Innovation In Air Distribution

Setting the Industry Standard in Safety Products for over 25 years

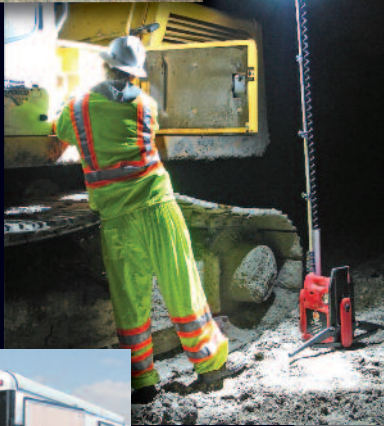INGENUITY

QUALITY

RELIABILITY

TECHNOLOGY

DURABILITY

AIR SYSTEMS INTERNATIONAL

The AIR Systems' Team

Quality Products Backed by our Experienced Customer Service Department

Our dedicated family of safety specialists take the time to deliver the right solution to your application with our combined knowledge and expertise in the safety field.

Ray Ellis
Senior Vice President
Sales & Marketing

Mick Bowden, V.P.
National Sales Manager

Maria Combs
Marketing Manager

Marcey Ricucci
Senior Coordinator
Specialty Markets

Mike Fugere
Inside Sales

Shane Intravatola, V.P.
Engineering

J.D. Jamison, V.P.
Production Manager,

Patrick Ricucci
Quality Assurance
Manager

Andy Iannicelli
Inside Sales

Amber Kerzanet
Repair Services
Coordinator

Jan Gebelein
Order Entry
Administrator

## Customer Commitment
For over 25 Years

Air Systems International is totally committed to our customers' needs and special job requirements. We have always taken great pride in being responsive to the safety and health concerns of our equipment users.

The products that we manufacture have been developed out of a specific need or desire to perform work more safely and with greater productivity. We will always continue to respond to the demands and innovative

ideas of our most valued asset –

THE CUSTOMER.

DAVID F. ANGELICO, PRESIDENT
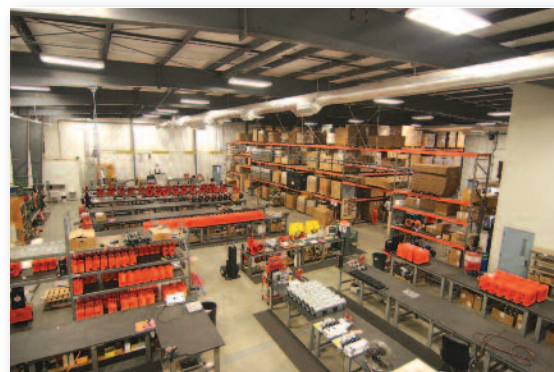
**REGISTERED TO ISO 9001
CERTIFICATE REGISTRATION NO. 10001575 QM08**

Have a technical question? Skype Us!

Air Systems is now available to chat Live to answer your questions via Skype. Add Contact "AirTechLive". Please include your Company name in the Subject Line to be added for Live Support.

Mon-Fri
8am - 5pm EST

Follow us on Facebook!

Become a fan of Air Systems International to get updates in your news feed about what we are up to. You'll be the first to hear about any exciting products, upcoming shows and industry news.

If you have a Facebook account already, it couldn't be easier, sign in to your account and click 'become a fan'...if you don't have a Facebook account already don't worry, just click on the 'Sign Up' button to create an account, it only takes a minute or two.
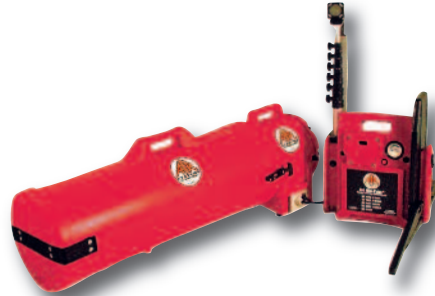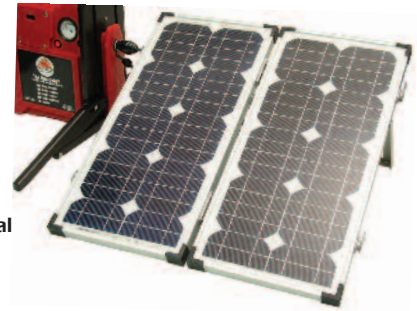
Innovative New Products

Contractor Series of Ventilation Equipment
See Pages 47, 53

Emergency Response Ventilation Kit
See Pages 56, 64

Environmentally Friendly Products

Recharge DC Electrical Devices with our New Solar Panel
See Pages 56, 64

Innovative New Products to Meet New Regulations and Standards

Air Systems' HEPA filtered vacuums compliant to meet the EPA's New RRP (Renovation, Repair and Painting Regulations)
See Pages 67-68

Designed to Meet National and State Flagger Illumination Regulations
See Pages 59-60

Innovative New Product Improvements

The Industry Standard for portable blowers for over 20 years has been known for its rugged, reliable and dependable design.

Air Systems' *NEWLY REDESIGNED* Centrifugal Blowers Feature a Tubular Steel Frame, Reduced Weight, Roll Cage Protected Components, Molded Polyethylene Housing for increased performance, and Ergonomic Dual Carry Handles. No sacrifice to our existing standards of quality and dependability.
See Pages 45, 49-50

"Understanding Breathing Air Systems"

To Understand Breathing Air you MUST First Understand The Various Types of NIOSH Approved Respirators Available to Meet the Respiratory Hazard

All Respirators are classified as either Negative Pressure or Positive Pressure Respirators

Negative Pressure Disposable Mask Respirator

The respirator wearer must inhale through the mask. Approved for dusts, mists, vapors and fumes.

Not approved for IDLH use. (**I**mmediately **D**angerous to **L**ife or **H**ealth)

Negative Pressure Disposable Cartridge Respirator

This style of Respirator has replaceable cartridges or filters and comes in half mask or full face. Not approved for IDLH atmospheres.

Powered Air Purifying Respirators (PAPR) are a type of cartridge filtering respirator with a battery powered blower. They are approved for use where a filter cartridge is approved for the containment.

Not approved for IDLH use.

Note: Wearers must be fit tested to assure a proper face seal is achieved.

Positive Pressure (Type-C) Airline Respirator Constant Flow Hood Style

ALL CONSTANT FLOW RESPIRATORS SUPPLY AIR CONTINUOUSLY TO MAINTAIN POSITIVE PRESSURE INSIDE THE FACE PIECE OR HOOD.

All airline respirators are classified by NIOSH as Type-C or Type-CE (approved for sandblasting). Hood Style airline respirators are required by NIOSH to flow 6-15cfm air flow per person. Hoods are available in low pressure style for ambient air pumps, requiring 3-15psi. High pressure hoods, 25-110psi, would require Grade-D breathing air provided by a Breather Box™.

Not approved for IDLH use.

No fit test is required with a hood style respirator.

Positive Pressure (Type-C) Airline Respirator - Constant Flow Mask

This style of respirator is available in half mask or full face and are required by NIOSH to flow 4-15cfm air flow per mask. They are available in low pressure style for ambient air pumps, requiring 3-15psi, and high pressure, 25-110psi would require Grade-D breathing air provided by a Breather Box™. Constant flow respirators provide higher Protection Factors than air-purifying negative pressure respirators. They are not recommended for use with high pressure bottled air systems as they consume a lot of air.

Not approved for IDLH use.

Positive Pressure (Type-C) Airline Respirator - Pressure Demand Style

Pressure Demand (PD) respirators supply air on "demand" and maintain a minimum positive pressure in the face piece at all times. They require by NIOSH to flow 4-15cfm to the mask just like a constant flow style respirator. Pressure demand respirators provide a high protection factor and can be used on high pressure cylinder air or low pressure filtration systems like a Breather Box™.

All PD respirators operate between 60-120psi and require the use of Grade-D breathing air provided by a Breather Box™ or Grade-E cylinder air. PD's with a minimum five minute hip bottle allows for use in IDLH atmospheres. PD respirators are a part of all SCBA's (Self Contained Breathing Apparatus).
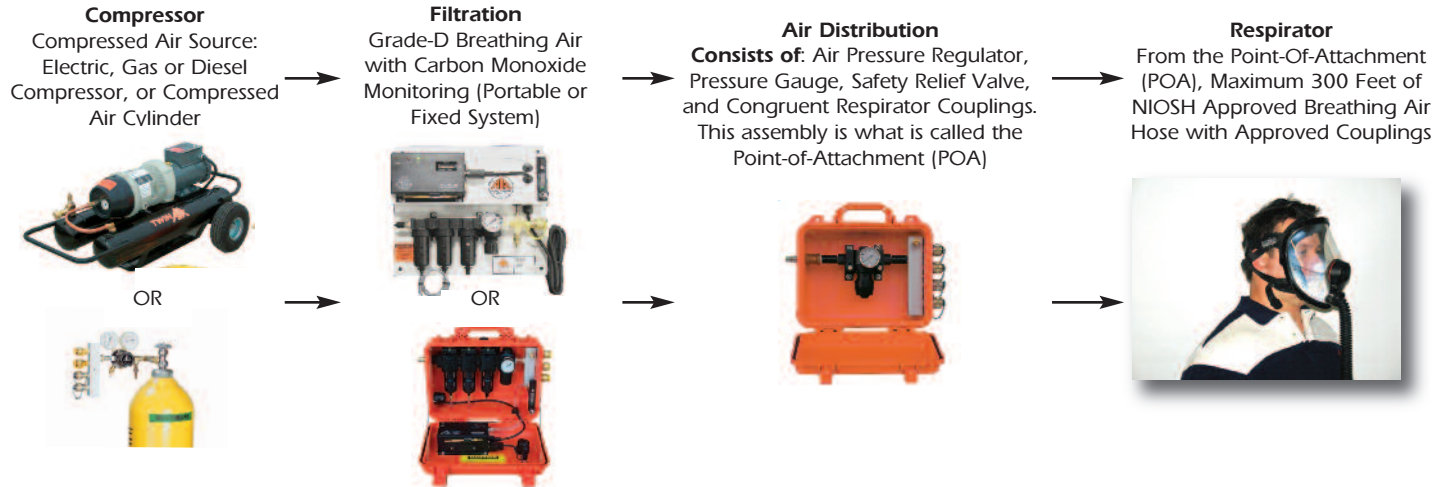
Elements of a Type-C or CE Breathing Air System

Note: Type-C is a NIOSH designation for an air supplied breathing air respirator system. All airline respirators are Type-C or Type-CE. CE designates an airline respirator that is approved for abrasive blasting.

Compressor
Compressed Air Source: Electric, Gas or Diesel Compressor, or Compressed Air Cylinder

OR

Filtration
Grade-D Breathing Air with Carbon Monoxide Monitoring (Portable or Fixed System)

OR

Air Distribution
Consists of: Air Pressure Regulator, Pressure Gauge, Safety Relief Valve, and Congruent Respirator Couplings. This assembly is what is called the Point-of-Attachment (POA)

Respirator
From the Point-Of-Attachment (POA), Maximum 300 Feet of NIOSH Approved Breathing Air Hose with Approved Couplings

Sizing a Type-C or CE Airline Filtration System

Sizing of the filtration system, determining what size Breather Box™ or panel to order, is based on the flow (CFM) and pressure requirements (PSI) of the respirators being worn and the number of workers. Air Consumption (CFM) and Pressure (PSI) ranges for representative types of respirators are listed below:

Pressure Demand	4-15cfm @ 60-120psi
Constant Flow Half/Full Mask	4-15cfm @ 4-30psi
Constant Flow Hood (Low Pressure)	6-15cfm @ 3-15psi
Constant Flow Hood (High Pressure)	6-15cfm @ 25-110psi
Vortex Cooling Tube (Option)*	15-25cfm @ 60-110psi

*If a vortex cooling or heating tube is used by the worker, the total air consumed is calculated by the air consumption of the vortex device.

Once the total number of workers are established and the type of respirator to be used is selected, multiply the number of workers by the respirator flow rate required per worker, to determine total flow requirements:

Example: 4 workers using 4 hood style respirators
4 x 15cfm = 60cfm required

Filtration recommended: Air Systems' BB50-CO Breather Box™, 4-workers, with CO monitor (maximum flow capacity of 79cfm). User must have enough compressor flow (cfm) capacity to supply the above respirators, plus additional air needs placed on the system, i.e. air tools/spray nozzles. **All of Air Systems' filtration products are designed to flow the maximum amount of air that a worker's respirator could demand. NEVER undersize a filtration system.**

When ordering a Breather Box™, the customer MUST specify the fittings used on the respirator he has selected. The Breather Box™ fittings must be the same type as the respirator hose fittings to maintain NIOSH approval on the respirator and hose assembly.

What is Grade-D Air Quality?

Breathing air quality standards have been developed by ANSI/Compressed Gas Association (CGA) G-7.1 - 1989, and adopted by OSHA under their respiratory standard 29 CFR, 1910.134.

AIR QUALITY MUST MEET OR EXCEED THE FOLLOWING REQUIREMENTS:
- Oxygen: 19.5%-23.5% (20%-22% Canada)
- Hydrocarbon (condensed oil) 5 mg/m^3 maximum (<1Mg/m^3 in Canada)
- Carbon Monoxide (CO): 10ppm maximum (5ppm in Canada)
- Carbon Dioxide (CO_2): 1000ppm maximum (500ppm in Canada)
- Odor: No noticeable tastes or smells
- Water Content:
    High pressure cylinder air must have a dew point of at least -50°F (-45.6°C) at 1 atmosphere (14.7psi).
    Low pressure breathing air must have a dew point of at least 10°F (5.56°C) below the ambient temperature at 1 atmosphere (14.7psi)
    Canada: 5° C below lowest temperature, 27ppm maximum water vapor
- Total Volatile Hydrocarbons (Canada): 5ppm maximum

Did You KNOW?

Our breathing air compressors and filtration systems meet all of the following specifications when used and serviced in accordance with our instruction manuals.

- *FEDERAL OSHA 29 CFR, 1910.134 "COMPRESSOR OPERATIONS FOR BREATHING AIR"*
- *CSA Z180.1-00 "COMPRESSED BREATHING AIR AND SYSTEMS*
- *BRITISH STANDARD BS-EN 12021:1999 "RESPIRATORY PROTECTIVE DEVICES"*

AIR SYSTEMS' IS SO CONFIDENT THAT YOU WILL BE PLEASED WITH YOUR PORTABLE OR FIXED BREATHING AIR FILTRATION SYSTEM, WE WILL PROVIDE, AT NO CHARGE, YOUR FIRST LAB CERTIFIED AIR QUALITY TEST OF YOUR NEW AIR SYSTEMS' BREATHING AIR FILTRATION DEVICE OR COMPRESSOR SYSTEM. CONTACT CUSTOMER SERVICE FOR DETAILS.

What is Grade-E Air Quality?

Grade-E air quality is specified by ANSI/Compressed Gas Association (CGA) G-7.1 1997 for all compressed air stored in air cylinders, e.g., SCBA tanks or large breathing air cylinders.

Grade-E air quality is the same as Grade-D with the following differences:

- Oxygen content - 20%-22%
- Total Volatile Hydrocarbons - 25ppm maximum
- Water Content - High pressure cylinder air must have a dew point of at least -50°F (-45.6°C) and a water vapor content of 67ppm maximum. NFPA 1500 regulations for Fire Department use may vary from OSHA requirements
- Canadian standards for cylinder air may vary. Contact CSA for details

Air Systems' Grade-D Filtration Specifications:

• 1ST STAGE FILTER w/ Filter Change Indicator, Automatic Drain, Removes Liquids and Particulate to 5.0 micron Particle Size
• 2ND STAGE FILTER w/ Filter Change Indicator, Automatic Drain, Provides Oil Coalescing and Ultra-fine Particulate Filtration to .01 micron Particle Size
• 3RD STAGE FILTER w/ Filter Change Indicator, Manual Drain, Charcoal Removes Organic Vapors and Objectionable Odors, .03 micron filtration
• In-Line Carbon Monoxide (CO) Monitor. Optional CO/O_2 Monitor
• All portable and fixed units are available with CSA approved intrinsically safe monitor for work in hazardous locations
• 2-year Warranty on Sensor and Entire CO Monitor
• Filter Change Indicator provided on all 3 filters (BB15-CO series has Filter Change Indicator installed on second stage only)
• Three Standard Power Options: Dual 9-Volt Battery, 8-16 VDC and/or 115 Volt AC, 60Hz (50Hz Optional)
• Safety Relief Valve set at 125psi on outlet pressure
• Solid Aluminum Block Manifold with manual drain
• 0-160psi Pressure Gauge
• Visual Flowmeter to Verify Air Flow to Monitor, adjustable flow rate, 50 -100cc
• External Mounted CO Warning LED Lights and Audible Alarm
• Remote DC Alarm Jack with Cover Cap are standard on portable units (Optional on Model BB15-CO Series). AC output supplied on all panel mount units.
• Maximum Inlet Pressure - 150psi
• All respirator couplings provided with safety lock feature
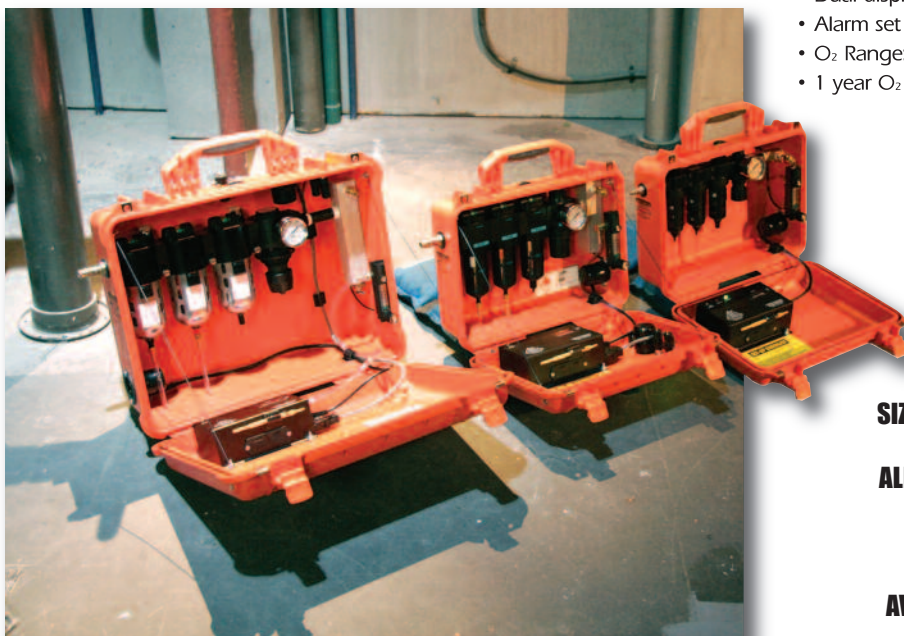• ALL FILTRATION UNITS ARE DESIGNED TO FLOW THE NIOSH MAXIMUM CAPACITY PER WORKER

CO Monitor Specifications:

• Calibration: Less than 2 minutes
• Monitor display: LCD 3-digit readout
• Temperature range: 4 to 113 degrees F (-20 to 45 degrees C)
• Accuracy: +/- 1% of full scale
• Monitor range: 0-200ppm CO (15-23% for optional O_2)
• Intrinsically safe, CSA approved monitor available for hazardous locations
• Pressure range: 1-3psi, flow 50-100cc
• Response: 90% of full scale in 10 seconds
• Sensor type: 3-electrode electrochemical with bias voltage
• Humidity range: 5% to 95% relative humidity
• Warranty: 2 years on entire unit and CO sensor (1 year on oxygen sensor)
• Alarm set point: 10ppm CO (5ppm Canada)
• Voltage operation: 115 VAC, dual 9-volt DC battery, or 8-16 volt DC
• Test circuitry: manual push-to-test for sensor operation and alarms
• Shielding: internal RFI/EMI circuitry, aluminum case
• Warning indicators: low battery (amber), normal operation (green), high CO level (red) (LED indicators vary with model ordered)
• Output signals (standard): DC output on portables, AC output on panel versions
• Monitor case housing; black anodized aluminum
• Control panel standard features: inlet gas quick connect coupling, auxiliary 12 VDC jack, on/off/test switch, auxiliary/remote alarm jack, 115 VAC jack.
• Dimensions: 7.0″L x 2.75″H x 5.1″W
• Weight: 2.1 lbs.

OPTIONAL CO/O_2 MONITOR
• Dimensions: 9.5″L x 5.1″W x 2.75″H
• Weight: 2.8 lbs.
• Dual display for CO and O_2 content
• Alarm set point: 19.5%
• O_2 Range: 15-23%
• 1 year O_2 sensor warranty

Did You KNOW?

SIZING THE FILTERS CORRECTLY ASSURES WORKER SAFETY, COMFORT AND EXTENDS FILTER LIFE.
ALL AIR SYSTEMS' FILTRATION SYSTEMS ARE DESIGNED TO FLOW THE NIOSH MAXIMUM CAPACITY PER WORKER.

ALL AIR SYSTEMS' FILTRATION UNITS ARE AVAILABLE WITH CSA APPROVED INTRINSICALLY SAFE CO OR CO/O_2 MONITORS FOR WORK IN HAZARDOUS LOCATIONS.

Grade-D Filtration
Portable Systems

The Breather Box™
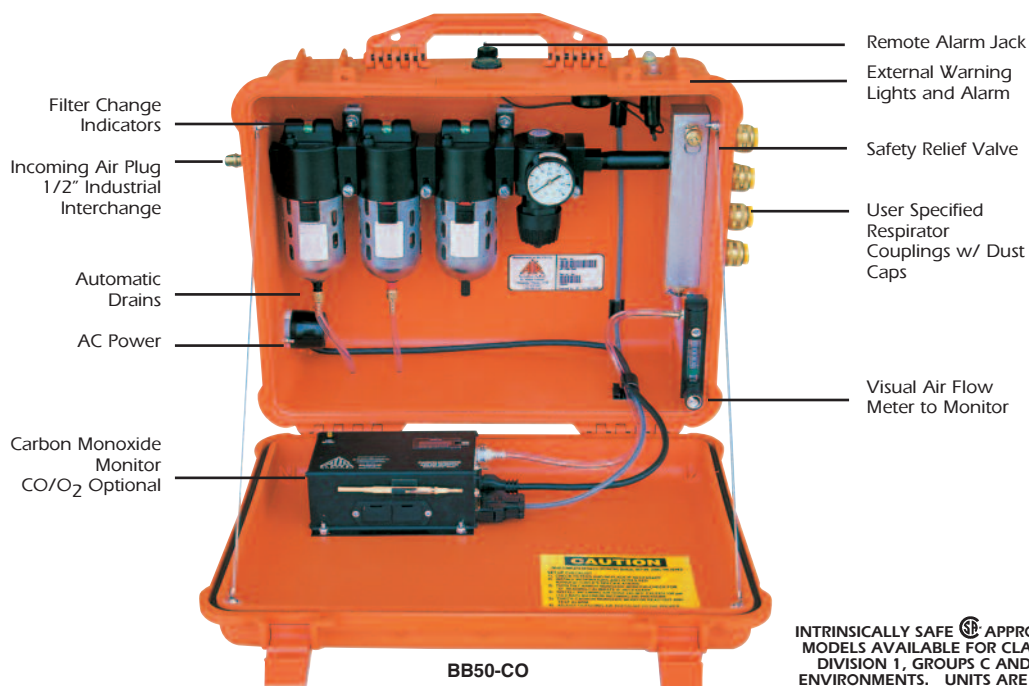### High Performance Portable Grade-D Breathing Air Filtration System

The Breather Box™ is a portable Grade-D filtration system designed to provide breathing air for a specific number of workers.   The system filters incoming air from a compressor to provide respirator users with Grade-D quality air and monitors for CO and/or Oxygen.

The first stage element filters bulk water and particulate and has an auto drain. The second stage coalescing filter eliminates atomized oils, mists, ultra-fine particulates, and has an auto drain. The third stage filter removes organic vapors and odors and has a manual drain. Filter change indicators are standard on all three stages of filtration. Filtration efficiency is 99.99% @ .01 micron. All Breather Boxes™ are designed to be used in the upright and closed position to prevent internal contamination.

The standard carbon monoxide (CO) airline monitor operates on disposable 9-volt batteries, 8-16 volt DC, or 115 VAC for continuous air monitoring. An external audible alarm and light signals the workers of high CO content.   A remote alarm jack is provided on all models except for Model BB15-CO. Point-of-Attachment (POA) boxes can extend respirator usage beyond 300 feet. See page 11 for additional details.

Did You KNOW?

• *All portable and fixed breathing air filtration systems meet or exceed OSHA 1910.134, Canadian Z180.1 Breathing Air Standards and British Standard BS-EN 12021:1999 "RESPIRATORY PROTECTIVE DEVICES"*

• *All filtration units are designed to flow the NIOSH maximum capacity per worker*

• *Air Systems' provides at NO CHARGE your first lab certified air quality test of your new breathing air filtration device. Contact Customer Service for details.*

Filter Change Indicators

Incoming Air Plug 1/2" Industrial Interchange

Automatic Drains

AC Power

Carbon Monoxide Monitor CO/O$_2$ Optional

Remote Alarm Jack

External Warning Lights and Alarm

Safety Relief Valve

User Specified Respirator Couplings w/ Dust Caps

Visual Air Flow Meter to Monitor

BB50-CO

INTRINSICALLY SAFE Ⓢ APPROVED MODELS AVAILABLE FOR CLASS I, DIVISION 1, GROUPS C AND D ENVIRONMENTS.   UNITS ARE "DC" (9-VOLT) OPERATION ONLY

2 YEAR WARRANTY ON SENSOR & MONITOR

Please specify 1/4" Hansen style or Schrader style fittings when ordering. Other fittings available for an additional charge.

Model No.	Description
BB15-CO	15cfm Breather Box™, CO monitor - (30cfm flow capacity) -1 coupling
BB15-CO2	15cfm Breather Box™ , CO monitor - (30cfm flow capacity) - 2 couplings
BB30-CO	30cfm Breather Box™ , CO monitor - (48cfm flow capacity) - 2 couplings
BB30-CO3	30cfm Breather Box™ , CO monitor - (48cfm flow capacity) - 3 couplings
BB50-CO	50cfm Breather Box™ , CO monitor - (79cfm flow capacity) - 4 couplings
BB75-CO	75cfm Breather Box™ , CO monitor - (97cfm flow capacity) - 6 couplings
BB100-CO	100cfm Breather Box™ , CO monitor - (123cfm flow capacity) - 4 couplings
BB100-CO6	100cfm Breather Box™ , CO monitor - (123cfm flow capacity) - 6 couplings
BB100-CO8	100cfm Breather Box™ , CO monitor - (123cfm flow capacity) - 8 couplings
BB150-CO	150cfm Breather Box™ , CO monitor - (203cfm flow capacity) - supplied with 3 each 1/2" sockets
Carbon Monoxide and Oxygen Monitoring	
BB30-COO2	30cfm Breather Box™ , CO/O₂ monitor - (48cfm flow capacity) - 2 couplings
BB50-COO2	50cfm Breather Box™ , CO/O₂ monitor - (79cfm flow capacity) - 4 couplings
BB100-COO2	100cfm Breather Box™ CO/O₂ monitor - (123cfm flow capacity) - 4 couplings
Independent Regulators	
BB30-CO2R	30cfm Breather Box™ - (48cfm flow capacity) - 2 couplings, 2 independent regulators & pressure gauges
BB50-CO4R	50cfm Breather Box™ - (79cfm flow capacity) - 4 couplings, 4 independent regulators & pressure gauges
BB100-CO4R	100cfm Breather Box™ - (123cfm flow capacity) - 4 couplings, 4 independent regulators & pressure gauges
Ⓢ **Intrinsically Safe**	
BB30-COIS	30cfm Breather Box™ Intrinsically Safe - (48cfm flow capacity) 2 couplings
BB50-COIS	50cfm Breather Box™ Intrinsically Safe - (79cfm flow capacity) 4 couplings
BB100-COIS	100cfm Breather Box™ Intrinsically Safe - (123cfm flow capacity) - 4 couplings (Optional 6 or 8 couplings)

BB100-CO8
BB50-CO
BB30-CO
BB15-CO

Custom Designed Breather Box™ Options
• Clear View Windows
• Independent Regulators to allow different respirators and lengths of hoses to be used simultaneously
• Fully Automated Reserve Air System
• Low Pressure Alarms
CONTACT CUSTOMER SERVICE FOR DETAILS

Ⓢ **CSA APPROVED FOR CLASS I, DIVISION 1, GROUPS C AND D ENVIRONMENTS.   UNITS ARE "DC" (9-VOLT) OPERATION ONLY**
SEE PAGE 12 FOR CALIBRATION KIT ORDERING INFORMATION

Breathing Air Panels
for Permanent Mounting Applications

Permanent mount Grade-D filtration systems are designed to provide breathing air for a specific number of workers. The system filters compressor air to provide respirator users with Grade-D quality air. The first stage element filters bulk water and particulate, the second stage coalescing filter removes atomized oils and ultra-fine particulate, and the third stage removes organic vapors and odors. Filter change indicators are standard on all three filtration stages. Filtration efficiency is 99.99% @ .01 microns. A built-in carbon monoxide monitor operates on twin 9-volt DC, 115 VAC, or 8-16 VDC for continuous detection. A high intensity audible alarm and light signals the workers of high CO content in their breathing air. A 115 VAC electrical conduit box is provided as standard to provide AC power in and connection for AC powered remote alarms. Filtration components are mounted on a powder coated steel panel.

Did You KNOW?

