straws)	Flexible Hose	Rigid Tube/ Small Pipe	Flexible Trim/ Gasketing	Rigid Trim/ Small Profile	Window/ Door Lineals	Plastic Lumber/ Decking
CSC-2L / CSC-3L	1.25/2.25	2.7	Servo	350-2800	•	•	•		•	•		
CSC2 / CSC-3	1.75/2.25	2.7 to 3.8	Servo	350-750	•	•	•		•	•		
CSC-4 / CSC-5	3.75/4.75	2.7 to 3.8	Servo	250-750		•	•		•	•		
SureCut / Tube	2.25 to 4.75 dia.	4.6	Servo	150-300		•	•	•	•	•		
SureCut / Profile	1.5x3.5 to 3.5x6.5	4.6	Servo	150-300		•	•	•	•	•		
TS Up-Cut Series	up to 9 dia.	3 to 5	AC	Consult Factory				•		•	•	•
TS CrossCut Series	6x20 to 10x30	3 to 5	AC	Consult Factory				•		•	•	•

Combination Puller Cutter	Tube/Profile Capacity inches	Cutter Motor Hp	Puller Motor Hp	Belt Length inches	Belt Width inches	Line Speed ft/min.	Medical Tubing	Thin-Wall Tube (Straws)	Flexible Hose	Rigid Tube/ Small Pipe	Flexible Trim/ Gasketing	Rigid Trim/ Small Profile	Window/ Door Lineals	Plastic Lumber/ Decking
Medline Series	micro to 0.5 dia.	2.5 to 2.7	0.4 to 1.0	12 to 20	1 to 3	up to 750	•		•					
CPC Series	up to 4 dia.	2.5 to 3.8	1.5 to 2.5	12 to 26	1 to 6	up to 500	•	•	•		•	•		

Cut and Transfer Winders	Tube Capacity inches	Coil Size inches	Traverse	Turret Drive	Line Speed ft/min.	Medical Tubing	Thin-Wall Tube (Straws)	Flexible Hose	Rigid Tube/ Small Pipe	Flexible Trim/ Gasketing	Rigid Trim/ Small Profile	Window/ Door Lineals	Plastic Lumber/ Decking
ATC Automatic	0.85 to 0.5	24 to 48 dia.	Servo	Servo	500 to 800	•		•					
MTC Manual	0.85 to 0.5	24 to 48 dia.	Amacoil	N/A	100 to 150	•		•					

Conveyors	Conveyor Length ft	Belt Width	Belt Speed ft/min.	Motor Hp	Medical Tubing	Thin-Wall Tube (Straws)	Flexible Hose	Rigid Tube/ Small Pipe	Flexible Trim/ Gasketing	Rigid Trim/ Small Profile	Window/ Door Lineals	Plastic Lumber/ Decking
TAC Series	6 to 16	4 to 8	Up to 500	1	•	•	•		•			

Dump Tables	Table Length ft	Table Width inches	Tilt	Medical Tubing	Thin-Wall Tube (Straws)	Flexible Hose	Rigid Tube/ Small Pipe	Flexible Trim/ Gasketing	Rigid Trim/ Small Profile	Window/ Door Lineals	Plastic Lumber/ Decking
DT Series	12 to 20	12	Pneumatic				•	•	•	•	•

Model MedVac-235
(Gauge is not included. Shown without pump cover.)

PRECISION SIZING FOR FLEXIBLE AND RIGID MEDICAL TUBE PRODUCTS

MedVac flood-cooling/sizing tanks are uniquely designed to meet the specialized process needs of medical tubing manufacturers. These high technology, simple-to-use systems feature advanced digital controls and rock-steady precision alignment systems to ensure optimum product quality for tubes from single and multi-lumen microbore heart catheters to large-gauge medical tubing.

ABSOLUTELY CONSISTENT DIMENSIONAL CONTROL

Available in five models, MedVac series vacuum tanks provide exceptional tube ovality and concentricity for product sizing under vacuum or as a process aid for free extrusion.

Industrial duty, stainless steel construction combined with bow resistant half-inch (12.7mm) tempered glass lids and an integrated proportional valve allow fine-control of the vacuum level to within 0.1 inch of water for repeatable, precise process control. An optional water tempering unit controls the bath to ±1 degree optimizing heat transfer rates and obtaining specific material properties.

Pivoting overhead controls allow process adjustments and monitoring right at the extrusion die.

Specialized non-contact tooling is available for processing of low durometer materials.

Cleaner interior design

Tank interior is designed to ease daily cleanout by minimizing sharp corners and exposed threads where bacteria, pyrogens and other particulate matter can build up. Telescoping drip tray is one piece to aid wipe-down by eliminating open seams. Guide rollers inside the tank are fixed to free-standing removeable mounts for cleaning.

Medical-grade filtration

Process water is segregated from the heat/cool circuit to minimize contamination. System can be optionally fitted with a UV water purifier and a 5 micron sedimentary pre-filter.

Easy set-up and operation

Narrow tank frame accommodates almost any extruder or melt pump, even three layer. Three-axis tank alignment system with hand wheels, linear slides and ball-screw actuators provide stable, precision positioning to within thousandths of an inch.

Process validation

Optional PAVC control offers a serial interface for a host microprocessor to record process settings. Optional Patriot Transducer provides digital linear readout for measuring/recording distance from die face to where the tube enters the water.

MEDVAC TANKS

FEATURES

1. **Stainless steel tank**
2. **Single piece, telescoping drip tray** - easier to clean since there are no separate pieces to hide pyrogens or other contaminates.
3. **Rounded bottom for easier cleaning** - eliminates corners to ease cleanout and removal of contaminates.
4. **Hinged one-half inch {12.7mm} tempered glass tank lids** - solid design restricts bending to provide excellent visibility of the product and uncompromised sealing.
5. **Rock-steady, 3-axis precision position adjustment** offers fine adjustment, is tighter and less prone to vibration and unwanted movement during process of critical tubes.
6. **Manual 12 inch {305 mm} longitudinal adjustment** with hand wheel provides smooth linear movement to and from the die.
7. **Painted steel frame**
8. **Swing arm fully pivoting control pod** with ten-turn potentiometer control and vacuum guage offers ease of access while allowing use of a co-extruder without frame interference.
9. **Highly durable urethane swivel casters** with jackscrews for positive positioning.
10. **Full capacity stainless steel reservoir** with easy access glass lids.

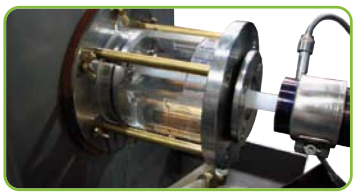
- **Variable speed VFAC vacuum pressure blower**. High CFM capacity with low RPM allows operation to 130 inches water {3.3 meters water} with minimum noise.
- **Stainless steel (306) centrifugal water circulation pump** and heat exchanger.
- **Quick change, spin off filter**
- **Float valve** for automatic filling and make up.
- **Adjustable water level control** with thermometer.
- **Free-standing blank product roller assemblies** lift out of the tank for ease of cleaning.

OPTIONS

- Left to right direction
- Special non-automotive powder coat
- Stainless steel frame
- Full-length stainless steel splash tray under main tank
- Passivation of stainless components to minimize corrosion caused by surface impurities that is recommended for medical applications
- Stainless steel plumbing package for deionized water
- Mounting of customer supplied ultrasonic wall unit in first 18 inches {457 mm} of vacuum chamber with water connections, including de-bubbling unit for water input
- Ultraviolet water treatment unit
- Filter housing with 5 micron rating filter
- Three additional view windows in vacuum compartment for total of four

TOOLING OPTIONS

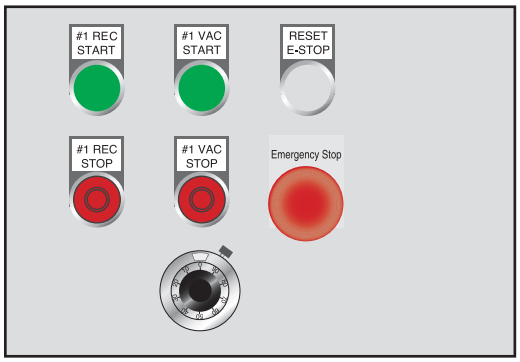
- Pre-skinning chamber with independent water flow control valve complete with one set of tooling
- Additional sets of pre-skinner inserts for other product sizes
- Flow meter rated for 0 to 50 gallons per hour {0 to 189 liters per hour} with pressure regulator
- Split design air wipe assembly with mounting bracket
- Additional blank product guide roller assemblies
- Contoured product guide roller assemblies



Pre-skinning chamber with tooling inserts for flexible polymers

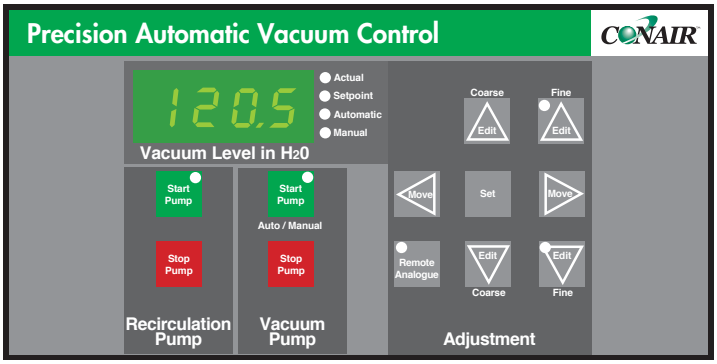
- Calibrate/quench assembly for flexible materials
- Hold-down guide rollers, contoured or non-contoured
- Split-design air-wipe assemblies
- Adjustable water level

CONTROLS



Potentiometer Control

This potentiometer control provides push buttons to start and stop the vacuum blower and the water recirculation pump. Vacuum levels are adjusted using a 10-turn potentiometer, which controls the RPMs of the vacuum blower.



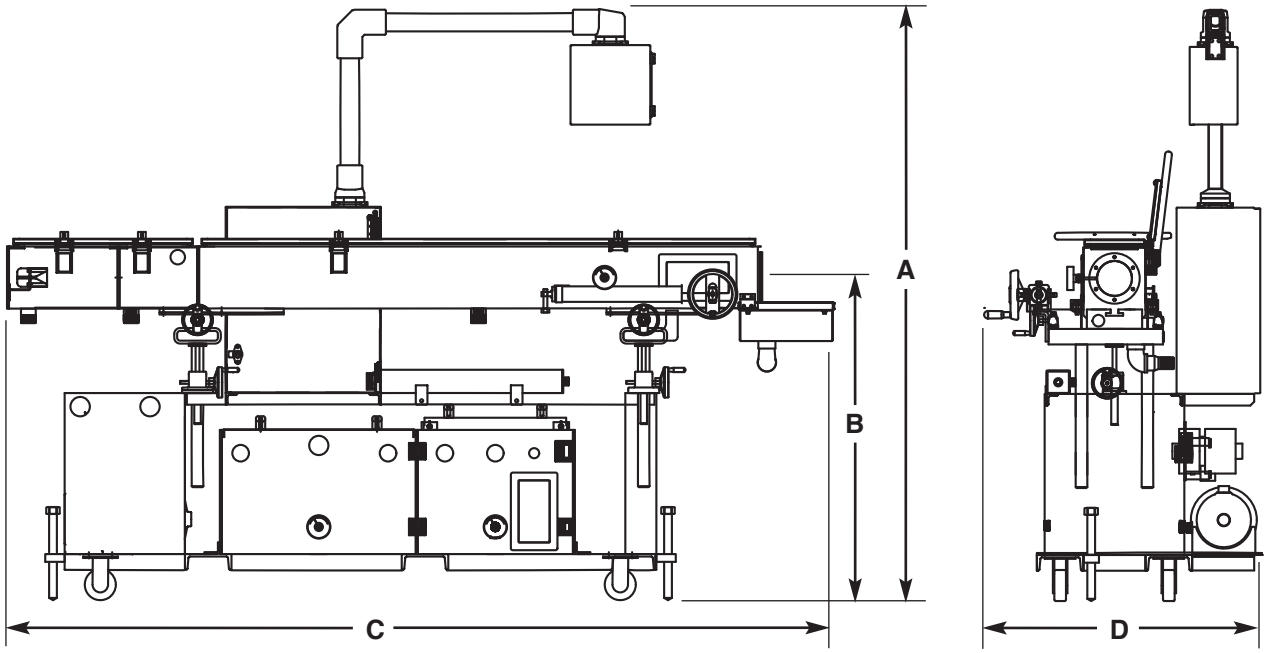
Optional Digital Control

The Precision Automatic Vacuum Control (PAVC) provides manual or automatic control of the vacuum system. Using a PID program and built-in vacuum transducer, the PAVC controls the vacuum level to the setpoint entered.

The PAVC can be connected to an in-line product gauge for automatic adjustment of the vacuum setpoint. The PAVC also has a serial port for data acquisition or remote control.

A remote digital potentiometer is available only with the addition of this option.

SPECIFICATIONS



MODELS	MedVac-235	MedVac-238	MedVac-2311	MedVac-2317	MedVac-2323
Performance characteristics					
Tube/profile capacity	Up to 2 inch {168mm}				
Vacuum system	Variable-speed vacuum blower / 0 to 130 In. H_2O {0 to 32.38 kPa}				
Water system	Stainless steel centrifugal water circulation pump and heat exchanger with spin-off filter				
Recirculating pump Hp {kW}	1 {0.75}	1 {0.75}	2 {1.49}	2 {1.49}	2 {1.49}
Vacuum pump Hp {kW}	1.70 {1.26}	1.70 {1.26}	1.70 {1.26}	1.70 {1.26}	1.70 {1.26}
Tank length inch {mm}	60 {1524}	96 {2438}	132 {3353}	204 {5181}	276 {7010}
Number of compartments	3	3	4	5	6
Compartment type					
Vacuum inch {mm}	36 {914}	72 {1829}	108 {2743}	180 {4572}	252 {6401}
Water (flood) seal inch {mm}	10 {254}	10 {254}	10 {254}	10 {254}	10 {254}
Air wipe inch {mm}	14 {355.6}	14 {355.6}	14 {355.6}	14 {355.6}	14 {355.6}
Blank roller assemblies included	2	3	4	8	12
Dimensions in. {mm}					
A - Overall height	76.8 {1951}	76.8 {1951}	76.8 {1951}	76.8 {1951}	76.8 {1951}
B - Height to centerline	42 ± 2 inch {1067 ± 51 mm}				
C - Overall length	84 {2134}	106 {2692}	142 {3607}	214 {5436}	285 {7239}
D - Overall depth	39.5 {1003}	39.5 {1003}	39.5 {1003}	39.5 {1003}	39.5 {1003}
Longitudinal adjustment (manual)	8 - 12 inches {203 - 305 mm}				
Tank compartment cross section	8 x 8 inch {203 x 203 mm}				
Approximate weight lb {kg}					
Shipping	1000 {454}	1200 {544}	1500 {680}	2000 {907}	2500 {1134}
Voltage	240/480 volts/3phase/60Hz				
Water requirements	City, tower or chiller water. Main supply line: 1 inch NPT fitting				

SPECIFICATION NOTES:

Specifications may change without notice. Consult a Conair representative for the most current information.

Model HTMP 18-4

COMBINATION **MULTI-PASS** FOR TIGHT SPACES

HTMP multi-pass tanks accommodate tight space demands for high speed, high rate medical tubing production. High technology vacuum sizing is integrated with servo driven multi-pass sheaves within the primary cooling tank to satisfy product-specific residence times while precisely cooling and metering the product. Ideally designed for cleanroom and other space limited production areas, the HTMP delivers the industry's best control over medical product sizing, ovality, tolerance and tension for flexible PVC, TPE, TPU and PE tubing.

ELIMINATE STRETCH AND TIGHTEN TOLERANCES

HTMP combination multi-pass tanks are designed for high-speed commodity tube extrusion requiring extensive bath cooling. The multi-purpose tanks take up to five times less floor space compared to standard cooling tanks. HTMP tanks incorporate a vacuum (or free extrusion) chamber and feature a servo-driven 20-inch {508 mm} diameter primary sheave that doubles as a puller. The large diameter and controlled pull force avoid tube flattening and distortion. Sheaves can be machined to a particular tube diameter, improving accuracy over belt pullers by eliminating the normal 'crush' effect. The driven sheave significantly shortens the travel distance of the tube before pickup, minimizing stretch and tension.

Precision glass bearings on non-driven sheaves reduce drag and stretching as the tubing makes subsequent passes through the tank at line speeds that can approach 800 feet/minute {243 meters/minute}.

Improve process control

Supplied with an integral vacuum chamber, the HTMP adds critical stability to the process by holding precise and repeatable ovality, concentricity and wall thickness. Vacuum can be held to 0.1 inch {2.54 mm} of water. Seamless controls integration with third party measuring systems assure repeatability.

Integrated components save cost

The HTMP integrates a precision vacuum tank, primary puller, multi-pass cooling and air wipe chamber into a single package, eliminating added cost and space requirements for stand-alone components.

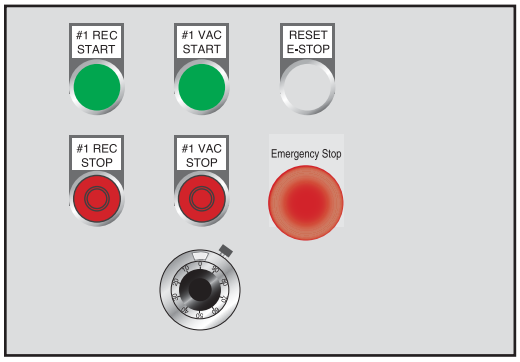
Cut material waste and increase yield

Precision vacuum combined with a third party ID/OD gauge provides exceptional dimensional control to save tens of thousands of pounds of material while increasing production yield. Example: Systems have reduced tolerances from ±0.005 inch {±0.127 mm} down to ±0.003 inch {±0.076 mm}.