• All portable and fixed breathing air filtration systems meet or exceed OSHA 1910.134, Canadian Z180.1 Breathing Air Standards and British Standard BS-EN 12021:1999 "RESPIRATORY PROTECTIVE DEVICES"

• Air Systems' provides at NO CHARGE your first lab certified air quality test of your new breathing air filtration device. Contact Customer Service for details.
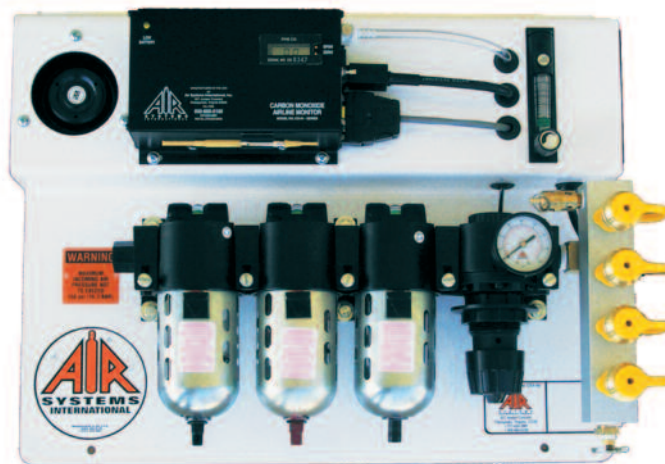

BB50-COPM
50cfm 4 Outlet Grade-D Filtration

BB15-COPM
15cfm SINGLE WORKER GRADE-D FILTRATION
16"W x 14.5"H x 5.25"D

INTRINSICALLY SAFE ℠ APPROVED MODELS AVAILABLE FOR CLASS I, DIVISION 1, GROUPS C AND D ENVIRON-MENTS. UNITS ARE "DC" (9-VOLT) OPERATION ONLY

2 YEAR WARRANTY ON SENSOR & MONITOR

Please specify 1/4" Hansen style or Schrader style fittings when ordering.
Other fittings available for an additional charge.
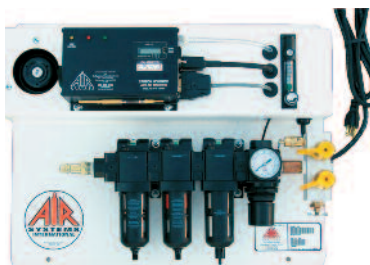
Model No.	Description
BB15-COPM	15cfm Grade-D breathing air panel with CO monitor (30cfm flow capacity) - 1 coupling
BB30-COPM	30cfm Grade-D breathing air panel with CO monitor (48cfm flow capacity) - 2 couplings
BB50-COPM	50cfm Grade-D breathing air panel with CO monitor (79cfm flow capacity) - 4 couplings
BB75-COPM	75cfm Grade-D breathing air panel with CO monitor (97cfm flow capacity) - 6 couplings or NPT outlet
BB100-COPM	100cfm Grade-D breathing air panel with CO monitor (123cfm flow capacity) - 4 couplings or NPT outlet
BB150-COPM	150cfm Grade-D breathing air panel with CO monitor (203cfm flow capacity) NPT outlet*
BB250-COPM	250cfm Grade-D breathing air panel with CO monitor (741cfm flow capacity) NPT outlet*
	*Consult Customer Service
Carbon Monoxide and Oxygen Monitoring	
BB30-CO2PM	30cfm Grade-D breathing air panel with CO/O₂ monitor (48cfm flow capacity) - 2 couplings or NPT outlet
BB50-CO2PM	50cfm Grade-D breathing air panel with CO/O₂ monitor (79cfm flow capacity) - 4 couplings or NPT outlet
BB100CO2PM	100cfm Grade-D breathing air panel with CO/O₂ monitor (123cfm flow capacity - 4 couplings or NPT outlet
Auto-Air™ Option	
BB30COAAPM	30cfm Grade-D Auto-Air™ breathing air panel with CO monitor - (48cfm flow capacity) 2 couplings or NPT outlet
BB50COAAPM	50cfm Grade-D Auto-Air™ breathing air panel with CO monitor - (79cfm flow capacity) 4 couplings or NPT outlet
B100COAAPM	100cfm Grade-D Auto-Air™ breathing air panel with CO monitor - (123cfm flow capacity) 4 couplings or NPT outlet
℠ **Intrinsically Safe**	
BB15COPMIS	15cfm Grade-D breathing air panel with intrinsically safe CO monitor - (30cfm flow capacity) - 1 coupling
BB30COPMIS	30cfm Grade-D breathing air panel with intrinsically safe CO monitor - (48cfm flow capacity) - 2 couplings
BB50COPMIS	50cfm Grade-D breathing air panel with intrinsically safe CO monitor - (79cfm flow capacity) - 4 couplings or NPT outlet
B100COPMIS	100cfm Grade-D breathing air panel with intrinsically safe CO monitor - (123cfm flow capacity) - 4 couplings or NPT outlet

BB30-COPM
30cfm TWO WORKER GRADE-D FILTRATION

℠ **CSA APPROVED FOR CLASS I, DIVISION 1, GROUPS C AND D ENVIRONMENTS. UNITS ARE "DC" (9-VOLT) OPERATION ONLY**

SEE PAGE 12 FOR CALIBRATION KIT ORDERING INFORMATION

What Is an Auto-Air System?

If IDLH work environments exist, the Auto-Air™ Breather Box™ option should be considered. The Auto-Air™ filtration system was developed to provide Grade-D breathing air with full automatic reserve air in the event of either electrical failure or reduced pressure from the main air source while working in hazardous environments. Reserve air activation occurs at 60psi and/or loss of electrical supply, the system automatically switches to the reserve air cylinder(s). Local and optional remote alarms signal the workers that the primary air system has failed and has switched to the back-up air system. This Auto-Air™ feature is offered in electric or pneumatic versions. *Note: IDLH conditions require the use of a pressure demand respirator with at least a 5 minute escape cylinder. For technical questions, contact Air Systems' Customer Service Department.*

The Auto-Air™ Breather Box™
Fully Automatic Reserve Air System for Work in IDLH Environments

**BB50-COAA
STANDARD ELECTRIC VERSION**

**BB100COAAP
FULLY PNEUMATIC SYSTEM
WITH CSA CERTIFIED INTRINSICALLY SAFE CO
MONITOR FOR USE IN HAZARDOUS LOCATION
ENVIRONMENTS**

Did You KNOW?

NIOSH requires the use of a 5 minute air-line escape respirator when working in IDLH environments. Our Auto-Air™ feature does not replace the NIOSH requirement, however, some work environments may require a 30-minute (or longer) airline escape method to safely egress the hazardous area. This situation would require the use of an Auto-Air™ Breather Box™ or Auto-Air™ Cart.
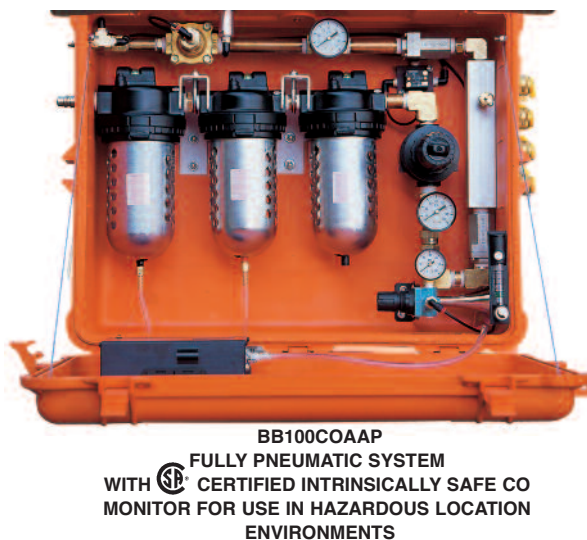
Primary Air Line

Reserve Air Line

The primary air line connection is attached from the compressor to the Auto-Air™ Breather Box™ A reserve air line is attached from a single or bank of air cylinders based on the required egress duration. The system can be tested prior to each use to ensure proper function of the Auto-Air™ system.

ALWAYS SIZE THE RESERVE AIR SYSTEMS TO ALLOW AN ADEQUATE SAFETY FACTOR FOR ALL WORKERS TO EGRESS THE ENVIRONMENT.

2 YEAR WARRANTY ON SENSOR & MONITOR

Please specify 1/4" Hansen style or Schrader style fittings when ordering. Other fittings available for an additional charge.

Model No.	Description
BB30-COAA	30cfm Auto-Air™ Breather Box™ - (48cfm flow capacity) - 2 couplings
BB50-COAA	50cfm Auto-Air™ Breather Box™ - (79cfm flow capacity) - 4 couplings
BB100-COAA	100cfm Auto-Air™ Breather Box™ - (123cfm flow capacity) - 4 couplings
	Intrinsically Safe
BB30-COAAP	30cfm Intrinsically Safe Auto-Air™ Breather Box™ (48cfm flow capacity) - 2 couplings
BB50-COAAP	50cfm Intrinsically Safe Auto-Air™ Breather Box™ (79cfm flow capacity) - 4 couplings
BB100COAAP	100cfm Intrinsically Safe Auto-Air™ Breather Box™ (123 cfm flow capacity) - 4 couplings
	Contact Customer Service for Reserve Air Cylinders and Regulators

CSA APPROVED FOR CLASS I, DIVISION 1, GROUPS C AND D ENVIRONMENTS.   UNITS ARE "DC" (9-VOLT) OPERATION ONLY

SEE PAGE 12 FOR CALIBRATION KIT ORDERING INFORMATION

The Auto-Air™ Cart

The Auto-Air™ Cart provides a systems approach to breathing air filtration. The cart contains our Grade-D filtration unit, and either a pneumatic or electric reserve air system and twin air cylinder storage. Choose a cart size based on the desired amount of reserve air needed to allow workers to safely egress the work area. Carts can operate with either 2400 to 5000psi cylinders. **The pneumatic version should be selected for hazardous environments.**

Intrinsically Safe Auto-Air™ Cart
Complete Pneumatic Operation

NOTE: INTRINSICALLY SAFE (IS) CO MONITORS ARE CSA APPROVED FOR CLASS I, DIVISION 1, GROUPS C AND D ENVIRONMENTS. UNITS ARE "DC" (9-VOLT) OPERATION ONLY

APPLICATIONS
- Refineries
- Chemical and Pharmaceutical manufacturing
- Refueling applications
- Tank cleaning
- Decon required situations
- Grain silo entry

All lights and remote alarms are pneumatically operated and spark free. The intrinsically safe CO monitor is ⓈⓅ approved and operates on 9-volt DC batteries only.

System mounted on
2300 series large
cylinder cart
B10023HTAP

The Auto-Air™ Cart
Standard Electric Model

APPLICATIONS
- Confined space entry
- Hazardous material handling
- Boiler cleaning operations
- Nuclear work
- Fuel cell maintenance
- Tank entry and cleaning

ALL HTAA SERIES STANDARD CARTS
HOLD TWO 87 OR 60CF AIR CYLINDERS.

LARGE CYLINDER CARTS
PICTURED ARE FOR LONG DURATION
APPLICATIONS.

System mounted on small
cylinder cart
BB50-HTAA

The custom Auto-Air™ Cart, pictured left, utilizes our Ergo-Air® Cart frame. The unit holds two large storage air cylinders and provides ease of mobility for use in plant air operations. Any size Auto-Air™ Breather Box™ can be added to the Ergo-Air® Cart frame.

CONSULT CUSTOMER SERVICE TO DESIGN A CART TO MEET YOUR APPLICATION

2 YEAR WARRANTY ON SENSOR & MONITOR

Please specify 1/4" Hansen style or Schrader style fittings when ordering. Other fittings available for an additional charge.

Model No.	Description
BB30-HTAA	30cfm Auto-Air™ Small Cart - requires 115 VAC (48cfm flow capacity) - 2 couplings
BB50-HTAA	50cfm Auto-Air™ Small Cart - requires 115 VAC (79cfm flow capacity) - 4 couplings
BB100HTAA	100cfm Auto-Air™ Small Cart - requires 115 VAC (123cfm flow capacity) - 4 couplings
BB100-23AA	100cfm Auto-Air™ Large Cart - requires 115 VAC (123cfm flow capacity) - 4 couplings
ⓈⓅ **Intrinsically Safe**	
BB30-HTAAP	30cfm Intrinsically Safe Auto-Air™ Small Cart - (48cfm flow capacity) - 2 couplings
BB50-HTAAP	50cfm Intrinsically Safe Auto-Air™ Small Cart - (79cfm flow capacity) - 4 couplings
BB100HTAAP	100cfm Intrinsically Safe Auto-Air™ Small Cart - (123cfm flow capacity) - 4 couplings
B10023HTAP	100cfm Intrinsically Safe Auto-Air™ Large Cart - (123cfm flow capacity) - 4 couplings

ⓈⓅ **CSA APPROVED FOR CLASS I, DIVISION 1, GROUPS C AND D ENVIRONMENTS. UNITS ARE "DC" (9-VOLT) OPERATION ONLY**

Grade-D Filtration
Blast-Air™ Cart

The Blast-Air™ Cart
Designed for the Commercial Sandblasting, Paint and Coatings Industry

The Blast-Air™ Cart has been designed to meet the demanding needs of the sandblast and coatings industry. The Blast-Air™ 50 pictured is our standard 4 worker Breather Box™ mounted on a BA-1CAA pre-filter cart. Air can be supplied to the cart from mobile or plant air compressors and pre-filtered through high capacity water, oil, and particulate separators located on the rear of the rugged steel cart. These pre-filters automatically drain large amounts of oil and water discharged from a compressor before it enters the Breather Box™. This process will extend the filter life of the Breather Box™ and reduce maintenance downtime and costs.

BA-50

Specifications:
- Dual 300cfm Cart Mounted Pre-Filters with Automatic Drains
- 1ST STAGE FILTER w/ Filter Change Indicator, Removes Bulk Water and Particulate, 5.0 micron
- 2ND STAGE FILTER w/ Filter Change Indicator, Coalescing Oil and Ultra-fine Particulate Filtration, .01 micron
- 3RD STAGE FILTER w/ Filter Change Indicator, Charcoal Removes Organic Vapors and Objectionable Odors, .03 micron
- Automatic Drains in 1st and 2nd Stage Filter Assemblies
- 2-year Warranty on CO Sensor and Monitor
- In-Line Carbon Monoxide (CO) Monitor with optional CO/O_2 Monitor - Intrinsically Safe CSA Approved Models available
- Electro-chemical Sensor for Specific Gas Detection and Rapid Calibration in less than 2 minutes
- Dual 9-Volt Battery Operation, 8-16 VDC and/or 115 Volt AC
- Safety Relief Valve set at 125psi
- Solid Aluminum Block Manifold with manual drain
- 0-160psi Pressure Gauge
- Visual Flowmeter to Verify Air Flow to Monitor
- External Case Mounted CO Warning Lights and Audible Alarm
- Remote DC Alarm Jack with Cover Cap, standard
- Maximum Inlet Pressure - 150psi
- All respirator couplings provided with safety lock feature

Cart Dimensions: 40"H x 20"W
Weight: 42 lbs.

TWO 300cfm REAR PRE-FILTERS SAVES THE BREATHER BOX™ FILTERS AND REDUCES EQUIPMENT DAMAGE!

2 YEAR WARRANTY ON SENSOR & MONITOR

Please specify 1/4" Hansen style or Schrader style fittings when ordering.
Other fittings available for an additional charge.

Model No.	Description
BA-30	30cfm Breather Box™ installed on the Blast-Air™ Cart (48cfm flow capacity) - 2 couplings
BA-50	50cfm Breather Box™ installed on the Blast-Air™ Cart (79cfm flow capacity) - 4 couplings
BA-100	100cfm Breather Box™ installed on the Blast-Air™ Cart (123cfm flow capacity) - 4 couplings
BA-100-6	100cfm Breather Box™ installed on the Blast-Air™ Cart (123cfm flow capacity) - 6 couplings
BA-100-8	100cfm Breather Box™ installed on the Blast-Air™ Cart (123cfm flow capacity) - 8 couplings
BA-1CAA	Blast-Air™ **cart only** with rear filters and connect hose - customer mounts existing Breather Box™
BB100-A	Pre-filter replacement element for Blast-Air™ Cart, rear filters

Portable CO Monitoring
Intermittent or Continuous Sampling

This portable airline monitor connects easily to a breathing air filtration source or ambient air pumps and monitors the air for CO content. The audible alarm (90 dbA) and light will activate when the CO level exceeds 10ppm (5ppm Canadian). External alarm and lights allow for the unit to be used in the closed position and eliminates damage and contamination of the internal components.

Specifications:

- Operates on 9-volt batteries, 8-16 VDC, and/or 115 VAC
- Connector kit includes 1/4" Industrial Interchange coupling supplied on 5ft. hose
- Standard alarm jack allows for connection to remote alarm devices
- Standard version allows air pressures up to 150psi
- Available in high pressure version up to 6000psi for fill compressors
- Optional high intensity alarm
- Available in ⓈⓅ approved Intrinsically safe version, 9 VDC only
- Consult page 4 for complete monitor specifications

CO91-14LAC
PORTABLE CO MONITOR

APPLICATIONS
- Portable filter pots
- Filter systems
- Ambient air pumps
- Equipment Rentals
- Retro-fit old style compressors and filtration systems

Model No.	Description
CO91-14LAC	Portable CO monitor, 9 VDC and/or 115 VAC, 5ft. hose, 5000psi maximum inlet pressure
CO91-14HAC	Portable CO monitor, 9 VDC and/or 115 VAC, 5ft. hose, rated for 5000psi maximum pressure, includes 5500psi regulator and 5ft. hose
CO91-LACG	Portable CO monitor with built-in calibration gas cylinders, 150psi maximum, includes calibration gas and regulator
CO91-HACG	Portable CO monitor with built-in calibration gas cylinders, rated for 5000psi maximum pressure, includes calibration gas and regulator
CO2-91LAC	Portable CO/O_2 monitor, 9 VDC and/or 115 VAC, 5ft. hose, 150psi maximum inlet pressure

SEE PAGE 12 FOR CALIBRATION KIT ORDERING INFORMATION

Did You KNOW

Alarm set point is set at 10ppm in compliance with U.S. and International standards. Specify 5ppm for Canadian operation.

CO-91PM

Panel Mounted CO Monitor
for Fixed Systems
Continuous Sampling of CO and/or O_2 levels

CO/O_2 MONITOR
CO2-91

This durable carbon monoxide (CO) airline monitor panel can be ordered to retrofit any existing Grade-D breathing air system. It can be ordered with dual monitoring for CO and Oxygen (O_2) content. Units supplied with high intensity audible alarm and 115 VAC power cord. All units are powder coated steel and are ready for wall mounting. Available in ⓈⓅ approved Intrinsically safe version, 9 VDC only.

2 YEAR WARRANTY ON SENSOR & MONITOR

Model No.	Description
CO-91PM	Panel mounted CO monitor, 9 VDC and/or 115 VAC, audible alarm, visual lights, flowmeter, quick connect calibration fitting, LCD display
CO-91PMIS	Panel mounted intrinsically safe CO monitor, 9 VDC only, ⓈⓅ approved for Class I, Division 1, Groups C and D environments, audible alarm, visual lights, flowmeter, quick connect calibration fitting, LCD display
CO2-91PM	Panel mounted carbon monoxide (CO) and oxygen (O_2) monitor, simultaneously monitors for high CO and low O_2 levels in breathing air with independent digital readout, audible alarm, visual lights, flowmeter, quick connect calibration fitting, LCD display

SEE PAGE 12 FOR CALIBRATION KIT ORDERING INFORMATION

ⓈⓅ APPROVED INTRINSICALLY SAFE MONITOR
CO-91IS

Remote Air Manifolds
Point of Attachments (POA)

A remote air manifold is often called a Point-of-Attachment (POA). All of our remote air manifolds meet NIOSH requirements of the 87-116 (1989) document for point-of-attachment.
The Point-Of-Attachment (POA) series provides remote manifold capability for respirator users, while complying with NIOSH regulations. The POA consists of a regulator, pressure gauge, safety relief valve, and fitting congruency necessary for proper respirator operation. The POA box can be located any distance from the Grade-D filtration Breather-Box™ or filtration panel. The remote air manifold (POA) assembly becomes the NIOSH attachment point for the respirators and is now limited to a maximum 300 feet of breathing air hose at the air outlet fitting on the remote POA box.

POA-4

Specifications:
• Adjustable regulator
• 1/2" industrial Interchange male inlet plug
• Pressure gauge (0-160psi)
• Safety relief valve - set at 125psi
• 1/4" respirator couplings supplied with safety locks
• Aluminum block manifold
• Water resistant polycarbonate case
• Rubber gasketed lid helps to prevent internal contamination
• Unit can be taken into wet or hazardous locations

Did You KNOW?
Using POA units, you can move the NIOSH point-of-attachment for airline respirators closer to the worker.

POA-XWM

Replace "X" in part number for the required number of fittings

WALL MOUNTED POA MANIFOLD

• Available from 1-8 outlets
• Adjustable regulator
• Pressure gauge (0-160psi)
• Safety relief valve - set at 125psi
• Aluminum block manifold
• Use with plant compressor systems, see page 23-24

POA-4R

INDEPENDENT REGULATOR POA MANIFOLD

Four independent regulators allow each worker to adjust their desired pressure depending on the style of respirator and length of hose.

POA-5RF

INDEPENDENT REGULATOR POA MANIFOLD WITH FILTRATION

Final filtration is added to remove water and particulates in plant air piping systems.

Please specify 1/4" Hansen style or Schrader style fittings when ordering. Other fittings available for an additional charge.

Model No.	Description
POA-4	Standard POA Box - 4 couplings
POA-4R	POA Box with 4 independent regulators
POA-4F	POA Box with final particulate filter
POA-4RF	POA Box with final particulate filter and 4 independent regulators
POA-X	POA Box, replace "X" in part number for the required number of fittings
BBM-4LF	"NRC" POA Box, final particulate filter, 4 independent regulators, low pressure warning alarm and lights (a clear gauge viewing window is optional)
POA-XWM	Wall mounted POA manifold, replace "X" in part number for the required number of fittings

Custom Designed POA Options
• Clear view windows
• Multiple filters and regulators
• Stainless steel or aluminum cases
• Low pressure warning alarms
• Models available for 1 - 8 workers
CONTACT CUSTOMER SERVICE FOR DETAILS

Portable Pre-Filter

Air Flow

PF-240
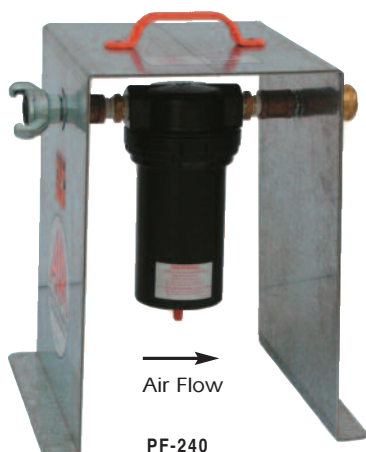
Designed for use with compressors that discharge a large volume of oil and water. Ideal for use in humid climates.

• High capacity 300cfm bulk filtration and moisture removal - 200psi rated with metal bowl
• Automatic drain assembly
• Use after compressor and before Grade-D Breather Box™ filtration unit
• Galvanized steel frame with carry handle
• Supplied with 1/2" Chicago fitting on inlet, 1/2" industrial interchange socket on outlet

Replacement Filters
for Breather Boxes™ and Filtration Panels

Did You KNOW?

In order to maintain Grade-D air quality, filters must be changed on a regular basis

BB15 SERIES

BB15-AW	Replacement particulate filter - Stage 1
BB15-CW	Replacement coalescing filter - Stage 2
BB15-DW	Replacement charcoal filter - Stage 3
BB15-FKW	Filter kit for BB15-CO series models
	Contains 1 ea. "A", "C", and "D" replacement filter

* For all BB15 Series units purchased prior to 12/1/04 – consult Customer Service for correct ordering information

BB30 SERIES

BB30-A	Replacement particulate filter - Stage 1
BB30-C	Replacement coalescing filter - Stage 2
BB30-D	Replacement charcoal filter - Stage 3
BB30-FK	Filter kit for BB30-CO series models
	Contains 1 ea. "A", "C", and "D" replacement filter

BB50 SERIES

BB50-A	Replacement particulate filter - Stage 1
BB50-C	Replacement coalescing filter - Stage 2
BB50-D	Replacement charcoal filter - Stage 3
BB50-FK	Filter kit for BB50-CO series models
	Contains 1 ea. "A", "C", and "D" replacement filter

BB75 SERIES

BB75-A	Replacement particulate filter - Stage 1
BB75-C	Replacement coalescing filter - Stage 2
BB75-D	Replacement charcoal filter - Stage 3
BB75-FK	Filter kit for BB75-CO series models
	Contains 1 ea. "A", "C", and "D" replacement filter

BB100 SERIES

BB100-A	Replacement particulate filter - Stage 1
BB100-C	Replacement coalescing filter - Stage 2
BB100-D	Replacement charcoal filter - 1 Stage 3
BB100-FK	Filter kit for BB100-CO series models
	Contains 1 ea. "A", "C", and "D" replacement filter

Note: For replacement filters not listed, contact Customer Service.

BBK-20

BBK-20103

Airline Monitor Calibration Kits

Model No.	Description
BBK-20	Calibration kit for CO monitor - 20ppm CO, zero air, regulator, pressure gauge, tubing, and hard case – 17 liter size disposable cylinders
BBK-10	Calibration kit – same as above with 10ppm CO gas for Canadian calibration
Large Calibration Kits	
BBK-20103	Large calibration kit includes 20ppm CO, zero air, regulator, pressure gauge, tubing, and hard case – 103 liter size disposable cylinders
Replacement Cylinders	
BBG-00	17 Liter replacement cylinder, zero air
BBG-20	17 Liter replacement cylinder, 20ppm CO
BBG-02	17 Liter replacement cylinder, O_2, 20.9% in nitrogen

Did You KNOW?

Monitor calibration should be done monthly or whenever the reading may be questionable. Use only Air Systems' gas concentration or an inaccurate calibration may occur.

Please specify Hansen style or Schrader style fittings when ordering. Other fittings available for an additional charge.

Model No.	Description
H-6-3	6 ft. 3/8" breathing air hose
H-10-3	10 ft. 3/8" breathing air hose
H-25-3	25 ft. 3/8" breathing air hose
H-50-3	50 ft. 3/8" breathing air hose
H-100-3	100 ft. 3/8" breathing air hose
H-300-3	300 ft. 3/8" breathing air hose
H-6-5	6 ft. 1/2" breathing air hose
H-10-5	10 ft. 1/2" breathing air hose
H-50-5	50 ft. 1/2" breathing air hose
H-100-5	100 ft. 1/2" breathing air hose
H-300-5	300 ft. 1/2" breathing air hose
H-25-12	25 ft. 3/4" breathing air hose
H-50-12	50 ft. 3/4" breathing air hose
H-100-12	100 ft. 3/4" breathing air hose

Breathing Air Hose

3/8" ID

1/2" ID

3/8", 1/2", 3/4" ID in stock
Specify desired couplings, fitting size, and hose length when ordering

Quick Connect Couplings

• Hansen • Schrader • Parker • Snap-Tite • National • Perfecting • CEJN • Chicago • Breco

* Specify size and type when ordering breathing air systems and hoses

CEJN Plug   Hansen Plug   Schrader Plug   Chicago Coupling   Snap-Tite Plug   Hansen S.S. HK Plug

CEJN Coupling   Hansen Coupling   Schrader Coupling   Chicago Coupling   Snap-Tite Coupling   Hansen S.S. HK Coupling

Did You KNOW?

Air Systems' has a complete guide to understanding quick connect couplings to assist you in the proper size and selection. See catalog page 72.

Breathing Air Hose Reels

All reels can be supplied with hose installed. Hose reels can be mounted on roller carts. Consult factory for details.

NOTE: BREATHING AIR HOSE MUST BE ORDERED SEPARATELY

Model No.	Description
	Automatic Rewind Hose Reels - 3/8" Hose (150psi Max)
HR-50	Automatic hose reel, holds 50' of 3/8" ID breathing air hose with automatic retracting and multi-position installation
HR-50SS	Stainless steel automatic hose reel, holds up to 50' of 3/8" ID breathing air hose with automatic retracting and multi-position installation
HR-50POA	NIOSH point of attachment automatic hose reel, holds 50' of 3/8" ID breathing air hose with installed regulator, pressure gauge, and safety relief valve - use with NIOSH approved respirator hose
HR-100	Automatic hose reel, holds 100' of 3/8" ID breathing air hose with automatic retracting and multi-position installation
	Automatic Rewind Hose Reels - 1/2" Hose (250psi Max)
HR-505	Holds up to 50' of 1/2" ID breathing air hose with auto retracting and multi-position installation
HR-575	Holds up to 75' of 1/2" ID breathing air hose with auto retracting and multi-position installation
	Manual Hose Reels (250psi MAX)
HR-100M	Manual hose reel, holds 100' of 3/8" ID hose or 50' of 1/2" ID breathing air hose
HR-400M	Manual hose reel, holds 400' of 3/8" ID hose or 200' of 1/2" ID breathing air hose
HR-550M	Manual hose reel, holds 550' of 3/8" ID hose or 300' of 1/2" ID breathing air hose
HR-500MC	Manual hose reel, cart with fold down handle, holds 400' of 3/8" or 300' of 1/2" ID breathing air hose
	High Pressure Hose Reels (6000psi MAX)
HPR-350	Auto hose reel, holds 50' of 1/4" ID high pressure air hose
HPR-300M	Manual hose reel, holds 300' of 1/4" ID high pressure air hose
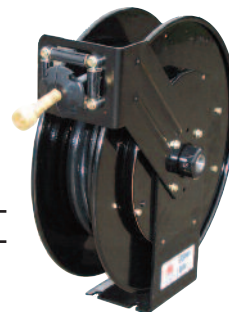
Colors may vary depending on reel type ordered.

Auto Hose Reel   **Manual Hose Reel**

When ordering hose reels for use with NIOSH approved hose, order HR-50POA or contact Customer Service.

HR-500MC

Remote Alarms

Remote alarms act as a valuable early warning device for the isolated worker and allows him to make a safe egress when a system fault alarm occurs.

These alarm units have been designed to duplicate local alarms found on the primary equipment, such as the Breather Box™, to signal workers in a remote location that there is an alarm condition with their system.

DC OPERATED ALARM

Note: Portable Breather Box™ units require DC alarms. Wall mount filter panels require AC alarms.

Models Available:
• Standard audible, alarm, 90dbA
• High intensity audible, 123dbA
• Audible and visual combination units
• Explosion-proof alarm
• Wall mount alarm

115 VAC WALL MOUNT ALARM

Strobe

Horn

50-ALMST

ALMSTH120

Model No.	Description
	Remote alarms for standard 9-12 VDC Breather Box™ Models ONLY
50-ALM	Remote audible alarm, includes 50 ft. cable, 9-12 VDC
50-ALMH	Remote high intensity audible alarm, 123 dbA, includes 50 ft. cable, 9-12 VDC
50-ALMST	Remote audible alarm with mounted visual strobe and guard, includes 50 ft. cable, 9-12 VDC
50-ALMSTH	Remote high intensity audible alarm, 123 dbA, with mounted visual strobe and guard, includes 50 ft. cable, 9-12 VDC
	Remote alarms for standard 9-12 VDC Auto-Air Breather Box™ Models ONLY
50-ALMAA	Remote dual audible alarm, includes 50 ft. cable, 9-12 VDC
50-ALMSTAA	Remote dual audible alarm with mounted visual strobe, includes 50 ft. cable, 9-12 VDC
	Remote alarm for Intrinsically Safe Breather Box™ Models ONLY
50-ALMP	Remote audible alarm, pneumatic horn
	Remote alarms for panel mounted filtration Models ONLY
ALMSTH120	Remote audible/visual strobe with conduit box - 120 VAC
EXAL	Explosion-proof remote audible alarm - 120 VAC
EXVL	Explosion-proof strobe light - 120 VAC

Did You KNOW?

THE RESPONSIBILITY FOR THE QUALITY OF BREATHING AIR RESTS WITH THE USER.
The air supply compressor should be located in a safe, clean ambient air environment. This "safe" location should be tested periodically to ensure clean ambient air quality on a consistent basis. Total system air quality should be tested at the time the compressor is initially set up. If the compressor is moved, retesting air quality is recommended. Should the location or environment significantly change, the air quality should be retested.

Air Systems provides at NO CHARGE your first lab certified air quality test of your new Air Systems' breathing air filtration device or monitor/ compressor system. Contact Customer Service for details.

AirCheck✔Kit™

Certified laboratory air testing is now available for high pressure bottled air or low pressure compressor air requirements. Take your own samples in 10 minutes and send out for precise laboratory results. A 2LA accredited lab will test to any recognized standards, e.g., CGA, NFPA, or Federal MIL Specs. Results can be obtained in less than 3 days; same day service is available for an additional charge.

AIR SAMPLING KITS AVAILABLE FOR RENTAL OR PURCHASE

Laboratory Air Testing Service
FAST * EASY * ACCURATE

ACK-97 & AQT-1LS

Model No.	Description
ACK-97	Air Check Kit to collect air sample. Specify pressure adapter required for testing SCBA, SCUBA, or low pressure. **Purchase of AQT-1LS required**
ACK-97R	RENTAL Air Check Test Kit - 2 week rental period. **Purchase of AQT-1LS required**
AQT-1LS	Laboratory analysis fee and sample media kit. **One kit required for each air test performed.**

Custom Designed Filtration Systems

Air Systems' engineering and design team will manufacture a custom Grade-D breathing air system to meet your most stringent needs.
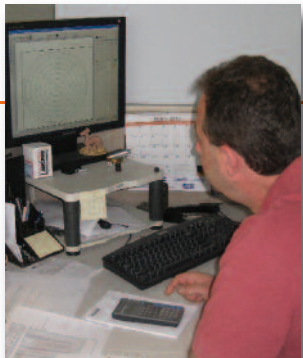
Custom Plant Breathing Air

**BB650-COPM
650cfm Grade-D Filtration**

Plant Filtration Systems are Available up to 3000cfm

Explosion-Proof Grade-D System

Model B50-COPMEX, 50cfm, explosion-proof Grade-D Filtration supplied with NEMA 7 enclosure for CO monitor and electronics with viewing window mounted on a steel panel. The 50-EXALPST, explosion-proof visual alarm and strobe, is designed for use with the explosion-proof panel and has a high intensity pneumatic audible alarm with adjustable volume. Consult factory for additional details.
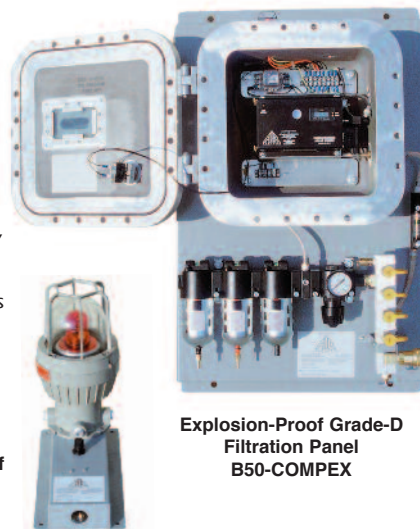
**Explosion-Proof Grade-D Filtration Panel
B50-COMPEX**

**Explosion-Proof Remote Alarm
50-EXALPST**

Grade-D Filtration for Clean Room Applications

Portable Plant Filtration Cart with Auto-Air™ Feature

150cfm Portable Grade-D Filtration

Breathing Air Compressors
Portable

TA-3

H-50-3

BB30-CO3

COMP-3™ Breathing Air Compressor System
Designed for use with Pressure Demand Respirators Only

TA-3 Compressor Specifications
• Rotary vane air compressor rated for continuous duty
• Pressure range to 110psi output
• 2 HP electric motor,1750rpm continuous duty – thermally protected
• 115/230 VAC 1-phase, 60Hz, 17.2 amps (Requires 20amp service)
• Low maintenance - 500 hours between oil changes
• 10″ pneumatic tires
• 50,000 hour minimum vane life
• Built-in skid plate for stair climbing
• USDA approved food grade oil in compression end
• Automatic pressure unloading - full modulation air control
• Breather Box™ Grade-D filtration package required
• Noise level below 70 dbA at 3 feet
• 8 Gallon Twin-Air™ tank assembly, 8.5cf air storage @ 110psi, ASME coded
• 1/2″ 5000 series Hansen style coupling on air outlet
• Optional explosion-proof motor (230/3 VAC only), MODEL TA-3EXP, see page 18
• Dimensions: 46″L x 24″W x 22″H
• Weight: 150 lbs.

2 YEAR WARRANTY ON SENSOR & MONITOR

The Twin-Air™ Compressor system is designed to provide Grade-D breathing air to 3 workers wearing pressure demand respirators. The TA-3 has twin ASME receiver tanks that act as the mounting frame for the compressor. The use of the receiver tanks provides air that has been cooled to within 10 degrees of the ambient temperature. We've added pneumatic tires for ease of mobility in rough terrain and a bottom skid plate for going up and down stairs. This plate becomes the frame for the addition of a reserve air cylinder on the model TA-3EA., see page 18.

This compressor is not designed for use with constant flow respirators or Vortex cooling tubes.

Did You KNOW?

All compressors MUST be placed in a clean air environment per OSHA 1910.134

Model No.	Description
TA-3	Twin-Air™ Compressor, 115/230 VAC, 1 phase, 2HP, 20amp
COMP-3	Package system includes: Model TA-3 compressor, H-10-5 (1/2″ x 10′) connect hose, and BB30-CO3 Breather Box™ filtration package, 3 respirator fittings
BBK-20	Calibration kit for CO monitor - 20ppm CO, zero air, regulator and case – 17 liter size disposable cylinders
BBK-10	Calibration kit – same as above with 10ppm CO gas for Canadian calibration
BB30-FK	Replacement filter kit

NOTE: SIZE THE RESERVE AIR SYSTEM TO ACHIEVE THE REQUIRED EGRESS TIME

COMP-1™ Breathing Air Compressor System
Designed for use with Two Pressure Demand Respirators Only

The TA-1 compressor has been designed to operate 1 or 2 pressure demand airline respirators. Grade-D filtration must be provided in the form of a 1 or 2 worker Breather Box™. The TA-1 uses a 115/230 VAC 60Hz electrical supply. Model TA-3G uses a gasoline engine for mobile operations. USDA food grade oil is used in the compressor air end. This compressor is not designed for use with constant flow respirators or Vortex cooling tubes.

TA-1
(Non–Coded Twin Air Tanks)

BB15-CO

Model No.	Description
TA-1	Electric compressor, 1-2 worker, 115 VAC
TA-3G	Gasoline compressor, 1-2 worker with remote intake snorkel
	Note: Grade-D filtration and hoses ordered separately or available in packages below
COMP-1	Grade-D compressor package includes: TA-1 compressor, BB15-CO Breather Box™, H-25-3 connect hose
COMP-2	Same as COMP-1 with the addition of Model BB15-CO2, 2-outlet Breather Box™

Compressors for use in IDLH and Hazardous Environments

BB30-COAA AUTO-AIR™ BREATHER BOX™

TA-3EA COMPRESSOR

COMP-3EA™ Breathing Air Compressor System
Designed for use with Pressure Demand Respirators Only

THE AUTO-AIR™ COMPRESSOR SYSTEM PACKAGE

This compressor system is designed to provide automatic back-up air for up to 3 workers in the event of compressor failure. An optional 60 or 87cf cylinder can be installed on the compressor frame to provide additional egress air.

The package consists of the Auto-Air™ Breather Box™ model BB30-COAA, the TA-3EA compressor supplied with a CGA-347 high pressure reducing regulator, primary and secondary hoses. NIOSH requires the use of a 5 minute airline escape respirator when working in IDLH environments. Our Auto-Air™ feature does not replace the NIOSH requirement, however, some work environments may require longer than a 5 minute airline hip bottle to safely egress the hazardous area.   This compressor is **not** designed for use with constant flow respirators or Vortex cooling tubes.

Model No.	Description
TA-3EA	Twin-Air™ Compressor System: Includes TA-3 with an adjustable high pressure (5000psi) regulator for attachment to a CGA-346 or CGA-347 cylinder, bottle strap, and cylinder protection molding.
TA-3EXP	Twin-Air™ Compressor, 2 HP explosion-proof electric, 230/3VAC, on-off switch, no plug user wired per NEC requirements
COMP-3EA	Package system includes: Model TA-3EA compressor, H-10-5 (1/2" x 10') hose, H-10-3 (3/8" x 10') hose, high pressure regulator, and BB30-COAA Breather Box™ (order reserve air cylinder separately).
AC-60	60cf aluminum cylinder - 2400psi rated
AC-87	87cf carbon fiber cylinder - 4500psi rated
BBK-20	Calibration kit for CO monitor - 20ppm CO, zero air, regulator and case – 17 liter size disposable cylinders
BBK-10	Calibration kit –same as above with 10ppm CO gas for Canadian calibration
BB30-FK	Replacement filter kit

2 YEAR WARRANTY ON SENSOR & MONITOR

NOTE: SIZE THE RESERVE AIR SYSTEM TO ACHIEVE THE REQUIRED EGRESS TIME

Explosion-Proof Auto-Air™ Compressor
Designed for use with Pressure Demand Respirators Only

Specifications:
- 110psi output air pressure, 3 couplings supplied
- Explosion-proof electric motor - 230 VAC, 3 phase
- Explosion-proof on/off switch
- 25ft. power cord, no plug, user wired per NEC requirements
- 3-worker operation - pressure demand respirators only
- Full automatic back-up air feature, up to 4500psi capability
- Pneumatic visual indicator and audible alarm for system failure
- Grade-D, 3-stage filtration with 48cfm flow capacity
- Twin-Air™ tank design for cool breathing air output, ASME coded
- Intrinsically safe carbon monoxide monitor, approved for 9-volt DC operation in Class 1, DIV. 1, Groups C and D environments
- Holds one SCBA cylinder up to 4500psi back-up air
- Steel air control panel with high pressure regulator
- Pneumatic 10" tires

This compressor is **not** designed for use with constant flow respirators or Vortex cooling tubes.

Grade-D, 3-stage Filtration with Approved Intrinsically Safe Carbon Monoxide Monitor

TA3-AXAF

Model No.	Description
TA3-AXAF	Explosion-proof compressor includes: Grade-D filtration, air control panel with CO monitor, 25ft. power cord, user wired per NEC requirements. Reserve air cylinders sold separately.
AC-60	60cf aluminum cylinder - 2400psi rated
AC-87	87cf carbon fiber cylinder - 4500psi rated
BB15-FKW	Replacement Filter Kit
BBK-20	Calibration kit for CO monitor - 20ppm CO, zero air, regulator and case – 17 liter size disposable cylinders
BBK-10	Calibration kit –same as above with 10ppm CO gas for Canadian calibration

NOTE: SIZE THE RESERVE AIR SYSTEM TO ACHIEVE THE REQUIRED EGRESS TIME

FOR PROPER AIR PUMP OPERATION, always choose a constant flow respirator that is designed and approved to operate with an ambient air pump, UNDER 15psi. Specify the approved respirator coupling size when ordering a particular model pump that matches the respirator hose selected. Compressors MUST be placed in a clean air environment per OSHA 1910.134. **Ambient air pumps are not designed for use with pressure demand respirators or Vortex cooling tubes due to low output pressure.**

Low Pressure Ambient Air Pumps
for use with Constant Flow Respirators Only


BAC-10
2-WORKER AIR PUMP

Specifications
- Operates 1 hood style respirator or 2 tight fitting constant flow masks. Respirator requirements CAN NOT exceed maximum pressure of 15psi
- Maximum 10psi at 9cfm output, 9.5cfm output at 4psi
- Electric motor: 3/4 HP, ODP, 100-115/208-230 VAC, 12.2/6.1 amps, 50/60 Hz, 1 phase, thermally protected, CSA approved
- 0.5-0.7 micron inlet and compressor filters
- 0-30psi pressure gauge
- Prewired with on/off switch and plug (115 VAC plug only)
- Approximate weight: 55 lbs.

FOR RESPIRATOR COOLING, SEE PAGE 21

Specifications
- Operates 2 hood style respirators or 3 tight fitting constant flow masks as long as the combined flow requirements DO NOT exceed 15cfm at 4psi
- Maximum pressure 15psi at 12cfm output, 15cfm output at 4 psi
- Electric motor: 1.5 HP, TEFC, 115/208-230 VAC, 15.2/8.2 amps, 60 Hz, 1 phase, thermally protected, CSA approved
- 0.5-0.7 micron inlet and compressor filters
- 0-30psi pressure gauge
- Prewired with on/off switch and plug (115 VAC plug only)
- Approximate weight: 96 lbs.
- Optional explosion-proof electric motor available – Model BAC-17EXP 230/460 3 phase motor
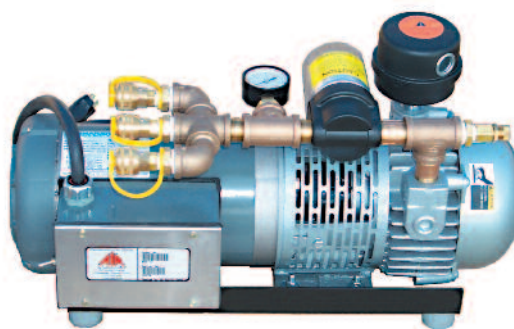
BAC-17
3-WORKER AIR PUMP

BAC-20
4-WORKER AIR PUMP

Specifications
- Operates 2 hood style respirators or 4 tight fitting constant flow masks
- Maximum pressure 15psi at 16cfm output, 20cfm output at 4psi
- Electric motor: 2 HP, TEFC, 115/208-230 VAC, 20.0/10.0 amps, 60 Hz, 1 phase, thermally protected, CSA approved
- 0.5-0.7 micron inlet and compressor filters
- 0-30psi pressure gauge
- Prewired with on/off switch and plug (115 VAC plug only)
- Approximate weight: 103 lbs.

Note: BAC-17, BAC-20, and BAC-20P models are now available with an optional HEPA intake filter

Model No.	Description
	BASIC AIR PUMPS
BAC-10	2-worker ambient air pump
BAC-17	3-worker ambient air pump
BAC-17EXP	3-worker explosion-proof ambient air pump, 230/460 VAC, 3-Phase, explosion-proof on/off switch sold separately
BAC-20	4-worker ambient air pump
BAC-20P	4-worker pneumatic ambient air pump
	REPLACEMENT FILTERS
	Note: All ambient air pumps require two (2) replacement filters - the pump/compressor filter and the air intake filter.
BAC-393	Replacement pump compressor filter for all models (Box of 10)
BAC-10F	Replacement air intake filter - Model BAC-10 (Box of 27)
BAC-20F	Replacement air intake filter - Models BAC-17, BAC-20, BAC-20P (Box of 14)
BAC-20HF-1	Replacement HEPA (99%) air intake filter for Models BAC-17, BAC-20 and BAC-20P

Low Pressure Ambient Air Pumps
for use with Constant Flow Respirators Only

Optional
CO Monitor with
Lights and Alarm

Approximate weight: 180 lbs.

BAC-203TCO

2 YEAR
WARRANTY
ON SENSOR &
MONITOR

Portable Cool-Air™ Pump

All air pumps deliver output air temperatures ranging between 140-180°F. The low cost solution to cool the pump's air is to order Air Systems' air pump mounted on the ASME Twin-Air™ tank/cart frame assembly. Output air temperatures will be approximately 20°F above the ambient temperature. The system has large tires for ease of mobility. Each tank is supplied with a manual moisture drain valve. A **COOL-BOX™** can be ordered for additional cooling, see page 21 for details. **These compressors are not designed for use with pressure demand respirators. Vortex cooling tubes can not be used on air pumps due to low output pressure.**

Model No.	Description
	AIR PUMPS WITH CO MONITORING
BAC-103TCO	BAC-10 compressor pump on TA-3T, Twin-Air™ tank with CO monitor
BAC-173TCO	BAC-17 compressor pump on TA-3T, Twin-Air™ tank with CO monitor
BAC-203TCO	BAC-20 compressor pump on TA-3T, Twin-Air™ tank with CO monitor
	TANK MOUNTED PUMPS
BAC-10-3T	BAC-10 compressor pump on TA-3T, Twin-Air™ tank
BAC-17-3T	BAC-17 compressor pump on TA-3T, Twin-Air™ tank
BAC-20-3T	BAC-20 compressor pump on TA-3T, Twin-Air™ tank
BAC-20P-3T	BAC-20P compressor pump on TA-3T, Twin-Air™ tank

Did You KNOW?

OSHA REQUIRES CO MONITORING.... "For compressors not oil lubricated, the employer shall ensure that CO (carbon monoxide) levels do not exceed 10ppm." {OSHA 1910.134(i)(6)} Air Systems' CO-91 series monitor can be fitted to ANY ambient air pump.

Portable CO Monitor for Air Pumps

SEE PAGE 10 FOR MONITOR DETAILS ON CO91-14LAC

High Volume Air Pumps

Air Systems offers large, high volume, oilless air pumps that deliver a maximum 15psi. These pumps operate only constant flow respirators. Due to high output air temperatures, a small receiver tank is recommended to provide cooler air to the workers. A six outlet manifold or straight pipe outlet is supplied as standard. Custom variations available. Call Customer Service for details and specifications. **These compressors are not designed for use with pressure demand respirators or Vortex cooling tubes due to low output pressure.**

BAC-30RT30
6-WORKER AIR PUMP
Optional CO Monitor available

THE COOL-BOX™
Portable Cooling Air Distribution Manifold

Features

- Provides approximately 50°F output air temperature with input temperatures up to 180°F
- Provides 4 to 8 hours of cooling using 20lbs. of ice for operation
- Manual condensate drain installed inside
- Attaches to any Grade-D compressed air source up to 125psi
- Adjustable pressure regulator, gauge, and safety relief valve installed in the system with a final filter on Model BACB-196
- Entire unit is packaged in a rugged Igloo® roller cooler with a fold down pull handle

**LOW PRESSURE
MODEL BACB-196LP
MAXIMUM PRESSURE 20PSI**

Benefits

- Provides low cost cool breathing air anywhere
- Operates with any airline Type-C mask or hood style respirator
- Ideal for cooling Level "A" chemical suits and air supplied hoods
- Provides cool air for up to four workers
- Attaches easily to any Grade-D air source up to 125psi with Model BACB-196. 20psi maximum for Model BACB-196LP, ambient air pump version
- Eliminates the need and expense of noisy vortex cooling tubes
- Designed and engineered for less than 2psi pressure drop in the system with flow capacities to 75cfm
- Provides NIOSH point-of-attachment components and cooling in one package
- CUSTOM MOUNTING OPTIONS AVAILABLE, CONSULT FACTORY

**"JUST ADD ICE FOR
IMMEDIATE
RESPIRATOR AIR COOLING"**

**HIGH PRESSURE
MODEL BACB-196
MAXIMUM PRESSURE 125PSI**

> **Note: Output temperatures may vary depending on ambient conditions, the type of respirator used, and length of hose**

Model No.	Description
BACB-196	**COOL-BOX™** complete with 1/4″ Hansen or Schrader style fittings – rated to 125psi inlet pressure
BACB-196LP	**COOL-BOX™** designed specifically for use with Ambient Air Pumps (0-20psi max.), low pressure pump conversion kit BACB-196K included

KOOL–VEST™
Personal Airline Cooling

The KOOL-VEST™ has been designed to increase worker productivity and reduce heat stress to improve worker safety. Fresh air is distributed through small holes in the vest and neck ring to provide evaporative cooling across the worker's back, chest, and head. The vest operates with only 10-20psi and will accommodate a vortex cooling tube, Air Systems' Cool-Box™ or straight airline hose as pictured below.

Specifications

• Double coated PVC on nylon scrim material with velcro front closures and sewn-in adjustable belt
• Small holes on interior of vest direct air to the entire upper torso, front and rear
• Specially designed plenum directs air to a neck ring for cool air distribution to the neck and face. A rear velcro strip controls the air volume to the neck ring
• Meets thermal and flame resistance tests 191 and 5903

The KOOL-VEST™, KV-99NR, is supplied without an airline or vortex tube adapter. Order the vortex adapter or Air Systems' unique Cool-Box™ for additional body cooling.

**KV-99NR
VEST ONLY**

**99-4X
Optional Vortex
Cooling Tube**

Model No.	Description
KV-99NR	KOOL-VEST™ airline model - add either a vortex tube or straight airline adapter
99-4X	Vortex tube assembly for KV-99NR KOOL-VEST™
KV-99AA25	Airline Adapter for KOOL-VEST™ with 1/4" Hansen style plug
KV-99AA50	Airline Adapter for KOOL-VEST™ with 1/2" Hansen style plug

**Optional Airline Adapter for Direct Airline Attachment
to Connect to our Cool-Box™ or a Breather Box™**

**Airline adapters are available in two Quick Connect Fitting sizes:
Model KV-99AA25 supplied with 1/4″ Hansen style plug
Model KV-99AA50 supplied with 1/2″ Hansen style plug**

Designing a Breathing Air System: Air Systems' technical staff will assist you in selecting the proper compressor package as the first step in designing a breathing air system to meet your needs. The compressor styles and specifications listed below are for general information. Once a specific compressor package is selected, detailed information such as technical specifications and Auto-Cad® drawings will be provided for customer review and approval.

ALL SYSTEMS ARE DESIGNED AND ENGINEERED TO BE READY FOR IMMEDIATE USE.

PLUMBING AND ELECTRICAL SERVICE IS ALL THAT IS REQUIRED TO BE PREPARED PRIOR TO DELIVERY.

Plant Breathing Air Compressor Systems
Electric, Gasoline, & Diesel Rotary Screw

Plant breathing air systems are designed to provide Grade-D breathing air for industrial applications. Remote air manifolds are used at various work stations. The system pictured below includes our 135cfm compressor, a 120 gallon ASME receiver tank, Air Systems' Grade-D filtration panel with our CO-91 series carbon monoxide monitor and a refrigerated air dryer. The entire filtration system is mounted on a steel forklift frame assembly. This package configuration can be designed for any required flow (cfm) capacities and output pressures.

SEE CATALOG PAGE 71 FOR OUR PLANT BREATHING AIR DESIGN QUESTIONNAIRE OR COMPLETE THE FORM ONLINE AT WWW.AIRSYSTEMS.COM

AIR SYSTEMS PROVIDES AT NO CHARGE YOUR FIRST LAB CERTIFIED AIR QUALITY TEST.

It is recommended that after the initial set-up of a plant breathing air compressor system and before workers are allowed to use the breathing air system, a certified laboratory analysis of the air quality should be performed to assure that the system is functioning properly and that the compressor is located in a clean fresh air environment.
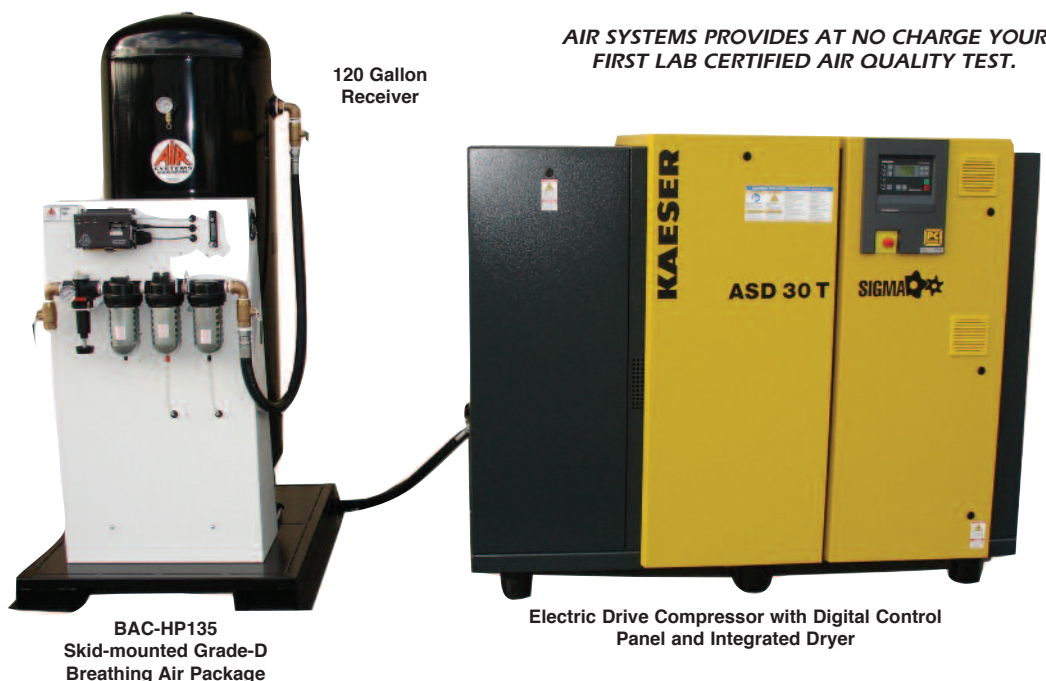
Air Systems provides at NO CHARGE your first lab certified air quality test. Contact Customer Service for details.

120 Gallon Receiver

BAC-HP135 Skid-mounted Grade-D Breathing Air Package

Electric Drive Compressor with Digital Control Panel and Integrated Dryer

Typical Breathing Air Packages

Model Number	acfm Output @ 110 psi	Electric Motor Horsepower
BAC-HP20	21	5
BAC-HP40	42	10
BAC-HP70	68	15
BAC-HP90	92	20
BAC-HP115	115	25
BAC-HP135	135	30
BAC-HP170	170	40
BAC-HP195	195	40
BAC-HP240	240	50
BAC-HP280	282	60
BAC-HP360	360	75
Breathing Air Compressors Available up to 3000cfm		

Typical Compressor System Layout

Compressor   Aftercooler   Water Separator   Dryer Alternate Location Before Receiver Tank   Receiver Tank   Dryer Normal Location After Receiver Tank   Oil Removal Coalescing Filter
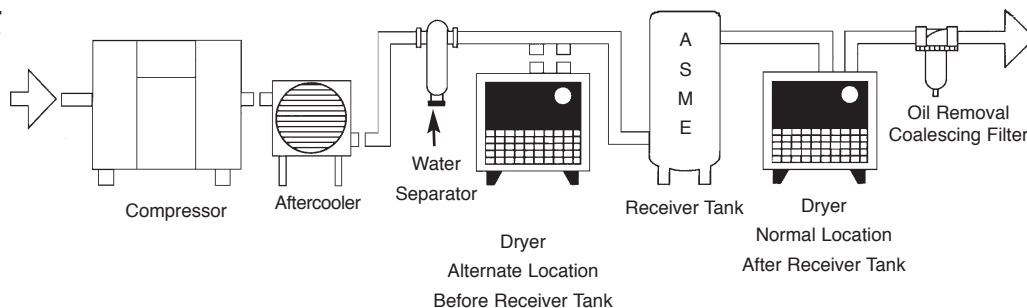
Plant Breathing Air Compressor Systems
"Choose the Industry's Finest Compressors"

Select from vertical compressor/refrigerated dryer systems or select our standard horizontal

Engineered Options
- Standard and HEPA Remote Intake Air Filters Available
- Refrigerated Air Dryers
- ASME Receiver Tanks
- Air or Water Cooled Aftercoolers
- Automatic Moisture Separators
- Skid Mounting
- Trailer Mounting
- Heat and Air Conditioning Systems
- Sequencers
- On-site Field Training Available

Compressor   Filtration/ CO Monitor   Air Dryer

Packages Ready for Plant Installation

DUAL AIR TOWER COMPRESSORS WITH AUTO SEQUENCING

Portable Rotary Screw Compressors Available in Gas or Diesel Engines. Flow Ranges: 50cfm – 950cfm @ 100psi Grade-D Filtration Required

Breathing Air Compressors
High Pressure

High Pressure Fill Compressors

Air Systems provides a full line of high pressure fill compressors with high CO shutdown, air storage, air distribution systems and containment fill stations. We can provide output air pressures to 6000psi and 26cfm capacity.

We specialize in designing custom systems to meet Military, Fire/Rescue and Industrial fill applications.

Call Air Systems' Customer Service Department to discuss your particular application. A high pressure compressor questionnaire is provided on page 70 and online to aid us in designing the system to meet your needs.

A Complete Fill System Includes:
- High Pressure Fill Compressor with CO Monitor
- Air Storage Cylinders
- Full Containment Fill Station

**ELECTRIC, GASOLINE OR DIESEL ENGINES AVAILABLE**

HORIZONTAL FILL COMPRESSOR

VERTICAL FILL COMPRESSOR

These compressors meet or exceed the Grade-E air quality specifications found in NFPA 1989 and OSHA 1910.134 when used in accordance with manufacturer's recommendations.

Air Systems provides at NO CHARGE your first lab certified air quality test with the purchase of a new compressor with CO monitor. Contact Customer Service for details.
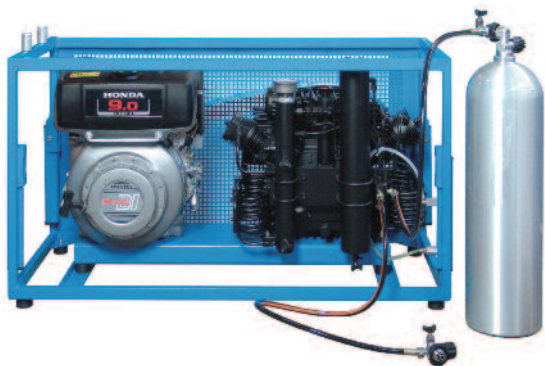
Portable Fill Compressors
CFM outputs available from 3.5 to 10.8cfm, Electric, Gas or Diesel

SCUBA FILL WHIPS AVAILABLE

Laboratory Air Testing Service

Certified laboratory air testing is now available for high pressure bottled air or low pressure compressor air requirements. Take your own samples in 10 minutes and send out for precise laboratory results. A 2LA accredited lab will test to any recognized standards, e.g., CGA, NFPA, or Federal MIL Specs. Results can be obtained in less than 3 days or expedited service is available at an extra charge.

AIR SAMPLING KITS AVAILABLE FOR RENTAL OR PURCHASE
CONTACT CUSTOMER SERVICE FOR DETAILS

Breathing Air Compressors
Fragmentation/Storage Racks

Containment Fill Stations
Meets NFPA-1901 Fill Requirements

These fill stations are designed to meet NFPA cylinder containment requirements. They are the ideal choice for flexibility and trouble-free performance with supply pressures to 6000psi and cylinder capacities from 2 to 6 positions.