Cleaner interior design

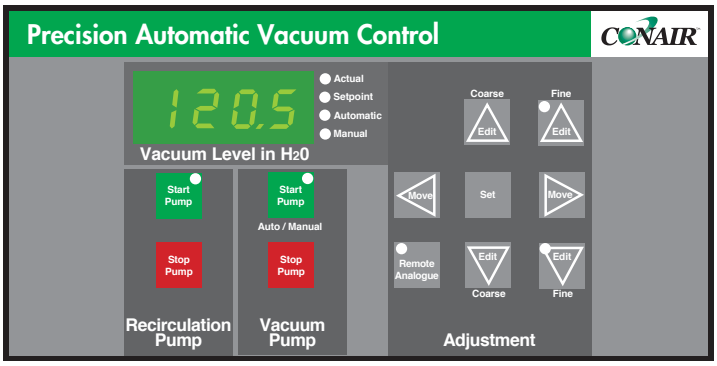
Tank interior is designed to ease daily cleanout by minimizing sharp corners and exposed threads where bacteria, pyrogens and other particulate matter can buildup. Telescoping drip tray is one piece to aid wipe-down by eliminating open seams. Guide rollers inside the vacuum tank are fixed to free-standing mounts to allow removal for cleaning.

CONTROLS



Potentiometer Control

This potentiometer control provides push buttons to start and stop the vacuum blower and the water recirculation pump. Vacuum levels are adjusted using a 10-turn potentiometer, which controls the RPM of the vacuum blower.



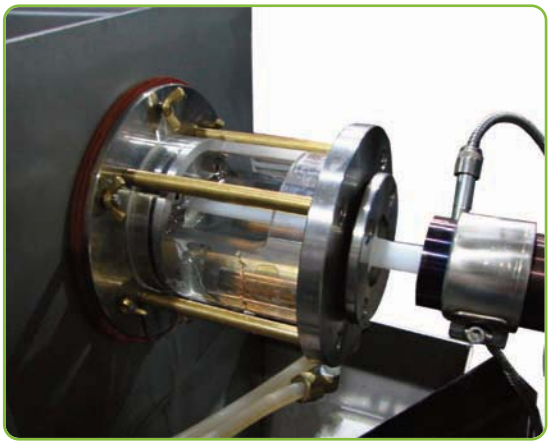
Optional Digital Control

The Precision Automatic Vacuum Control (PAVC) provides manual or automatic control of the vacuum system. Using a PID program and built-in vacuum transducer, the PAVC controls the vacuum level to the setpoint entered.

The PAVC can be connected to an in-line product gauge for automatic adjustment of the vacuum setpoint. The PAVC also has a serial port for data acquisition or remote control.

A remote digital potentiometer is available only with the addition of this option.

TOOLING OPTIONS



Pre-skinning chamber with tooling inserts for flexible polymers

- Calibrate/quench assembly for flexible materials
- Hold-down guide rollers, contoured or non-contoured
- Split-design air-wipe assemblies

Additional sets of pre-skinner inserts for other products sizes

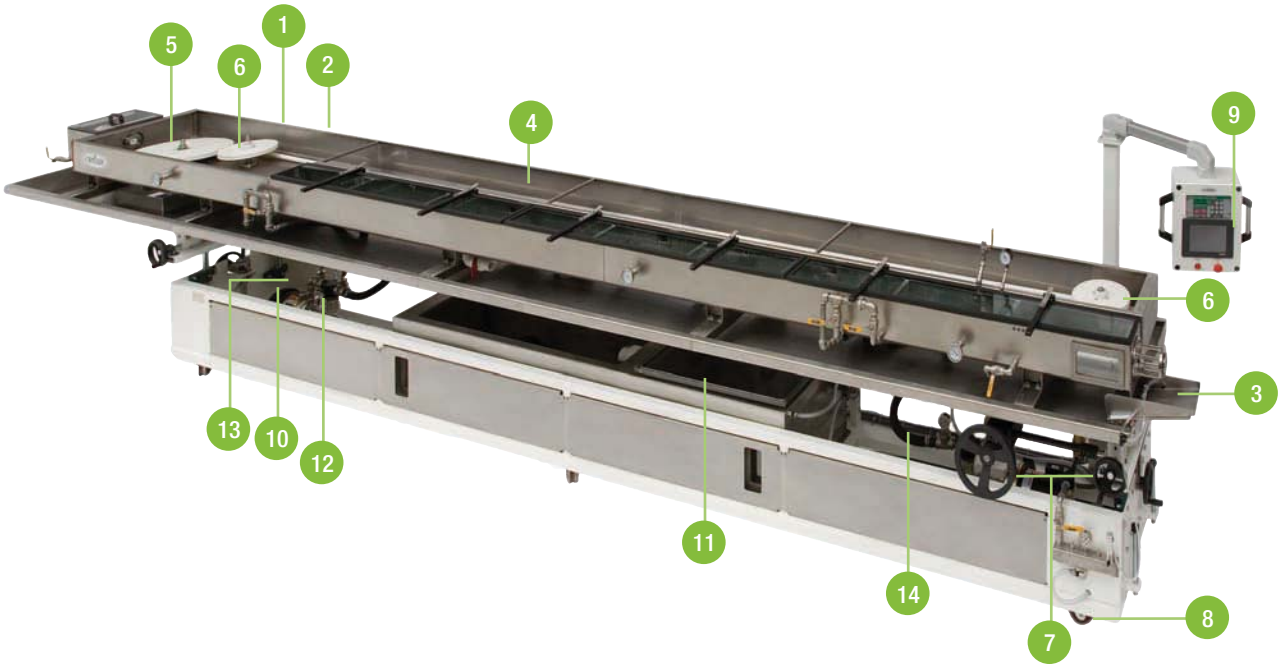
Flow meter rated for 0 to 50 gal./hr. {0-189 l/hr.} with pressure regulator

Split design air wipe assembly with mounting bracket

Additional blank product guide roller assemblies

Contoured product guide roller assemblies

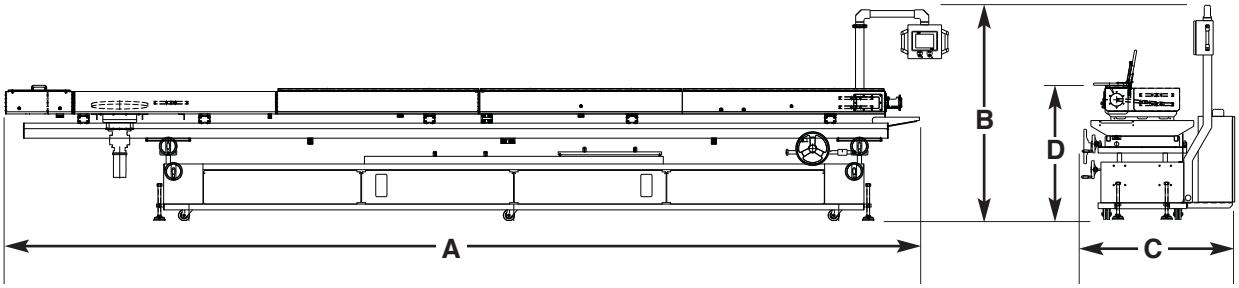
FEATURES



1. Heavy guage stainless steel tank.
2. Single piece, telescoping drip tray - easier to clean since there are no separate pieces to hide pyrogens or other contaminates.
3. Stainless steel splash tray.
4. Hinged one-half inch {12.7mm} tempered glass tank lids.
5. One (1) 20 inch {508 mm} primary sheave.
6. Two (2) 12 inch {304 mm} secondary sheaves.
7. Rock-steady, 3-axis precision position adjustment with manual 12 inch {304} longitudinal, 1 inch {25 mm} side to side and ±2 inch {51 mm} height adjustment.
8. Urethane swivel casters with jackscrews for positive positioning.
9. Ten turn potentiometer control with vacuum gauge.
10. Stainless steel (306) centrifugal water circulation pump and heat exchanger.
11. Full capacity stainless steel reservoir with easy access glass lids.
12. Variable speed VFAC vacuum pressure blower.
13. Water circulation pump - cooling.
14. Braised stainless steel heat exchanger.

- Float valve for automatic filling and make up.
- Adjustable water level control with thermometer.
- Variable speed vacuum blower with 110 inches water {2.8 meters water} vacuum capacity.
- Rounded bottom for easier cleaning - eliminates corners to ease cleanout and removal of contaminates.
- Blank product roller assemblies for vacuum tank.
- Painted steel frame.
- Quick change, spin off filter.

SPECIFICATIONS



MODELS	HTMP-12-3	HTMP-18-4	HTMP-24-5
Performance characteristics			
Capacity (tube)	up to .05 inch {12.5mm} dia.	up to .05 inch {12.5mm} dia.	up to .05 inch {12.5mm} dia.
Compartments	3	4	5
Number of passes	Up to 5	Up to 5	Up to 5
Vacuum system	0-110 in Blower - VFAC	0-110 in Blower - VFAC	0-110 in Blower - VFAC
Water circulation pump (vac)	1 Hp	1 Hp	2 Hp
Water circulation pump (open)	1 Hp	2 Hp	2 Hp
Water system contacts	Non-ferrous	Non-ferrous	Non-ferrous
Dimensions inches {mm}			
A - Overall length feet {mm}	14 {4267}	20 {6096}	26 {7925}
B - Overall height	74 {1880}	74 {1880}	74 {1880}
C - Overall width	48 {1219}	48 {1219}	48 {1219}
D - Tank height	8 {203}	8 {203}	8 {203}
Vacuum chamber length feet	6 {1829}	12 {3657}	18 {5486}
Vacuum chamber width	8 {203}	8 {203}	8 {203}
Cooling chamber length feet	12 {3658}	18 {5486}	24 {7315}
Cooling chamber width	26 {660}	26 {660}	26 {660}
Air wipe chamber	12 {304}	12 {304}	12 {304}
Primary (driven) sheave dia	20 {508}	20 {508}	20 {508}
Secondary (non-driven) sheave	12 {304}	12 {304}	12 {304}
Adjustments	3-plane manual		
Centerline height	42 2 {1066.8 50.8}		
Construction			
Tank material	Stainless steel	Stainless steel	Stainless steel
Full length splash tray	Stainless steel	Stainless steel	Stainless steel
Tank roller brackets*	12	18	24
Base frame	Carbon steel	Carbon steel	Carbon steel
Weight lb {kg}			
Shipping	2500 {1134}	3000 {1361}	3500 {1588}
Voltage	460V/3 phase/60 Hz		

SPECIFICATION NOTES:

* Rollers not included.

Specifications may change without notice. Consult a Conair representative for the most current information.

200 West Kensinger Drive • Cranberry Township, PA 16066 • 724-584-5500 • fax 724-584-5299 • www.conairgroup.com

Model MT104-16-4

PRECISELY SIZE **SMALL TO LARGE** TUBE AND PROFILE

MT Vacuum Sizing Tanks provide stable vacuum for precise sizing of tube and profile extrusions up to 4.5 inches {114.3 mm} in diameter. Water/air separation technology improves product tolerances and surface finishes and allows for repeatable quality and minimizes scrap.

All models offer a high-efficiency plate heat exchanger; an improved spray bar and water level adjustment system; and a wide range of tank sizes and pump configurations. Manual motor starters are standard.

WATER/AIR SEPARATION ENSURES VACUUM STABILITY

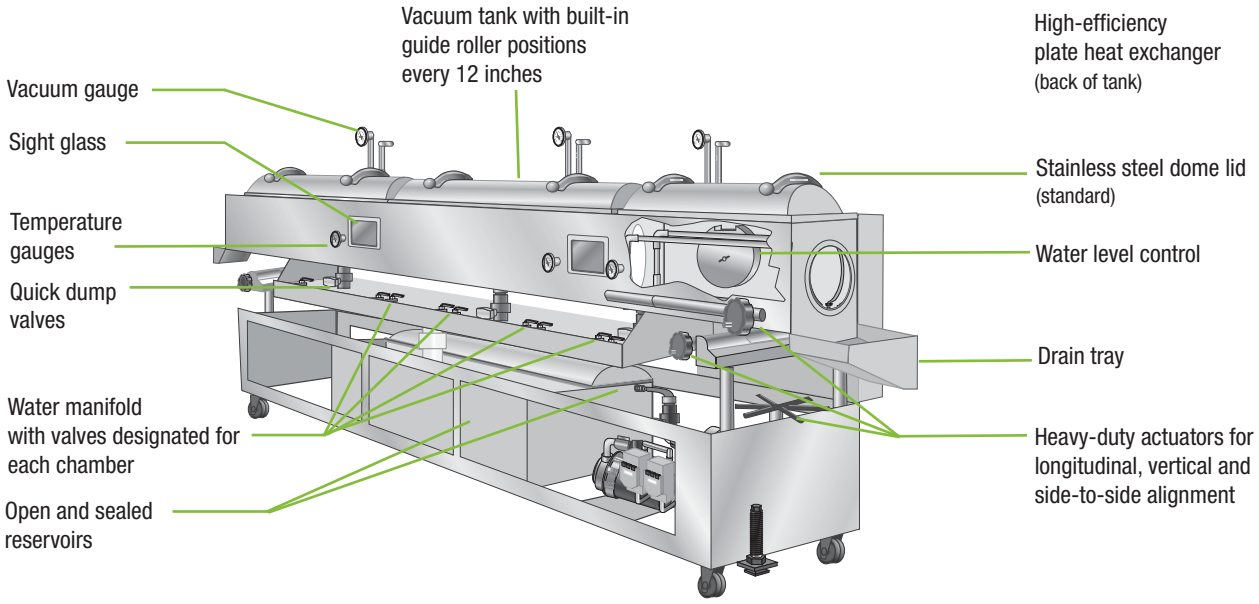
Most vacuum sizing tanks use a single standpipe to maintain water levels and pull vacuum into the chamber. Pockets of water and air surging through the same line can cause a hammer effect and vacuum fluctuations that can harm the shape and surface finish of the product.

MT sizing tanks eliminate this problem by using separate water and air pipes that lead to a closed water reservoir. Float valves in the reservoir maintain the water level below the vacuum pump inlet. The vacuum pump evacuates only the air in the reservoir, never the water, allowing optimum pump performance and minimizing surges in vacuum level.

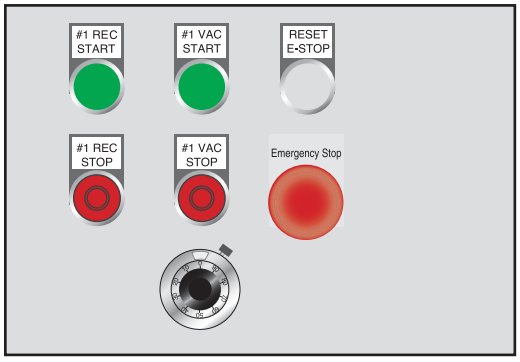
- **Easy to operate**
  Built-in water-manifold system with water and vacuum valves dedicated to each vacuum chamber. Quick dump valves for draining the tank. Optional digital control offers automatic vacuum adjustment and in-line gauge or computer interface.
- **Improved tank stability**
  Redesigned to handle heavier pulling forces. Roller system eliminates tank rock. Heavy-duty shafts and bearings provide precise yet rigid longitudinal, vertical and side-to-side adjustment capabilities.
- **Stainless-steel components**
  The vacuum tank, water reservoirs, splash tray, drip trays and dome lid are stainless steel. Other surfaces are painted for corrosion resistance.
- **Tank lengths 7 to 22 feet**
  Wide range of sizes, from a 7-foot {2.1 meter}, 2-chamber tank to the 22-foot {6.7 meter}, 5-chamber tanks.

MT VACUUM SIZING TANKS

FEATURES



CONTROLS



Potentiometer Control

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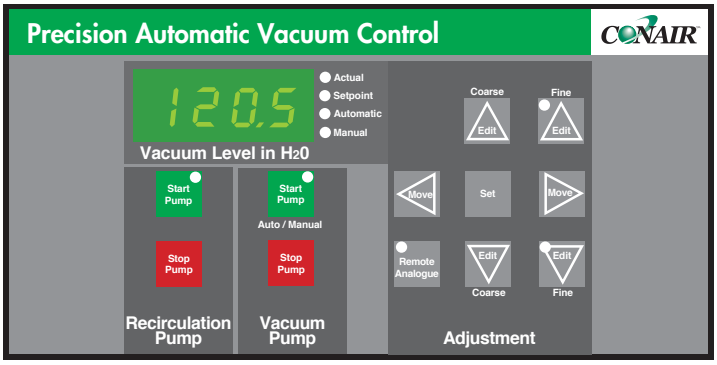


Optional Digital Control

The Precision Automatic Vacuum Control (PAVC) provides manual or automatic control of the vacuum system. Using a PID program and built-in vacuum transducer, the PAVC controls the vacuum level to the setpoint entered.

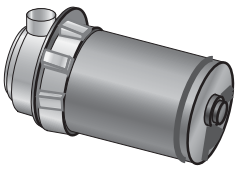
The PAVC can be connected to an in-line product gauge for automatic adjustment of the vacuum setpoint. The PAVC also has a serial port for data acquisition or remote control.

A remote digital potentiometer is available only with the addition of this option.

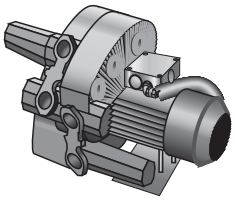
OPTIONS

OPTION AVAILABILITY BY MODEL ● Standard O Optional Not Available

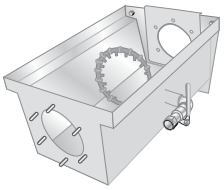
OPTIONS	WATER PUMPS			VACUUM PUMP		AIR WIPE COMPARTMENT	WATER FLOW METERS	GLASS LIDS	TELESCOPING DRAIN TRAY	FLIP-UP ROLLERS
	2 HP	5 HP	7.5 HP	1.7 HP	5 HP					
MT104-7-2	●			●		O	O	O	O	O
MT104-10-3	●			●		O	O	O	O	O
MT104-13-3	●			●		O	O	O	O	O
MT104-16-4	●			●		O	O	O	O	O
MT104-22-5	●			●		O	O	O	O	O
MT105-7-2	●			●		O	O	O	O	O
MT105-10-3	●			●		O	O	O	O	O
MT105-16-4	●	O		●	O	O	O	O	O	O
MT105-22-5	●	O	O	●	O	O	O	O	O	O



5 or 7.5 Hp water pump for processing thick-walled products or high-speed lines that require greater water flow.
2 Hp = 40 gpm @ 50 psi
5 Hp = 100 gpm @ 45 psi
7.5 Hp = 180 gpm @ 50 psi

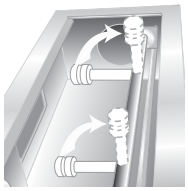


5 Hp vacuum pump for processes that require vacuum pressures up to 200 inches of water (14.7 inches of mercury) and cfm rates up to 150 for producing larger tubes and profiles.