All fill stations have been 3rd party tested to NFPA 1901 requirements and are individually tested prior to shipment.

Custom multi-bank cascade control panels are available upon request.

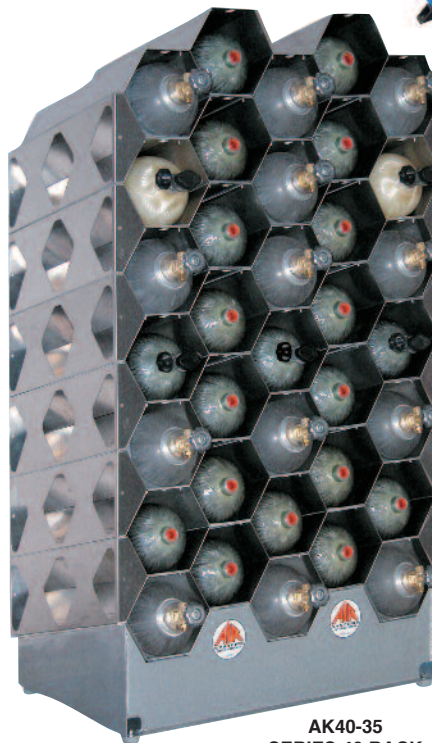3-Cylinder Fill Station w/Built-in Fill Control Panel, Pneumatic Powered Door Opening

Economical 2-Cylinder Fill Station designed for Use with Existing or Separately Ordered Fill Control Panels, Manual Door Opening

STANDARD FEATURES
All Steel Construction
Grade-8 Steel Structural Hardware
Vertical Blast Tubes with Liners
Designed to Fit All Size SCBA Cylinders
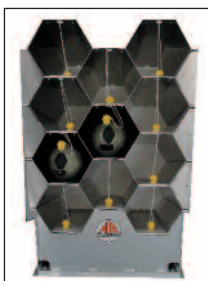Third Party Tested to Meet NFPA 1901

OPTIONAL FEATURES
Single or Multiple Fill Pressures
Isolation Valves for Each Fill Position
Color Coded Fill Lines and Labels for Each Fill Pressure and Position
Cascade Bank Control Panels

AIR-KADDY™
Modular Aluminum SCBA Cylinder Storage Racks

The Air-Kaddy's™ unique modular aluminum design allows for expansion as needed to accommodate your SCBA storage requirements...today and in the future! Available in Free Standing, Series 40, and Vehicle Style, Series 24. All racks are lined with nylon pads to prevent cylinder scratches.

CONTACT CUSTOMER SERVICE FOR CUSTOM SIZES!

AK40-35
SERIES 40 RACK

SERIES 24 RACK

Series 24 has been designed to fit in fire/rescue trailers and trucks requiring a narrower profile. THREAD SAVERS® (TS) pictured are optional. Add "TS" to model number when ordering to have Thread Savers® installed on your order.

AK24-11

Model No.	Description
	SERIES 24: 25.25"W X 22.25"D
AK24-8	AIR-KADDY™ 8 cylinder rack - 32"H
AK24-11	AIR-KADDY™ 11 cylinder rack - 48"H
AK24-18	AIR-KADDY™ 18 cylinder rack - 60"H
AK24-24	AIR-KADDY™ 24 cylinder rack - 76"H
	SERIES 40: 37.5"W X 22.5"D
AK40-15	AIR-KADDY™ 15 cylinder rack - 36"H
AK40-25	AIR-KADDY™ 25 cylinder rack - 60"H
AK40-35	AIR-KADDY™ 35 cylinder rack - 68"H
AK40-40	AIR-KADDY™ 40 cylinder rack - 76"H
VAL-TS	THREAD SAVER® - cylinder thread protector

THREAD SAVER®

Cylinders Sold Separately

CBF3-346NB

Cascade Cylinder Fill Assemblies

Air Systems' cascade fill assemblies are used for refilling either 2216 or 4500psi SCBA cylinders. Fill assemblies include a 5 ft. high pressure fill whip with gauge, universal hand-tight nut, on/off and bleed valve. Cylinder connecting whips are supplied with a CGA stem, nut, and tee assembly. Additional cylinder connecting whips can be added to any of the below assemblies for multiple or extended SCBA fill capacity.

Model No.	Description
CBF4-346NB	4 cylinder fill assembly, 2400psi, CGA-346 fill whip and connecting whips, no cylinders
CBF4-347NB	4 cylinder fill assembly, 5000psi, CGA-347 fill whip and connecting whips, no cylinders
CBF4-702NB	4 cylinder fill assembly, 6000psi, CGA-347 fill whip and connecting whips, no cylinders

Additional Fill Assemblies Available. Contact our Customer Service Department.

Cylinder Fill Whips

LOW PRESSURE
HP-FW5-346
CGA-346 Fill Whip
3000psi Maximum

HIGH PRESSURE
HP-FW5-347
CGA-347 Fill Whip
5000psi Maximum

ULTRA HIGH PRESSURE
HP-FW5-702
CGA-702 Fill Whip
6000psi Maximum

HP-FW5-346

5 ft. Hose

On/Off Valve

Pressure Gauge

Bleed Valve

Universal Hand-Tight Nut

CW-30

Cylinders Sold Separately

Air Cylinder Connecting Whips

Model No.	Description
	WITHOUT CHECK VALVES
CW-30	30" Connecting whip with tee, CGA-346 stem and nut
CW-30HP	30" Connecting whip with tee, CGA-347 stem and nut
CW-30-702	30" Connecting whip with tee, CGA-702 stem and nut
	WITH CHECK VALVES
CWCV-30	30" Connecting whip with check valve, tee, CGA-346 stem and nut
CWCV-30HP	30" Connecting whip with check valve, tee, CGA-347 stem and nut
CWCV-702	30" Connecting whip with check valve, tee, CGA-702 stem and nut

Fill Regulator

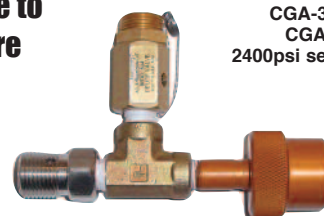| Model No.	Description
RG-6000FIL	Fill regulator, 6000psi inlet, 0-5000psi outlet with gauges, CGA-347 or CGA-702 inlet

RG-6000FIL

High Pressure to Low Pressure Adapters

HT-346RV

Relief Valve

CGA-347 TO CGA-346 2400psi set pressure

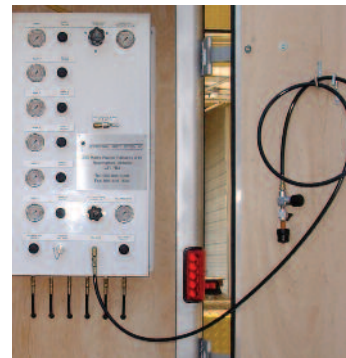
CGA-346   CGA-347

We Specialize in Custom Fill Panels

Contact Customer Service for assistance is designing a fill panel for your specific needs.

Cascade Breathing Air Assemblies

Air Systems' cascade breathing air assemblies offer a complete system for use with airline respirators. Additional cylinder connecting whips can be added to extend breathing air capacity with additional cylinders.

Model No.	Description
CBA3-346NB	3 cylinder breathing air assembly, 2400psi, includes regulator, 4-outlet manifold assembly, low pressure alarm whistle, relief valve, connecting whips with check valves, no cylinders
CBA3-347NB	3 cylinder breathing air assembly, 5000psi, includes regulator, 4-outlet manifold assembly, low pressure alarm whistle, relief valve, connecting whips with check valves, no cylinders
CBA4-702NB	4 cylinder breathing air assembly, 6000psi, includes regulator, 4-outlet manifold assembly, low pressure alarm whistle, relief valve, connecting whips with check valves, no cylinders

Additional Breathing Air Assemblies Available. Optional Bell Alarm Available. Contact our Customer Service Department.

Cylinders Sold Separately

CBA3-346NB

Breathing Air Regulator/Manifolds

HP-CW1-346

Manifold assemblies available from 1 to 8 outlets

Model No.	Description
HP-CW1-346	4-outlet manifold assembly with safety relief valve, 3000psi regulator, CGA-346 connection, low pressure alarm whistle, 4 fittings
HP-CW1-347	Same as above with CGA-347 connection, 5000psi regulator, low pressure alarm whistle, 4 fittings
HP-CW1-702	Same as above with CGA-702 connection, 6000psi regulator, low pressure alarm whistle, 4 fittings

Low Pressure Bell Alarm Available - Contact Customer Service.
Please specify fittings when ordering.

Breathing Air Regulators

RG-3000

Model No.	Description
RG-3000	CGA-346, 3000psi, adjustable regulator, dual gauge, relief valve and 1/4" QD fitting
RG-5000	CGA-347, 5000psi, adjustable regulator, dual gauge, relief valve and 1/4" QD fitting

Please specify fittings when ordering.

"Test Air Quality Prior to Use"

Compressed Air Cylinder Test Meter for Blended Air

The Model AQT-O2 Air Quality Test Meter has been developed out of a need to test rented cylinder's blended air quality before putting them in service. Obtain an immediate and accurate oxygen (O_2) reading for both high pressure cylinder air and low pressure plant air lines. The tester can be ordered with an additional sensor to read carbon monoxide (CO) simultaneously with oxygen (O_2), order Model AQT-COO2.

The tester requires two 9-volt batteries for operation and is supplied with 5 feet of hose. **For cylinder air testing, order the optional high pressure adapter Part No. AQT-347LP.** See page 15 for ordering information.

AQT-C002

We Specialize in Custom Breathing Air Panels

Contact Customer Service for assistance is designing your breathing air panel for your specific needs.

AC-444

Air Storage Cylinders

Model No.	Description
AC-60	60cf CGA-346, 2216psi, aluminum
AC-87	87cf CGA-347, 4500psi, fully wrapped carbon fiber
AC-300	300cf CGA-346, 2400psi, steel
AC-444	444cf CGA-347, 4500psi, steel
AC-472	472cf CGA-347, 5000psi, steel
AC-509	509cf CGA-702, 6000psi, steel
ASME-420	420cf ASME, 5000psi, steel, requires special fittings and gauges
ASME-480	480cf ASME, 6000psi, steel, requires special fittings and gauges

AC-60

AC-87

Economical SCBA/SCUBA Storage Rack

- Steel wire basket
- Floor mountable
- Dimensions:
  34″L x 8.75″W x 11″H

TR-4

High Pressure CGA Fittings

Hand Tight Fittings
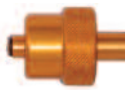
SS347HT
CGA-347 Universal hand tight fits CGA-346 or 347 male thread, maximum pressure 5500psi

SS347SNHT
CGA-347 High pressure hand tight fits CGA-347 male thread only, maximum pressure 5500psi

Wrench Tight Fittings

CGA-346 Series
Maximum pressure, 3000psi

HPBR025	CGA-346 Brass Nut
HPBR026	CGA-346 Brass Stem
HPBR027	CGA-346 Brass Stem with Check Valve

CGA-347 Series
Maximum pressure, 5500psi

HPBR049	CGA-347 Brass Nut
HPBR050	CGA-347 Brass Stem
VC4SMMSS	CGA-347 Brass Stem with Check Valve

CGA-702
Maximum pressure, 7500psi

SS702N	CGA-702 Brass Nut
SS702S	CGA-702 Brass Stem
VC4SMMSS	CGA-702 Brass Stem with Check Valve

OPTIONAL FORKLIFT GUIDES

Custom Large Air Cylinder Storage Racks

Order any size rack in either vertical or horizontal style. Systems can be ordered with cylinders and all hardware supplied at pressures up to 6000psi. Air control panels can be customized for the most demanding applications. Racks can be designed for slide-in vehicle mounting.

Custom heavy-duty steel floor storage racks can be ordered in any combination to meet cylinder storage requirements. Racks can be floor or wall mounted. Two heavy gauge chains with snap hooks are supplied for each row of cylinders.

Model No.	Description
BR-1	1-cylinder rack wide
BR-2	2-cylinder rack wide
BR-3	3-cylinder rack wide
BR-22	2 deep x 2 wide, 4-cylinder rack
BR-23	2 deep x 3 wide, 6-cylinder rack

BR-1

LIFT-PAK™
Air Cylinder Transport PAKS

LIFT-PAK™ is designed for ease of lifting and securing multiple air cylinders. LIFT-PAK™ can be supplied complete with a respirator regulator, manifold, safety relief valve, low pressure alarm whistle, hardware, and cylinders. The LIFT-PAK™ frame has a center lift hook and is manufactured with heavy gauge steel or aluminum.

All LIFT-PAK™ units are made to order on a custom basis.

CERTIFIED LOAD TESTING AVAILABLE

STEEL LIFT-PAK™ LP-3LNB

ALUMINUM LIFT-PAK™ "THE SHARK CAGE" BR-6AL

MULTI-PAK™ Small Cylinder Air Carts

The patented MULTI-PAK™ series of small bottled air carts has been designed with the user in mind. Choose from many basic designs to fit the simplest or most complex job application. All of the small MULTI-PAK™ carts feature fold-down handles, recessed air control panels, rounded cart corners, quick release hose racks, and many other unique features. Choose the pressure range and the number of fittings that you require. All carts have input and output pressure gauges. **Ideal for working in hazardous locations.**

U.S. Patent
#D443,744

Specifications

• Fold down handle
• Intrinsically safe low pressure alarm whistle - (Bell
   alarm optional)
• High flow adjustable regulator
• Input and output pressure gauges
• Solid aluminum block manifold
• Universal handtight CGA fittings with bleeder valves
• Wrenchtight fittings on Model MP-2L
• Nylon cylinder straps with Velcro®
• Quick release hose rack
• In-line check valves
• 8" Semi-pneumatic tires
• Steel frame with black powder coat paint
• 21"L x 16"W x 41"H (Handle up) 34.5" (Handle down)
• Weight: 49 lbs.

MP-4H

INDUSTRIAL FIRE CART MODEL MP-4R

• High pressure auxiliary CGA-347 inlet for
   continuous operation from an external air
   supply
• Secondary low pressure regulator to operate
   pneumatic tools and lift bags at low pressure
• Cylinder selector valve for independent
   cylinder operation

CART MODELS AVAILABLE FOR 2216 TO 4500 PSI

Nylon Cart Cover

Transport and store any of your MULTI-PAK™ carts with a custom cart cover. Available in 400 denier black nylon with velcro closures at the top and base.

MP-C

Model No.	Description
MP-2L	MULTI-PAK™, 2-cylinder air cart, 2400psi, supplied with 2-outlet manifold, CGA-346 **wrenchtight nuts**
MP-2H	MULTI-PAK™, 2-cylinder air cart, 4500psi, supplied with 2-outlet manifold, CGA-347 **handtight nuts**
MP-4H	MULTI-PAK™, 2-cylinder air cart, 4500psi, supplied with 4-outlet manifold, high flow regulator, CGA-347 **handtight nuts**
MP-4R	MULTI-PAK™ Rescue, 2-cylinder air cart, 4500psi, supplied with 4-outlet manifold, high flow regulator, CGA-347 **handtight nuts**
MP-TR1	TECH-RESCUE™ Cart, see page 37 for details
	ACCESSORIES
AC-87	87cf carbon fiber cylinder, 4500psi
AC-60	60cf aluminum cylinder, 2216psi
MP-C	Black nylon cart cover for small MP-series carts

The MULTI-PAK™ series of large air cylinder carts is Air Systems' design for long duration industrial applications. The entire line of carts is designed for easier mobility and function. The large cylinder carts incorporate features like protected recessed controls, an equipment storage box, narrow profile, 16″ pneumatic tires and quick-release hose hangers. Pick and choose the features that best suit your job application and work environment. **Custom applications are always welcome!**

MULTI-PAK™ Large Cylinder Air Carts

Model MP-2300ENB
Pneumatic Alarm Version

Specifications

• 5000psi hardware
• Pneumatic low pressure alarm whistle
• Solid aluminum block manifold
• In-line check valves
• High flow adjustable regulator
• Input and output pressure gauges
• Storage box with latch
• Universal handtight nuts -- fits 2400 to 5000psi cylinders
• Quick release hose rack - holds 200ft of 3/8″ hose
• 16″ pneumatic tires
• 62″H x 25″W x 30″D w/cylinders
• Weight: 112 lbs. without cylinders
• **Ideal for working in hazardous locations**

MP-2300ENB

Front view with hose storage rack that holds 200 feet of 3/8″ hose

REAR STORAGE BOX

Model MP-2300HNB
Electric Alarm Version.

CONTROL BOX WITH ELECTRONIC ALARM

Specifications

• 5000psi hardware
• Electronic, high intensity, low pressure alarm
• Solid aluminum block manifold
• In-line check valves
• High flow adjustable regulator
• Input and output pressure gauges
• Alarm jack for remote low pressure alarms
• Quick release hose rack - holds 200ft of 3/8″ hose
• 16″ pneumatic tires
• 62″H x 25″W x 30″D w/cylinders
• Weight: 112 lbs. without cylinders
• **This cart is NOT approved for hazardous locations**

MP-2300HNB

Model No.	Description
MP-2300ENB	**PNEUMATIC ALARM** 2-cylinder cart complete with pneumatic alarm whistle, no cylinders supplied, 5000psi rated
MP-2300HNB	**ELECTRONIC ALARM** 2-cylinder cart complete with electronic alarm, no cylinders supplied 5000psi rated
50-ALMST	**REMOTE ALARM** Electronic 9-volt DC low pressure alarm with strobe and 50ft cable
AC-300 AC-444 AC-472	**OPTIONAL CYLINDERS** 300cf steel cylinder - 2400psi 444cf steel cylinder - 4500psi 472cf steel cylinder - 5000psi
MP-2300C	**CART COVER** Black nylon cart cover for 2300 series carts

ERGO-AIR® Cart System
"Helps Reduce Back Injuries"

Ergonomically Designed Mobile Breathing Air Cart System

Air Systems' innovative air cylinder cart has been ergonomically designed to help prevent back injuries and facilitate mobility. The Ergo-Air® Cart features one-hand operation during raising or lowering of the air control panel and cylinders.

No back strain is placed on the operator during pushing or pulling the cart. The basic cart design comes standard with Air Systems' unique air control panel and cart assembly. Several hose reel options are available to meet particular job applications.

Lift hooks

Recessed air control panel

Optional upper storage cabinet

Cylinders, hose and reel ordered separately

Ergo-Air® is the Registered Trademark of Air Systems International, Inc.

**EAC-97NB
WITH OPTIONAL UPPER
STORAGE CASE**

**Raising cart: 15 lbs. of force
Lowering cart: 35 lbs. of force**

**OPTIONAL TWIN AUTO
HOSE REELS WITH 16"
PNEUMATIC TIRES**

Specifications

- 2400 or 5000psi rated air pressure regulator
- Dual 9-volt electronic low pressure audible and visual alarms are supplied on the electronic versions only - **not approved for hazardous locations**
- Low pressure alarm whistle is standard on the pneumatic version - optional bell alarm is available - **approved for hazardous locations**
- Remote audible and visual alarm jack – electronic versions only
- Steel air control panel with 4-outlet respirator manifold
- 16" semi-pneumatic rear tires and front locking swivel casters - standard
- High pressure hardware with in-line check valves
- Twin cylinder straps with padded brackets
- Cart lifting hooks installed as standard feature
- Cart Dimensions: 32"W x 41"D x 62"H

- Optional steel upper storage cabinet: Dimensions: 24" W x 12" H x 12" D

Model No.	Description
EAC-97NB	ERGO-AIR® cart, 2400psi regulator, no reel or cylinders, LP whistle alarm, semi-pneumatic tires
EAC-97HNB	ERGO-AIR® cart, 5000psi regulator, no reel or cylinders, LP whistle alarm, semi-pneumatic tires
EAC-97ENB	ERGO-AIR® cart, 2400psi regulator, no reel or cylinders, electronic alarm, semi-pneumatic tires
EAC-97HENB	ERGO-AIR® cart, 5000psi regulator, no reel or cylinders, electronic alarm, semi-pneumatic tires
EAC-97PTNB	ERGO-AIR® cart, 2400psi regulator, no reel or cylinders, LP whistle alarm, pneumatic tires
EAC-97PHNB	ERGO-AIR® cart, 5000psi regulator, no reel or cylinders, LP whistle alarm, pneumatic tires
EAC-97PENB	ERGO-AIR® cart, 2400psi regulator, no reel or cylinders, electronic alarm, pneumatic tires
EAC97PHENB	ERGO-AIR® cart, 5000psi regulator, no reel or cylinders, electronic alarm, pneumatic tires
CART OPTIONS	
EAC-97150A	Single HR-50. auto hose reel - holds 50ft. 3/8" hose
EAC-97250A	Dual 50ft. auto hose reels installed
EAC-97300M	300ft. manual hose reel –holds 200 ft., 1/2" or 300ft., 3/8" hose
EAC-97210M	Dual 100ft. manual hose reels installed –holds 100ft. 3/8" hose
EAC-97450M	Manual hose reel - holds 450ft. of 3/8" hose or 300ft. of 1/2" ID hose
H-300-5	Breathing air hose 1/2" ID - 300ft.
H-300-3	Breathing air hose 3/8" ID - 300ft.
EAC-97SBU	Storage cabinet - upper
EAC-C	Nylon cart cover- fits all ERGO-AIR® carts

UNI-PAK™
Single Cylinder "PAK"

**Optional UNI-PAK™ Carrier, SVH-DC25**

PAK-UNI1

Specifications:
- Steel frame with powder coat orange paint
- 2-outlet manifold
- Holds either a 2216 or 4500psi SCBA cylinder
- Adjustable regulator and low pressure alarm whistle
- Specify desired respirator fittings when ordering
- Dimensions: 34"L x 7.4"W x 4.5"D
- Weight: 7 lbs. w/out cylinder

Specifications:
- High pressure 4500psi regulator with CGA-347 connections, universal handtight nuts
- Low pressure alarm whistle
- Check valves in-line to allow independent cylinder operation and removal
- Orange powder coated aluminum frame with padded carry handles
- 4-outlet breathing air manifold with safety relief valve
- Quick connect couplings with dust caps; specify desired fittings when ordering
- Optional wall mount brackets and pull cart available - see ordering information below
- Dimensions: 29"L x 21"W x 6"D
- Weight: 25 lbs. w/out cylinders

PORTA-PAK™
Twin Cylinder "PAK"
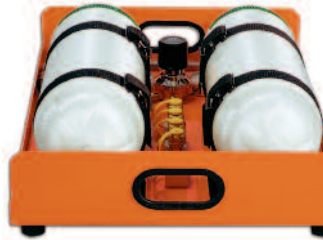
Accepts either 2216 psi or 4500 psi cylinders

**PAK-3
ORDER CYLINDERS SEPARATELY**

PAK-4R
RESCUE CART
With Removable Air Cylinder Tray

Telescoping 2-Position Handle

Specifications
- CGA-347 operation at 4500psi
- Adjustable cylinder straps with velcro
- 3-way high pressure directional cylinder valve
- High pressure male inlet, CGA-347
- Low pressure regulator for pneumatic tools
- 8" diameter ball bearing wheels
- Adjustable output regulator w/relief valve
- In-line check valves
- Telescoping aluminum handle
- Rear hose rack
- Removable air cylinder tray (PAK-4)
- Low pressure alarm whistle
- Dimensions: 33"H x 25"W x 17"D
- Weight: 37 lbs. w/out cylinders

PAK-4 RESCUE

Model No.	Description
PAK-UNI1	UNI-PAK™, single cylinder "PAK"
PAK-3	PORTA-PAK™ tray assembly without cylinders
PAK-4	Bottled air tray assembly complete without cylinders, cart, or cover. Includes cylinder directional valve, secondary low pressure regulator, gauge, and outlet fitting
PAK-4R	Rescue Cart - same as PAK-4 with cart model PAK-CRT included
ACCESSORIES	
PAK-CRT	PORTA-PAK™ cart only
PAK-CRTC	Cart cover - aluminum
PAK-C	PORTA-PAK™ nylon cover
PAK-WM	PORTA-PAK™ wall mount brackets, 2 each

Air Wagon™
Large Cylinder Air Carts

The AIR-WAGON™ has been designed to hold four or six large breathing air cylinders for use in industrial plants and hospitals. A six outlet air control panel is installed with a low pressure alarm bell or optional electronic high intensity alarm. A CGA-347 male inlet is provided to bulk fill the air cylinders without removing them from the cart. 10" semi-pneumatic tires provide ease of mobility.

ALL CARTS CAN BE CUSTOMIZED TO YOUR PARTICULAR APPLICATION. CONSULT CUSTOMER SERVICE FOR MORE DETAILS

Optional high intensity electronic alarm

Steerable front end

Air control panel with gauges, on/off pressure valves, adjustable output pressure regulator, low pressure alarm, and CGA-347 bulk fill port

AW-6HNB-HA

Steel Cylinder Rack Powder Coat Black

Steel Deck 30"W x 72"L

Model No.	Description
AW-6NB	AIR-WAGON™, includes hardware and cylinder straps for 6 cylinders, low pressure alarm bell - 2400psi, order cylinders separately
AW-6HNB	AIR-WAGON™, includes hardware and cylinder straps for 6 cylinders, low pressure alarm bell - 4500psi, order cylinders separately
AW-6NB-HA	AIR-WAGON™, includes hardware and cylinder straps for 6 cylinders, electronic alarm - 2400psi, order cylinders separately
AW-6HNB-HA	AIR-WAGON™, includes hardware and cylinder straps for 6 cylinders, electronic alarm - 4500psi, order cylinders separately

AIR-KADDY™
Modular Aluminum SCBA Cylinder Storage Racks
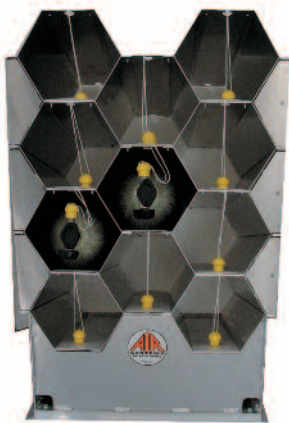
The Air-Kaddy's™ unique modular design allows for expansion as needed to accommodate your SCBA storage requirements...today and in the future! Available in Free Standing, Series 40, and Vehicle Style, Series 24. All racks are lined with nylon pads to prevent cylinder scratches. Add "TS" to model number when ordering to have Thread Savers® installed on your order. See page 41 for additional models.

AK24-11

Custom Rack Designs for Mobile Breathing Air Applications and Quick Filling of SCBA Cylinders

| Model No.	Description
	SERIES 24: 25.25"W X 22.25"D
AK24-8	AIR-KADDY™ 8 cylinder rack - 32"H
AK24-11	AIR-KADDY™ 11 cylinder rack - 48"H
AK24-18	AIR-KADDY™ 18 cylinder rack - 60"H
AK24-24	AIR-KADDY™ 24 cylinder rack - 76"H
	SERIES 40: 37.5"W X 22.5"D
AK40-15	AIR-KADDY™ 15 cylinder rack - 36"H
AK40-25	AIR-KADDY™ 25 cylinder rack - 60"H
AK40-35	AIR-KADDY™ 35 cylinder rack - 68"H
AK40-40	AIR-KADDY™ 40 cylinder rack - 76"H
VAL-TS	THREAD SAVER® - cylinder thread protector

Contact Customer Service for Details

Custom High Capacity Breathing Air Cylinder Carts and Trailers

Air Systems' experienced technical staff and engineering department can design a breathing air trailer with custom storage and air delivery for ANY application. Custom mobile air cylinder carts are available for industrial plant applications.

Emergency Response Open or Enclosed Trailers for Long Duration Breathing or Cylinder Filling Applications
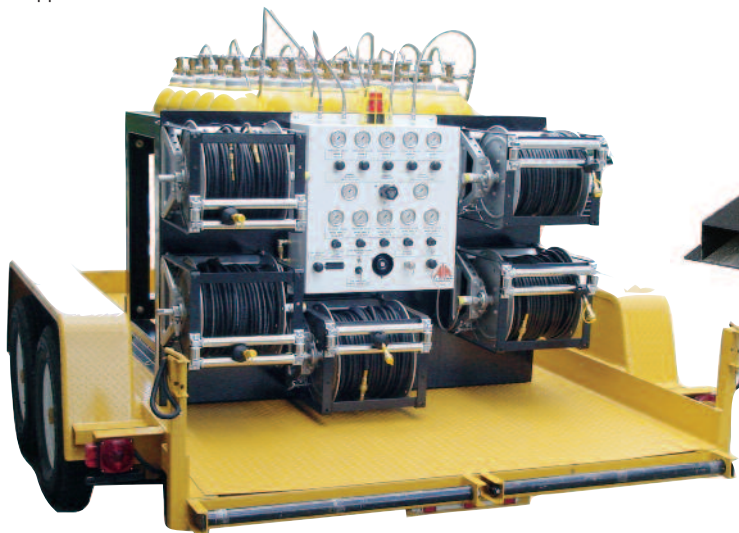
Long Duration Air Storage for Work in Hazardous Response Locations

Slide-In Vehicle Cylinder Rack Systems for Breathing and Filling Applications

Economical Air-Responder™ Trailer for Emergency Response Breathing Air and Filling Applications

Mobile Plant Air Cylinder Carts for Emergency Response

Tech-Rescue™ Cart

The patented TECH-RESCUE™ Cart has been designed to provide air for all of the various respirators and unique rescue tools that are used by Fire and Technical Rescue teams.

Air Systems has designed a unique stainless steel cart with a color-designated control panel to allow one side of the panel to be used for primary respirator breathing air and one side for tool/secondary air requirements.

Two 2216/4500psi cylinders or high pressure cascade (fire truck) cylinder air can be used to operate the air control panel. The standard features of the TECH-RESCUE™ Cart make it the most versatile and unique air cart in the fire service industry.

The TECH-RESCUE™ cart is available with an optional 5 ft. Quick-Fill hose assembly pictured below.

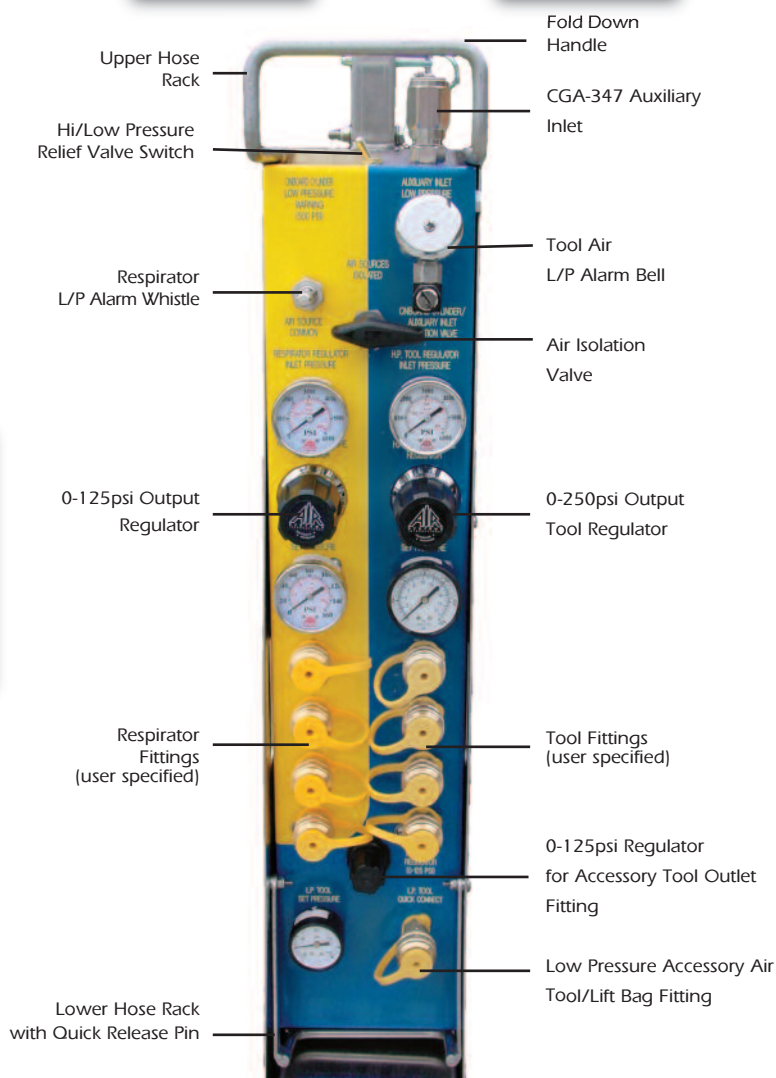### Quick-Fill Option

QFH-5MPTR1 OPTION

U.S. Patent #D443,744

Yellow Side Respirator Air Control

Blue Side Tool Air Control

Fold Down Handle
CGA-347 Auxiliary Inlet
Upper Hose Rack
Hi/Low Pressure Relief Valve Switch
Tool Air L/P Alarm Bell
Air Isolation Valve
Respirator L/P Alarm Whistle
0-125psi Output Regulator
0-250psi Output Tool Regulator
Respirator Fittings (user specified)
Tool Fittings (user specified)
0-125psi Regulator for Accessory Tool Outlet Fitting
Low Pressure Accessory Air Tool/Lift Bag Fitting
Lower Hose Rack with Quick Release Pin

MP-TR1 CONTROL PANEL

CART WEIGHT & DIMENSIONS

Width: 21.0"
Depth: 15.5"
Height with Handle Down: 34.5"
Height with Handle Up: 41.5"
Weight: 55 lbs.

Model No.	Description
MP-TR1	TECH-RESCUE™ Cart, 1/4" Hansen style or Schrader style fittings standard Optional fittings available at an additional charge. (Cylinders sold separately)
	ACCESSORIES
QFH-5MPTR1	5 ft. Quick-Fill hose installed on MP-TR1 (at time of order)
AC-87	87cf carbon fiber cylinder, 4500psi
AC-60	60cf aluminum cylinder, 2216psi
CW-300	25 ft. (300") high pressure connect whip, CGA-347 hand-tight on each end with bleed valves, connects from cart to truck cascade air supply - 5000psi
MP-C	Black nylon cart cover, fits all small Multi-Pak™ Series carts

MP-4R

Cart Specifications

- High pressure CGA-347 auxillary inlet
- Secondary low pressure regulator to operate pneumatic tools and lift bags
- Fold down handle
- Intrinsically safe low pressure alarm whistle
- High flow adjustable regulator
- Input and output pressure gauges
- Solid aluminum block manifold
- Nylon cylinder straps with Velcro®
- Quick release hose rack
- In-line check valves
- 8" Semi-pneumatic tires
- Steel frame with black powder coat paint
- Cylinder selection switch

MULTI-PAK™ Rescue Air Cart

The patented MULTI-PAK™ series of small bottled air carts has been designed with the user in mind. Choose from many basic designs to fit the simplest or most complex job application. All of the small MULTI-PAK™ carts feature fold-down handles, recessed air control panels, rounded cart corners, quick release hose racks, and many other unique features. Choose the pressure range and the number of fittings that you require. All carts have input and output pressure gauges.

The Air-Responder™
Mobile Breathing Air Trailer

The AIR RESPONDER™ series of breathing air trailers have been designed for mobile quick response at an economical price. These trailers provide breathing air for airline respirators, rescue air tools, or SCBA quick filling. The AIR RESPONDER™ comes in two series. The 100 series is an open frame six (6) cylinder trailer. The 200 series is an enclosed eight (8) cylinder trailer. Both trailers have a rear air control panel with respirator couplings and CGA-347 fittings to bulk fill the storage cylinders and provide for attachment of a quick fill hose for SCBA filling. An optional cascade fill panel is available for both trailer series. The front of each trailer will hold optional storage boxes, a small fill compressor, or a generator.

**AR-101
Cascade Air Control
Panel**

Spitfire™
Positive Pressure
Ventilators

Available in:
- **Electric**
- **Explosion-proof**
- **Variable Speed**
- **Gasoline**

U.S. Patent #'s
D484,586S,
D484,589S
Other U.S. and
Foreign Patents
Pending

| Model No.	Description	HP	CFM
PPV-20GH	Gasoline Honda	6.0	15,277
PPV-20E	Single Speed Electric-TEFC	1.5	11,198
PPV-20EV	Variable Speed Electric-TEFC	1.0	10,987
PPV-20EXP	Explosion-Proof Electric, TEFC,, Class 1, Div. 1, Group D, Class II, Div. 1, Groups E, F, G	1.0	9,185

MACK-NFPA™ SERIES
Air Distribution System Designed Specifically for Confined Space Rescue Teams

The MACK-NFPA™ series has been developed specifically for the Fire/Rescue teams working under NFPA guidelines. The NFPA version of the MACK™ unit comes in two standard models. Each model has two separate regulator/manifold systems. Two SCBA connect whips are provided for each regulator. In the event of a regulator malfunction, rescue can be performed on the standby regulator system. The basic unit described above, Model MACK-NFPA1, can have a regulator isolation valve added to allow one or both air sources to be used simultaneously; this addition forms the Model MACK-NFPA3 which has a CGA-347 high pressure inlet included.

CGA-347 Inlet

MACK-NFPA3

Model No.	Description
MACK-NFPA1	Dual independent regulators with 3-outlet manifolds, dual low pressure alarms, 4 each 5 ft.connect whips
MACK-NFPA3	MACK-NFPA1 with the addition of a regulator isolation valve and CGA-347 H/P inlet and cover cap
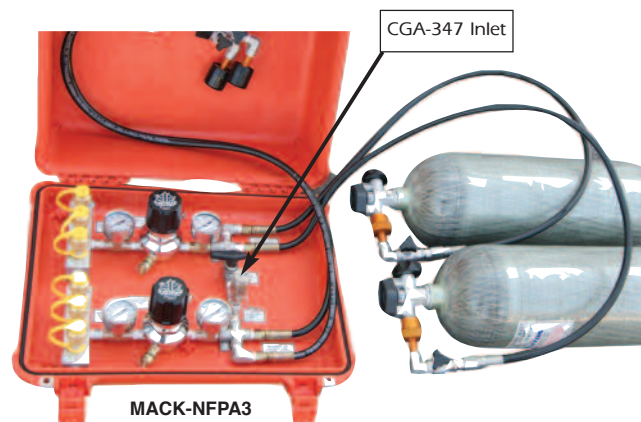
MACK™ Systems
Air Distribution for Breathing, Filling, and Rescue Applications

The MACK™ units have been designed as a series of portable air distribution boxes to meet the most demanding air handling needs of the Fire, Rescue, and Emergency Response industry. Each unit has been designed and tested by professional firefighters to meet the rigorous industry and NFPA requirements. All models have been manufactured to provide emergency low pressure breathing air from either SCBA cylinders or from a bank of large storage cylinders located on department vehicles. More advanced models offer multiple air pressure regulators for confined space rescue operations, mid-range pressure for rescue tool devices, and high pressure emergency air cylinder filling systems. Choose a standard MACK™ unit to fit your needs or call our Customer Service Department to design a unit for your special air handling applications.
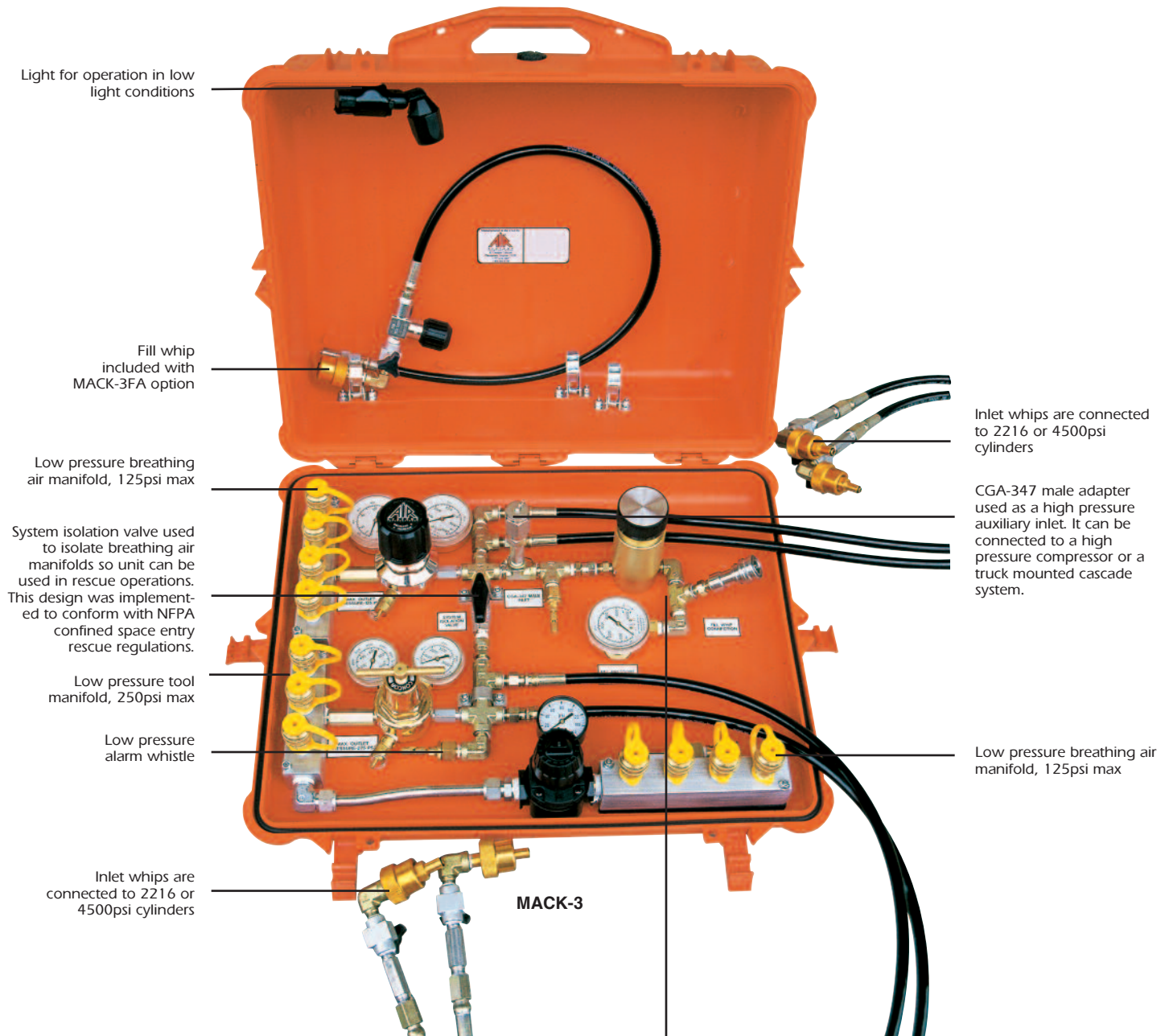
MACK-1

All MACK™ Series units start with the MACK-1 basic functions. One or two SCBA cylinders provide air to the system. A CGA-347 high pressure inlet is also provided to allow continuous operation from truck mounted air cylinders. A low pressure regulator provides 0-125psi air to a four outlet respirator manifold. A low pressure alarm whistle and a DC lamp to illuminate the case interior are provided as standard.

MACK-2

The MACK-2 is ideal for emergency refilling SCBA cylinders from aerial command stations

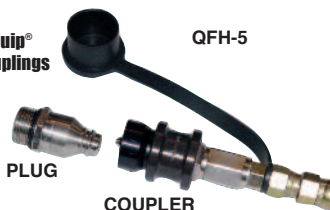| Model No.	Description
MACK-1	4-outlet manifold, 5000psi regulator, 2 high pressure cylinder whips, 1 H/P inlet port, L/P alarm whistle
MACK-2	MACK-1 with the addition of a high pressure fill regulator and 1 fill whip, optional 2nd fill whip available for installation
MACK-3	8 L/P respirator/tool outlets (0-150psi), 3 medium pressure outlets (0-250psi), 4 H/P inlet whips, 1 H/P CGA-347 inlet and pressure cap, L/P alarm whistle, optional fill regulator and hose
	ACCESSORIES
MACK-3FA	Fill regulator assembly for MACK-3, includes 5ft. fill hose

**The MACK-3 system has been designed and tested by fire and rescue professionals.
Four separately regulated air systems provide a portable air distribution package for any pressure requirement.**

Light for operation in low light conditions

Fill whip included with MACK-3FA option

Low pressure breathing air manifold, 125psi max

System isolation valve used to isolate breathing air manifolds so unit can be used in rescue operations. This design was implemented to conform with NFPA confined space entry rescue regulations.

Low pressure tool manifold, 250psi max

Low pressure alarm whistle

Inlet whips are connected to 2216 or 4500psi cylinders

MACK-3

Inlet whips are connected to 2216 or 4500psi cylinders

CGA-347 male adapter used as a high pressure auxiliary inlet. It can be connected to a high pressure compressor or a truck mounted cascade system.
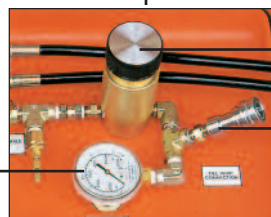
Low pressure breathing air manifold, 125psi max

Did You KNOW? An optional 5ft. Quick-Fill hose assembly can now be added to comply with NFPA 1981 regulations. Contact Customer Service for ordering information.
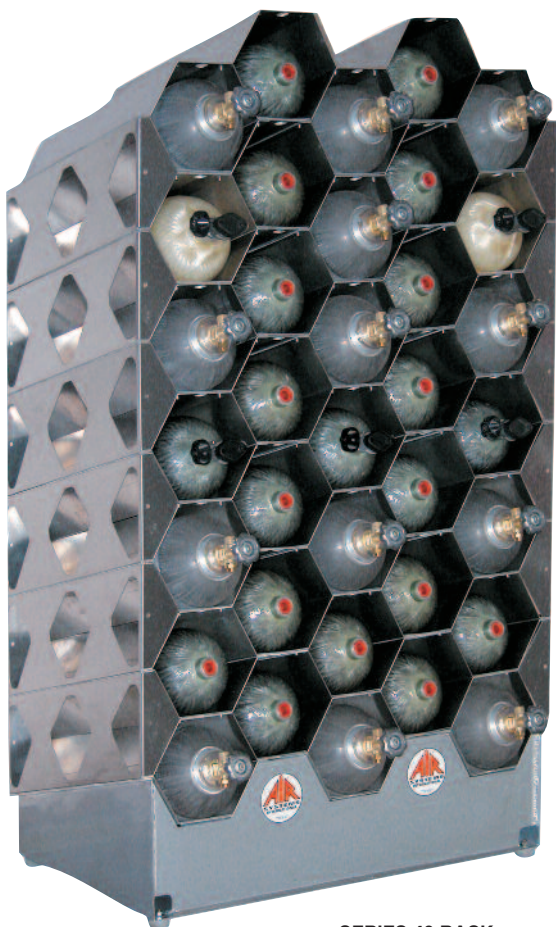
Optional fill regulator assembly to fill SCBAs.

Fill Whip Connection

Pressure Gauge

**MACK-3FA
FILL REGULATOR ASSEMBLY,
ORDER AS MACK-3 OPTION**

**FD-17 Aeroquip®
Quick-Fill Couplings**

QFH-5

PLUG

COUPLER

**SERIES 40 RACK
MODEL AK40-35**

AIR-KADDY™
Modular Aluminum SCBA Cylinder Storage Racks

The Air-Kaddy's™ unique modular design allows for expansion as needed to accommodate your SCBA storage requirements...today and in the future! Available in Free Standing, Series 40, and the Vehicle Style, Series 24. All racks are lined with nylon pads to prevent cylinder scratches.
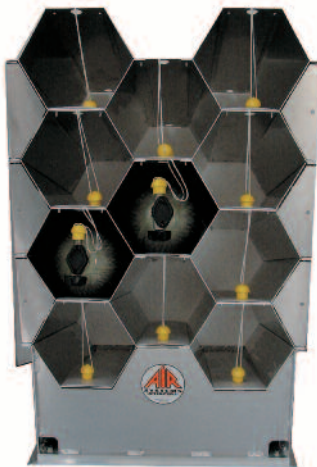
Series 24 has been designed to fit in fire/rescue trailers and trucks requiring a narrower profile. THREAD SAVERS® (TS) pictured are optional. Add "TS" to model number when ordering.

**SERIES 24 RACK
AK24-11**

RACK CAN BE ORDERED WITH AN OPTIONAL L-CART FOR EASY TRANSPORTATION

Model No.	Description
	SERIES 24: 25.25"W X 22.25"D
AK24-8	AIR-KADDY™ 8 cylinder rack - 32"H
AK24-11	AIR-KADDY™ 11 cylinder rack - 48"H
AK24-18	AIR-KADDY™ 18 cylinder rack - 60"H
AK24-24	AIR-KADDY™ 24 cylinder rack - 76"H
	SERIES 40: 37.5"W X 22.5"D
AK40-15	AIR-KADDY™ 15 cylinder rack - 36"H
AK40-25	AIR-KADDY™ 25 cylinder rack - 60"H
AK40-35	AIR-KADDY™ 35 cylinder rack - 68"H
AK40-40	AIR-KADDY™ 40 cylinder rack - 76"H
VAL-TS	THREAD SAVER® - cylinder thread protector

THREAD SAVER®

Custom Fire and Rescue Trailers and Accessories

Air Systems' experienced technical staff and engineering department can design a mobile breathing air response system tailored to your exact specifications. Complete our design questionnaire available on page 70 or online at www.airsystems.com and we will provided AutoCAD® drawings, specifications and pricing.

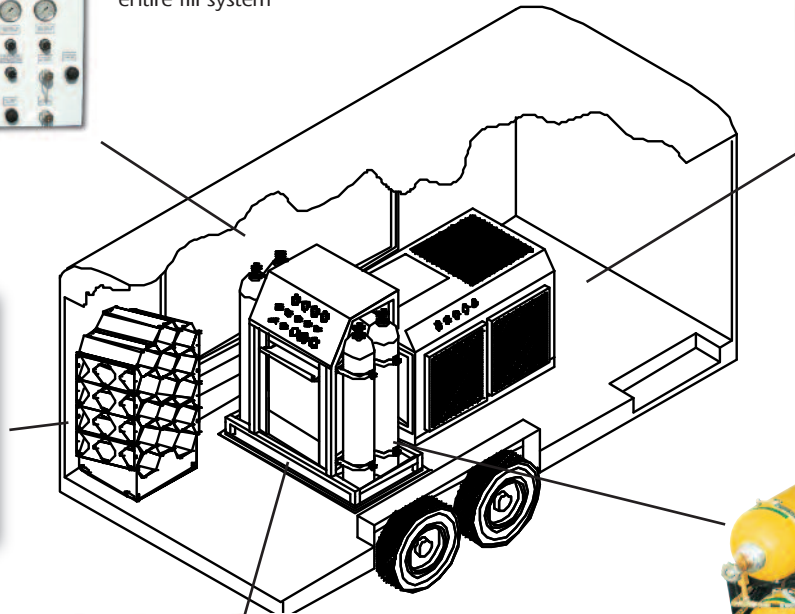Custom cascade air control panels to manage entire fill system

Gasoline or Diesel Fill Compressor from 3.5 to 26cfm

Custom SCBA Storage

NFPA Compliant Full Containment Fill Stations from 2 to 4 cylinder fill positions

Air Storage Systems in horizontal or vertical configurations

Fully Enclosed Breathing Air Trailer with Fill Compressor, Air Storage Cylinders and Containment Fill Station

Optional sound proofing, air conditioning or heating packages, generators and lighting

Slide in vehicle rack systems to upgrade rescue vehicles

Selecting the Proper Ventilation Equipment

Working in confined spaces is one of the most dangerous and potentially life threatening environments found in industry. Air Systems' objective is to present information for our customers to select and use the proper ventilation equipment to eliminate many of the potential hazards that can be encountered in a confined space. Ventilation is a significant part of a total safety program that consists of eye, face, and head protection along with proper gas monitoring instruments, respiratory and fall protection devices. Selection and training with the proper equipment will reduce the potential for accidents and loss of life. **In order to select the proper ventilation system for a particular work location, the worker must first determine whether the location is considered a "Hazardous" or "Non-Hazardous" location.**

What is a Hazardous Location?

All confined spaces should be considered as a "Hazardous Location" until proven otherwise. Federal OSHA refers to the National Electrical Code (NEC) as the "Bible" for reference information concerning hazardous locations. NEC defines a hazardous location as those areas "where fire or explosion hazards may exist due to flammable gases or vapors, flammable liquids, combustible dust, or ignitable fibers or flyings."

NEC classifies hazardous locations in three ways: TYPE, CONDITION, AND NATURE:

• THREE "TYPES" OF HAZARDOUS CONDITIONS EXIST AND THEY ARE CALLED CLASSES:
Class codes tell us the type of hazard we are going to encounter.
CLASS I (NEC-500-5)
Those areas in which flammable gasses or vapors may be present in the air in sufficient quantities to be explosive or ignitable.
TYPICAL CLASS I LOCATIONS
• Petroleum refineries, gasoline storage and dispensing areas
• Industrial firms that use flammable liquids in dip tanks for parts cleaning or other operations
• Petrochemical companies that manufacture chemicals from gas or oil
• Dry cleaning plants where vapors from cleaning fluids can be present
• Companies that have spraying areas where they coat product with paint or plastics
• Aircraft hangers and fuel servicing areas
• Utility gas plants and operations involving storage and handling or liquefied petroleum gas or natural gas
CLASS II (NEC-500-6)
Those areas made hazardous by the presence of combustible dust
TYPICAL CLASS II LOCATIONS
• Grain elevators, flour and feed mills
• Plants that manufacture, use or store magnesium or aluminum powders
• Plants that have chemical or metallurgical processes, producers of plastics, medicines and fireworks, etc.
• Producers of starch or candies
• Spice-grinding plants, sugar plants and cocoa plants
• Coal preparation plants and other carbon-handling or processing areas
CLASS III (NEC-500-7)
These areas in which there are easily ignitable fibers or flyings present, due to type of material being handled, stored, or processed
TYPICAL CLASS III LOCATIONS
• Textile mills, cotton gins, cotton seed mills and flax processing plants
• Any plant that shapes, pulverizes or cuts wood and creates sawdust or flyings

• TWO KINDS OF HAZARDOUS "CONDITIONS" EXIST AND THEY ARE CALLED DIVISIONS:

DIVISION I (NEC-800-5, 6, 7)
Division 1 tells us whether the hazard is present continuously
DIVISION II (NEC-500-5, 6, 7)
Division 2 specifies the hazard may occur accidentally such as a ruptured drum of fuel or chemical

• THE "NATURE" OF THE HAZARDOUS SUBSTANCE IS CALLED A GROUP (NEC-500-3)
All Class 1 hazards fall under Groups A, B, C, or D where Group A is the most volatile (Acetylene) and Group D would be the least flammable (Propane). All Class II hazards fall under Groups E, F, and G where Group E is conductive and explosive metal dust, Group F is carbon (coal) dust, and Group G is flour and grain dust. Class 3 hazards consist of textile and wood fibers.

Ventilation Tips

1) Proper ventilation procedures should be followed in accordance with all Federal, State, and local laws. For work in hazardous locations, follow ANSI/API 2015 and 2016 procedures.
2) Always test the confined space for hazardous gases and sufficient oxygen with a calibrated multi-gas monitor prior to ventilating the space. After ventilating for a sufficient amount of time, re-test the confined space before entering the space. Ventilation must remain in operation during entry.
3) Use a purge time chart, provided on Air Systems' blowers, to calculate purge times prior to entering a confined space. Each 90° bend in a section of 8" duct will reduce flow approximately 10-15%.
4) If toxic or combustible gases or low oxygen levels are encountered, increase ventilation purge times by 50% and retest the air quality.
5) When ventilating a manhole or tank, always set the blower back from the opening a minimum of five (5) feet. This should prevent any hazardous gases that may be purged from the confined space from being drawn back into the intake of the blower and forced back into the confined space.
6) Never block or restrict entry and egress to or from a confined space opening. Always use Air Systems' Conductive Saddle Vent® System placed in the opening of the manhole or tank to allow continuous ventilation without restricting entry and egress to the opening.
7) With gases heavier than air, ventilation duct should be placed at the bottom of the confined space allowing the blower's air to push the gases out the top of the confined space.
8) Always use non-sparking tools in and around a hazardous work site
9) When using a Venturi style pneumatic air horn (also called an eductor) on a steel tank, make sure the aluminum base is not dragged along the surface of the steel tank; this may cause a spark where rust is forming. Always make certain that the Venturi blower has been properly grounded to the tank prior to ventilating and assure that the tank is properly grounded.
10) Always have proper respiratory equipment for the ventilated work space and for emergency rescue.
11) The build-up of static electricity is more prevalent during cool dry conditions, typically below 50% relative humidity. Depending on the work environment, anti-static clothing and special static removal devices may be necessary to prevent ignition from static electrical discharge.

Ventilation Equipment Selection for Hazardous Locations

Once you have determined that you have or potentially have a "Hazardous" work location, it is necessary that every precaution be taken to guard against ignition of the hazardous atmosphere. The traditional "Combustion Triangle" tells us that the three elements of, 1) fuel, 2) oxygen and 3) ignition source, must always be considered when developing a plan to ventilate in a hazardous or potentially hazardous environment. Hazardous location electrical equipment, approved by a Nationally Recognized Testing Laboratory (NRTL) like UL or CSA, is designed and constructed to eliminate the potential for ignition of the work environment. **The following is a recommended list of ventilation equipment and components that should be used in a hazardous ventilation location:**

1) EXPLOSION-PROOF ELECTRIC FANS/BLOWERS. These units should have the hazard Class, Group, and Division approvals on the blower and motor along with the approving agency. The blowers should have a grounding lug to ground the unit and safely remove the build-up of static electricity to a safe grounded source. These types of electric blowers should have a metal frame and housing or a conductive plastic housing to assure a good ground to the electric source. Blowers used in hazardous locations should have an aluminum non-sparking blower wheel to prevent metal sparking.

SVB-E8EXP

2) PNEUMATIC OR AIR DRIVEN BLOWERS. These types of blowers have an air motor to drive the fan blade instead of an electric motor. These units do not need third party electrical approval but do require the use of a ground lug to remove potential static build-up. The pneumatic blower is considered intrinsically safe when properly grounded.

SVB-A8

3) CONDUCTIVE DUCTING. Choose ventilation duct that has fabric made of conductive material. This type of duct will reduce the potential build-up of static electricity on both the interior and exterior surfaces of the duct that results from the movement of air and small dust particles during ventilation. Additionally, Air Systems has added a grounding wire to the duct's interior wire helix so that any static charges can be removed to either the blower's ground lug or to Air Systems' Conductive Saddle Vent®. For additional information on using Air Systems' Conductive Saddle Vent® Ventilation System. Read the section below on "Controlling Static Electricity".

Controlling Static Electricity in Hazardous Locations

The Saddle Vent® device was developed and patented by Air Systems over 20 years ago as a safety tool to maintain continuous ventilation while allowing unrestricted entry and egress to a manhole or tank. Air Systems has continued to improve the Saddle Vent® by developing a fully conductive Saddle Vent® and a ventilation method for removing static electricity from the entire ventilation system consisting of the entire length of ventilation duct all the way back to the blower and safely discharging static to a safe electrical ground. The new recommended method, The Conductive Saddle Vent® Ventilation System, uses conductive ventilation ducting connected to the Conductive Saddle Vent® which is then connected to an explosion-proof blower or pneumatic. The entire system is assembled above ground in less than five minutes before installing it in the opening to the manhole or tank; it can then be tested for electrical conductivity using a standard ohm meter. Achieving an electrical resistance reading between 30K and 300K ohms will assure an electrical path is made for static electricity to safely discharge back to the blower and its grounded electrical connection. This ventilation system is the only safety industry method for safely removing static build-up during confined space entry; it provides continuous confined space ventilation, unrestricted entry and egress and the entire system can be tested prior to commencing work operations in a hazardous work area. A step-by-step set up of the entire Conductive Saddle Vent® System is pictured here in our catalog. Controlling static electricity discharge will prevent spontaneous ignition of hazardous vapors and dusts. As a work tool, The Conductive Saddle Vent® Ventilation System will allow workers to concentrate on the many other hazards associated with working in a confined space while maintaining continuous ventilation.

STEP 1) Select an electric explosion-proof or pneumatic blower with an installed metal grounding lug.

STEP 2) For work in explosive environments, read and follow recommended work procedures found in ANSI/API 2015 and 2016 prior to entering a tank or confined space.

STEP 3) Use only conductive ducting supplied with a continuous metal helix and a static ground wire connected to the helix. The ground wire is connected to the metal ground lug on the blower. (See Pic. 1).

Pic. 1

STEP 4) Attach the conductive elbow to the top of the black conductive Saddle Vent®, (see Pic. 2), and attach the ground wire from the duct to the elbow. If no elbow is used, an alternate ground lug is provided on the top of the Saddle Vent®.

STEP 5) Attach conductive duct to the base of the Saddle Vent® and attach the ground wire to the Saddle Vent® (See Pic. 3).

Pic. 2

STEP 6) Test the ventilation set-up for conductivity prior to starting ventilation. Use a volt/ohm meter set to read ohms in "thousands". Attach a lead from the meter to the farthest end of the duct's grounding wire and the other lead touching the ground lug on the blower. A reading between 30K and 300K ohms will assure a good ground is achieved to allow any static charges to flow toward the grounded source (See Pic. 4). Pneumatic blowers should have a ground wire run from the blower to a grounded source.