Bolt-on air wipe compartment for drying the plastic product as it leaves the sizing tank. The air-wipe requires compressed air supplied at up to 80 psi.

Flow meters on the water valves in each chamber.

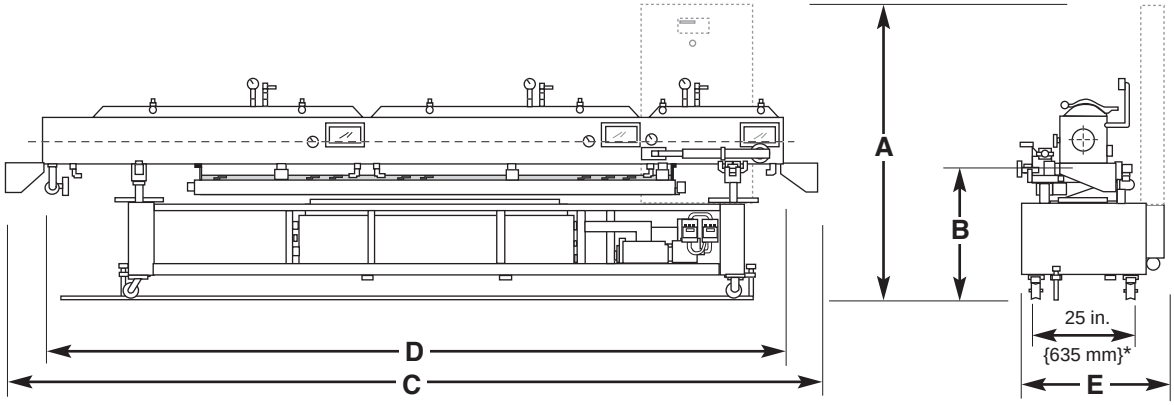


Flip-up immersion rollers for holding the plastic product above or below the water in the sizing tank.

Glass lids to view the product as it goes through the process. Glass lids may not be used on units that have vacuum blowers larger than a 1.7 HP and produce pressures greater than 135 inches of water {3.4 meters of water}.

Telescoping front drain tray for catching water running off the calibration tool. The tray expands from 4 to 12 inches {102 mm to 305 mm}.

SPECIFICATIONS



MODEL	MT104					MT105			
TANK STYLE	104-7-2	104-10-3	104-13-3	104-16-4	104-22-5	105-7-2	105-10-3	105-16-4	105-22-5
Performance characteristics									
Tube/profile capacity	up to 2 in. {50 mm}					up to 4.5 in. {125 mm}			
Vacuum blower / Water pump	1.7 Hp vacuum / 2 Hp water					1.7 Hp vacuum / 2 Hp water			
Number of compartments	2	3	3	4	5	2	3	4	5
3 ft. / 6 ft. / 1 ft. seal	0 / 1/ 1	1 / 1 / 1	0 / 2 / 1	1 / 2 / 1	1 / 3 / 1	0 / 1 / 1	1 / 1 / 1	1 / 2 / 1	1 / 3 / 1
Dimensions inches {mm}									
A - Overall height	84 {2134}	84 {2134}	84 {2134}	84 {2134}	84 {2134}	84 {2134}	84 {2134}	84 {2134}	84 {2134}
B - Height to centerline†	42 {1067}	42 {1067}	42 {1067}	42 {1067}	42 {1067}	42 {1067}	42 {1067}	42 {1067}	42 {1067}
C - Overall length	108 {2743}	144 {3658}	180 {4572}	216 {5486}	288 {7315}	108 {2743}	180 {4572}	216 {5486}	288 {7315}
D - Tank length feet {mm}	7 {2134}	10 {3048}	13 {3962}	16 {4877}	22 {6705}	7 {2134}	13 {3962}	16 {4877}	22 {6706}
E - Overall width	7 {2134}	48.5 {1232}	48.5 {1232}	48.5 {1232}	48.5 {1232}	48.5 {1232}	48.5 {1232}	48.5 {1232}	48.5 {1232}
Tank compartment width	12 {306}	12 {306}	12 {306}	12 {306}	12 {306}	12 {306}	12 {306}	12 {306}	12 {306}
Tank compartment height	8 {203}	8 {203}	8 {203}	8 {203}	8 {203}	12 {306}	12 {306}	12 {306}	12 {306}
Weight lb {kg}									
Shipping	1500 {680}	1800 {816}	2200 {998}	2800 {1270}	3500 {1587}	1500 {680}	2200 {998}	2800 {1270}	3500 {1587}
Electrical requirements Full load amps‡									
240V/3 phase/50-60 Hz	12.9					12.9			
480V/3 phase/50-60 Hz (Std)	6.5					6.5			
Water requirements	City, tower or chiller water; main supply line 1 inch NPT fitting								

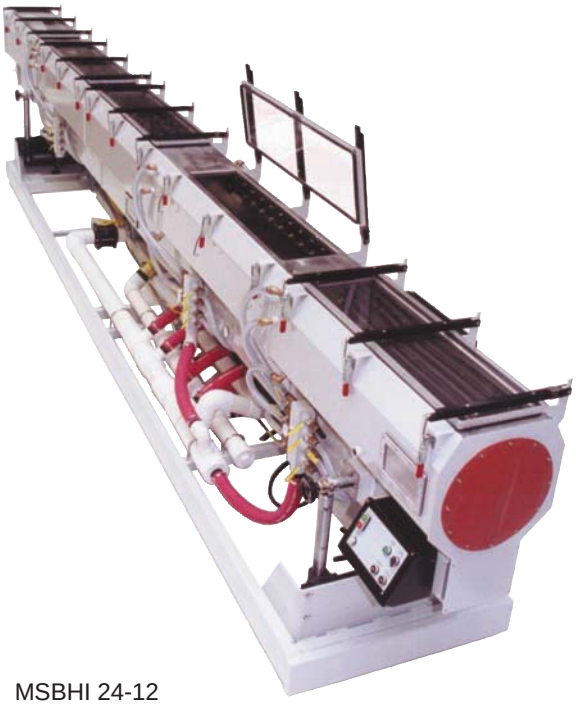
SPECIFICATION NOTES:

* You will need a V-groove caster adapter if you have rails that are not spaced 25 inches {635 mm} apart. Adapters are available for rails with centerline spacing of 22 to 25 inches {559 to 635 mm}.

† Centerline height is adjustable 2 inches {50.8 mm}.

‡ Amp draws will increase for optional pump configurations.

These tables define standard configurations only. Specifications can change without notice. Contact a Conair representative for the most current information.



MSBHI 24-12

HIGH-INTENSITY SPRAY FOR MORE RAPID COOLING

MSBHI Series Cooling Tanks produce a high-pressure spray that cools tube and profile extrusions faster and in less space than immersion tanks.

For pipe and tube of sufficient mass, immersion tanks compromise cooling efficiency due to the formation of an insulation layer over the hot product surface. MSBHI high intensity spray bars eliminate this problem and increase cooling efficiency through the process of extreme turbulent cooling. Cooling water droplets striking the hot surface rapidly conduct the heat away and are driven off in a continuous process.

KEYHOLE DESIGN: MINIMIZES PLUMBING/ENHANCES FLOW

The keyhole design of the MSBHI incorporates the spray and reservoir tanks into one compartment. The combined tanks require less plumbing, minimize future maintenance and improve water flow through the tank for more efficient cooling of extruded products.

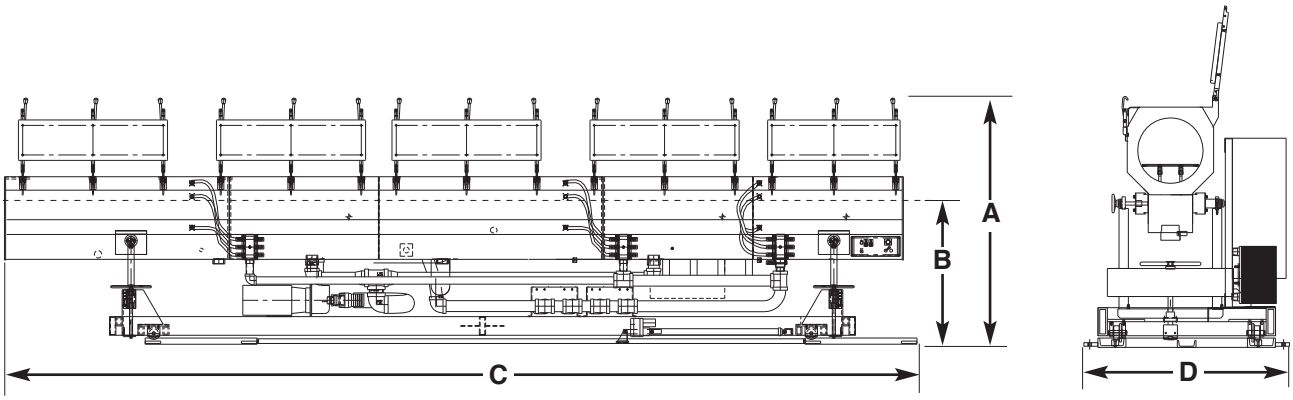
All standard MSBHI models include an integral reservoir/spray tank, individual control of all spray zones, a spray system sized for up to 100 gpm {379 liters/min}, stainless steel lids and adjustable tank height and side-to-side movement.

For faster cooling rates, you can increase the flow rate to as much as 340 gpm {1287 liters/min} and cooling efficiency with an optional process pump and heat exchanger. Other options include motorized tank forward, reverse movement and clear lids.

- **Easy to operate**
  Built-in water manifold system has water valves dedicated to each chamber. Individual spray bars control the direction of the spray to optimize cooling. Quick dump valves are provided for draining the tank.
- **Stainless-steel components**
  The tank, water reservoirs, splash tray and drip trays are stainless steel. Other surfaces are painted for corrosion resistance.
- **Tank lengths of 16 to 24 feet**
  The MSBHI is available in a range of sizes; from a 16-foot {4.9 meters}, two-chamber tank to the 24-foot {7.3 meters}, three-chamber tank.
- **Options to fit your needs**
  Optional recirculation and heat exchanger packages increase cooling efficiency by circulating from 100 to 340 gallons {379 to 1287 liters} of cold water per minute around the extrudate. Reduce maintenance with a filter system for optional 5, 7.5 or 15 Hp process pumps. Also available: Four foot start-up chamber for flood or independent vacuum and recirculation system, motorized forward and reverse tank movement and nozzle spray bar configuration.

MSBHI SERIES WATER SPRAY TANKS

SPECIFICATIONS



MODEL	MSBHI			
TANK STYLE	**16-9**	**24-9**	**16-12**	**24-12**
Performance characteristics				
Tube/profile capacity inches {mm}	up to 9 {229}		up to 12 {305}	
Number of compartments	1	1	1	1
Length of compartments feet {cm}	16 {488}	24 {732}	16 {488}	24 {732}
Tank movement inches {mm}				
Width	1.5 {45.7}	1.5 {45.7}	1.5 {45.7}	1.5 {45.7}
Height	2.5 {76.2}	2.5 {76.2}	2.5 {76.2}	2.5 {76.2}
Dimensions				
Overall length ft {cm}	17 {518}	25 {762}	17 {518}	25 {762}
A - Overall height in {mm}	60 {1524}	60 {1524}	60 {1524}	84 {1524}
B - Height to centerline* in {mm}	39 {991}	39 {991}	39 {991}	39 {991}
C - Tank length ft {cm}	16 {488}	24 {731}	16 {488}	24 {731}
D - Overall width in {mm}	53 {1346}	53 {1346}	53 {1346}	53 {1346}
Tank compartment width in {mm}	12 {305}	12 {305}	12 {305}	12 {305}
Tank compartment height in {mm}	8 {203}	8 {203}	8 {203}	8 {203}
Bulk head diameter in {mm}	12 {305}	16 {406}	12 {305}	16 {406}
Weight lb {kg}				
Shipping	3800 {1724}	4600 {2087}	4000 {1814}	4800 {2177}
Electrical requirement full load amps†				
230V/3 phase/60 Hz	14.2			
460V/3 phase/60 Hz (Std.)	7.1			
Water requirement ‡				
	100 gpm {379 liters/min} (if purchased without pumps) main supply line 1 inch NPT fitting			

SPECIFICATION NOTES:

* Centerline height is adjustable - 2 or 3 inches {-50.8 or 76.2 mm}.

† Amp draws will increase with the addition of an optional pump(s).

‡ With the optional recirculation system, models 16-9 and 16-12 can pump up to 180 gpm and models 24-9 and 24-12 can pump up to 340 gpm. One main supply line with a 1 inch NPT fitting would be required for all models.

Consult factory for 32 ft {975 cm} and 40 ft {1219 cm} models for pipe and profile applications.

This table defines pipe and profile configurations only.

Specifications can change without notice. Contact a Conair representative for the most current information.

OPTIONS

Increase cooling rates with a process pump and heat exchanger: 5 Hp pump (100 gpm); 7.5 Hp (180 gpm); and 15 Hp (340 gpm).

Process filter system for a 5 Hp, 7.5 Hp or 15 Hp pump.

Motorized forward and reverse tank movement.

Roller system for composite products.

Vacuum system for pipe and hollow profiles.

APPLICATION NOTES:

The base unit is supplied without pumps. Using plant supplied water nearly 100 gpm can be pushed through the tank. The tank is drained by gravity.

Model MCB2-21
(shown with
optional drip tray)

UNIFORM COOLING FOR TUBE, PIPE AND PROFILE

MCB Cooling Tanks provide flood or optional spray cooling of profile, tubing and pipe extrusions up to 6 inches {152 mm}.

The internal plumbing for flood cooling has been designed to provide maximum turbulence. This breaks up the warmer water that tends to surround and insulate the product, allowing maximum cooling efficiency. The spray cooling approach enhances the heat transfer rate through evaporative cooling.

An adjustable rotary water level control is used to easily adjust process water level for flood or spray cooling.

DURABLE STAINLESS STEEL CONSTRUCTION

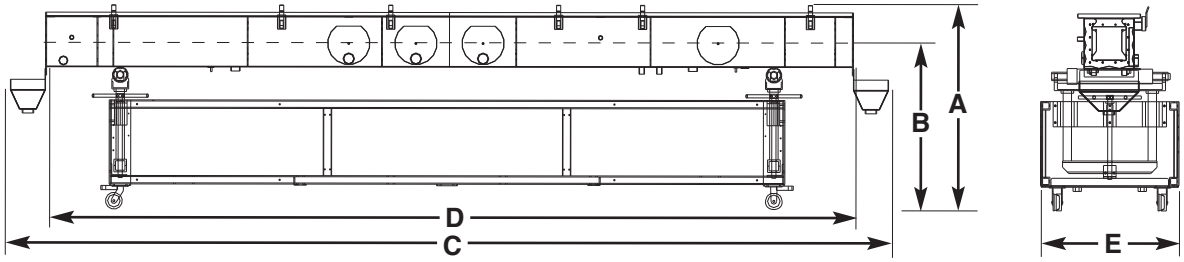
MCB Cooling Tanks are constructed using welded, heavy gauge stainless steel for maintenance-free operation.

Grooved casters and positioning screws ensure proper tank alignment. Also, hand wheels are positioned at each end of the tank for precise height adjustment. Optional adjustments for linear movement and side-to-side movement are available.

The optional closed recirculation system with water reservoir pump and heat exchanger can interface with your Conair portable or central chiller for reduced water consumption.

- **Easy to operate**
  Adjustments and water valves are positioned for ease of operation.
- **Tank lengths from 6 to 30 feet**
  Cross sections range from 8 x 12 {203 x 305 mm} to 16 x 16 inches {406 x 406 mm}. The wide range of sizes allows you to choose a tank that meets your needs.
- **Options to meet your needs**
  Choose to add a 2 Hp (40 gpm), 5 Hp (100 gpm) or 7.5 Hp (180 gpm) recirculation system and high efficiency heat exchanger; a process filter for a 2 Hp, 5 Hp or 7.5 Hp pump; longitudinal and side-to-side adjustments; spray bars and tank lids made from stainless steel or polycarbonate.