Pic. 3

STEP 7) The ventilation system is now ready for use. Place the duct and Saddle Vent® system in the manhole and secure with the universal mount. Follow the "Typical Saddle Vent® set-up procedure found in your blower's instruction manual.

Pic. 4

Saddle Vent® is a Registered Trademark of Air Systems International, Inc.

U.S. PATENTS
#6,843,274
#7,467,645
CANADIAN PATENTS
#2,561,299
#2,436,809
EUROPEAN PATENTS
#1491695
AUSTRALIAN PATENT
#202394
Other U.S. and International Patents Pending

**CONDUCTIVE SADDLE VENT®
SV-189CND**

SV™ Technology

Heavy Duty, Industrial Grade, Ergonomically Designed Centrifugal Blowers

PNEUMATIC AIR POWERED BLOWER
MODEL SVB-A8
Intrinsically Safe Operation

• 4HP air motor, operates from 10 - 100psi
• Ultra-quiet operation – under 80 dbA
• CE registered
• Conductive Polyethylene fan housing
• Aluminum non-sparking blower wheel
• Static grounding lug installed
• Powder coat tubular steel frame with dual handles
• Adjustable flow output regulator
• In-line moisture separator/lubricator provided as standard
• Air Systems' unique muffler and oil coalescing filter installed at air motor discharge
• 8″ intake and exhaust flange
• Molded safety guards
• Weight: 48 lbs.
• 1500cfm free air delivery, at min psi and cfm
• 1040cfm free air delivery, at min psi and cfm, 25ft duct 1 - 90° bend
• 3000cfm free air delivery, at max psi and cfm
• 1725cfm free air delivery, at max psi and cfm, 25ft duct 1 - 90° bend

EXPLOSION-PROOF ELECTRIC BLOWER
MODEL SVB-E8EXP

• Explosion-proof switch installed and wired with 25ft cord, no plug, user wired per NEC requirements
• 3/4 HP electric motor, 115 VAC, 12.6 amp
• Approved for Class I, Div. 1, Groups C and D
  Class II, Div. 1, Groups E, F, G
• CSA approved and CE registered
• Conductive Polyethylene fan housing
• Aluminum non-sparking blower wheel
• Static grounding lug installed
• Powder coat tubular steel frame with dual handles
• Molded safety guards
• 8″ intake and exhaust flange
• Weight: 68 lbs.
• 1570cfm, free air delivery
• 1047cfm, 25ft duct, 1 - 90° bend

CONDUCTIVE SADDLE VENT®
VENTILATION KITS
FOR HAZARDOUS LOCATIONS

International blowers available with 50 Hz 220 VAC 1 phase. Contact Customer Service for details and specifications.

**ALL KITS INCLUDE
1 EACH OF THE FOLLOWING:**
1) Pneumatic or Explosion-proof Blower
2) Conductive Saddle Vent®
3) 15 ft. Conductive duct
4) 6 ft. Conductive duct
5) Duct canister (holds 50ft. of duct)
6) Universal mount
7) Conductive 90° elbow for Saddle Vent®

SVB-E8XCUP

| Model No.	Description
SVB-E8XCUP	Explosion-Proof 8″ Electric Blower Kit, includes SVB-E8EXP blower and SV-CUPCND Conductive Saddle Vent® Ventilation Kit
SVB-A8CUP	Pneumatic 8″ Blower Kit, includes SVB-A8 blower and SV-CUPCND Conductive Saddle Vent® Ventilation Kit
SV-CUPCND	Includes Conductive Saddle Vent® and elbow, 6 and 15 ft Conductive duct, Duct canister, and universal mount

SV™ Technology

Hook Multiple Blowers in Series to Run Long Sections of Duct

Inline Axial Fans

The 10″ in-line axial fan has been designed to be used as a stand alone fan or it can be attached in series to run long lengths of ventilation duct. Intake and exhaust flanges allow for either 8″ or 10″ duct to be attached to either end of the blower to achieve positive or negative ventilation. The blower is made of light weight steel and is available in standard electric or explosion-proof electric.

10" to 8" Duct Adapters Supplied with Blower for Intake and Exhaust

Grounding Lug
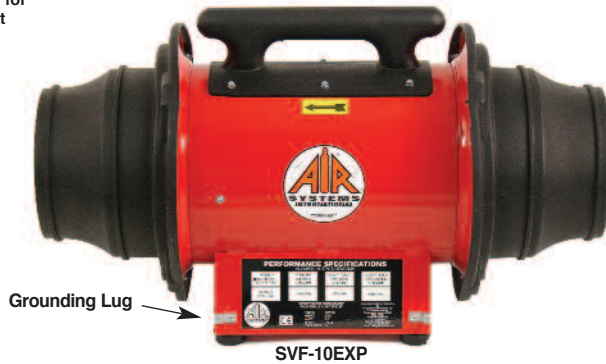
SVF-10EXP

ATEX Approved Motor Available. Contact Customer Service for details and specifications.

10" IN-LINE EXPLOSION-PROOF ELECTRIC AXIAL FAN SVF-10EXP

- Explosion-proof Electric Motor: 1/3 HP, 115 VAC, 1-phase, 60 Hz. UL and ⓈⓇ Approved for Class 1, Div. 1, Groups C and D, Class II, Groups E, F, and G - built-in on/off switch
- Automatic reset thermal overload
- Dual grounding lugs installed on steel housing
- Frame: All steel, powder coat red with rubber base feet
- Inlet/Exhaust flange made of molded conductive polyethylene
- Power cord: 10ft. power cord without plug, user wired per NEC requirements
- Dimensions: 16″L x 16.75″H x 12.5″W
- Weight: 32 lbs.
- 72 dbA @ 3ft.
- 1390cfm, free air delivery
- 973cfm, 25ft duct, 1 - 90º bend

ALL KITS INCLUDE 1 EACH OF THE FOLLOWING:
1) Explosion-proof Fan, SVF-10EXP
2) Conductive Saddle Vent®
3) 15 ft. Conductive duct
4) 6 ft. Conductive duct
5) Duct canister (holds 50ft. of duct)
6) Universal mount
7) Conductive 90° elbow for Saddle Vent®

CONDUCTIVE SADDLE VENT® VENTILATION KITS FOR HAZARDOUS LOCATIONS

Model No.	Description
SVF10EXCUP	Explosion-Proof 10″ Electric Fan Kit, includes SVF-10EXP fan and SV-CUPCND Conductive Saddle Vent® Ventilation Kit
SV-CUPCND	Includes Conductive Saddle Vent® and elbow, 6 and 15 ft Conductive duct, Duct canister, and universal mount
SVF-10ATEX	Explosion-Proof 10″ Electric Fan 220VAC, 50/60 Hz ATEX Approved Motor, Fan only

Contractor Grade Explosion-Proof Axial Fans

The contractor's series of ventilation fans is the latest addition to Air Systems' ventilation product group. Known for product quality and performance, Air Systems' offers a rugged polyethylene ventilation line designed to accommodate a variety of applications as well as demanding jobsite conditions at an economical price point.

APPLICATIONS:

• Boiler Work
• Utility Companies
• Telecommunications
• Open Trenching
• Construction
• Electrical Transformer Repair
• Maintenance
• Manhole Entry
• Tank Cleaning

CVF-8EXP

EXPLOSION-PROOF
ELECTRIC VENTILATION FAN
CVF-8EXP

• 8" Fan, 115 VAC, 1/4 HP
• 10ft. Power Cord
• Built-In Sealed On/Off Switch, No Plug, user wired per NEC requirements
• UL/CSA Approved Explosion-Proof Motor
• Approved for Class I, Groups C and D, Class II, Groups E, F, and G Environments
• Weight: 19 lbs.
• 974cfm, free flow
• 786cfm, 15ft. duct, 1 - 90° bend
• 661cfm, 15ft. duct, 2 - 90° bends

Model No.	Description
CVF15CANEX	Contractors Explosion-Proof Canister Fan, includes CVF-8EXP Fan, 15 ft conductive duct, canister, no plug, user wired per NEC requirements
CVF25CANEX	Contractors Explosion-Proof Canister Fan, includes CVF-8EXP Fan, 25 ft conductive duct, canister, user wired per NEC requirements

CVF15CANEX
WITH REMOVABLE DUCT CANISTER
WEIGHT: 35 LBS.

CONDUCTIVE SADDLE VENT®
VENTILATION KIT FOR
HAZARDOUS LOCATIONS

THE SADDLE VENT® VENTILATION SYSTEM IS NOW AVAILABLE IN A LOW COST CONTRACTOR'S KIT.

Air Systems' SV™ Technology provides optimal safety for your confined space ventilation needs. One part number at one low price provides a high quality ventilation system with a variety of applications for hazardous work environments.

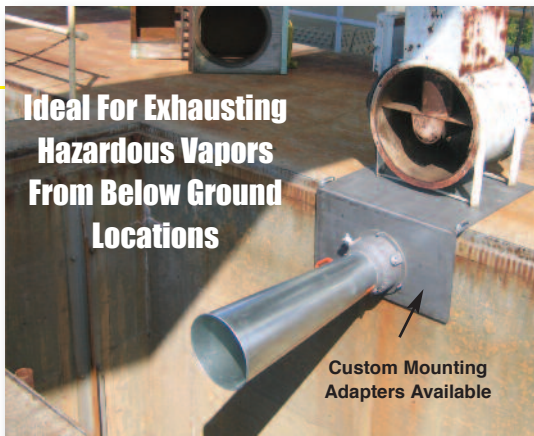| Model No.	Description
CVF8EXPKIT	Contractors Ventilation Kit, includes CVF-8EXP Fan, 6 ft Conductive Duct with canister and 15 ft Conductive Duct, Conductive Saddle Vent®, Conductive 90° elbow, and universal mount

CVF8EXPKIT
WEIGHT: 64 LBS

Ideal For Exhausting Hazardous Vapors From Below Ground Locations

Custom Mounting Adapters Available

Venturi-Style Blowers
These Blowers Are Often Called "Air Horns" or "Eductors"

VENTURI BLOWER FEATURES
- Used to ventilate hazardous vapors or fumes safely
- Operates on compressed air or steam
- No moving parts
- Static grounding lug is standard
- Lightweight cast aluminum base
- Galvanized steel horn (replaceable)
- Steel Handle
- Use in high heat locations
- Operating pressures up to 140psi
- Larger models available up to 8000cfm capacity

ASI-1000   ASI-1200   ASI-2900   ASI-4100

Note: Order air inlet fittings separately

PETRO-VENT™ Tank Ventilator

Air Flow

This blower has been designed to meet ventilation requirements for underground storage tanks.
A special flange adapter, Model ASI-12 ADPT has been developed to thread directly on the 4-inch vent pipe found on most storage tanks. The ASI-1200 blower bolts directly on the compatible flange.

Model ASI-1200 order adapter ASI-12ADPT

Model ASI-2900 order adapter ASI-29ADPT

Blower Attached to Petro-Vent™ Adapter

Compressor Hose w/ Shut-Off Valve

Petro-Vent™ Threaded To 4˝ Vent Pipe Flange

AIR FLOW

VAPOR REMOVAL SYSTEM

UNDERGROUND STORAGE TANK

CHEMICAL IN TANK
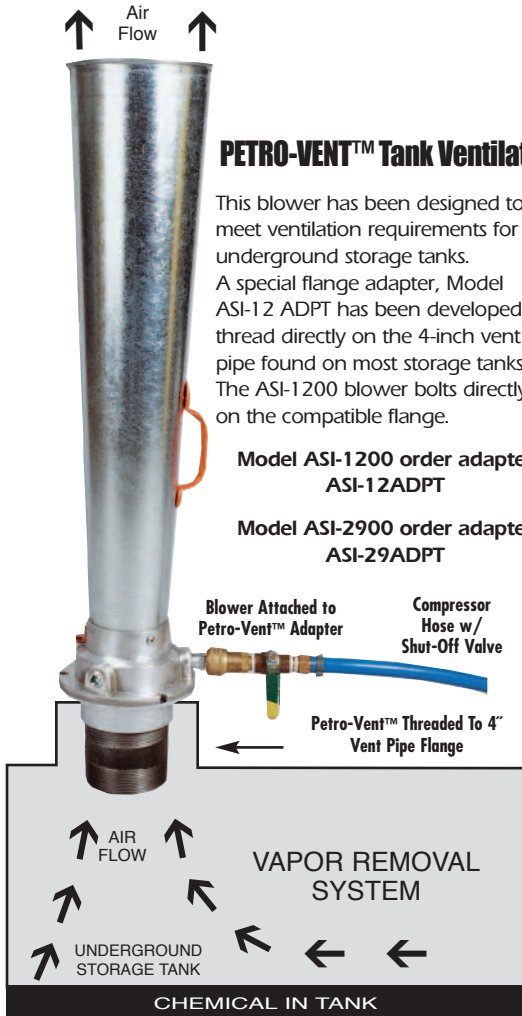
Model	50 PSIG Total Air Flow (CFM)	70 PSIG Total Air Flow (CFM)	90 PSIG Total Air Flow (CFM)
ASI-1000	935	1274	1422
ASI-1200	1211	1429	1580
ASI-2900	2770	3340	3752
ASI-4100	3785	4562	5041
Model	**Air Consumed (CFM)**	**Air Consumed (CFM)**	**Air Consumed (CFM)**
ASI-1000	38	53	64
ASI-1200	38	53	64
ASI-2900	76	99	127
ASI-4100	117	152	197

Model	Overall Length	Diameter of Base	Diameter of Horn	NPT	Bolt Circle	Base Slot	Weight
ASI-1000	16.31"	7.38"	6.19"	1/2"	6.75"	0.31"	5.3 lbs
ASI-1200	32.12"	7.38"	7.37"	1/2"	6.75"	0.31"	8.1 lbs
ASI-2900	44.00"	11.16"	13.00"	1"	10.28"	0.43"	22.1 lbs
ASI-4100	46.50"	14.31"	14.37"	1"	13.18"	0.56"	32.3 lbs

Pneumatic Circular Jet Fan
Designed for Hazardous Location Tank Ventilation

- 20˝ diameter
- Fits API tank flange
- 10,400cfm free air maximum @ 40-110psi input pressure and 60-290cfm flow
- Cast aluminum housing and fan blade
- Weight: 100 lbs.
- 24˝ model available order ASI-JF24
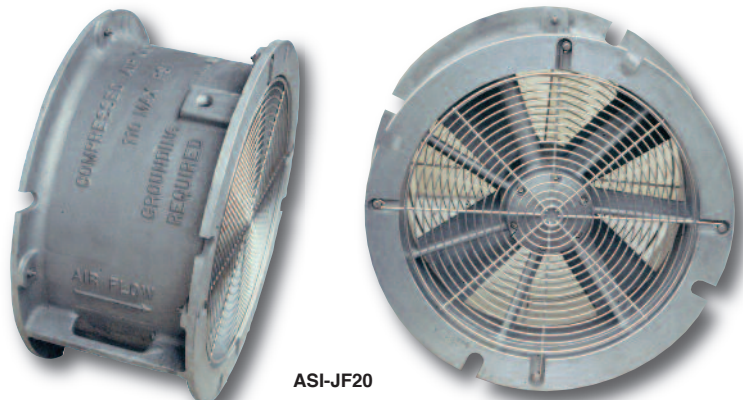
ASI-JF20

Confined Space Ventilation
Non-Hazardous Location Ventilators

SV™ Technology

GASOLINE POWERED VENTILATION KIT
MODEL SVB-G8CUP

Heavy Duty, Industrial Grade, Ergonomically Designed Centrifugal Blowers

Note: All AC electric blowers and fans are approved as a unit.

SINGLE SPEED ELECTRIC BLOWER
MODEL SVB-E8
• 3/4 HP electric motor, 115 VAC, 11.2 amp, 60 Hz
• GFI power cord
• Aluminum non-sparking blower wheel
• Polyethylene fan housing
• Powder coat tubular steel frame with dual handles
• Molded safety guards
• 8″ intake and exhaust flange
• CSA approved and CE registered
• Weight: 53 lbs.
• Dimensions: 23″L x 12″ W x 19″H
• 1570cfm, free air delivery
• 1047cfm, 25ft. duct, 1 - 90º bend

SVB-E8

ECONOMY ELECTRIC BLOWER
MODEL SVB-E8EC
• 1/2 HP electric motor, 7.9 amps, 60 Hz, 115 VAC
• GFI power cord
• Aluminum non-sparking blower wheel
• Polyethylene fan housing
• Powder coat steel frame
• Molded safety guards
• 8″ intake and exhaust flange
• CSA approved and CE registered
• Weight: 37 lbs.
• Dimensions: 17″L x 17″ W x 18″H
• 1390cfm, free air delivery
• 973cfm, 25ft. duct, 1 - 90º bend

2-SPEED ELECTRIC BLOWER
MODEL SVB-E8-2
• 3/4 HP, 2-speed electric motor, 115 VAC, 11.5 amp, 60 Hz
• Aluminum non-sparking blower wheel
• Polyethylene fan housing
• Powder coat tubular steel frame with dual handles
• Molded safety guards
• 8″ intake and exhaust flange
• CSA approved and CE registered
• Weight: 58 lbs.
• Dimensions: 23″L x 12″ W x 19″H
• 750cfm low/1570cfm high, free air delivery
• 490cfm low/1047cfm high, 25ft. duct, 1 - 90º bend

International blowers available with 50 Hz, 220 VAC, 1 phase. Contact Customer Service for details and specifications.
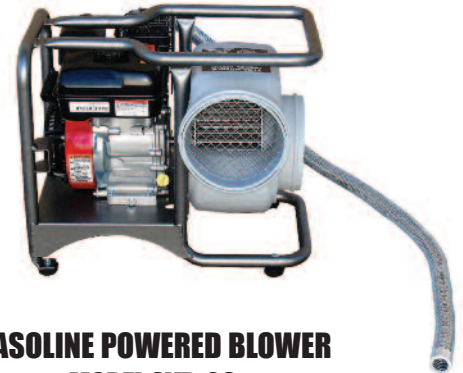
GASOLINE POWERED BLOWER
### MODEL SVB-G8
BRIGGS & STRATTON ENGINE
• 3.5 HP Briggs & Stratton motor - meets CAL/OSHA emission standards
• 5ft. remote flexible steel exhaust hose with custom gas-tight muffler to prevent intake of CO exhaust
• Polyethylene fan housing
• Powder coat tubular steel frame with dual handles
• Molded safety guards
• 8″ intake and exhaust flange
• CE registered
• Weight: 53 lbs.
• Dimensions: 23″L x 12″ W x 19″H
• 1500cfm min/3000cfm max free air delivery
• 1040cfm min/1725cfm max, 25ft. duct, 1 - 90º bend
HONDA ENGINE - MODEL SVB-G8H
• 4 HP Honda engine option
PROPANE ENGINE - MODEL SVB-G8P
• Includes propane conversion kit, Briggs & Stratton engine and propane tank

Industrial Grade Blower Kits

AIR SYSTEMS' SV™ TECHNOLOGY

THE SADDLE VENT® ALLOWS UNRESTRICTED ENTRY AND EXIT AND IMPROVES AMBIENT LIGHT IN A CONFINED SPACE OPENING
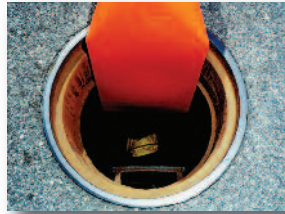
Saddle Vent® is the Registered Trademark of Air Systems International

Length: 43.5″

Width: 14.5″

Depth: 3.5″

Top Opening: 8″ O.D.

Bottom Opening: 8″ O.D.

Construction: Polyethylene

Temperature Rating: +250°F Melt Temp. - 158°F Brittleness Temp.

SV-189

The Saddle Vent® History

The Saddle Vent® was invented and developed by Air Systems and has been used around the world for over 20 years to make it easier and safer for workers to enter and exit a confined space. The Saddle Vent® takes up only 3 inches in a manhole opening and functions as a fresh air conduit to the workers in the confined space. With the Saddle Vent® in place, continuous ventilation is supplied to the workers by eliminating the need to remove the air duct each time a worker needs to enter or exit a confined space.

SADDLE VENT® VENTILATION KITS FOR NON-HAZARDOUS LOCATIONS

SVB-E8SCUP

ALL KITS INCLUDE 1 EACH OF THE FOLLOWING:
1) Centrifugal Blower of your choice
2) Industrial Saddle Vent®
3) 15 ft. duct
4) 6 ft. duct
5) Duct canister (holds 50ft. of duct)
6) Universal mount
7) 90° elbow for Saddle Vent®

Model No.	Description
SVB-E8CUP	Economy 8″ Electric Blower Kit, includes SVB-E8EC blower and SV-CUP Saddle Vent® Ventilation Kit
SVB-E8SCUP	Standard 8″ Electric Blower Kit, includes SVB-E8 blower and SV-CUP Saddle Vent® Ventilation Kit
SVB-E82CUP	2-Speed 8″ Electric Blower Kit, includes SVB-E8-2 blower and SV-CUP Saddle Vent® Ventilation Kit
SVB-G8CUP	Gasoline 8″ Blower Kit, includes SVB-G8 blower and SV-CUP Saddle Vent® Ventilation Kit
SV-CUP	Saddle Vent® Ventilation Kit - no blower

In-Line Axial Fans

### Hook Multiple Blowers in Series to Run Long Sections of Duct

The 10" in-line axial fan has been designed to be used as a stand alone fan or it can be attached in series to run long lengths of ventilation duct. Intake and exhaust flanges allow for either 8" or 10" duct to be attached to either end of the blower to achieve positive or negative ventilation. The blower is light weight and weighs less than thirty pounds; it is available in standard electric or explosion-proof electric.

10" to 8" Duct Adapters Supplied with Blower for Intake and Exhaust

SVF-10E
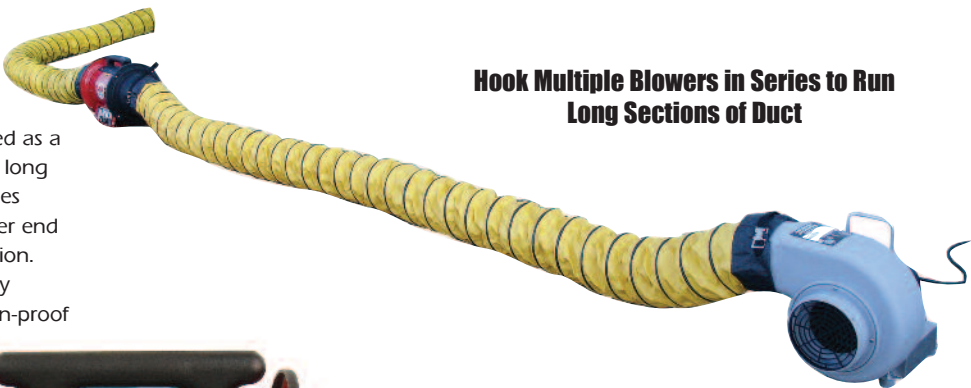
10" IN-LINE ELECTRIC FAN
SVF-10E

- Standard Electric Motor: 1/3 HP, continuous duty, 115 VAC, 1-phase, 60 Hz
- Power cord: 10ft. SOOW cable with installed strain release
- Frame: All steel, powder coat red with rubber base feet
- Inlet/Exhaust flange made of molded polyethylene
- CSA Approved
- 72 dbA @ 3ft.
- Dimensions: 16"L x 16.75"H x 12.5"W
- Weight: 28 lbs.
- 1390cfm, free air delivery

SADDLE VENT® VENTILATION KIT FOR NON-HAZARDOUS LOCATIONS

Air Systems' SV™ Technology

**ALL KITS INCLUDE
1 EACH OF THE FOLLOWING:**
1) Inline Axial Fan
2) Industrial Saddle Vent®
3) 15 ft. duct
4) 6 ft. duct
5) Duct canister (holds 50ft. of duct)
6) Universal mount
7) 90° elbow for Saddle Vent®

Model No.	Description
SVF-10ECUP	Standard 10" Electric Fan Kit, includes SVF-10E fan and SV-CUP Saddle Vent® Ventilation Kit

SV™ Technology

Air Systems manufactures a combination ventilation fan and duct storage unit to meet the most demanding customer needs. Our rugged polyethylene duct canister is securely attached to one of our industrial lightweight steel fans to make an ideal ventilator for the customer who wants a one piece ventilation package.

CANISTER FAN SVF-15DCAN

**WEIGHT: 39 LBS. w/25' DUCT
35 LBS. w/15' DUCT**

Note: All AC electric blowers and fans are approved as a unit.

Model No.	Description
SVF-8AC	AC axial fan only. 1395cfm free air
SVF-8DC	DC axial fan only, 1170cfm free air
SVF-6ACAN	AC axial canister fan with 6 ft. duct installed - 890cfm output
SVF-15ACAN	AC axial canister fan with 15 ft. duct installed – 870cfm output
SVF-25ACAN	AC axial canister fan with 25 ft. duct installed - 858cfm output
SVF-6DCAN	DC axial canister fan with 6 ft. duct installed - 825cfm output
SVF-15DCAN	DC axial canister fan with 15 ft. duct installed - 815cfm output
SVF-25DCAN	DC axial canister fan with 25 ft. duct installed - 796cfm output

AC VERSION - SVF-8AC
- 1/3 HP - 115 VAC
- 8" diameter outlet
- 1395cfm, free air delivery
- 72 dbA @ 3 ft.
- Weight: 22 lbs.

DC VERSION - SVF-8DC
- 12-volt DC, 1/4 HP, 19 amps
- 8" diameter outlet
- 1170cfm, free air delivery
- 10' power cord with battery clips
- In-line 20 amp fuse holder
- 72 dbA @ 3 ft.
- Weight 22 lbs.

SVF-8AC

SV™ Technology

SADDLE VENT® VENTILATION KITS FOR NON-HAZARDOUS LOCATIONS

**ALL KITS INCLUDE
1 EACH OF THE FOLLOWING:**
1) Axial Fan of your choice
2) Industrial Saddle Vent®
3) 15 ft. duct
4) 6 ft. duct
5) Duct canister (holds 50ft. of duct)
6) Universal mount
7) 90° elbow for Saddle Vent®

SVF-8ACUP

Model No.	Description
SVF-8ACUP	Economy 8" Electric Fan Kit, includes SVF-8AC fan and SV-CUP Saddle Vent® Ventilation Kit
SVF-8DCUP	Economy 8" Electric Fan Kit, includes SVF-8DC fan and SV-CUP Saddle Vent® Ventilation Kit

Confined Space Ventilation
Non-Hazardous Location Ventilators

Contractor Grade Axial Fans

The contractor's series of ventilation products is the latest addition to Air Systems' ventilation product group. Known for product quality and performance, Air Systems offers a rugged portable polyethylene ventilation product line designed to accommodate a variety of applications as well as demanding job site conditions at an economical price.

DC VENTILATION FAN
CVF-8DC

- 1/4 HP, 19 amps
- 20 amp fuse holder
- 10 ft. cord with Battery Clips
- 8" Fan, 12VDC
- Optional Battery Pack Available
- Weight: 15 lbs.
- 848cfm, free flow
- 702cfm, 15ft. duct, 1 - 90° bend
- 590cfm, 15ft. duct, 2 - 90° bends

AC VENTILATION FAN
CVF-8AC

- 1/3 HP 8" Fan, 115 VAC, 60Hz
- 10 ft. cord
- CSA/CUS Approved
- Weight: 15 lbs.
- 974cfm, free flow
- 786cfm, 15ft. duct, 1 - 90° bend
- 661cfm, 15ft. duct, 2 - 90° bends

CVF-8AC

APPLICATIONS:

- Contractor Confined Space Ventilation
- Boiler Work
- Utility Companies
- Telecommunications
- Open Trenching
- Construction
- Electrical Transformer Repair
- Maintenance
- Manhole Entry
- Tank Cleaning

**CVF-15ACAN
WEIGHT: 32 LBS.**

CANISTER FANS FOR NON-HAZARDOUS LOCATION

Model No.	Description
CVF-15ACAN	Contractors Canister Fan, includes CVF-8AC Fan with 15 ft duct canister
CVF-25ACAN	Contractors Canister Fan, includes CVF-8AC Fan with 25 ft duct canister
CVF-15DCAN	Contractors Canister Fan, includes CVF-8DC Fan with 15 ft duct canister, supplied with Battery Clips
CVF-25DCAN	Contractors Canister Fan, includes CVF-8DC Fan with 25 ft duct canister, supplied with Battery Clips

SADDLE VENT®
VENTILATION KITS
FOR NON-HAZARDOUS LOCATIONS

The Saddle Vent® Ventilation Systems is now available in a low cost contractor's kit.

One part number at one low price provides a high quality Saddle Vent® ventilation system with a variety of applications for non-hazardous work environments.

SV™ Technology

CVF8A15KIT

Model No.	Description
CVF8A15KIT	Contractors Ventilation Kit, includes CVF-8AC Fan, 6 ft duct with canister and 15 ft duct, Saddle Vent®, 90° elbow, and universal mount
CVF8D15KIT	Contractors Ventilation Kit, includes CVF-8DC Fan 6 ft duct with canister and 15 ft duct, Saddle Vent®, 90° elbow, and universal mount

Confined Space Entry Carts

Cart shown with Model CBA2-346 breathing air assembly option

Cylinders optional

Steerable front end

CSC-3072P CART WITH PNEUMATIC TIRES

MODEL CSC-3072 STANDARD CART
or
*Customize your own cart!*

Specifications

• 30" W x 72" L x 48" H steel cart rated for 1200 lbs. with 10"semi-pneumatic tires, optional pneumatic tires
• 3-cabinet design, galvanized steel, with shelving; 2 ea. 14" deep, 1 ea. 28" deep
• Nylon bottle straps and steel safety chains for cylinder security
• Combination "T" handle with "Pintle Hitch"
• Articulating (steerable) front end
• Top rubber mat with tie-downs for storing retrieval tripod
• Order cylinders, regulator/manifold assembly, separately
• Optional wheel chocks available
• Dim Weight: 515 lbs.

Customizing Suggestions

• Leave off a cabinet and add a blower or extra air cylinders
• Make it wider or longer

2 each 14" deep cabinets
1 each 28" deep cabinet

Optional Tripod

Cabinet height:

34"

Cabinet widths: 30" 30"

Model No.	Description
CSC-3072	Standard confined space cart with 10" semi-pneumatic tires. Order cylinders and high pressure hardware, and tripod separately (tripod sold through local distributors)
CSC-3072P	Standard confined space cart with 10" pneumatic tires
CBA2-346NB	2 cylinder breathing air assembly, no cylinders - 2400psi
CBA2-347NB	2 cylinder breathing air assembly, no cylinders - 4500psi
AC-300	300cf air cylinder, 2400psi
AC-444	444cf air cylinder, 4500psi
AC-472	472cf air cylinder, 5000psi

Confined Space Ventilation
Special Application Ventilators
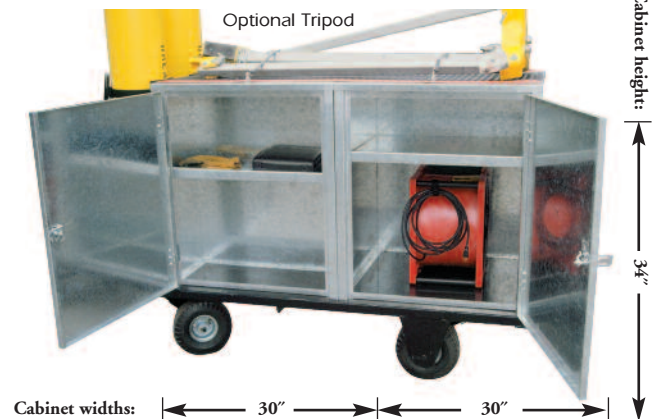
Special Application Fans and Blowers

The Saddlator™
Pneumatic Powered Saddle Vent® Blower

Provides positive or negative pressure ventilation to supplement confined space entry operations in large work areas or tanks and is ideal for hazardous environments.

Specifications
- Conductive Saddle Vent® with Venturi blower installed
- 90° bolt-on conductive elbow, SV90-29, supplied
- Air operated with no moving parts
- 1/2″ Industrial Interchange plug
- Static ground lug installed
- Delivers 2000 - 3000cfm on pressures from 50-100psi

SV189-29

← Air Flow ←

Saddle Vent®
Standard Tank Model

The Tank Model Saddle Vent® is specially designed to fit 18″W x 20″L oval tanks. The tank model is installed in the hatch entry area with complete entry and egress access to the ladder. The required metal guard is left in place without interference from the Tank Saddle Vent®. The Tank Saddle Vent® can be installed in any position.

FIRE RETARDANT

SV-189T

* Order 90° Elbow Model SV-90T

Model No.	Description
SV189-29	Industrial Model SADDLATOR™ w/ elbow, positive pressure
SV189-29-N	Industrial Model SADDLATOR™ w/ elbow, negative pressure
SV90-29	90° bolt-on elbow to fit SADDLATOR™
SV189T-29	Tank model SADDLATOR™
H-50-5	1/2″ compressor connect hose – 50 ft.
H-50-12	3/4″ compressor connect hose – 50 ft.

Large Centrifugal Blowers

Air Systems can design a custom blower to meet your most demanding requirements. Our blowers are used by steel mills, shipbuilding companies, and power generating stations. Select from a wide variety and style of inlet and outlet flange sizes. The blower at right is a 15 HP electric with a 14″ inlet and outlet flange. It is set on a 4-way steel fork lift skid. This blower has been designed to deliver high static pressure and high cfm output for maximum lengths of ducting.

Specifications:
- 13.9″ W.G. static pressure @ 4200cfm output
- 8500cfm free flow
- TEFC 15HP motor
- Sealed NEMA 4 on/off switch box
- 230/460 VAC, 3-phase motor
- User wired per NEC requirements
- 14″ intake and exhaust flange
- Welded steel safety guards on inlet and exhaust
- Adjustable flow control gate
- Forklift guide on all four sides plus sling hooks
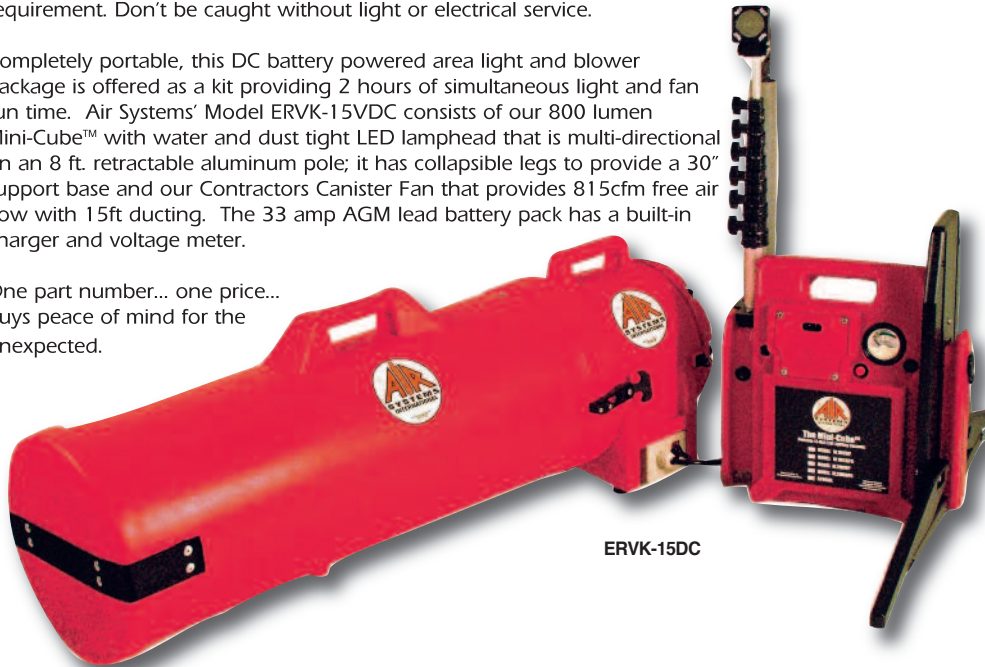- Custom variations available
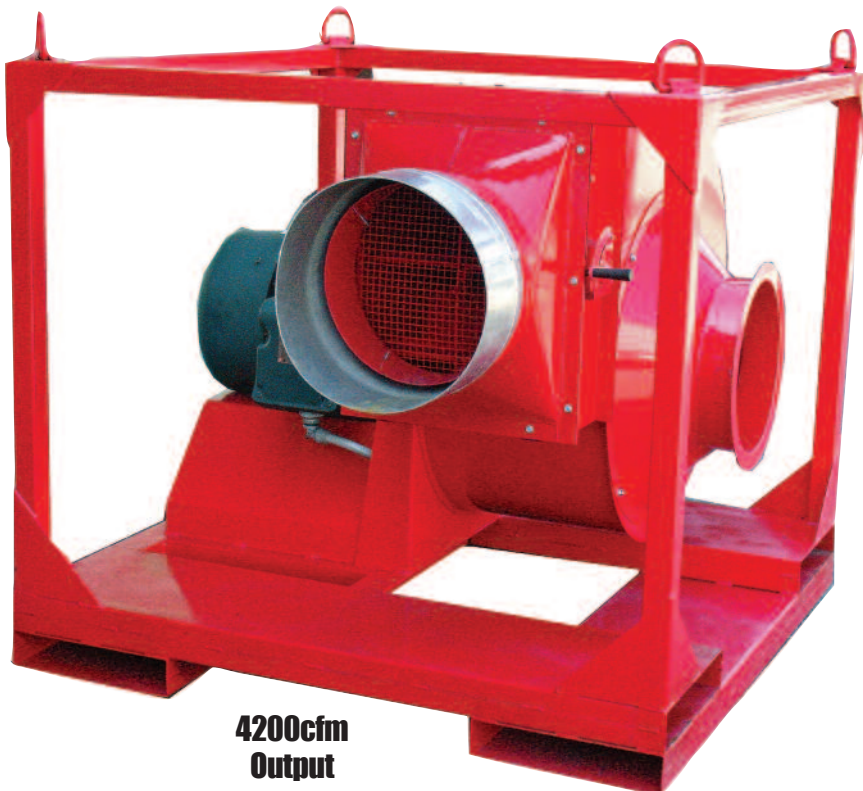
4200cfm Output

SVB-E14

Emergency Response Ventilation Kit
for Non-Hazardous Locations

Did you ever notice that emergencies happen when you least expect it? During storms, inside difficult to access areas in the dark, or any emergency ventilation requirement. Don't be caught without light or electrical service.

Completely portable, this DC battery powered area light and blower package is offered as a kit providing 2 hours of simultaneous light and fan run time. Air Systems' Model ERVK-15VDC consists of our 800 lumen Mini-Cube™ with water and dust tight LED lamphead that is multi-directional on an 8 ft. retractable aluminum pole; it has collapsible legs to provide a 30" support base and our Contractors Canister Fan that provides 815cfm free air flow with 15ft ducting. The 33 amp AGM lead battery pack has a built-in charger and voltage meter.

One part number... one price... buys peace of mind for the unexpected.

ERVK-15DC

Environmentally Friendly Products

• No gasoline vapors
• No generators
• No emissions
• No spill AGM battery
• Removable/rechargeable energy source

12 VOLT POWER PORT SUPPLIED FOR OPERATING 12-VOLT DEVICES LIKE OUR ERGONOMICALLY DESIGNED 800 LUMEN PISTOL GRIP HAND HELD LIGHT
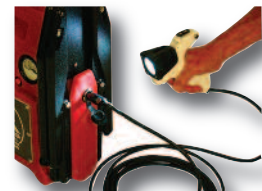
ALHL25

Model No.	Description
ERVK-15DC	Emergency Response Ventilation Kit. Includes MINI-CUBE™, Model AL1MCBPC and Contractors Canister Fan, Model CVF15DCNBP

Solar Charging Panel

• High efficiency mono-crystalline solar panel
• Delivers 40 watts of charge power
• 2.4amp output in full sunlight
• 2 piece folding panel with aluminum frame
• Rear metal support frame
• Built-in charger/regulator
• Power port charge connector supplied for re-charging Air-Light™ and Mini-Cube™ LED lights (battery clips optional)
• Padded storage bag with shoulder strap supplied
• 5-6 hours charge time for Air-Light™
• 8-9 hours charge time for Mini-Cube™
• 1 year warranty
• Weight: 16 lbs
• Closed Dimensions: 12"W x 24"L x 2"D
• Open Dimensions: 24"W x 24"L x 1"D
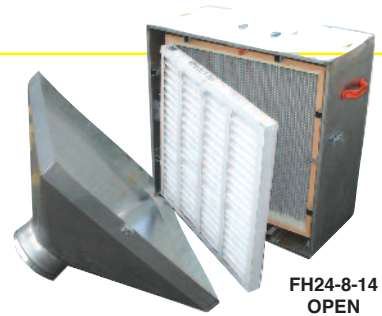
SCP-40

Confined Space Ventilation
Accessories

Ventilation Accessories

**FH24-8-14
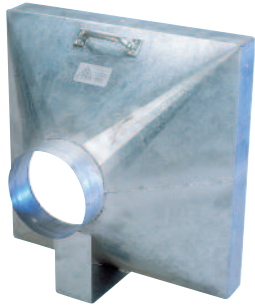OPEN**

In-line HEPA Filter Holder
• Attaches before or after blower for positive or negative filtration
• Pre-filter for dusts or odors
• 8″ inlet and exhaust flange
• Galvanized steel
• Optional stainless steel or aluminum frame
• Holds a 24″ x 24″ x 11.5″ HEPA filter plus a 24″ x 24″ x 2″ pleated pre-filter

**FH24-8-14
CLOSED**

In-line Filter Holder
Specifications
• Holds a 24″ x 24″ x 2″ pleated filter
• 8″ duct flange on one end
• Allows user to filter intake or discharge air
• Galvanized steel
• Optional stainless steel or aluminum frame
• Custom sizes and designs available

FH24-8

Model No.	Description
FH24-8	In-line Filter Holder holds 24″ x 24″ x 2″ pre-filter
FH24-8-14	In-line Filter Holder holds 24″ x 24″ x 11.5″ HEPA and 2″pre-filter
ASI-242C	Pleated Carbon Odor Removal Filter, 24″ x 24″ x 2″, case of 6
FLTR004C	Pleated dust Filter, 24″ x 24″ x 2″, case of 12
PFE-2412HF	HEPA Filter, 24″ x 24″ x 11.5″

Electric Ventilation Heaters

Specifications
• Heaters operate with blower only
• 8″ inlet and exhaust flange
• Aluminum frame with steel control box
• Automatic start with blower running
• Built-in safety pressure switch
• Automatic thermal shutdown at 170°F
• 144°F output at exhaust, 112°F with 15′ duct
• Order 3 ft. heater connect duct, Model no SVH-3

**SVF-15KW-8
32"L X 27"H X 37.5" W
95 LBS.**

**SVF-7KW-8
27"L X 16"H X 15.5" W
40 LBS.**

Model No.	Description
SVF-7KW-8	Electric 8″ ventilation heater, 7kw, 230/1, 28amps, 23,900 BTU - 30amp plug
SVF-10KW-6	Electric 6″ ventilation heater, 10kw, 440/3, 15amps, 34,145 BTU - user wired
SVF-15KW-8	Electric 8″ ventilation heater, 15kw, 440/3, 26amp, 51,216 BTU - user wired

ALL ELECTRIC HEATERS ARE AVAILABLE WITH OPTIONAL DUCT SIZE FLANGES

Inlet Filter Assembly for "SVB" Series Blowers

This inlet filter is designed to fit Air Systems' "SVB" series of portable industrial blowers. The unit filters the ambient air where the blower is located so that workers in a confined space are not exposed to ambient dusts. This system will control dusts and particulates from entering a confined space where industrial coatings are being applied. The filter will also reduce the potential for dust ignition in a confined space when used with an explosion-proof or intrinsically safe blower. Filters are available with 5 micron or 99.97% HEPA rating.

FILTER HOLDER

SVB-IFH9

STANDARD FILTER

SVB-IF9ST

HEPA FILTER

SVB-IF9HE

Air Flow

Model No.	Description
SVB-IFH9	Inlet filter holder, no filter, order filter choice below
SVB-IF9ST	Inlet filter, standard, 99% efficient at 5 micron, <1% flow loss with 25 ft duct
SVB-IF9HE	Inlet filter, HEPA 99.97% efficient at 0.3 micron, 40% flow reduction with 25 ft duct

**BLOWERS SOLD
SEPARATELY**

Standard and Conductive Ventilation Ducting

STANDARD VINYL DUCTING

- Vinyl polyester ventilation air duct hose
- 8" diameter with external wear strips – custom sizes available on request
- Internal steel reinforced wire hoop – 5" pitch
- 6" long attachment cuff, 8 3/8" diameter, with adjustable belt straps on both hose ends
- Maximum temperature rating 180°F

CONDUCTIVE FABRIC DUCTING WITH GROUND WIRES ATTACHED TO EACH END OF WIRE HELIX

Galvanized Steel or Polyethylene Supplied

8" DUCT TO DUCT CONNECTOR SVH-88C

Model No.	Description
	STANDARD DUCT
SVH-3	8" Diameter - 3 ft. Vinyl Hose Duct
SVH-6	8" Diameter - 6 ft. Vinyl Hose Duct
SVH-15	8" Diameter - 15 ft. Vinyl Hose Duct
SVH-25	8" Diameter - 25 ft. Vinyl Hose Duct
	CONDUCTIVE FABRIC DUCT
SVH-CND86	8" Diameter - 6 ft. Conductive Duct
SVH-CND815	8" Diameter - 15 ft. Conductive Duct
SVH-CND825	8" Diameter - 25 ft. Conductive Duct
	DUCT TO DUCT CONNECTORS
SVH-88C	8" Duct to Duct Connector
SVH88-CND	8" Conductive Polyethylene Duct to Duct Connector w/ Ground Lugs
	CUSTOM SIZES AVAILABLE UP TO 36" DIAMETER

Duct Carrier

- Holds 50 ft of 8" diameter duct
- Snap-lock lid
- Large carry handle
- Polyethylene construction
- Keeps duct from getting ripped
- Solves duct storage problem

SVH-DC25

Custom Duct Transitions

Enlarging and Reducing Adapters are Available to Accommodate Any Transition Size - Contact Customer Service for Ordering Information

Vent Flow™ Alarm
Designed to meet Confined Space Ventilation Flow Loss Alarm Requirements

Specifications
- Attaches inline to any 8" blower duct. (Optional larger and smaller duct sizes available upon request)
- Operates on two standard 9-volt batteries
- Audible alarm (92dbA) and visual red light activate with approximately 50% flow loss in the duct
- Alarms deactivate when normal flow is re-established
- Galvanized tubular steel housing
- Weight: 7 lbs.
- Overall length, 13"
- No AC power required

SVF-8ALM

8 FT EXTENSION

200 YDS

150 YDS

75 YDS

25 YDS

AL1MCBP

Mini-Cube™ Flagger Light
Designed to Meet National and State Flagger Illumination Regulations
The Flagger Light is Lightweight, Highly Portable with Long Duration Runtime
Complies with NCHRP Report 476 Section 2.5.2 (Illumination, Visibility, and Temporary Lighting) and the MUTCD Section 6E.05

Use your 12-Volt Adapter Cable to Charge and/or Run Your DC Powered Electrical Devices

Model No.	Description
AL1MCBP	MINI-CUBE™ LED LIGHT, 800 Lumens, Includes Battery Pack/Charger
AL2MCBP	MINI-CUBE™ DUAL LED LIGHT, 1600 Lumens, Includes Battery Pack/Charger
AL1MCBPC	MINI-CUBE™ LED LIGHT, 800 Lumens, Includes Battery Pack/Charger and SB® connector
AL2MCBPC	MINI-CUBE™ DUAL LED LIGHT, 1600 Lumens, Includes Battery Pack/Charger and SB® connector

The Mini-Cube™
Portable Lighting

The MINI-CUBE™ has been developed as a lightweight, high output, LED Portable Area Lighting System. The internal 33 amp AGM battery pack provides over 30 hours of runtime. The water and dust tight 800 Lumen LED head is multi-directional on an 8 ft. retractable aluminum pole. The MINI-CUBE™ is available with a single or dual 800 Lumen LED lamphead.

OPERATIONAL FEATURES

• Full 8 ft. light elevation
• Collapsible aluminum extension mast with locking thumb screws and retractable cable 24″ collapsed height
• Single cube,10 watts, 800 lumens per cube
• Dual cube, 20 watts, 1600 total lumens
• Rated 50,000 hours service on LED lamphead
• Push-to-test volt meter built in to front panel
• 12-volt power port for quick charge from an external battery source or voltage out to run 12-volt devices
• Adjustable directional lamphead(s)

INTERNAL BATTERY

• 12 VDC sealed 33amp AGM lead acid battery
• Deep cycle, with built-in 115 VAC charger system, and cord
• Run time for Single LED MINI-CUBE™ with full charge, 32+ hours
• Run time for Dual LED MINI-CUBE™ with full charge, 16+ hours
• Battery pack rated for 500+ charge cycles
• Approved for continuous charging, Keep unit plugged in when not in use. If MINI-CUBE™ becomes fully depleated, recharge times may require up to 24 hours
• One year replacement warranty on battery pack and charger

   Note: See page 64 for Solar Panel Charging Options

APPROVALS

• Battery FAA, DOT, CAB, IA, and TA approved for air transport
• RoHs (Restriction of Hazardous Substances) compliant
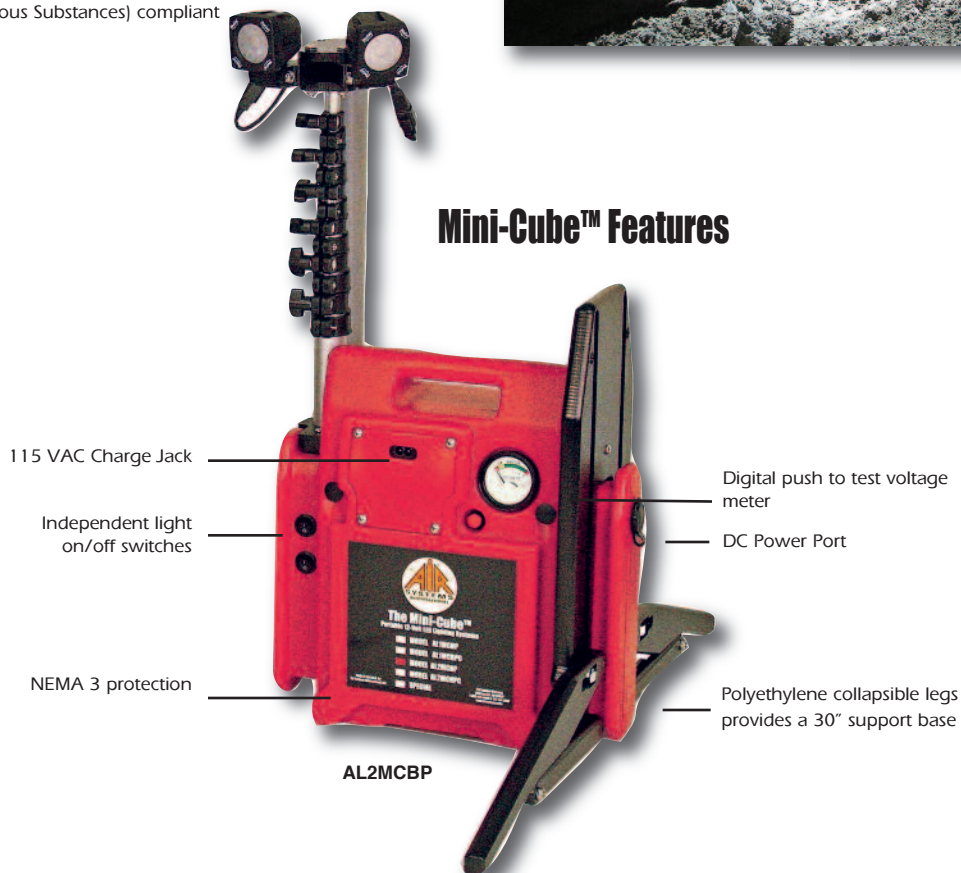
Mini-Cube™ Features

115 VAC Charge Jack

Independent light on/off switches

NEMA 3 protection

Digital push to test voltage meter

DC Power Port

Polyethylene collapsible legs provides a 30″ support base

AL2MCBP

Air-Light™ System (A.L.S.)
DC Powered Portable LED Light Series

The Air-Light™ Systems have been designed to provide high power lighting for indoor and the most adverse outdoor conditions. The compact portable design comes fully assembled for use and deploys rapidly in under 30 seconds without the need for component assembly. It's stable platform insures reliable lighting on rugged terrain and high wind conditions. With it's high capacity 22amp/hr internal battery and the ability to switch over to AC power or DC power from a response vehicle, the Air-Light™ will see you through until your job is complete.

Note: All Specifications and Features Apply to ALL A.L.S. Series Light Products

OPERATIONAL FEATURES

- Power supply can be switched from internal battery to external 12 VDC power or 110-240 VAC 50/60Hz power without interrupting light operation
- Internal battery can be charged from external 12 VDC or 110-240 VAC 50/60Hz power sources
- Power port socket for charging of internal battery or powering external accessories like cell phones, laptops, handheld lights or any other device that utilizes 12 VDC power
- Operate/charge with clamp style jumper cables
- Unit delivered fully assembled
- Unit deploys/stows rapidly without the use of tools and folds to fit within the integral storage case
- Operational in sustained 35mph full frontal winds, 50mph rear winds
- Mast extends from a range of 30" - 87" above ground

INTERNAL BATTERY

- 12 VDC, 22amp/hr, deep cycle sealed lead acid, AGM battery (Absorptive Glass Matt)
- Maintenance-free, non-spillable, and operates in any position
- Safely stored/operated at -40°F to 140°F, (-40°C to 60°C)
- 6 hour minimum recharge time. 12 hours or overnight to condition the battery from full discharge
- One year replacement warranty on battery pack and charger

INTERIOR FRAME

- Integral stainless steel unitized structural frame assembly and battery box
- Drop tested from 1 meter, (all 6 sides, all 4 corners) with no internal, structural, or electrical failures
- Stainless steel telescoping stabilizer leg assemblies
- Stabilizer legs fully deployed to create a stable 36" x 32" 3-point platform
- Stainless steel support legs unfold with the push of a spring release button
- The support legs can extend to either 19" or 32" length
- Mast extends from a range of 30" - 87" above ground

CONTROL PANEL

- NEMA 3 protection
- Independent light control switches
- Digital push to test voltage meter
- External color coded POS (+) and NEG (-) connection posts
- Dual ended power port cable for connection to vehicle cigarette lighter or auxiliary power port outlet
- 110 VAC US cord standard, (international cord sets available)

APPROVALS/CONFORMANCES

- Declaration of Conformity CE council directive 2006/95/EC
- Specifications Declared : Essential Health and Safety Requirements of Annex 1 of the Low Voltage Directive
- RoHs (Restriction of Hazardous Substances) compliant
- CE registered lights
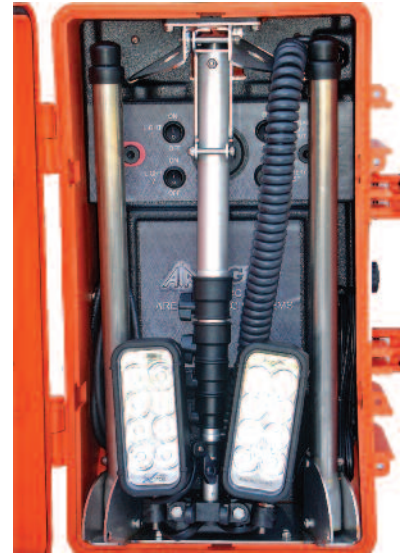- Battery FAA, DOT, CAB, IA, and TA approved for air transport

87" ALUMINUM MAST AND LAMP HEAD EXTENSION

WEIGHTS & DIMENSIONS

• RETRACTED - 22-1/2"H x 12-11/16"W x 9-3/4"D
• DEPLOYED – 87"H x 32"W x 36"D
• 48 lbs.

POWER SOURCE FEATURES

POWER SOURCE
The internal AGM battery pack is pictured above with dual lamp switches and is supplied with three electrical power sources rated for 500+ discharge cycles, 3 -5 year service life

POWER SOURCE
DC to DC power cord and 115 VAC charger cables are provided. 12 volt DC power port can operate/charge accessory equipment like cell phones or laptops

POWER SOURCE
Direct connection from a vehicle's battery system via jumper cables to battery posts located on the standard battery pack

GENERAL SPECIFICATIONS - LED LIGHT

- 50,000 + hrs LED service life.
- Lamp assembly auto shut-off at 9VDC.
- Color temperature 5,000° Kelvin, (pure white)
- Flood pattern light beam diffusion, (Spot and EURO beam patterns available)
- Water proof, dust proof, IP68 rating
- Independent directional adjustment of each lamp assembly
- 87" aluminum extension mast with locking thumb screws

Note: Infrared LED bar lights available in 850nm and 940nm

Single Cube Specifications:

- 12 VDC, .75amps, 10 watts
- 800 Lumens
- Anodized aluminum w/ polycarbonate lens
- Operating temperature, -40°C to 85°C
- Full Charge Run Time: 20+ hours

Dual Cube Specifications:

- 12 VDC, 1.5amps, 20 watts
- 1600 Lumens
- Anodized aluminum w/ polycarbonate lens
- Operating temperature, -40°C to 85°C
- Full Charge Run Time: 10+ hours
- IR Models, Full Charge Run Time: 30+ hours

Quad Cube Specifications:

- 12 VDC, 3amps, 40 watts
- 3200 Lumens
- Anodized aluminum w/ polycarbonate lens
- Operating temperature, -40°C to 85°C
- Full Charge Run Time: 5+ hours
- IR Models, Full Charge Run Time: 15+ hours

## CHOOSE A LIGHT ASSEMBLY TO MEET YOUR APPLICATION

Model No.	Description
	LED CUBE LIGHT MODELS
AL1CUBEBP	A.L.S Single Cube LED Light Assembly - Includes internal battery pack and 3 amp battery charger
AL2CUBEBP	A.L.S Dual Cube LED Light Assembly - Includes internal battery pack and 3 amp battery charger
AL4CUBEBP	A.L.S. Quad Cube LED Light Assembly - Includes internal battery pack and 3 amp battery charger
AL2C-IR850	A.L.S. Dual Cube Light Assembly - Includes internal battery pack and 3 amp battery charger, 850 NM output light spectrum for night vision
AL2C-IR940	A.L.S. Dual Cube Light Assembly - Includes internal battery pack and 3 amp battery charger, 940 NM output light spectrum for night vision
AL4C-IR850	A.L.S. Quad Cube Light Assembly - Includes internal battery pack and 3 amp battery charger, 850 NM output light spectrum for night vision
AL4C-IR940	A.L.S. Quad Cube Light Assembly - Includes internal battery pack and 3 amp battery charger, 940 NM output light spectrum for night vision *Note: Additional LED Cube Pods can be added to your assembly as needed. Contact Customer Service.*
	LED BAR LIGHT MODELS
AL48LEDBP	A.L.S. Dual LED Light Assembly - Includes internal battery pack and 3 amp battery charger
AL48IR850	A.L.S. Dual LED Light Assembly - Includes internal battery pack and 3 amp battery charger, 850 NM output light spectrum for night vision
AL48IR940	A.L.S. Dual LED Light Assembly - Includes internal battery pack and 3 amp battery charge, 940 NM output light spectrum for night vision
	INTRINSICALLY SAFE LED BAR LIGHT MODEL
AL48LEDIS	A.L.S. Intrinsically Safe Dual LED Light Assembly - Includes internal battery pack and external 3 amp battery charger

LED Dual Bar Specifications:

- 12 VDC, 4amps, 48 watts
- 2880 Lumens
- Anodized aluminum w/ polycarbonate lens
- Operating temperature, -40°C to 85°C
- Full Charge Run Time: 5+ hours
- IR Models, Full Charge Run Time: 5+ hours

Intrinsically Safe LED Dual Bar Specifications:

- 12 VDC, 4amps, 48 watts
- 2880 Lumens
- Anodized aluminum w/ polycarbonate lens
- Operating temperature, -40°C to 85°C
- Full Charge Run Time: 5+ hours

Exception to general specification:

- No battery status indicator
- Battery charger is a separate component and must not be used for recharging in a hazardous location

Note: Contact Customer Service for detailed specifications and availability

Solar Charging Panel
Recharge Portable Lighting and DC Electrical Devices

**Environmentally Friendly Products**
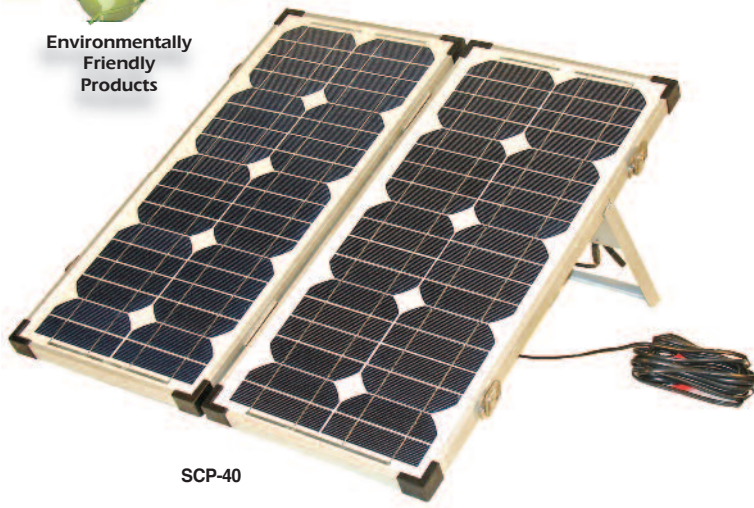
Specifications:
• High efficiency mono-crystalline solar panel
• Delivers 40 watts of charge power
• 2.4amp output in full sunlight
• 2 piece folding panel with aluminum frame
• Rear metal support frame
• Built-in charger/regulator
• Padded storage bag with shoulder strap supplied
• 8-9 hours charge time for Mini-Cube™
• 6-7 hours charge time for Air-Light™
• Power port charge connector (battery clips optional)

SCP-40

Hand Held LED Light

Specifications:
• 12 VDC, .75amps, 10 watts, 800 Lumens
• Anodized aluminum housing with polycarbonate lens
• Operating temperature -40°C to 85°C
• 25 ft power cord with male power port connector
• Ergonomically designed polyethylene pistol grip
• Magnet rated @ 30 lbs. with adjustable base
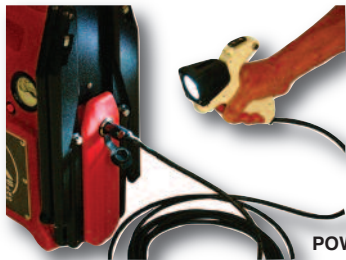
POWER PORT CONNECTION
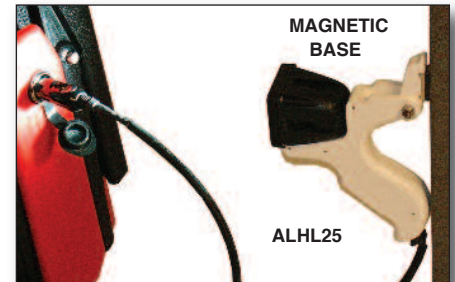
MAGNETIC BASE

ALHL25

Model No.	Description
	SOLAR PANEL
SCP-40	Solar Charging Panel with padded carrying case and shoulder strap
	MAGNETIC HAND-HELD SINGLE CUBE LED LIGHT
ALHL25	LED Hand Light, 25ft. cord with power port male adapter
	EMERGENCY RESPONSE VENTILATION KIT
ERVK-15DC	Emergency Response Ventilation Kit. Includes MINI-CUBE™, Model AL1MCBPC and Contractors Canister Fan, Model CVF15DCNBP
	CHARGING CORD SETS
LP-PC-DE	Dual end power port connector cable, 8ft.
C7-PC-USA	7ft. DC cord set with AC charger - U.S.
C7-PC-EUR	7ft. DC cord set with AC charger - EUROPE
C7-PC-UK	7ft. DC cord set with AC charger - UK
C7-PC-AUS	7ft. DC cord set with AC charger - AUSTRALIA

Emergency Response Ventilation Kit

ERVK-15DC

Environmentally Friendly Products

This kit provides emergency response ventilation and high output DC lighting for emergency applications. The kit provides a full 2 hour simultaneous fan and light run time. See page 56 for complete details.