SPECIFICATIONS



MODEL	MCB-1	MCB-2			
TANK LENGTH ft.	7	12	16	21	30
Performance characteristics					
Tube/profile capacity	1" {25mm}	up to 2 inches {50 mm}			
Pumps	.5 Hp	2 Hp or 5 Hp water			
Number of compartments	2	2	2	2	2
Size - Cooling / Air wipe	6 inch {152}/ 1 inch {25mm}	11 ft . / 1 ft.	15 ft. /1 ft.	20 ft. / 1 ft.	29 ft. / 1 ft.
Dimensions inches {mm}					
A - Overall height	55 {1397}	55 {1397}	55 {1397}	55 {1397}	55 {1397}
B - Height to centerline*	42 {1067}	42 {1067}	42 {1067}	42 {1067}	42 {1067}
C - Overall length	84 {2134}	180 {4572}	216 {5486}	288 {7315}	396 {10058}
D - Tank length ft {m}	7 {2.1}	13.5 {4.1}	17.5 {5.3}	22.5 {6.9}	31.5 {9.6}
E - Overall width	30 {762}	48.5 {1232}	48.5 {1232}	48.5 {1232}	48.5 {1232}
Tank compartment width†	8 {203}	12 {306}	12 {306}	12 {306}	12 {306}
Tank compartment height	8 {203}	8 {203}	8 {203}	8 {203}	8 {203}
Approximate weight lb {kg}‡					
Shipping	700 {318}	2200 {998}	2800 {1270}	3500 {1587}	4500 {2041}
Voltages available	240V/3 phase/50-60 Hz or 480V/3 phase/50-60 Hz				
Water requirements	City, tower or chiller water; main supply line 1 inch NPT fitting				

MODEL	MCB-4				MCB-6			
TANK LENGTH	12	16	21	30	12	16	21	30
Performance characteristics								
Tube/profile capacity	up to 4 inches {101 mm}				up to 6 inches {152 mm}			
Pumps	2 Hp, 5 Hp or 7.5 Hp water							
Number of compartments	2	2	2	2	2	2	2	2
Size - Cooling / Air wipe	11 ft. / 1 ft.	15 ft. / 1 ft.	20 ft. / 1 ft.	29 ft. / 1 ft.	11 ft . / 1 ft.	15 ft. /1 ft.	20 ft. / 1 ft.	29 ft. / 1 ft.
Dimensions inches (mm)								
A - Overall height	55 {1397}	55 {1397}	55 {1397}	55 {1397}	55 {1397}	55 {1397}	55 {1397}	55 {1397}
B - Height to centerline*	42 {1067}	42 {1067}	42 {1067}	42 {1067}	42 {1067}	42 {1067}	42 {1067}	42 {1067}
C - Overall length	180 {4572}	216 {5486}	288 {7315}	396 {10058}	180 {4572}	216 {5486}	288 {7315}	396 {10058}
D - Tank length ft {m}	13.5 {4.1}	17.5 {5.3}	22.5 {6.9}	31.5 {9.6}	13.5 {4.1}	17.5 {5.3}	22.5 {6.9}	31.5 {9.6}
E - Overall width	48.5 {1232}	48.5 {1232}	48.5 {1232}	48.5 {1232}	48.5 {1232}	48.5 {1232}	48.5 {1232}	48.5 {1232}
Tank compartment width†	12 {306}	12 {306}	12 {306}	12 {306}	14 {356}	14 {356}	14 {356}	14 {356}
Tank compartment height	12 {306}	12 {306}	12 {306}	12 {306}	14 {356}	14 {356}	14 {356}	14 {356}
Approximate weight lb (kg) ‡								
Shipping	2200 {998}	2800 {1270}	3500 {1587}	4500 {2041}	2200 {998}	2800 {1270}	3500 {1587}	4500 {2041}
Voltages available	240V/3 phase/50-60 Hz or 480V/3 phase/50-60 Hz							
Water requirements	City, tower or chiller water; main supply line 1 inch NPT fitting							

SPECIFICATION NOTES:

* Centerline height is adjustable 2 inches {50.8 mm}.

† You will need a V-groove caster adapter if you have rails that are not spaced 25 inches {635 mm} apart. Adapters are available for rails with centerline spacing of 22 to 25 inches {559 to 635 mm}.

‡ Weights are based on standard configuration only and do not include any of the available options. Consult factory. Amp draws will based on options selected.

These tables define standard configurations only.

Specifications can change without notice. Contact a Conair representative for the most current information.

APPLICATION NOTE:

The base tank is supplied without the recirculation system. The tank is drained by gravity.

PRECISION BELT PULLERS
MODELS 2-12, 3-20, 4-26, AND 6-39

Model 3-20 Puller

ROCK-STEADY **PRECISION PULLING** WITH APPLICATION FLEXIBILITY

Conair Precision Belt Pullers combine exceptional application versatility with low investment and installation costs.

Precision Pullers are available in four (4) standard model sizes to accommodate tubing diameters to 3 inch {76 mm} as well as flexible and rigid extrusions.

SMOOTH, RELIABLE TAKE-OFFS FOR TUBING/PROFILES

With superior tracking capabilities and low drift motor speed controls, these pullers provide rock-steady accuracy and smooth precision. Less resin giveaway, reduced waste and far fewer rejected parts provide consistent quality. Precise speed controls, easily adjusted belts and various options ensure optimum operator and machine productivity.

A choice of belt widths, contact lengths, torque ratings, entrance openings and belt coverings broaden the range of applications and ensure properly and consistently formed product.

Safeguards include OSHA color-coded cautions, adjustable entrance guides that allow walk-through operation and an emergency stop.

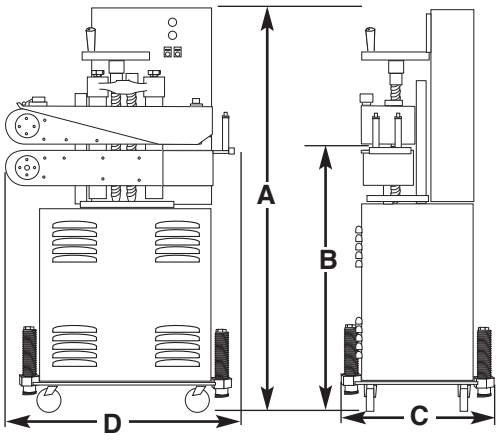
Performance versatility
Precision pullers are supplied standard with open loop vector with 10-turn potentiometer speed control. Optional drive packages include single or dual servo with touch screen for optimum performance. The servo touch screen offers built-in tuning of the servo. High speed servos can reach speeds of 2000 feet/min {609 meter/min}.

Industrial design prolongs life
These smooth, reliable pullers feature components that are selected for long service life, yet readily accessible for any required maintenance. The heavy-duty cabinet, leveling floor locks and casters provide a highly stable base for the table mounted puller assembly.

Tabletop design adds convenience
Tabletop versions allow the puller assembly to be conveniently removed for maintenance and feature a walk-through design that allows flexible parts to be fed in from the side versus fed from the belt end.

PRECISION BELT PULLERS
MODELS 2-12, 3-20, 4-26, AND 6-39

SPECIFICATIONS



MODELS	2-12	3-20		4-26		6-39	
Performance characteristics							
Belt width in. {mm}	2 {50.8}	3 {76}		4 {102}; optional 6 {152}		6 {152}; optional 8 {203}	
Belt contact length in. {mm}	12 {304.8}	20 {508}		26 {660}		39 {991}	
Maximum feed opening in. {mm}	3 {76}	4 {102}		5 {127}		7 {178}	
Motor Drives Hp							
Belt drive - Vector	1	1.0; optional 1.5		1.5; optional 2.0		2.0	
Servo drive*	2.4 Std.	2.4*		2.4*		2.4*	
Belt type†	Poly-V, 60	Poly-V, 40/50 durometer natural rubber covering/Precision flat option					
Belt speeds - Drive type	servo drive	open loop vector	servo drive	open loop vector	servo drive	open loop vector	servo drive
Available speeds feet/min	150, 250, 400, 550 650 up to 1000	2.6 - 80 5.3 - 160 10.6 - 320	0.8 - 80 1.6 - 160 3.2 - 320 15.7 - 472	1.9 - 59 3.9 - 118 7.8 - 236 9.4 - 472	0.5 - 59 1.2 - 118 2.3 - 236 15.7 - 472 200-2000‡	1.9 - 59 3.9 - 118 7.8 - 236 9.4 - 472	0.59 - 59 1.2 - 118 2.3 - 236
Dimensions inches {mm}							
A - Overall height	42 {1016}	62 {1575}		60 {1524}		60 {1524}	
B - Height to centerline 2 { 51}	77 {1959}	42 {1016}		42 {1067}		42 {1016}	
C - Width	41.25 {1048}	34 {864}		34 {864}		37 {940}	
D - Length	28.84 {733}	34 {864}		34 {864}		50 {1270}	
Weight lb {kg}							
Installed	600 {272}	840 {381}		920 {417}		1410 {639}	
Shipping	850 {386}	990 {449}		1070 {485}		1560 {707}	
Electrical requirements full load amps**							
Drive type	Servo	Open loop		Open loop		Open loop	
Hp {kW}	0.84 {0.63}	1 {0.75}	1.5 {1.1}	1.5 {1.1}	2 {1.5}	2 {1.5}	3 {2.2}
230V/3 phase/60 Hz	19	5.9	10	10	10	10	13.5
460V/3 phase/60 Hz	14.4	3.8	6.6	6.6	6.6	6.6	9.5

SPECIFICATION NOTES:

* Optional.

† Flat belts are available as an option. Optional belt coverings include: 40, 55 and 70 durometer natural rubber; and 60 durometer white nitrile (FDA).

‡ Speed achieved with use of (2) 2.4 Hp servo drive motors with flat belts.

Speed achieved with use of 2:1 inline reducer.

**Amp draws increase for the optional 3 Hp drive motor available on Model 6-39.

Specifications can change without notice. Contact a Conair representative for the most current information.

Model BP 8-48
Shown with custom enclosure

CONSISTENT PULLING WITH IN-LINE FLEXIBILITY

BP Series Belted Pullers offer a wide range of belt speeds and contact lengths for maximum flexibility and consistent pulling force.

BP pullers have been designed to handle tubing and flexible products, as well as rigid extrusions. Contact lengths up to 48 inches {1219.2 mm} minimize the chance for product distortion, especially with thin-wall profiles.

Every BP puller has an easy-to-use operator interface, maximum pull torque and low maintenance requirements and flexible operation.

ACCURATE, RELIABLE PULLING FOR TUBE AND PROFILE

They are called haul-offs, pullers, take-offs or tractor capstans. What you call them is not important. Your choice of one is.

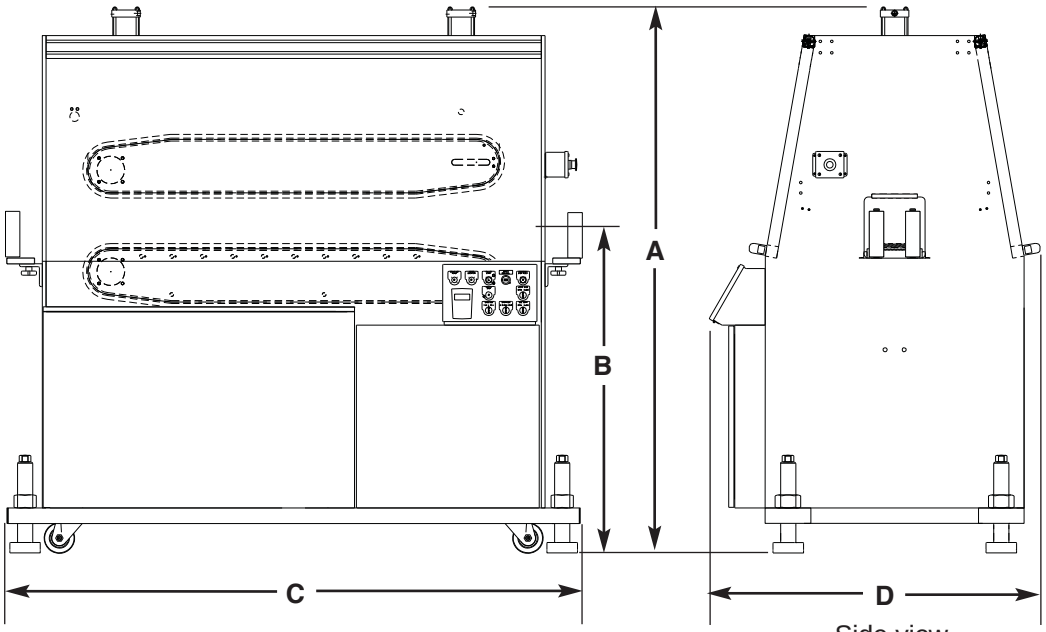
The puller, in combination with the extruder output, is what will maintain the dimensions of your product and the stability of your production.

BP pullers provide accurate pulling speeds and reliable, smooth pulling force for a wide range of products.

Available belt widths range from 6 to 12 inches {152.4 to 304.8 mm}. Available contact lengths range from 36 to 48 inches {914.4 to 1219.2 mm}.

- **Accurate pulling speed**
  The AC open and closed-loop drive provides a wide range of precisely controlled belt speeds, with longer motor life than the DC drives.
- **Smooth, stepless operation**
  Traction belts are tandem driven for synchronous travel. Grooved aluminum sheaves offer straight, non-slip traction. Non-marking, poly-v grooved belts are standard.
- **Easy to operate**
  Controls are front-mounted and angled up toward the operator for ease of use. The height of traction belts can be adjusted individually.
- **Heavy duty; low maintenance**
  This caster-mounted puller has locking leveling screws for line stability. Fan-cooled motors are totally enclosed. Construction is welded, heavy-duty steel. All material parts are painted, plated or made to resist corrosion.
- **Optional servo drive**
  The optional servo drive adds to the guaranteed reliability and speed regulation.

SPECIFICATIONS



Front view

Side view

MODELS	BP 6-48	BP 8-48	BP 12-36
Performance characteristics			
Belt width in. {mm}	6 {152}	8 {203}	12 {304}
Belt contact length in. {mm}	48 {1219}	48 {1219}	36 {914}
Maximum feed opening in. {mm}	7 {178}	7 {178}	7 {178}
Drive motor	3 Hp	3 Hp	3 Hp
Drive types available	Closed loop digital; AC inverter; AC flux vector; Servo		
Belt type*	Poly-V belt with 1/2 in. 40A duro pure gum rubber		
Belt speeds			
Drive type†	Fixed Reducer		
Available speeds feet/min.	2.5 - 27	2.5 - 27	2.5 - 27
	4 - 40	4 - 40	4 - 40
	6 - 65	6 - 65	6 - 65
	8 - 81	8 - 81	8 - 81
	10 - 108	10 - 108	10 - 108
	16 - 162	16 - 162	16 - 162
Dimensions in. {mm}			
A - Height	76 {1930}	76 {1930}	76 {1930}
B - Height to centerline	42.5 {1080}	42.5 {1080}	42.5 {1080}
C - Overall width	32 {813}	32 {813}	37 {940}
D - Overall depth	66 {1676}	66 {1676}	54 {1372}
Weight lb {kg}			
Installed	1910 {866}	1810 {821}	1710 {776}
Shipping	2210 {1002}	2110 {957}	2010 {912}
Voltage Total amps‡			
230V/1 phase/60 Hz	24	24	24
460V/1 phase/60 Hz	11	11	11
575V/1 phase/60 Hz	9	9	9

SPECIFICATION NOTES:

* 60A duro red EPDM belts are optional.

† Dual speed transmission available as an option.

‡ 3-phase power available on AC inverter, flux vector and servo equipped models.

Specifications can change without notice. Contact a Conair representative for the most current information.

Model CP10-96
Custom

CONSISTENT PULLING WITH **SMOOTH PRECISION**

The CP Series Cleated Pullers are designed and built for the demanding profile extrusion industry.

Every CP puller has an easy-to-use operator interface, maximum pull torque, low maintenance requirements and flexible operation.

This series of pullers is designed for large, general profile applications, such as decking and window lineals.

IMPROVED ACCESS FOR CLEANING

Special consideration was given to the design of the CP Series Cleated Puller to provide maximum performance with minimal effort.

The traction assemblies are individually driven to supply and maintain the required power for accurate, consistent and dependable pulling force.

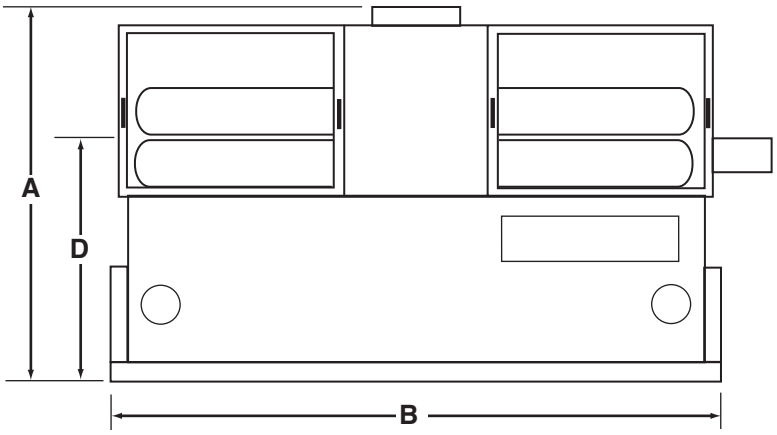
The traction assemblies offer easy start-up, with end mounted upper beam and pneumatic upper adjustment control.

A variety of speeds, contact lengths and widths can be selected allowing a wide choice of machines to suit your specific production requirements.

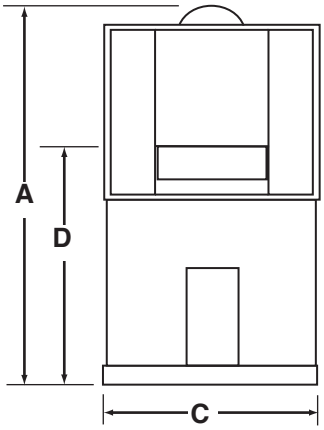
- **Consistent, accurate pulling**
  This line of pullers gives maximum performance for the life of the machine. AC inverter and vector drives on all units achieve a high level of accuracy.
- **Dependable**
  CP pullers have a record of low maintenance requirements, long productive life and solid performance.
- **Flexible and efficient**
  With the end mounted pivot designed upper beam assembly, easy operator interface with front mounted controls and many other options, this line of pullers offers maximum flexibility for minimum cost. A very efficient package.
- **Heavy-duty design**
  All steel-welded construction. All material parts are painted, plated or made to resist corrosion.

CP SERIES CLEATED PULLER

SPECIFICATIONS



Front view



Side view

MODELS	CP640	CP650	CP850	CP880
Performance characteristics				
Applications	Tube/Profile	Tube/Profile	Profile	Profile
Capacity in. {mm}	6 x 6 {152x152}	6 x 6 {152x152}	8 x 8 {203x203}	8 x 8 {203x203}
Cleat width in. {mm}	3 {76.2}	3 {76.2}	8 {203}	8 {203}
Cleat contact length in. {mm}	40 {1016}	50 {1270}	50 {1270}	80 {2032}
Maximum feed opening in. {mm}	6 {152.4}	6 {152.4}	8 {203.2}	8 {203.2}
Pull force lbs/kg	1700 {771}	1700 {771}	2500 {1134}	2500 {1134}
Drive motor*	(2) 2 Hp	(2) 2 Hp	(2) 2 Hp	(2) 3 Hp
Belt speed ranges ft/min {m/m}				
	1-10 {0.3-3} 2-20 {0.6-6.1} 3-30 {0.9-9.1} 4-40 {1.2-12.2} 5-50 {1.5-15.2}	1-10 {0.3-3} 2-20 {0.6-6.1} 3-30 {0.9-9.1} 4-40 {1.2-12.2} 5-50 {1.5-15.2}	1-10 {0.3-3} 2-20 {0.6-6.1} 3-30 {0.9-9.1} 4-40 {1.2-12.2} 5-50 {1.5-15.2}	1-10 {0.3-3} 2-20 {0.6-6.1} 3-30 {0.9-9.1} 4-40 {1.2-12.2} 5-50 {1.5-15.2}
Cleat assemblies				
Cleat Type	Caterpillar-type traction assembly with 65 durometer non-marking cleats			
Cleat style	Bolt-on			
Cleat height inch {mm}	1 {25.4}			
Dimensions inch {mm}				
A - Height	73 {1854}	74 {1880}	84 {2133}	84 {2133}
B - Length	69 {1752}	79 {2006}	120 {3048}	150 {3810}
C - Width	38 {990}	38 {990}	38 {990}	38 {990}
D - Centerline height 3 {76.2}	42 {1067}	42 {1067}	42 {1067}	42 {1067}
Weight lb {kg}				
Installed	2400 {1088}	2500 {1134}	2500 {1134}	2700 {1225}
Shipping	2700 {1225}	2900 {1315}	3100 {1406}	3600 {1633}
Electrical requirements full load amps				
230V/3Phase/60Hz	22.2	22.2	25.6	25.6
460V/3Phase/60Hz	14.1	14.1	19.3	19.3

SPECIFICATION NOTES:

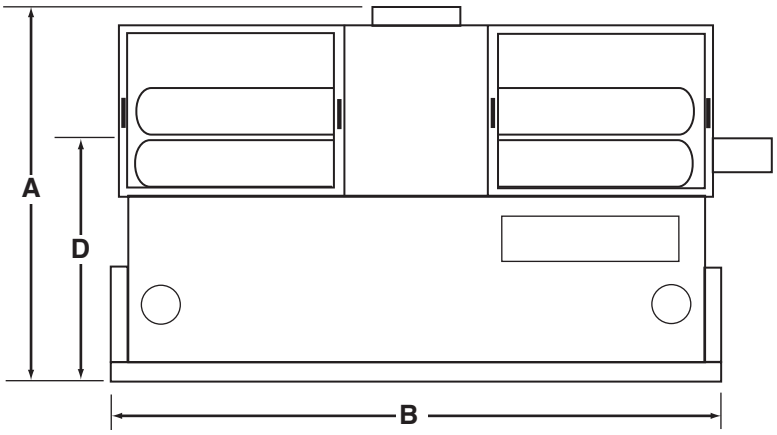
* Motor horsepowers are listed as standard. Line speed requirements may change horsepower requirements.

These tables define standard configurations only.

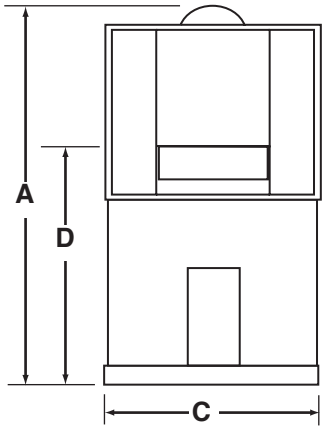
Specifications can change without notice. Contact a Conair representative for the most current information.

CP SERIES CLEATED PULLER

SPECIFICATIONS



Front view



Side view

MODELS	CP10100	CP10120	CP1250	CP1280
Performance characteristics				
Applications	Profile	Profile	Profile	Profile
Capacity in. {mm}	8 x 10 {203x254}	8 x 10 {203x254}	8 x 10 {203x254}	8 x 12 {203x304}
Cleat width in. {mm}	10 {254}	10 {254}	12 {305}	12 {305}
Cleat contact length in. {mm}	100 {2540}	120 {3048}	50 {1270}	80 {2032}
Maximum feed opening in. {mm}	8 {203.2}	8 {203.2}	8 {203.2}	8 {203.2}
Pull force lbs/kg	2500 {1134}	2500 {1134}	2500 {1134}	2500 {1134}
Drive motor*	(2) 5 Hp	(2) 5 Hp	(2) 3 Hp	(2) 5 Hp
Belt speed ranges ft/min {m/m}				
	1-10 {0.3-3}	1-10 {0.3-3}	1-10 {0.3-3}	1-10 {0.3-3}
	2-20 {0.6-6.1}	2-20 {0.6-6.1}	2-20 {0.6-6.1}	2-20 {0.6-6.1}
	3-30 {0.9-9.1}	3-30 {0.9-9.1}	3-30 {0.9-9.1}	3-30 {0.9-9.1}
	4-40 {1.2-12.2}	4-40 {1.2-12.2}	4-40 {1.2-12.2}	4-40 {1.2-12.2}
	5-50 {1.5-15.2}	5-50 {1.5-15.2}	5-50 {1.5-15.2}	5-50 {1.5-15.2}
Cleat assemblies				
Cleat Type	Caterpillar-type traction assembly with 65 durometer non-marking cleats			
Cleat style	Bolt-on	Bolt-on	Bolt-on	Bolt-on
Cleat height inch {mm}	1 {25.4}	1 {25.4}	1 {25.4}	1 {25.4}
Dimensions inch {mm}				
A - Height	84 {2133}	110 {2794}	110 {2794}	54 {1371}
B - Length	183 {4648}	203 {5156}	68 {1727}	98 {2489}
C - Width	77 {1956}	77 {1956}	38 {990}	38 {990}
D - Centerline height 1{25.4}	42 {1067}	42 {1067}	42 {1067}	42 {1067}
Weight lb {kg}				
Installed	3200 {1451}	3500 {1587}	2700 {1224}	3000 {1360}
Shipping	4600 {2086}	5000 {2268}	3500 {1588}	3800 {1724}
Electrical requirements full load amps				
230V/3Phase/60Hz	25.6	25.6	25.6	25.6
460V/3Phase/60Hz	19.3	19.3	19.3	19.3

SPECIFICATION NOTES:

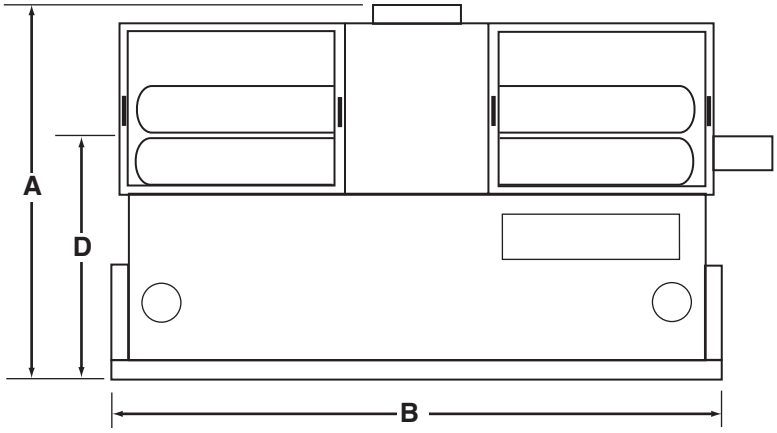
* Motor horsepowers are listed as standard. Line speed requirements may change horsepower requirements.

These tables define standard configurations only.

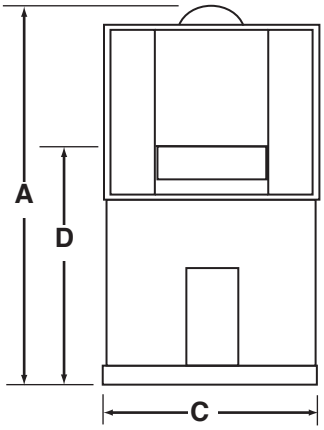
Specifications can change without notice. Contact a Conair representative for the most current information.

CP SERIES CLEATED PULLER

SPECIFICATIONS



Front view



Side view

MODELS	CP6360	CP12460	CP8660	CP24660
Performance characteristics				
Applications	Pipe	Profile	Profile	Profile
Capacity in. {mm}	6 dia. {152}	12 dia. {305}	18 dia. {457}	24 dia. {610}
Cleat width in. {mm}	1 {25}	3 {76.2}	3 {76.2}	3 {76.2}
Cleat contact length in. {mm}	60 {1524}	60 {1524}	60 {1524}	60 {1524}
Maximum feed opening in. {mm}	6.5 {165.1}	13.2 {335.3}	19.5 {495.3}	25.8 {655.3}
Pull force lbs/kg	2500 {1134}	2500 {1134}	2500 {1134}	2500 {1134}
Drive motor*	(3) 2 Hp	(4) 2 Hp	(6) 2 Hp	(6) 2 Hp
Belt speed ranges ft/min {m/m}				
	1-10 {0.3-3}	1-10 {0.3-3}	1-10 {0.3-3}	1-10 {0.3-3}
	2-20 {0.6-6.1}	2-20 {0.6-6.1}	2-20 {0.6-6.1}	2-20 {0.6-6.1}
	3-30 {0.9-9.1}	3-30 {0.9-9.1}	3-30 {0.9-9.1}	3-30 {0.9-9.1}
	4-40 {1.2-12.2}	4-40 {1.2-12.2}	4-40 {1.2-12.2}	4-40 {1.2-12.2}
	5-50 {1.5-15.2}	5-50 {1.5-15.2}	5-50 {1.5-15.2}	5-50 {1.5-15.2}
Cleat assemblies				
Cleat Type	Caterpillar-type traction assembly with 65 durometer non-marking cleats			
Cleat style	Molded	Bolt-on	Bolt-on	Bolt-on
Cleat height† inch {mm}	1 {25.4}	1 {25.4}	1 {25.4}	1 {25.4}
Dimensions inch {mm}				
A - Height	84 {2133}	84 {2133}	84 {2133}	84 {2133}
B - Length	109.6 {2783}	109.6 {2783}	109.6 {2783}	109.6 {2783}
C - Width	38 {990}	77 {1956}	87 {2028}	97 {2462}
D - Centerline height 1{25.4}	42 {1067}	42 {1067}	42 {1067}	42 {1067}
Weight lb {kg}				
Installed	2900 {1315}	consult Conair	consult Conair	consult Conair
Shipping	4500 {2041}	6500 {2948}	7500 {3402}	8500 {3856}
Electrical requirements full load amps				
230V/3Phase/60Hz	25.6	consult Conair		
460V/3Phase/60Hz	19.3	consult Conair		

SPECIFICATION NOTES:

* Motor horsepowers are listed as standard. Line speed requirements may change horsepower requirements.

† CP6360 belt is a 1 inch High-Molded/60-Duro belt. Quick change cleats are available for all models except CP6360 which has molded throw-away assemblies.

These tables define standard configurations only. Specifications can change without notice. Contact a Conair representative for the most current information.

Model CSC2

HIGH TORQUE CUTTING WITH SPEED AND ACCURACY

Conair Servo Cutters (CSC) maintain quality by precisely cutting flexible, rigid tubing or custom profiles to length on-demand or automatically. Choose a CSC model when you want close tolerances at high speeds. Pick the CSC-L (light duty) models for maximum cpm while cutting flexible tubing, or the heavy-duty model CSC with increased cutting torque for tough applications.

The eye-level operator interface, with front-mounted controls, allows easy setup and monitoring. The built in repeatability feature prevents inconsistent cuts.

ELIMINATE PARTS VARIATION; ENHANCE QUALITY

CSC servo cutters provide enhanced cutting quality with repeatability of ±0.10 millisecond.

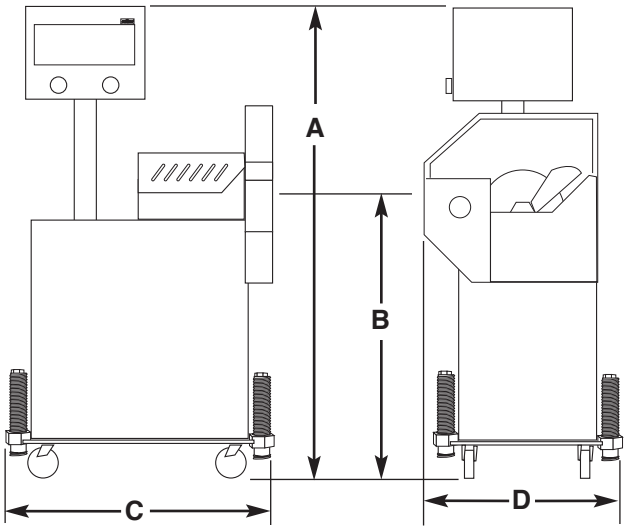
The optional follower mode lets you input cut length and number of blades. The rotary encoder then automatically compensates for puller speed fluctuations to maintain very accurate cut lengths.

Offset bushing bores allow you to center parts on a 6 inch {152.4 mm} wide conveyor making it easy to position the conveyor.

This cutter has a category 2 safety circuit, a redundant safety control circuit, that offers the operator a higher level of safety.

- **Cut capacity up to 4-3/4 inches**
  Cut parts up to 4-3/4 inches {121 mm} in diameter while essentially eliminating part size variations.
- **Continuous duty positional servo**
  Positional accuracy of ±0.10 millisecond for the price of a velocity controlled servo.
- **All new operator control**
  The CSC features a user-friendly 6 inch {152 mm} touch screen with high visibility graphics and common sense commands for controlling the cutter. A large pop-up “soft” keypad makes recipe entry fast and easy.
- **Adjustable center line**
  The CSC Servo Cutter meets domestic or international requirements for centerline height as material travels into the cutter.
- **Enhanced cutting**
  CSC models include precision 4:1 inline planetary gear reducer for enhanced cutting torque. (maximum RPM=750)
- **High-speed**
  CSC-2L uses no reduction, which allows flywheel operation up to 2800 RPM.

SPECIFICATIONS



OPTIONS

- Stainless steel cutter head
- Cutting torque horsepower upgrade (Std. on CSC4 & CSC5)
- Follower cutting mode
- Timer mode
- Variable blade speed for on-demand and flywheel cut modes
- Slide base system
- Electric eye and bracket for use with end sense mode
- Blade wipe system
- Bushing lubrication system
- Left to right operation
- Special paint
- Blade heater with Athena temperature control

MODELS	CSC2L	CSC3L	CSC2	CSC3	CSC4	CSC5
Performance characteristics						
Extrudate capacity in. {mm} dia.	1.25 {318}	2.25 {572}	1.75 {445}	2.75 {699}	3.75 {953}	4.75 {1207}
Blade drive motor Hp {kW}	2.7 {1.86}	2.7 {1.86}	2.7 {1.86}	2.7 {1.86}	3.8 {2.8}	3.8 {2.8}
High torque motor*	N/A	N/A	3.8 {2.8}	3.8 {2.8}	STD	STD
Feed direction	right-to-left	right-to-left	right-to-left	right-to-left	right-to-left	right-to-left
Dimensions in. {mm}						
A - Height	63 {1600}	63 {1600}	63 {1600}	63 {1600}	63 {1600}	63 {1600}
B - Height to centerline 42 2	40 {1016}	40 {1016}	40 {1016}	40 {1016}	40 {1016}	40 {1016}
C - Width	36 {914}	36 {914}	36 {914}	36 {914}	36 {914}	36 {914}
D - Depth	24 {614}	24 {614}	24 {614}	24 {614}	24 {614}	24 {614}
Weight lb. {kg}						
Installed	600 {272}	600 {272}	600 {272}	600 {272}	600 {272}	600 {272}
Shipping	700 {317}	700 {317}	700 {317}	700 {317}	700 {317}	700 {317}
Total Amps for volt/phase/frequency						
460V/1/60Hz*	8.3	8.3	8.3	8.3	N/A	N/A
230V/3/60Hz*	18	18	18	18	18	18
208V/3/60Hz*	20	20	20	20	20	20
460V/3/60Hz* (standard)	9	9	9	9	9	9
575V/3/60Hz*	7	7	7	7	7	7
Cutter head						
Aluminum 2-position	Yes	Yes	Yes	Yes	NA	NA
Stainless steel 2-position*	NA	NA	Yes	Yes	STD	STD
Cutter Control	touch screen	touch screen	touch screen	touch screen	touch screen	touch screen
Slide Base*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*

SPECIFICATION NOTES:

* Optional

These tables define standard configurations only.

Specifications can change without notice. Contact a Conair representative for the most current information.

SURE CUT ROTARY KNIFE CUTTER (SC-5)

Model SC-5

ONE CUTTER **FOR ALL APPLICATIONS**

The Conair Sure Cut Rotary Knife Cutter offers excellent versatility for processors who need one cutting system for a variety of applications. This cutter is essential for processors who face one or several product changes a day. The Sure Cut can go from cutting small parts at high line speeds to cutting extremely large tubes and profiles. In fact, the Sure Cut cutter can handle parts so large, that a saw would have been required previously.

The front-mounted control allows easy setup and monitoring. The repeatability feature ensures consistent cuts.

HIGHEST CUTTING TORQUE FOR LARGE PROFILES/TUBES

To provide optimum versatility, the Sure Cut employs a 24-inch {610 mm} diameter flywheel, uniquely mounted below the cutter bushings.

The size of the flywheel offers unmatched blade surface speed and cutting torque. Blade speeds are adjustable up to 300 RPM and can be modified easily to obtain clean, square cuts. A multiple-blade mounting system allows you to add blades to achieve higher cutting rates.

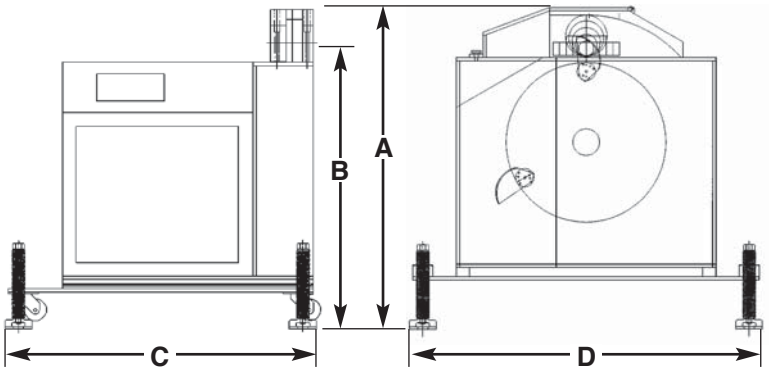
With the optional blade lubrication system, clean, accurate, quality cuts are consistently maintained.