LP-PC-DE   **C7-PC-USA**

FUME-AIR™ 750

Source Capture to Meet OSHA Standards

Portable HEPA Filtered Fume-Air™ 750

Specifications
- 115 VAC motor, 12.5 amps
- 13 inch fume capture hood with adjustable flow damper - optional hood light
- HEPA Filter, 99.97%, UL-586 approved, DOP Tested 1000cfm flow rate
- 6 inch diameter, 10 ft. ducted arm with 270 degree movement
- 750cfm flow with 10 ft. arm
- Filter change indicator
- Steel Cabinet
- 24" x 24" x 1" Pleated pre-filter holder
- Lift-up filter door for easy access filter change
- 5" Heavy Duty Casters
- Weight: 307 lbs. with 10ft. arm
- Size: 27"W X 40"D X 32.5"H

ARM SHIPPED COMPLETELY ASSEMBLED AND READY TO BOLT ON MAIN EXTRACTOR CABINET

LIFT UP FILTER DOOR FOR EASY ACCESS FILTER CHANGE
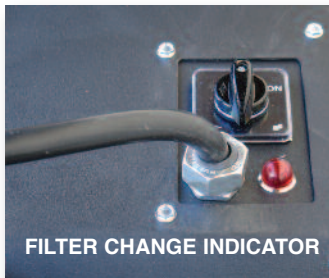
FILTER CHANGE INDICATOR
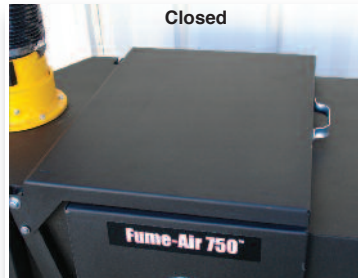
Closed
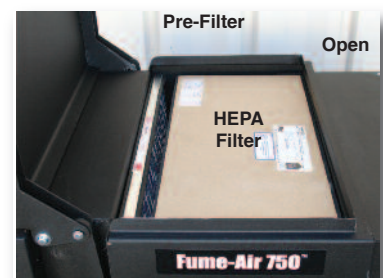
Pre-Filter

Open

HEPA Filter

IMPORTANT WELDING FUME HEALTH STANDARD CHANGE:

Effective May 30, 2006, OSHA lowered the PEL for Hexavalent Chromium and its compounds called Hex Chrome from 52 to 5 micrograms per cubic meter. This standard affects all general industry, shipyards, and construction industry activities with regard to welding on stainless steel and painted surfaces. The new standard necessitates source capture of these extremely harmful compounds with the use of HEPA filtered portable welding fume extractors. (FED REG 71:10099-10385)

Did You KNOW?

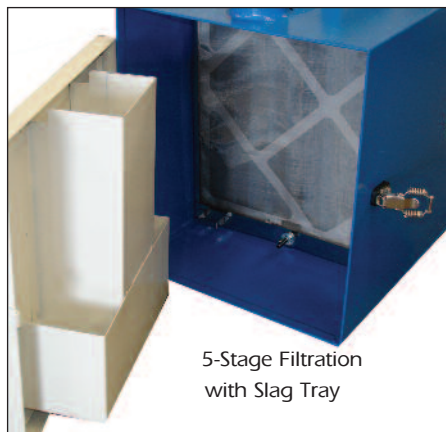| Model No.	Description
PFE-750-8	Portable Extractor, FUME-AIR™ 750 complete with 10 ft arm assembly, and 99.97% HEPA filter
PFE-750CAB	FUME-AIR™ 750 with no arm assembly designed for permanent central duct systems, includes HEPA filter
ACCESSORY FILTERS	
PFE-2412HF	HEPA filter 24" x 24" x 11.5"
PFE-2424PF	Pre-filter pad 24" x 24" x 1" (pkg. of 10)
PFE-2424C	Charcoal impregnated pre-filter pad, used with PFE-2424PF 24" x 24" x 1" (pkg/10)
PFE-750LK	Light kit for PFE-750-8 Fume Hood

Specifications
- 2 each, 115 VAC, 800 watt vacuum motors with 15amp overload protector
- Final stage HEPA filter, 99.97% at 0.3 micron
- 70dbA noise level at 3 feet w/ built-in noise suppressor
- 230cfm flow rate - variable speed
- Fire retardant, 10 ft, flexible
- Dual handle assembly
- Three pleated intermediate filters 2.5" ID hose supplied with 2.5" hose coupler for adding additional hose
- 5" fume capture hood with magnetic base stand supplied
- 5-stage filtration
- Stainless steel spark screen
- Removable slag tray
- Size: 28.5" L x 15"H x 18.5"W
- Weight: 57 lbs.

FUME-AIR™ 230
Designed for Light Duty, Short Duration Welding

Air Systems' small HEPA filtered portable fume extractor, Model PFE-230, provides 230cfm flow through a 5" hood and magnetic base stand. Ideal for many small welding and soldering applications where large cabinet style fume extractors are not practical, such as, spot or bench top welding. The PFE-230 features removable slag tray, spark screen, 3 pleated pre-filters and a final HEPA filter (99.97% at 0.3 micron).

PFE-230

HEPA FILTERED
FOR HAZARDOUS WELDING APPLICATIONS

5-Stage Filtration
with Slag Tray

5-Stage Filter Assembly

VARIABLE SPEED SWITCH AND CONTROL PANEL

SVB-LCRT
CART DIMENSIONS
30"L x 30"D x 42"H

Optional Cart holds Model PFE-230 and provides a storage cabinet for welding supplies. Cart is made of steel with black powder coat paint, front swivel casters and rear locking casters.

Model No.	Description
PFE-230	Portable Fume Extractor - complete with hose, filters, and accessories
	ACCESSORY FILTERS
PFE-230-F1	Stainless Steel Filter - captures up to 95% of the spark and steel chips down to 1-2 microns
PFE-230PF	Pleated Filter - 12" x 12" x 2" MERV 7 rated, 70% efficient (3 filters required)
PFE-230-HF	Pleated HEPA filter 12" x 12" x 5 7/8" captures 99.97% of the 0.3 micron particles. DOP certified
SVB-LCRT	Mobile steel cart with Storage Box

Electric HEPA Filtered Vacuums

Hazardous material vacuums are equipped with a HEPA filter system consisting of a certified absolute HEPA filter, a double layer intermediate micro filter, and a totally enclosed 2-ply disposable paper filter bag. The HEPA filter has a steel outer casing and micro-fibered glass paper filter media separated by corrugated aluminum sheeting that is encased in a protective steel screen. All HEPA filters are rated with a minimum efficiency of 99.97% at 0.3 microns. They are tested using the HOT DOP method @ 100cfm, UL 586 certified, maximum 1″ resistance. Models AV-2 and AV-15 motor heads are provided with a remote exhaust port for 1.5″ or 2.0″ hose. All motors have a 2 year warranty.

Models AV-2, AV-5, and AV-15 are shipped with a HEPA filter, an intermediate pre-filter, a 2-ply disposable paper filter bag, and tool kit. The tool kit includes, 5 ft. curved steel wand, 10 ft. vacuum hose with end cuffs, crevice tool, inlet swivel connector and hard floor brush. An optional wet conversion kit converts the dry vacuum for liquid pick up (not available on Model AV-4POLY).

DID YOU KNOW?

All of our Electric HEPA Vacuums meet the EPA's New RRP (Renovation, Repair, and Painting Regulations) 40CFR, Part 745, Subpart E. Models AV-4POLY, AV-5, and AV-15 are supplied standard with an external electric receptacle to operate the optional beater bar power head for use on lead and asbestos abatement projects.

Our new Contractor's model, AV-4POLY, is a compact, easy to carry HEPA vacuum which uses either an electric or pneumatic beater bar assembly (sold separately).

All HEPA filters meet or exceed the following standards:

- IEST-RP-CC007
- UL-586
- MIL-F-51079
- ANSI-2-92
- ASME AG-1

**CONTRACTORS MODEL
AV-4POLY
ELECTRIC**

**AV-2
ELECTRIC**

**AV-5
ELECTRIC
WITH POWER HEAD PLUG**

**AV-15
W/ OPTIONAL AUTO
SHUT-OFF FOR WET PICKUP
PICTURED**

Specifications

AV-4POLY   120 VAC, 60 Hz, 1.3 HP, by-pass, 7.5 amps, 900 watts, 94cfm, 84″ water lift, 4 gallon recovery, 6 gallon polyethylene tank, 30ft/18-3 power cord with plug, 78dbA, 10 ft. hose (1 1/4″) supplied. Motor head has a 2 year warranty. Includes all filters and tool kit. (Uses electric or pneumatic beater bar).

AV-2   120 VAC, 60 Hz, 1.3 HP, 2 stage by-pass, 7.5 amps, 900 watts, 94cfm, 84″ water lift, 2 gallon recovery, 3 gallon stainless steel tank, 30ft/18-3 power cord with plug, 78dbA, 10 ft. hose (1 1/2″) supplied. Motor head has a 2 year warranty. Includes all filters and tool kit.

AV-5   120 VAC, 60 Hz, 1.3 HP, 2 stage by-pass, 7.5 amps, 900 watts, 94cfm, 84″ water lift, 5 gallon recovery, 7 gallon stainless steel tank, 30ft/18-3 power cord with plug, 78dbA, 10 ft. hose (1 1/2″) supplied, on/off switch, MIL SPEC water dump valve. Motor head has a 2 year warranty. Includes all filters, tool kit, handles and wheel kit. (Electric beater bar option, Model AV-33150 only).

AV-15   120 VAC, 60 Hz, 2.3 HP, 2 stage by-pass, 11 amps, 1320 watts, 115cfm, 110″ water lift, 15 gallon recovery, 20 gallon stainless steel tank, 30ft/14-3 power cord with plug, 10 ft. hose (1 1/2″) supplied, 78dbA, on/off switch, MIL SPEC water dump valve. Motor head has a 2 year warranty.   Includes all filters, tool kit, handles and wheel kit. (Electric beater bar option, Model AV-33150 only).

NOTE: Optional voltage and Hertz available. Consult customer service for details.

Model No.	Description	Model No.	Description
AV-4POLY	4 gallon recovery, 1.3 HP motor, HEPA, polyethylene tank, complete with wand, accessory tools, and filters. External electric receptacle for beater bar option.		**BAGS, FILTERS &ACCESSORIES**
AV-2	2 gallon recovery, 1.3 HP motor, HEPA, stainless steel tank, complete with wand, accessory tools, and filters.	AV-2B	Paper bags - 2 gallon size - 5/pkg.
		AV-2H	HEPA filter (99.97%) - 2 gallon size - 1/ea.
		AV-5B	Paper bags – 5 gallon size – 5/pkg
AV-5	5 gallon recovery, 1.3 HP motor, HEPA, stainless steel tank with floor casters and handles, complete w/ wand, accessory tools, and filters. Fitted with a power nozzle receptacle	AV-4B	Paper bags - 4 gallon size - 5/pkg
		AV-5I	Intermediate filter – 5 gallon size – 2/pkg, fits AV-2, AV-5 and AV-4POLY models
AV-15	15 gallon recovery, 2.3 HP motor, HEPA, stainless steel tank, cart, wand, accessory tools, and filters. External electric receptacle for beater bar option.	AV-5H	HEPA filter (99.97%) – 5 gallon size - 1/ea., fits AV-5 and AV-4POLY models
AV-5PTE	5 gallon recovery, 1.3 HP motor, HEPA, polyethylene tank, wheels, wand, accessory tools, and filters. External electric receptacle for beater bar option.	AV-5WP	5 gallon water pick-up unit with auto shut-off
		AV-15B	Paper bags – 15 gallon size – 5/pkg.
AV-15PTE	15 gallon recovery, 2.3 HP motor, HEPA, polyethylene tank, cart, wand, accessory tools, and filters. External electric receptacle for beater bar option	AV-15I	Intermediate filter – 15 gallon size – 2/pkg.
		AV-15H	HEPA filter (99.97%) – 15 gallon size - 1/ea.
AV-55	55 gallon drum lid assembly with HEPA filter, 1.5″ hose connection, and 2.3 HP motor	AV-15WP	15 gallon water pick-up unit with auto shut-off
	BACK-PACK ELECTRIC MODEL	AV-335150	Electrically operated beater bar for AV-5 and AV-15 models
AV-2BP	2 gallon HEPA stainless steel vacuum with back pack frame	AV-4POLYTN	Pneumatically operated beater bar for AV-4POLY
		AV-4POLYPN	Electrically operated beater bar for AV-4POLY

Pneumatic HEPA Vacuums

Pneumatic powered vacuums are ideal for working in wet environments or where long lengths of vacuum hose are required. Air motors require no maintenance and contain no moving parts. A built-in pressure relief valve restricts water lift to 160″ to prevent tank collapse. An on/off flow valve and pressure gauge are provided. Spark-free air motor.

AV-15P   **AV-5P**

Specifications
- INLET PRESSURE: 80psi with 1/2″ I.D. hose
- INLET FLOW: 70cfm required
- VACUUM PRESSURE: 250″ water lift maximum, adjusted to 160″ water lift with relief valve
- VACUUM FLOW: 100 -170cfm based on inlet pressure
- NOISE LEVEL: 75dbA @ 90psi inlet pressure
- TANK: Stainless Steel

Model No.	Description
AV-2P	2 gallon recovery, pneumatic motor, stainless steel tank, complete with wand, filters, and accessories
AV-5P	5 gallon recovery, pneumatic motor, stainless steel tank, wand, accessory tools, and filters
AV-15P	15 gallon recovery, pneumatic motor, stainless steel tank, cart, wand, accessory tools, and filters
AV-55P	55 gallon drum lid assembly with HEPA filter, 1.5″ hose connection, and pneumatic motor
BACK-PACK PNEUMATIC MODEL	
AV-2PBP	2 gallon, pneumatic motor, stainless steel vacuum with back pack fram (pictured above)

SEE PAGE 67 FOR REPLACEMENT BAGS, FILTERS, AND ACCESSORIES

Conductive Pneumatic HEPA Vacuums
Safely Remove Potential Static Charge Build-up

- Pneumatic spark free vacuum motor
- All aluminum non-sparking tools and 2-piece aluminum wand
- 10 ft., 1.5″ Conductive Vacuum hose with cuffs (grounds to tank)
- Motor head has grounding wire attached to the recovery can
- 25 ft. ground wire is attached to the vacuum recovery can to attach to a grounded external device for static removal

Specifications
- INLET PRESSURE: 1/2″ I.D. hose - 80psi
- INLET FLOW: 70cfm required
- VACUUM PRESSURE: 250″ water lift maximum, adjusted to 160″ water lift with relief valve
- VACUUM FLOW: 100 -170cfm based on inlet pressure
- NOISE LEVEL: 75dbA @ 90psi inlet pressure

AV-15P-CND

AV-55P-CND

Note: AV-55P-CND is supplied with all ground wires connected, conductive hose, steel drum and a 55 gallon drum dolly

Model No.	Description
AV-2P-CND	2 gallon recovery, pneumatic motor, stainless steel tank, complete with wand, filters, accessory tools and ground wires
AV-5P-CND	5 gallon recovery, pneumatic motor, stainless steel tank, wand, filters, accessory tools and ground wires
AV-15P-CND	15 gallon recovery, pneumatic motor, stainless steel tank, cart, wand, filter accessory tools and ground wires
AV-55P-CND	55 gallon drum lid assembly with HEPA filter, 1.5″ conductive 10ft hose, pneumatic motor, steel 55 gallon drum dolly, filters, accessory tools and ground wires
AV-55DL	Drum lid includes 1.5″ goose neck adapter (order motor, filters, and hoses separately)
AV-55DD	Drum Dolly - 55 gallon

SEE PAGE 67 FOR REPLACEMENT BAGS, FILTERS, AND ACCESSORIES

WARRANTY DISCLAIMER

Air Systems' manufactured equipment is warranted to the original user against defects in workmanship or materials under normal use for one year after date of purchase. Any part which is determined by Air Systems to be defective in material or workmanship will be, as the exclusive remedy, repaired or replaced at Air Systems' option. This warranty does not apply to electrical systems or electronic components. Electrical parts are warranted, to the original user, for 90 days from the date of sale. During the warranty period, electrical components will be repaired or replaced at Air Systems' option. Airline monitors are warranted for two years from date of purchase. Carbon monoxide sensors are warranted for two (2) years; oxygen sensors are warranted for one (1) year from date of purchase.

NO OTHER WARRANTY, EXPRESSED OR IMPLIED, AS TO DESCRIPTION, QUALITY, MERCHANTABILITY, FITNESS FOR A PARTIC-ULAR PURPOSE, OR ANY OTHER MATTER IS GIVEN BY AIR SYSTEMS IN CONNECTION HEREWITH. UNDER NO CIRCUMSTANCES SHALL THE SELLER BE LIABLE FOR LOSS OF PROFITS, ANY OTHER DIRECT OR INDIRECT COSTS, EXPENSES, LOSSES OR DAM-AGES ARISING OUT OF DEFECTS IN, OR FAILURE OF THE PRODUCT OR ANY PART THEREOF.

The purchaser shall be solely responsible for compliance with all applicable Federal, State and Local OSHA and/or MSHA requirements. Although Air Systems International believes that its products, if operated and maintained as shipped from the factory and in accordance with our "operations manual", conform to OSHA, MSHA , or NFPA requirements, there are no implied or expressed warranties of such compliance extending beyond the limited warranty described herein. **Product designs, specifications, and prices are subject to change without notice.**

Air leaks are not covered under warranty except when they result from a defective system component, i.e. an on/off valve or regulator or upon initial delivery due to poor workmanship. Air leaks due to poor delivery or damage will be covered under delivery claims. Minor air leaks are part of routine maintenance and service and are the responsibility of the customer just as filter and oil changes.

DISCLAIMER OF SAFE DELIVERY:
IMPORTANT NOTICE – WE DO NOT GUARANTEE SAFE DELIVERY

1. Our terms of sale are FOB our factory – the responsibility for damage in transit is the carrier's, whether it is visible damage or concealed damage.

2. Inspect truck shipments immediately. Insist that visible damages be indicated on your copy of the freight bill.

3. Claims for damages must be made immediately by you to the truck carrier.

4. **IN CASE OF DAMAGE BY UPS OR FED-X, CALL AIR SYSTEMS' REPAIR SERVICE FOR ASSISTANCE. DO NOT RETURN DAMAGED GOODS OR DISPOSE OF ORIGINAL PACKAGING MATERIALS UNTIL INSPECTED BY THE CARRIER.**

5. Merchandise shortage must be reported within 10 days of receipt of goods.

MERCHANDISE RETURNS

No equipment can be returned without prior factory authorization and return freight must be prepaid. Call Repair Service Dept. toll free: 1-800-866-8100 or 757-424-3967 to obtain a return authorization number. Equipment returned under 90 days must be in like new condition in order to receive credit. A return authorization form will be faxed to you for use as your return merchandise packing slip.

PATENT AND TRADEMARK DISCLAIMER

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CUSTOM APPLICATIONS

We welcome any custom design applications to meet your specific needs. We will provide technical drawings and installation recommendations to ensure proper utilization of equipment. We feel that this phase of our business is one of the most important services to our distributors and customers. Custom products, once approved by the customer and delivered, are not returnable for credit.

FILL COMPRESSOR QUESTIONNAIRE

Please fill out as completely as possible and fax back to (800) 247-5850.
If help is required, please contact us Monday - Friday 8AM - 5PM EST at (800) 866-8100

Cut Here and Fax to 1-800-247-5850

Contact Information

Contact Name: _____ Telephone Number: _____
Company Name: _____ Fax Number: _____
Address: _____ Email Address: _____
_____ Cellular Number: _____
City: _____ Method of Contact:
State: _____ Zip Code: _____ Phone ☐ Fax ☐ Email ☐

Fill Compressor

1. Would you prefer a mobile or stationary system? Portable ☐ Stationary ☐
   Trailer Mounted ☐ Skid Mounted ☐

2. Which power source would you prefer? 1-Phase Electric ☐ 3-Phase Electric ☐
   Gasoline ☐ Diesel ☐
   If electric: Voltage: 208 VAC ☐ 230 VAC ☐ 460 VAC ☐ Hertz: 60 Hz ☐ 50 Hz ☐

3. What pressure SCBA/SCUBA cylinders do you need to fill?
   2216 PSI ☐ 3000 PSI ☐ 4500 PSI ☐ 5000 PSI ☐

4. What is the maximum number of these cylinders to be filled per day (per use)?
   0-5 ☐ 6-10 ☐ 11-14 ☐ 15-19 ☐ 20-24 ☐ 25+ ☐

5. What is the CFM output _____cfm and pressure _____psi required?

6. Would you like a carbon monoxide monitor installed? Yes ☐ No ☐

Fill Station

1. What kind of fill station is preferred?
   NFPA-1901 Compliant Full Containment ☐ Partial Containment ☐ None ☐

2. If none, what length fill whip is required? 5 Ft. ☐ 10 Ft. ☐ 15 Ft. ☐
   25 Ft. ☐ 50 Ft. ☐ 100 Ft. ☐

3. What kind of control panel is required? Cascade-Style ☐ Bulk-Style ☐

4. Do you need safety fill adapters? Yes ☐ No ☐
   If yes, which pressure set(s) will you require? 2216 PSI ☐ 3000 PSI ☐ 4500 PSI ☐

5. How many SCBA's would you like to fill simultaneously? One ☐ Two ☐ Three ☐

Air Storage

1. Will you be purchasing an air storage system? Yes ☐ No - Using Existing Cylinders ☐
   No - Not Using Storage ☐
   If you are using existing cylinders, do you still need connection hardware? Yes ☐ No ☐

2. Will you prefer high pressure flexible whips or rigid stainless steel tubing?
   Flexible Whips ☐ Rigid Stainless Steel ☐

3. Storage Rack preferences: Vertical ☐ Horizontal ☐ Wall Mountable ☐ Free Standing ☐

4. How many storage cylinders would you like in this system? 2 ☐ 4 ☐ 6 ☐ 8 ☐ 10 ☐

PLANT AIR COMPRESSOR QUESTIONNAIRE
Please fill out as completely as possible and fax back to (800) 247-5850.
If help is required, please contact us Monday - Friday 8AM - 5PM EST at (800) 866-8100

Contact Information

Contact Name: _____   Telephone Number: _____
Company Name: _____   Fax Number: _____
Address: _____   Email Address: _____
              _____   Cellular Number: _____
City: _____   Method of Contact:
State: _____ Zip Code: _____   Phone ☐   Fax ☐   Email ☐

System Requirements

1. This system will need to be: Portable ☐   Stationary ☐

    If Stationary, this system will be permanently located   Indoors ☐   Outdoors ☐

2. What are the power requirements for this system?

    1-Phase Electric ☐   3-Phase Electric ☐   Gasoline ☐   Diesel ☐

    If electric, what are the voltage requirements?

    115 VAC ☐   208 VAC ☐   230 VAC ☐   460 VAC ☐   60 Hz ☐   50 Hz ☐

3. What type of respirator is being used?

    Pressure Demand Mask ☐   Continuous Flow Mask ☐   Continuous Flow Hood ☐

4. What are the flow and pressure requirements? _____ cfm @ _____ psi

5. Are cooling tubes being used (i.e. Vortex)? If so, what are the flow and pressure requirements?
    _____ cfm @ _____ psi

6. How many workers do you anticipate using this system at any given time? (quote maximum) _____

7. What other types of devices are you planning to use? (pneumatic tools, air vests, etc.)
    _____

8. Will remote air manifolds (point-of-attachments) be required? Yes ☐   No ☐

9. Number of remote air manifolds required?   1 ☐   2 ☐   3 ☐   4 ☐   5 ☐   6 ☐   Other: ☐

10. Number of outlets desired per manifold?   1 ☐   2 ☐   3 ☐   4 ☐   5 ☐   6 ☐   Other: ☐

11. Will the remote air manifold need to be: Portable (Case Mounted) ☐   Stationary (Wall Mounted) ☐

12. Will audible and/or visual remote alarms be required? Yes ☐   No ☐

    If Yes, Audible ☐   Visual ☐   Both ☐

13. Will this system be used in an IDLH (Immediately Dangerous to Life or Health) environment? Yes ☐   No ☐

14. Are there any special environmental conditions that may exist where the system is located?
    (i.e. rain, chemicals, vapors, dust, heat, cold, etc) _____

Cut Here and Fax to 1-800-247-5850

UNDERSTANDING QUICK CONNECT FITTINGS

Air Systems offers standard 1/4" Hansen style Industrial Interchange Brass (pull to disconnect style) or 1/4" Schrader Twist Lock (Twist to disconnect style)fittings on most of our products. In ALL cases, the fitting on the end of the respirator hose and what it is being connected to MUST be compatible or they will not connect. For example, Hansen 1/4" Industrial Interchange plug fits to a 1/4" Industrial Interchange Socket.

Fitting – can refer to either a plug or a socket

Plug - Is commonly referred to as the male end

Hansen Style Plug Male Threads   Hansen Style Plug Female Threads   Schrader Style Plug Male Threads   Schrader Style Plug Female Threads

Socket - Is commonly referred to as the female end

Hansen Style Socket with Male Threads   Hansen Style Socket with Female Threads   Schrader Style Socket Male Threads   Schrader Style Socket Female Threads

MPT (male pipe thread) - threads that are on the outer body part of a plug or socket. Thread sizes are typically 1/8", 1/4", 3/8", 1/2" or 3/4" pipe thread. A fitting that has male pipe threads (MPT) can only mate to something with female pipe threads (FPT) that are of the same pipe thread size.

This male end will only thread to female pipe threads of the same size →

FPT (female pipe thread) - threads that are on the inner body part of a plug or socket. Thread sizes are typically 1/8", 1/4", 3/8", 1/2" or 3/4" pipe thread. A fitting that has female pipe threads (FPT) can only mate to something with male pipe threads (MPT) that are of the same pipe thread size.

This end will only thread to male pipe threads of the same size →

"Nominal" refers to the inner diameter size that the compressed air passes through. A plug and socket must both have the same "nominal size" in order to mate together properly.

← **1/4″ Inner diameter of the Socket**

1/4″ Inner diameter of the Plug →

When "coupling" a plug and socket together, only the "nominal" diameter size must be the same; thread sizes may differ. When trying to attach a plug or socket to another device, the thread size must match and if the fitting has male threads, the part being connected to must have female threads and visa versa.

There are a large number of companies manufacturing quick connect couplings. Hansen, Parker and Foster are a few of the more popular names. Almost all manufacturers make an industrial interchange style. A 1/4″ industrial interchange from Hansen will be compatible with a 1/4″ industrial interchange with either Parker or Foster. If a customer states they are in need of a Foster fitting, ask them if it is a Foster Schrader or Foster Hansen style. We can cross reference additional fitting types, please provide part numbers that are imprinted on the socket or plug.

QUICK-CONNECT COUPLINGS*

• Hansen • Schrader • Parker • Snap-Tite • National • Perfecting • CEJN • Chicago
* Specify size and type when ordering breathing air systems and hoses

CEJN Plug   Hansen Plug   Schrader Plug   Chicago Coupling   Snap-Tite Plug   Hansen S.S. HK Plug

CEJN Coupling   Hansen Coupling   Schrader Coupling   Chicago Coupling   Snap-Tite Coupling   Hansen S.S. HK Coupling

Look What's Inside

Customer Service
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