A sliding observation window provides for easy process monitoring. The discharge chute efficiently directs product away from the cutter. A discharge conveyor and automatic parts ejection systems are available as options.

- **Cut capacity up to 4 x 7 inches**
  Cut tube up to 5-1/4 inches {133 mm} in diameter or profiles as large as 4 x 7 inches {102 x 178 mm} while essentially eliminating part size variations. The position-controlled servo drive provides variable speed and repeatable cut accuracy.
- **Up to 300 cuts per minute**
  The SC-5 can achieve up to 150 cuts/minute on demand with one blade. Blade speeds are adjustable up to 300 RPM, and multiple-blade mounting system lets you add blades to increase cutting rates.
- **All new operator control**
  The CPC features a user-friendly 6 inch {152 mm} touch screen with high visibility graphics and common sense commands for controlling the puller and cutter. A large pop-up “soft” keypad makes recipe entry fast and easy.
- **Reduced maintenance costs**
  The heavy-duty positional servo drive system, with planetary gear reduction, minimizes the maintenance and downtime associated with clutch/brake cutters.

SURE CUT ROTARY KNIFE CUTTER (SC-5)

SPECIFICATIONS



MODELS	SC-5
Performance characteristics	
Extruder capacity in. {mm}	
Tube diameters	2.25 - 5.25 {57 - 133}
Profile dimensions	2x4 - 2x10, 4x7 {51x102 - 51x254, 102x178}
Blade drive motor	4.6 Hp {3.4kW}
Feed direction	right to left
Dimensions in. {mm}	
A - Height	47 {1194}
B - Height to centerline	40 2 {1016 50.8}
C - Length	44 {1118}
D - Width	52 {1321}
Voltage/phase/frequency	230 V/3/60 Hz Or 460 V/3/60 Hz
Cutter control	Red Lion {CL0/FM4}

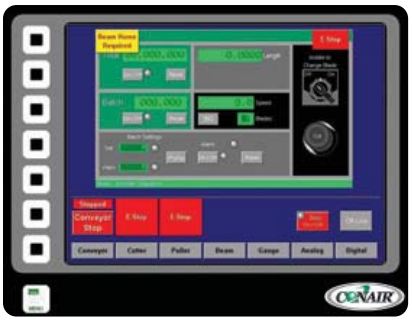
BENEFITS

- 24-inch {610 mm} flywheel
- Up to 150 cuts/minute on demand with one blade
- Blade speeds adjustable to 300 RPM
- Surface speeds to 0.438 inches {11.1 mm} per millisecond
- Heavy-duty positional AC brushless servo drive
- 10:1 planetary gear head reducer
- 3,000 pulse bi-directional encoder

SPECIFICATION NOTES:

Specifications may change without notice, consult with a Conair representative for the most current information.

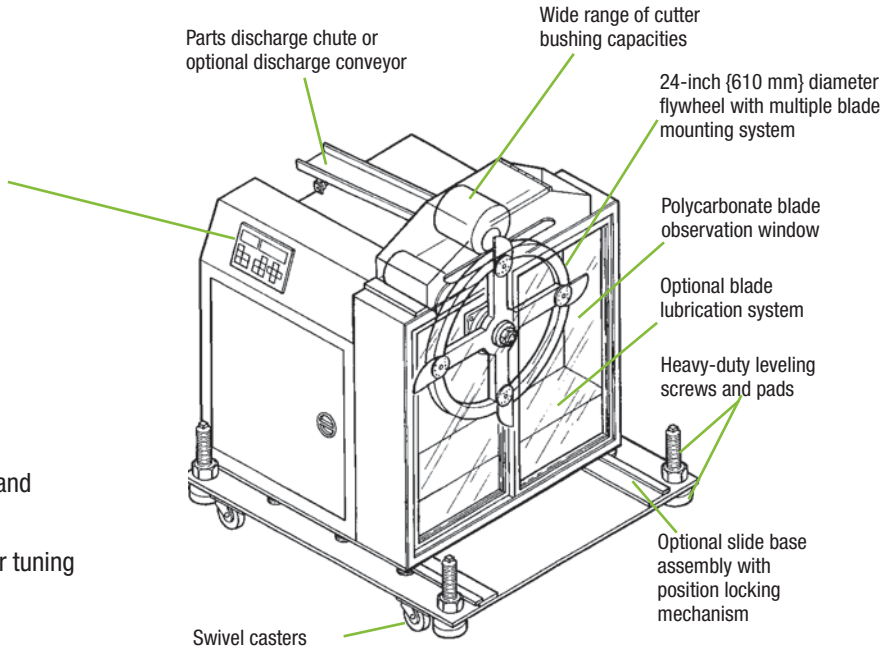
CONTROL



The standard touch screen control:

- Large easy-to-read displays
- Full-color graphics
- Selectable cutting modes, blade speed and Start/Stop functions
- Total access to vector or servo drives for tuning and service

FEATURES



Model TS-724

AUTOMATIC CUTTING WITH ACCURACY AND EASE

Conair TS Up-Cut and Cross-Cut Saws offer improved performance, larger standard cut capacities and a redesigned cabinet for easier servicing.

The TS Traveling Saw, in either configuration, accurately follows the process to cut pipe or custom profiles to length as the product moves through the extrusion line, eliminating the need for a secondary cutting operation. Up-cut is typically used for pipe and generally offers more cuts per minute, while cross-cut saws feature a wider sawing capacity and finer cut quality.

TS Up-Cut and Cross-Cut Saws are available in a variety of sizes and configurations.

FOLLOWS THE PROCESS FOR ACCURACY

Quality materials and workmanship go into every TS Saw. The combination of heavy-duty, steel-welded design and construction offers you the most reliable saw operation with the least amount of maintenance.

The arbor motor on the TS Saw eliminates all belts in the motor drive train reducing machine maintenance and allowing for higher blade rotation speeds leading to faster cycle times. All TS Saws come standard with carbide tipped blades for prolonged durability and resistance to product melting. Application specific blade styles are also available from Conair to optimize your TS Saw's performance with various types of extruded material.

A newly integrated heavy-duty precision linear bearing system improves table top travel consistency and operation.

Standard table travel is 20 and 24 inches {508 and 610 mm}. Longer table travel is available as an option. All saw models are supplied with guarding for safe operation.

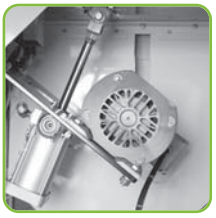
Reduced machine maintenance

A heavy-duty precision linear system provides smooth and consistent table top movement.

Precision cut lengths

Optional servo table travel with planetary reducers and a heavy-duty timing belt eliminates costly secondary operations, offers extreme cut-to-length repeatability and eliminates pneumatic adjustments for table travel.

Increased productivity



Eliminating the use of belt and pulley arrangements, the simplified arbor motor design reduces maintenance and increases blade surfacing motion allowing you to run faster line speeds. Variable blade speed is standard.

Wide-open access

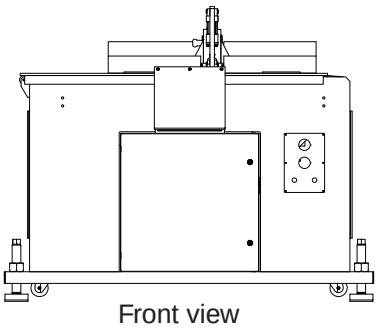
TS Saws feature access door panels for easy servicing. A Nema-12 electrical enclosure with rotary lockable disconnect, a redesigned table top blade guard and an improved blade shroud design for ease of vacuum dust/chip removal are just a few of Conair's new innovations.

Easy to navigate touch screen

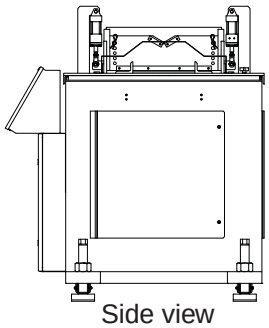
Front-mounted touch screen control allows you to start and stop the saw, adjust blade travel, cutting speed and clamping pressure from one convenient location.

SPECIFICATIONS

TS UP-CUT AND TS CROSS-CUT SAWS



Front view

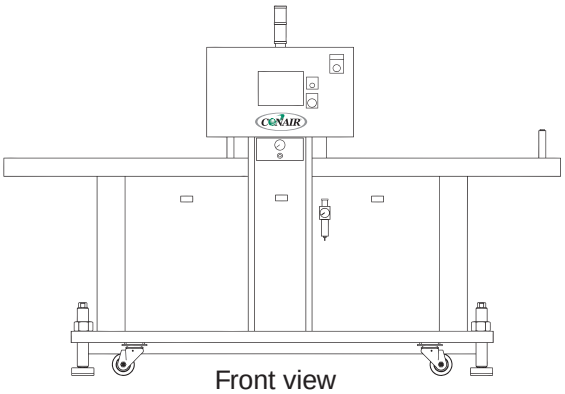


Side view

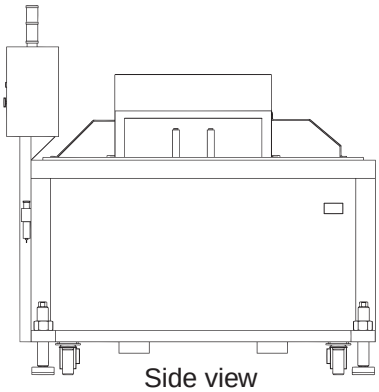
MODELS	TS524UP	TS724UP	TS924UP
Performance characteristics			
Applications	Pipe or Profile	Pipe or Profile	Pipe or Profile
Pipe diameter capacity in. {mm}	5 {127}	7 {178}	9 {228}
Profile capacity in. {mm} HxW*	1x28.5 {25.4x724}	2x16 {50.8x406}	2.75x23 {69x584}
Blade diameter in. {mm}	18 {457}	23 {584}	27 {686}
Blade type	carbide tipped	carbide tipped	carbide tipped
Blade drive motor Hp {kW}	3 {2.4}	3 {2.4}	5 {3.73}
Blade speed	Variable blade speed standard on all models†		
Dimensions in. {mm}			
Height to centerline	42 {1067}	42 {1067}	42 {1067}
Maximum table travel	24 {609}	24 {609}	20 {508}
Electrical requirements			
	230V/3 phase/60 Hz or 460V/3 phase/60 Hz		

OPTIONAL FEATURES

- Special power: 380/3/50 or 575/3/60.
- Electronic cut to length measuring system with digital automatic reset counter and encoder for mounting to customer puller.
- Chip collection system with 2 hp vacuum unit.
- Servo drive package for saw table travel. System uses an AC servo motor with a precision planetary gear drive assembly.
- Left-to-right extrusion direction.
- Special non-automotive paint.



Front view



Side view

MODELS	TS62020CC	TS63020CC	TS103020CC
Performance characteristics			
Applications	Profile	Profile	Profile
Pipe diameter capacity in. {mm}	6 {152.4}	6 {152.4}	10 {254}
Profile capacity in. {mm} HxW*	6x20 {152x508}	6x30 {152x762}	10x30 {254x762}
Blade diameter in. {mm}	20 {508}	20 {508}	30 {762}
Blade type	carbide tipped	carbide tipped	carbide tipped
Blade drive motor Hp {kW}	3 {2.4}	3 {2.4}	5 {3.73}
Blade speed	Variable blade speed standard on all models†		
Cuts per minute @ line speed fpm {m/min} (max product size)	8 @ 10 {3.05}	6 @ 10 {3.05}	3 @ 10 {3.05}
Dimensions in. {mm}			
Height to centerline ±2 {±50.8}	42 {1067}	42 {1067}	42 {1067}
Maximum table travel	20 {508}	20 {508}	20 {508}
Electrical requirements			
	230V/3 phase/60 Hz or 460V/3 phase/60 Hz		

SPECIFICATION NOTES:

* Profile capacity HxW dimensions are provided for guidance only. The actual capacity can vary depending on the profile you are attempting to produce.

† Maximum blade surface speeds are individually configured based on each models blade diameter

These tables define standard configurations only.

Specifications can change without notice. Contact a Conair representative for the most current information.

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Medline model CPC-1-12

PULL AND CUT WITH EXTREME PRECISION AND REPEATABILITY

Precisely pull and cut small diameter tubing with a puller/cutter unit designed specifically to enhance the production of microbore tubing. This combination puller/cutter is available with two styles of application specific belt pullers.

The cutter portion of the Medline is mounted on stainless steel rails with linear bearings that allow the cutter to be moved front-to-back and side-to-side to increase belt life and promote ease of string-up and coiling.

SIMPLIFIED MEDICAL TUBING PRODUCTION

The Medline CSC-0.25L cutter has a digital position-controlled servo motor that allows the unit to achieve up to 350 cuts/minute at 1000 rpm and a park position of ± 0.1 milliseconds with real-time repeatability monitoring.

The Medline puller includes either single or independent servo drives with precision planetary gearhead reducers that enhance precise speed control with exceedingly low gear backlash. The puller drive is operated by a digital puller control that allows extremely accurate speed control.

An optional digital belt gap sensor is available for both puller models. The sensor is used to set and measure the belt gap, displaying the reading in standard or metric measurements to three decimal places.

Precise pulling with servo motors

Medline pullers with single or dual servos use precision inline planetary gear reducers to provide consistent, repeatable pulling with optimum torque and minimum drive system backlash.

Eliminate belt slippage

The helical offset tooth design and self-tracking belts on the CPC-1-12 puller provide a highly accurate and efficient puller drive system.

Visible processing

The CPC-1-12 puller and CPC 2-12 puller with the CSC-0.25L cutter are equipped with 0.25 inch {6.4 mm} thick polycarbonate window guards that ease the string-up procedure by allowing the user to visually follow the microbore tubing through the pulling and cutting processes.

Cutting capacity up to 1 inch

The CSC-0.25L cutter can handle extrudates of up to 0.25 inches {6.3 mm} in diameter. Optional 1 inch {25 mm} cut capacities are available with optional 2.5 inch {13 mm} cutter bushings. Contact Conair for specific bore sizes.

Touch screen control

The intuitive, 8-inch digital operator control provides a user-friendly method to communicate with the Conair Combination Puller/Cutter. Optional 10-inch dedicated program screens for taper/bump/bubble tubing ease the setup process.

MEDLINE MODELS

FEATURES

Simple Conveyor Setup
Cutting from above the conveyor improves discharge interface.

Visible Cutter Head
Clear knife guard lets you view the rotating cutter head and blade(s) during operation.

Built-in Stainless Steel Particulate/Overflow Tray
Collects waste lubricant and material with each pass of the cutter blades. A fitting is provided for ease of draining.

Stainless Steel Cabinet
An optional stainless steel cabinet is available for medical applications.

Optimum Eye-level Monitoring
Controls are at eye-level and within easy reach.

Precisely Control Belt Tension
Adjust puller belts and control tension on your material by opening or closing the belts with an easy turn. Optional digital belt sensor available.

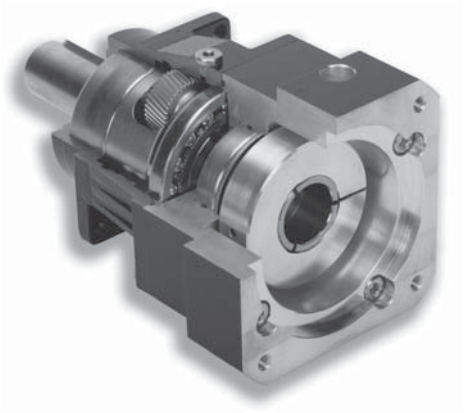
Centered, Guided Material
Adjustable rollers guide material onto the puller belts.

Precise Pulling
Opposing belts uniformly draw material through to the cutter.

Safety features include:
- Easy-to-reach emergency stop buttons*
- Polycarbonate knife guard
- Upper and lower clear polycarbonate belt guards
- Heavy-duty lockdown screws

*The Medline models include two independent emergency shutdown switches that, once pressed, will disconnect power to the entire unit and must be reset to restart the puller/cutter.

PULLER FEATURES/OPTIONS



Keep your process running smooth with independent precision planetary gearhead reducers. The Medline puller features helical gearing and gear tooth microgeometry reducers that allow you to produce flaw-free product.

- **Independent servo puller motors** with low backlash planetary gearheads.
- **Choice of in-line planetary gear reducer ratios.** A reducer ratio of 28:1, 16:1, 7:1 and 5:1 can be selected to optimize puller performance based on your application.
- **Remote belt speed control option.** *Exclusive* remote control digital potentiometer eases start-up by allowing you to conveniently adjust your belt puller speed while making extruder adjustments. You can dial in your precise speed with the 36 position rotary control knob; virtually eliminating variations due to voltage/noise fluctuations associated with analog controls.
- **Digital belt gap sensor and readout option.** Allows you to set and measure belt gap, to three decimal places, for consistent belt traction.
- **Optional intuitive taper/bump/bubble software.** A digital, positional control is added to the puller servo drive along with a programmable controller (PLC) enabling you to program up to 32 speed variations and 32 analog air pressure adjustments that can be stored for repeatable tube profiling. This combination of air pressure and speed control allow you to produce a high quality, consistent end-product.
- **3 inch {76 mm} or 6 inch {152 mm} dual servo driven pinch rolls.**

CONTROL

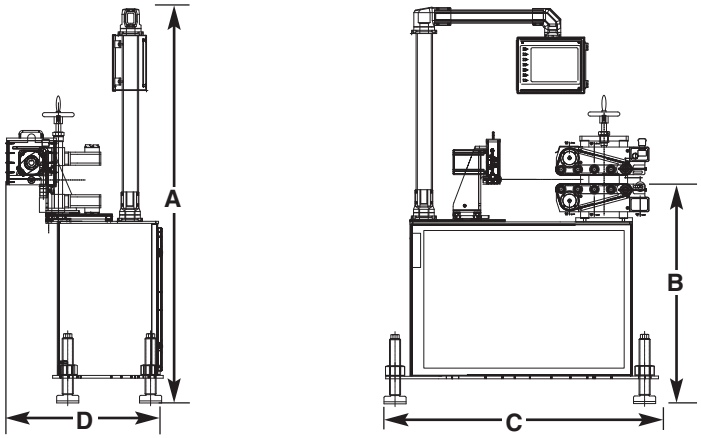
MEDLINE MODELS

Touch Screen Control features include:

- Large, easy-to-read display
- Total access to servo drives for tuning and serviceability
- Upload and download capabilities
- Ethernet communications
- Optional bubble/taper tube screens

Digital Belt Gap Sensor
This option allows you to set the zero point for the belt gap, and then set and measure belt gap to three decimal places.

SPECIFICATIONS



MODELS	CPC-1-12/CSC-0.25L			
Performance characteristics				
Extrudate capacity inches {mm} dia	0.25 {6.4}			
Blade drive motor (3000 rpm) CSC cutter Hp {kW}	2.5 {1.8}			
Servo puller drive motor Hp {kW}	0.75 {0.6}			
Dimensions inches {mm}				
A - Height	71.0 {1803.4}			
B - Height to centerline, ±2 {±50.8}	42.0 {1067.0}			
C - Width	40.0 {1016.0}			
D - Depth	27.0 {685.8}			
Belt width ±3/8 {±9.5}	1.0 {25.4}			
Belt traction length	12.0 {304.8}			
Feed opening	2.0 {50.8}			
Reducer ratio/Belt speed				
	28:1	16:1	7:1	5:1
Available speeds ft/min	1.4 to 140	2.5 to 250	5.5 to 550	10 to 750
Weight lb {kg}				
Installed	715.0 {324.0}			
Shipping	800.0 {363.0}			
Electrical requirements full load amps				
Drive type (Puller)	Single servo with precision planetary gearhead			
	0.75 Hp {0.63 kW}			
230V/3 phase/60Hz	20			
460V/3 phase/60Hz	12			
Cutter Control	Touch screen			

SPECIFICATION NOTES

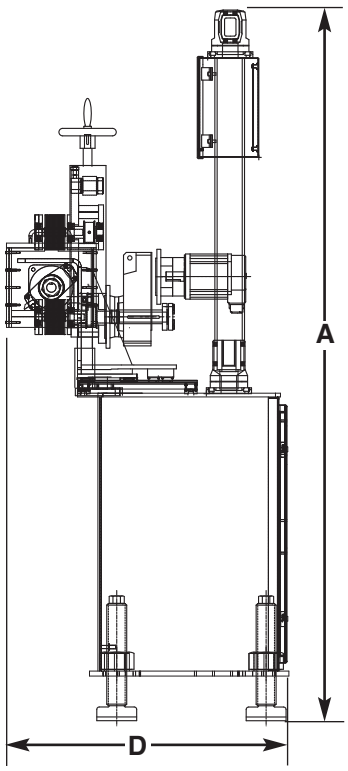
Specifications may change without notice. Check with a Conair representative for the most current information.

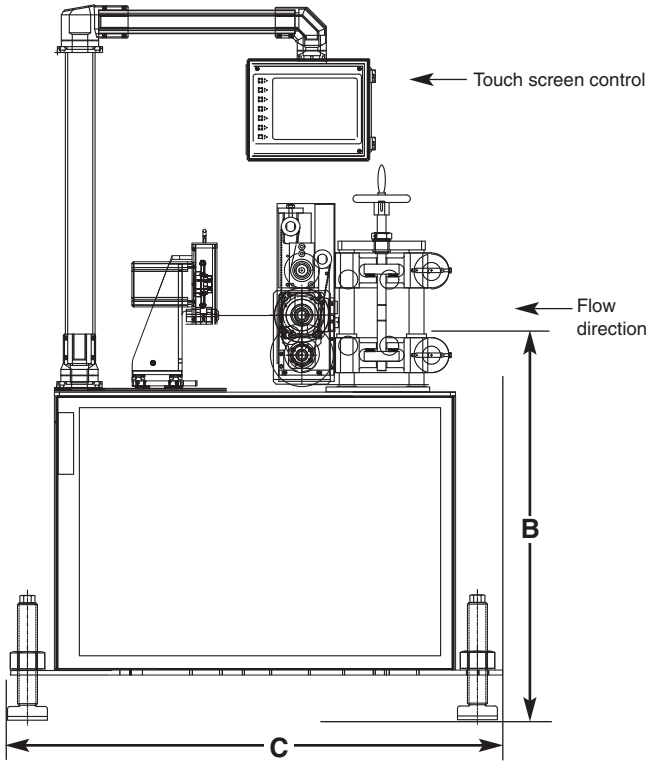
OPTIONS

- Dual, direct servo puller drivers
- Stainless steel cabinet
- Left-to-right puller motion
- Variable blade speed in both demand and flywheel cutting modes
- Bushing lubrication system
- Scrap mode
- Bushing sizes to 2.25 inch {57 mm}
- Cut capacity to 1 inch {25.4 mm}
- Multiple length and batch counts
- Follower cutting mode
- Digital belt gap sensor
- Tapered/bubble control tube/profile software
- Gauging interface
- Pinch roll puller units
- 10-inch touch screen display

MEDLINE MODELS

SPECIFICATIONS





MODELS	CPC-2-12/CSC-0.25L			
Performance characteristics				
Extrudate capacity inches {mm} dia	0.25 {6.4}			
Blade drive motor (3000 rpm) CSC cutter Hp {kW}	2.5 {1.8}			
Servo puller drive motor Hp {kW}	0.75 {0.6}			
Dimensions inches {mm}				
A - Height	71.0 {1803.4}			
B - Height to centerline, ±2 {±50.8}	42.0 {1067.0}			
C - Width	40.0 {1016.0}			
D - Depth	27.0 {685.8}			
Belt width ±3/8 {±9.5}	2.0 {50.8}			
Belt traction length	12.0 {304.8}			
Feed opening	3.0 {76.2}			
Reducer ratio/Belt speed				
	28:1	16:1	7:1	5:1
Available speeds ft/min	1.4 to 140	2.5 to 250	5.5 to 550	10 to 750
Weight lb {kg}				
Installed	715.0 {324.0}			
Shipping	800.0 {363.0}			
Electrical requirements full load amps				
Drive type (Puller)	Single servo with precision planetary gearhead			
	0.75 Hp {0.63 kW}			
230V/3 phase/60Hz	20			
460V/3 phase/60Hz	12			
Cutter Control	Touch screen			

SPECIFICATION NOTES

Specifications may change without notice. Check with a Conair representative for the most current information.

OPTIONS

- Dual, direct servo puller drivers
- Stainless steel cabinet
- Left-to-right puller motion
- Variable blade speed in both demand and flywheel cutting modes
- Bushing lubrication system
- Scrap mode
- Bushing sizes to 2.25 inch {57 mm}
- Cut capacity to 1 inch {25.4 mm}
- Multiple length and batch counts
- Follower cutting mode
- Digital belt gap sensor
- Tapered/bubble control tube/profile software
- Gauging interface
- Pinch roll puller units
- 10-inch touch screen display

Model CPC320CSC2

PULL AND CUT WITH REPEATED ACCURACY AND PRECISION

Precisely pull and cut plastic and rubber tubings, rigid tubing, and custom profiles. Choose when you want close tolerances at high cutting speeds. Combination Puller/Cutters are available with your choice of puller sizes, cutter capacities and torque to meet your specific needs.

Positional accuracy of ± 0.10 millisecond for the price of a velocity controlled servo.

IMPROVED ACCESS FOR CLEANING

The CPC's cutter features a position-controlled servo motor that allows the units to achieve a park position repeatability of ± 0.1 millisecond.

The puller belt drive is a high-performance AC vector system that offers extremely good speed control, which can be further improved by using an optional servo motor. A variety of puller belt materials available from Conair can optimize performance for various types of extruded materials.

An option available on the Combination Puller/Cutter digitally controls the belt gap with the sensor. It sets the zero point for the belts when closed, and then measures the gap to three decimal places.

More torque and motor life

Eliminate maintenance while improving performance. Our unique in-line gear reducer improves torque values while reducing maintenance associated with belt and pulley designs.

All new operator control

The CPC features a user-friendly, 6-inch {152mm} touch screen with high visibility graphics and intuitive commands for controlling the puller and cutter. A large pop-up "soft" keypad makes recipe entry fast and easy.

Cutting capacity to 4 inches

The Combination Puller/Cutter can handle extrudates up to 4 inch {101.6 mm} diameter. The puller portion lets you choose belt widths from 3 to 4 inches {76.2 to 101.6 mm} and traction lengths to 26 inches {660.4 mm}.

Available in wide size ranges

Choose from a variety of belt sizes and cutting capacities, as well as a range of speeds. Consult your Conair representative for the best model configuration for your needs.

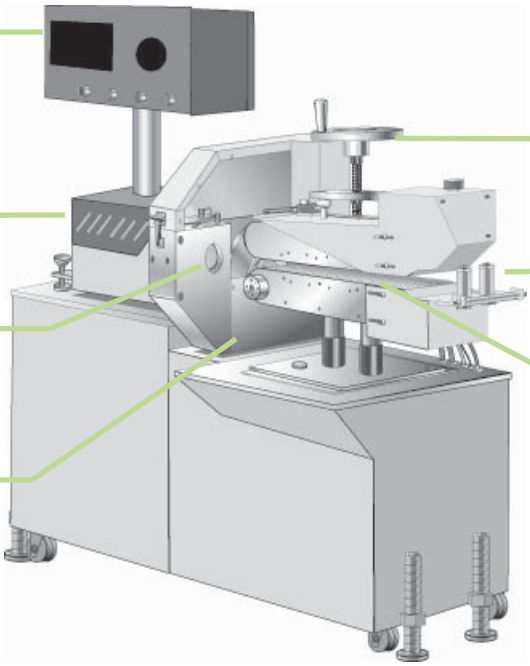
FEATURES

Optimum eye-level monitoring
Controls are at eye-level and within easy reach.

Easy-access motor
Quick-remove cover for easy access to motor during maintenance.

Visible cutter head
Clear knife guard lets you view rotating cutter head, blade(s) during operation.

Built-in cleaning
Stainless steel blade lubrication tray cleans and lubricates the blade(s) with each pass.

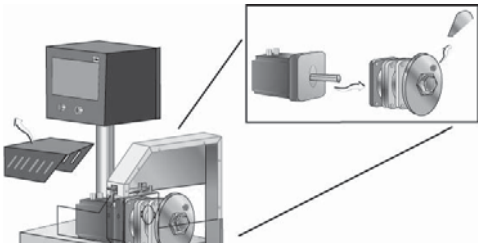


Controlled belt tension
Adjust belts and control tension on material by raising/lowering belts with an easy turn.

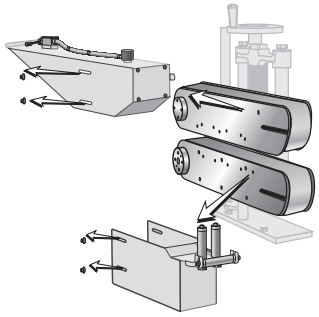
Centered, guided material
Adjustable rollers guide material into the belts.

Precise pulling
Opposing belts uniformly draw material through to the cutter.

Safety features include:
- Easy-to-reach Emergency and Stop buttons
- Polycarbonate knife guard
- Upper and lower belt guards
- Heavy-duty lockdown screws



In-line gearbox reducer lessens the maintenance required by traditional belt-and-pulley designs. The reducer improves torque performance, improves side load capabilities and extends the life of the servomotor. (Does not apply for L models.)



Upper and lower belt guards protect the user and are easily removed when changing the belts.

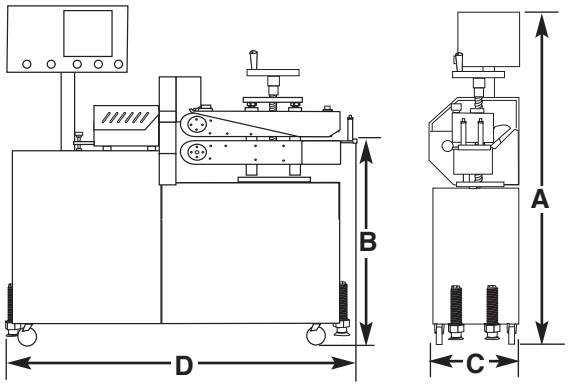
CONTROL

Standard touch screen features include:

- Full-color graphics
- Large easy-to-read display
- Selectable cutting modes, blade speed and Start/Stop functions
- Total access to vector or servo drives for tuning and service.

Digital Belt Gap Sensor
This option allows you to set the zero point for the belt gap, and then set and measure belt gap to three decimal places.

SPECIFICATIONS



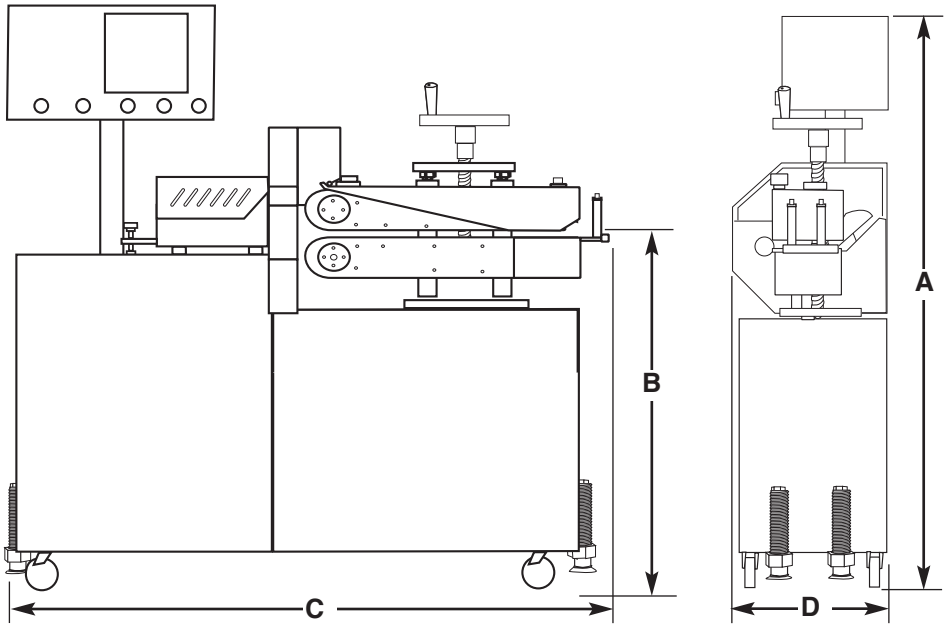
MODELS	CPC212CSC1L	CPC212CSC1L-SD	CPC320CSC2L	CPC426CSC2L
Performance characteristics				
Extrudate capacity in. {mm} dia.	1.0 {25.4}	1.0 {25.4}	1.25 {318}	1.25 {318}
Blade drive motor Hp {kW}				
CSC cutter	2.5 {1.8}	2.5 {1.8}	2.7 {2.01}	2.7 {2.01}
Puller drive motor Hp {kW}	N/A	N/A	1.0 {0.75}	1.5 {1.1}
Optional drive motor Hp {kW}	N/A	N/A	1.5 {1.1}	2.0 {1.5}
Servo drive motor Hp {kW}	2.5 {1.8}	2.5 {1.8}	2.4 {1.8}*	2.5 {1.8}*
Dimensions in. {mm}				
A - Height	71.0 {1803.4}	71.0 {1803.4}	66.6 {1691}	66.6 {1691}
B - Height to centerline, 2 { 50.8}	42.0 {1067.0}	42.0 {1067.0}	42.0 {1067}	42.0 {1067}
C - Width	40.0 {1016.0}	40.0 {1016.0}	26.6 {676}	26.6 {676}
D - Length	27.0 {685.8}	27.0 {685.8}	74.0 {1880}	74.0 {1880}
Belt width 3/8 { 9.5}	1.0 {25.4}	1.0 {25.4}	3.0 {76}	4.0 {102}
Belt traction length	12.0 {304.8}	12.0 {304.8}	20.0 {508}	26.0 {660}
Feed opening	3.0 {76.2}	3.0 {76.2}	4.0 {102}	5.0 {127}
Weight lb {kg}				
Installed	800 {364}	800 {364}	1200 {545}	1350 {613}
Shipping	950 {432}	950 {432}	1300 {590}	1450 {658}
Electrical requirements full load amps				
Drive type (Puller)	Dual servo/precision planetary gearhead	Single servo/precision planetary gearhead	Open loop	Servo
Hp {kW}	(2) 0.4 {0.3}	0.75 {0.56}	1.5 {1} 2.0 {1.5}	2.46 {1.8}
230V/3 phase/60Hz	20	20	21 25	32.3
460V/3 phase/60Hz (Std.)	12	12	11 14	16.2

SPECIFICATION NOTES

* Optional

Specifications may change without notice. Check with a Conair representative for the most current information.

SPECIFICATIONS



MODELS	320CSC2		320CSC3		426CSC2		426CSC3		426CSC4	
Performance characteristics										
Extrudate capacity in. {mm} dia.	2 {51}		3 {76}		2 {51}		3 {76}		4 {102}	
Blade drive motor Hp {kW}										
CSC cutter	2.7 {2.01}		2.7 {2.01}		2.7 {2.01}		2.7 {2.01}		NA	
High torque motor*	3.8 {2.8}		3.8 {2.8}		3.8 {2.8}		3.8 {2.8}		3.8 {2.8}	
Puller drive motor Hp {kW}	1.0 {0.75}		1.0 {0.75}		1.5 {1.1}		1.5 {1.1}		1.5 {1.1}	
Optional drive motor Hp {kW}	1.5 {1.1}		1.5 {1.1}		2.0 {1.5}		2.0 {1.5}		2.0 {1.5}	
Optional servo drive motor Hp {kW}	2.46 {1.83}		2.46 {1.83}		2.46 {1.83}		2.46 {1.83}		2.46 {1.83}	
Dimensions in. {mm}										
A - Height	66.6 {1691}		66.6 {1691}		66.6 {1691}		66.6 {1691}		66.6 {1691}	
B - Height to centerline 2 { 50.8}	42 {1067}		42 {1067}		42 {1067}		42 {1067}		42 {1067}	
C - Width	26.6 {676}		26.6 {676}		26.6 {676}		26.6 {676}		26.6 {676}	
D - Length	74 {1880}		74 {1880}		74 {1880}		80 {2032}		80 {2032}	
Belt width 3/8 { 9.5}	3 {76}		3 {76}		4 {102}		6 {152}		6 {152}	
Belt traction length	20 {508}		20 {508}		26 {660}		26 {660}		26 {660}	
Feed opening	4 {102}		4 {102}		5 {127}		5 {127}		5 {127}	
Weight lb {kg}										
Installed	1200 {545}		1200 {545}		1350 {613}		1350 {613}		1350 {613}	
Shipping	1300 {590}		1300 {590}		1450 {658}		1450 {658}		1450 {658}	
Electrical requirements full load amps										
Drive type (puller)	open loop	servo drive	open loop	servo drive	open loop	servo drive	open loop	servo drive	open loop	servo drive
Loops and Drives, Hp {kW}	1.0-1.5 {0.75-1.1}	2.5 {1.9}	1.0-1.5 {0.75-1.1}	2.5 {1.9}	1.5-2.0 {1.1-1.5}	2.5 {1.9}	1.5-2.0 {1.1-1.5}	2.5 {1.9}	1.5-2.0 {1.1-1.5}	2.5 {1.9}
230V/3 Phase/60Hz	22.5-26.5	32.3	22.5-22.5	32.3	26.5-26.5	32.3	26.5-26.5	32.3	26.5-26.5	32.3
460V/3 Phase/60Hz (Std.)	12.0-15.0	16.2	12.0-15.0	16.2	15.0-15.0	16.2	15.0-15.0	16.2	15.0-15.0	16.2

CUTTER HEADS

Standard: Aluminum 2-position
Optional: Stainless Steel 2-position

SPECIFICATION NOTES

* Optional

Specifications may change without notice. Check with a Conair representative for the most current information.

Model ATC-24
(Shown without full enclosure)

TENSIONLESS WINDING WITH AUTOMATIC CUT AND TRANSFER

ATC dual spindle coilers wind small flexible extrusions with little-to-no friction or winding tension. This eliminates deformities in delicate products making it ideal for extrusions such as medical tubing, small tube, filled cords and small flexible profiles.

The fully automated process transfers the product to the new reel without operator involvement or process disruption and effectively increases line speed and performance during changeover.

SERVO PRECISION FOR HIGHEST PERFORMANCE

Automatic Cut and Transfer Coilers are the perfect choice for tensionless winding of small diameter flexible tubing. Tension control is accomplished through a non-contact sonic loop detector communicating with a PLC to automatically adjust coil speed and traverse. Typical tube diameters are 0.085 inch to 0.50 inch {2.16 to 12.7 mm}. Tubes as small as 0.020 inch {0.5 mm} can be accommodated with a specialized minimal tension trim control.

Automatic turret changeover is accomplished when the set amount of footage for the coil is reached.

The system comes complete with collapsible core assemblies or spools and can optionally accept customer supplied spools.

All winder components that come into contact with the tube are made from stainless steel or are hard coat anodized.

Best accuracy with servo control

Turret rotation, traverse and spindle speed are all servo driven. This provides the ultimate in speed and positioning control for error-free performance, exceptionally high repeatability and minimal product tension throughout high speed coiling and cut/transfer. Finished spools require no 'dial-in' for product changeover.

Distortion-free product

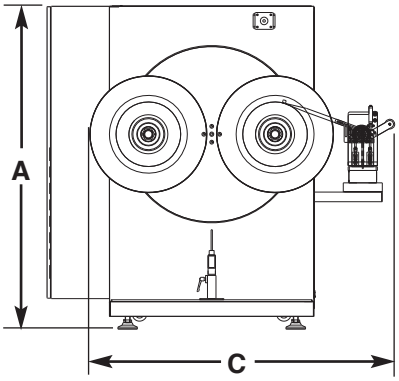
Minimum tension is achieved by an advanced control algorithm that calculates each successive wrap diameter to adjust coil speed and traverse relative to the puller speed. This allows the sonic loop control to perform as a fine-trim device and ensures accurate, distortion-free, error-free lay of each wrap. The following circuit allows automated ramp-up of the winder synchronously with the line at startup.

Recipes cut operator variability/error

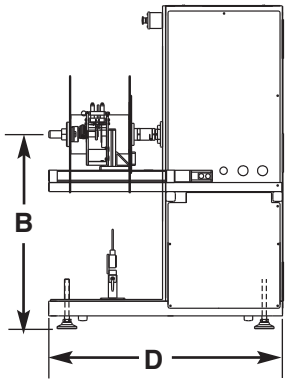
Every operating input parameter can be saved as a recipe for repeatable product and process consistency. This includes coil speed changes during cut and transfer, traverse speed for accurate lay and turret speed during changeover to avoid product touching the floor.

SPECIFICATIONS

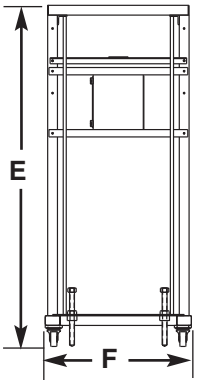
ATC front view



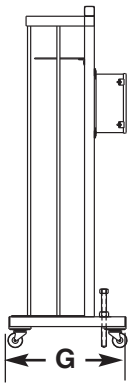
ATC side view



Trim control front view



Trim control side view



MODELS	ATC-24	ATC-36	ATC-48
Performance characteristics			
Product range tube diameter in {mm}	Typical 0.85 to 0.5 {2.16 to 12.7} / Optional 0.2 {0.5} and up to 1.0 {25.4}		
Coil type	Collapsible for coreless reel - one set included		
Coil drive	Independent servo drive on each reel		
Coil size OD inch {mm}	24 {609}	36 {914}	48 {1219}
Coil width inch {mm}	12 {304}	12 {304}	12 {304}
Coil size ID inch {mm}	8 {203}	12 {304}	12 {304}
Traverse	Servo control on traverse assembly		
Turret drive	Servo control on turret shaft		
Line rate	Nominal 500 FPM {152m/min} up to 800 FPM {243m/min} - Tube size dependant		
Line direction	Right to left		
Frame	Heavy-duty welded steel with four (4) swivel casters and four (4) leveling screws		
Controls			
PLC	Programmable microprocessor with touch screen HMI		
Panel	NEMA-4		
Dimensions inches {mm}			
A - Overall height	66.3 {1684.0}	86.0 {2184.4}	106.5 {2705.1}
B - Height to spindle centerline	40.0 {1016.0}	41.2 {1046.5}	52.0 {1320.8}
C - Overall length	68.7 {1745.0}	99.7 {2532.4}	125.0 {3175}
D - Overall width	48.0 {1219.2}	83.1 {2110.7}	83.5 {2120.9}
Weight lb {kg}			
Shipping	2200 {998}	4400 {1996}	5600 {2540}
Voltage	230V/3 phase/60 Hz		

Trim Control			
Dancer type	Non-contact ultrasonic for tube diameters 0.085 to 0.5 in. {2.16 to 12.7 mm} Ultra-lightweight roller contact ultrasonic for 0.02 to 0.085 in. {0.5 to 2.16 mm} tube		
Dimensions inches {mm}			
E - Overall height	70.0 {1778}	70.0 {1778}	70.0 {1778}
F - Overall length	30.0 {762}	30.0 {762}	30.0 {762}
G - Overall width	24.4 {620}	24.4 {620}	24.4 {620}
Weight lb {kg}			
Shipping	500 {226.8}	500 {226.8}	500 {226.8}
Voltage	230V/3 phase/60 Hz		

SPECIFICATION NOTES:

Specifications can change without notice. Contact a Conair representative for the most current information.

Model TAC-406

HANDS-FREE TAKE-AWAY CONVEYORS

The Conair belt discharge conveyor is a rugged, low profile conveyor designed to be used when cutting flexible and semi-rigid products. The conveyors enhance the cut length tolerance and cut quality by supporting and transporting the extruded product away from the cutter bushing. The product can then be optionally ejected into a collection tray for operator removal.

CONVENIENT BELT SUPPORT AND TAKE-AWAY

TAC Series take-away belt conveyors support and convey extruded parts post-cutter. Parts discharge off the end of the conveyor or can be directed by a mechanical arm to a collection tray. An optional pneumatic ejector system offers front and rear or side-to-side ejection for automated parts separation, for example by size.

A variable speed drive allows the conveyor speed to be set slightly faster than the line speed, ensuring adequate separation between the parts as they are moved to the collection tray.

Heavy-duty frame construction provides rigid support at each end of the conveyor. Swivel casters are utilized for easy alignment. Height adjustment of ±2 inches {51 mm} is provided.

Air nozzles are easily positioned for fast removal of the parts to the collection tray.

Labor free parts collection

The conveyor automatically discharges parts to a collection tray or scrap collection bin, allowing operators to tend to other value added activities. TAC conveyors can be optionally configured for split manifolds for common side front and rear collection or for dual sided collection.

Easy segregation of good and bad parts

The conveyor can be interfaced with the diameter or wall thickness measuring gauge to separate parts which do not meet specifications. The ejector system is disabled and the parts discharge off the end of the conveyor instead of into the collecting tray.

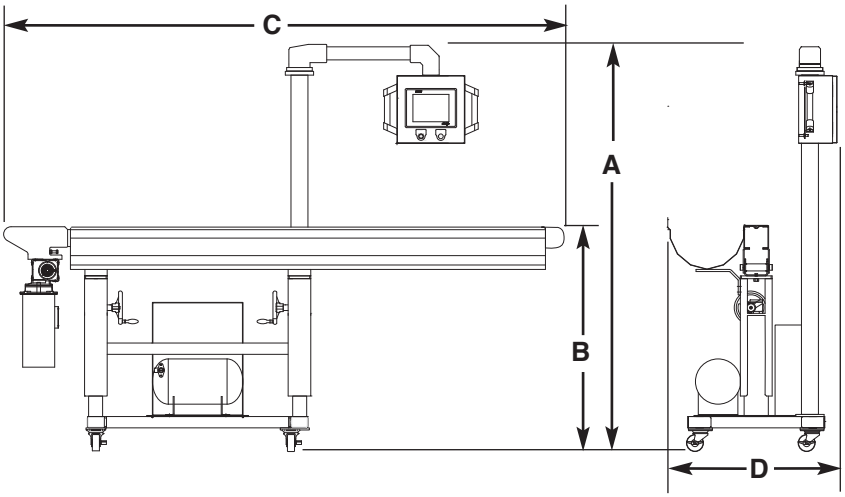
Medical application option

Medical option includes precision, geared height actuator for fine adjustment for up/down/tilt to optimize part support and take-away. The TAC can be powder coated or supplied with a stainless steel frame to aid wash down.

Static-free production collection

An optional de-ionizer removes any static build-up generated from the process to aid consistent product ejection and positioning in the collection tray(s).

SPECIFICATIONS



OPTIONS

- Pneumatic ejector system including accumulator tank, regulator and controls with air knife or position-able, variable flow nozzles to eject the parts into a collecting tray. Available single or dual station blow-off.
- Medical configuration with preci-sion up/down/tilt actuators. Avail-able powder coated or in stainless steel.
- Stainless steel parts collection tray (various lengths available).
- High speed drive configurations for 500 and 600 FPM applications.
- Left-to-right operation.

MODELS	TAC-406	TAC-408	TAC-412	TAC-416	TAC-808	TAC-812	TAC-816
Performance characteristics							
Belt width in. {mm}	4 {101}	4 {101}	4 {101}	4 {101}	8 {203}	8 {203}	8 {203}
Conveyor length feet {m}	6 {1.83}	8 {1.22}	12 {3.66}	16 {4.88}	8 {1.22}	12 {3.66}	16 {4.88}
Belt type	Endless Poly-Kleen white covered belts						
Belt speed	500 FPM {152 m/min.}						
Drive motor	1 Hp variable speed AC motor						
Dimensions in. {mm}							
A - Overall height	71.7 {1820}	71.7 {1820}	71.7 {1820}	71.7 {1820}	71.7 {1820}	71.7 {1820}	71.7 {1820}
B - Height to top of belt	40 2 {1016 51}						
C - Overall length	72 {1829}	96 {2438}	144 {3658}	192 {4877}	96 {2438}	144 {3658}	192 {4877}
D - Overall width	29.5 {749.3}	29.5 {749.3}	29.5 {749.3}	29.5 {749.3}	29.5 {749.3}	29.5 {749.3}	29.5 {749.3}
Weight lb {kg}							
Shipping	consult Conair						
Voltage							
	230V/3 phase/60 Hz						

SPECIFICATION NOTES:

These tables define standard configurations only.

Specifications can change without notice. Contact a Conair representative for the most current information.

Model DT20-12 HD
(heavy duty)

AUTOMATIC CYCLES FOR CONSISTENT OPERATION

Conair's DT Series Dump Table consistently gathers pipe, rigid tubing and custom profiles and stores them for easy removal. This system reduces material hang-up points and helps to preserve end-product quality.

An automated dump sequence tilts the primary collection table to deliver product to the secondary collection tray for subsequent processing or packaging.

STAINLESS STEEL TABLE; ALL WELDED-STEEL FRAME

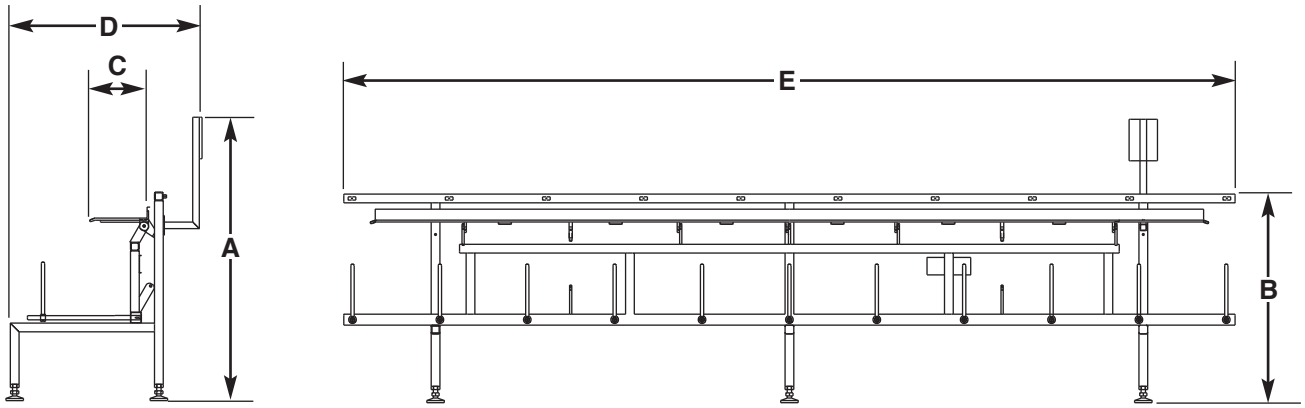
DT series dump tables feature welded steel construction and all stainless steel material contact points for low maintenance. Model DT20-12 is available with heavy-duty construction for larger profile or tubing applications.

Standard table lengths range from 12 to 20 ft. {4 to 6 m} with widths of 6 to 12 inches {152 to 305 mm}.

A Conair downstream extrusion specialist can help you to make the best choice for your specific extrusion configuration setup.

- **Simple-to-use operation**
  DT series dump tables automatically tilt when the pneumatic cylinder has been activated by a device upstream or the table's flag switch has been triggered. Simply adjust the table's floor bolts to the center line height of your process, connect the input voltage and let it do the rest.
- **Reduced maintenance**
  All stainless steel material contact points and a welded-steel frame offer the best combination for long life with greatly reduced routine maintenance.
- **Available in a variety of size ranges**
  Choose from a variety of table widths and lengths or choose to upgrade to the optional DT20-12 HD model when processing large pipe, tubing or profiles. Consult your Conair representative for the best choice for your needs.

SPECIFICATIONS



MODELS	DT12-12	DT16-12	DT20-12	DTV-20-6†
Dimensions in. {mm}				
A - Height	65 {1651}	65 {1651}	65 {1651}	65 {1651}
B - Height to centerline	39 - 45 {991 - 1143}	39 - 45 {991 - 1143}	39 - 45 {991 - 1143}	39 - 45 {991 - 1143}
C - Table width	12 {305}	12 {305}	12 {305}	6 {152}
D - Width	37.1 {942}	37.1 {942}	37.1 {942}	32.1 {815}
E - Length	156 {3962}	204 {5182}	252 {6401}	252 {6401}
Feed direction*	right-to-left	right-to-left	right-to-left	right-to-left
Weight lb {kg}				
Installed	800 {363}	995 {451}	1400 {635}	1400 {635}
Shipping	1100 {499}	1295 {587}	1780 {870}	1780 {807}
Input voltage Total amps				
115V/1 phase/60 Hz	1	1	1	1
Compressed air requirement				
Pressure psi {bars}	60 - 80 {4.14 - 5.52}	60 - 80 {4.14 - 5.52}	60 - 80 {4.14 - 5.52}	60 - 80 {4.14 - 5.52}
Consumption ft^3/m {liter/sec}	3 - 5 {1.4 - 2.4}	3 - 5 {1.4 - 2.4}	3 - 5 {1.4 - 2.4}	3 - 5 {1.4 - 2.4}
NPT fitting size inch	3/8	3/8	3/8	3/8

SPECIFICATION NOTES:

* Left to right feed direction is available as an option.

† V denotes a V" shape tray for the collection of pipe or tube.

Specifications may change without notice. Check with a Conair representative for the most current information.

CONAIR™

Corporate Headquarters

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