



Products Catalog

VICTOR

VICTOR
Specialty Products

VICTOR
Medical

 **TurboTorch**

Tweco

Tweco
Robotics

Arcair

THERMAL DYNAMICS
AUTOMATION

THERMAL DYNAMICS

THERMAL ARC

STOODY

Thermadyne® is a manufacturer and marketer of some of the most respected brands in the industry. Through our network of distributors, we are proud to serve a diverse group of skilled individuals including:



JUSTIN “RED” WEIRICH Willerd Metal Fabrication [O’Fallon, MO]

Justin specializes in TIG aluminum, but is an expert in MIG. Thermal Dynamics®, Tweco® and Victor® help him do things that other people only wish they could do.



LIEUTENANT JAMES C. STANFIELD Palm Beach Fire Rescue [Palm Beach, FL]

Lt. Stanfield is a technical rescue officer for the Palm Beach Fire Rescue team. To help them prepare for any type of emergency, they recently added a Thermal Dynamics portable plasma cutting system to their Special Operations Truck.



TERESA MAXEY Maximum Welding [Sioux City, IA]

Teresa is a decorative artist and a businesswoman. She has incredible influence on young women who take up welding. She encourages people not to fear being adventurous with their work.



JEFFREY STEWART Instructor/Consultant Technical Welding Services, Inc. [Dryden, Michigan]

Jeff excelled in welding and represented the state of Michigan in the SkillsUSA Championships in 1981. He won 3 state welding medals, 2 regional gold medals and 1 silver national medal, launching his welding career.



ROBERT RUSH Millcraft SMS Services [Washington, PA]

Robert Rush learned welding on the job, and has been doing it everyday for the past 30 years. He is part of a team that repairs equipment for steel mills keeping these companies operational and in business.



TOM HEEGER President, Acme Erectors [St. Louis, MO]

Welding has been good to Tom. After years of being a welder, he became an owner by purchasing Acme Erectors in 1995 and grew it from a three-person shop to a large diversified corporation.



BROTHER MELVIN MEYER, S.M. Artist-in-Residence Marianist Galleries [St. Louis, MO]

Brother Mel has been welding metal into art for nearly 50 years. He first started welding when someone just gave him a torch. He soon discovered that welding was in his blood. From there, he moved quickly into the big welders and cutters.



BILL MOORE Ironworkers Local 396 [O’Fallon, MO]

Bill’s dad was an ironworker. He taught Bill how to weld when he was 15. Today, Bill applies his craft at Weaver Steel and has contributed to building significant landmarks, sports venues and public arenas.



TIMOTHY MULLALLY Ironworker Local 361 [New York City, NY]

He chose to pursue a career as an ironworker because he likes working on the big visible projects. He works for one of the world’s leading construction groups. They restore and build notable landmarks in New York.



Bringing You The Most Respected Names In Welding.

Our company is comprised of many of the most respected market leading brands in the welding and metal fabricating industry. Thermadyne product lines include oxy-fuel welding and cutting torches and regulators, plasma arc cutting and welding systems, arc welding power supplies, hardfacing and welding alloys, a wide array of manual and semi-automatic arc welding torches, tips and accessories, and high pressure gas control products. The scope of Thermadyne products allows the company to serve industries ranging from transportation and construction to mining, energy exploration, and a full range of manufacturing areas.

Thermadyne's business philosophy is founded on a commitment to growth through strategic acquisitions, aggressive new product development, superior quality and reliability, and service excellence on a worldwide basis. Thermadyne remains at the forefront of welding technology holding more than 340 U.S. and foreign patents. Our products are designed to deliver added value for our customers through enhanced safety, improved efficiency and productivity, and an improved working environment.

Service excellence is a long-standing tradition and trademark for Thermadyne companies, and we believe that excellent service is best defined by our customers. While we continually strive to raise our internal service quality standards and measurements, we also listen closely to our customers in all industries. Superior customer care extends far beyond our offices and manufacturing facilities. Thermadyne's field sales representatives and technical support personnel are recognized as the finest in the industry providing unequalled levels of service and customer training.

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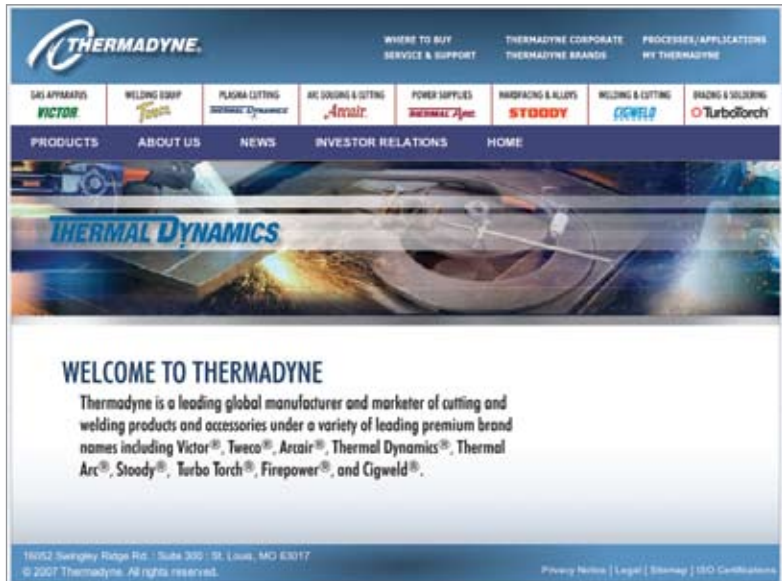
Thermadyne On-Line.

www.thermadyne.com

This catalog is provided as a starting point and overview for Thermadyne distributors and end-users. We hope this catalog will be helpful but we understand that the information in any printed catalog will be somewhat static. Because greater numbers of people look to the internet for current information about our brands and products, we have made significant improvements to our website. Changes have been straightforward and always with our customers in mind.

Our website features:

- Quality graphic design with a friendly, inviting appearance.
- Integrated campaigns, news, promotions and marketing materials.
- Each individual brand within the website has similar feel in design and navigation, but each brand has colors schemes, banners and graphic elements that makes them unique and distinct.
- Intuitive navigation system that allows new sections and pages to be added and changed as updated information is required.
- Enhanced ability to locate and compare product offerings.
- Improved functionality and usefulness for distributors of MY THERMADYNE, the password protected and secure area of the site.



The web is an interactive resource and, for that reason, we will always be looking for ways to improve it. We encourage you to visit our website often for the latest product and brand information available.

Look for the keyword search tips in each section of this catalog and a keyword search index on the next page to help you find the products and information you seek on our website at **www.thermadyne.com**.

THERMADYNE Website Search Tip – If you do not know the exact name or part number of the product you are looking for, try to use a wildcard search using an asterisk. Example: cutmaster* or victor*

Keyword Search Index

To help in searching our new Thermadyne® website, here are some keywords sorted by brand:

(Note: * Denotes a Wildcard search and is needed to give most comprehensive search results)

VICTOR®

Outfits

Professional (Product Name)	CutSkill® (Product Name & Number)	FirePower® (Product Name & Number)
Journeyman	CutSkill 450	FirePower 350
SuperRange	CutSkill 350	FirePower 250
Cutter Select*	CutSkill 250	
Portable Torch		

Regulators & Flowmeters

Professional (Series, Type*)	CutSkill (Series, Type*)	FirePower (Series, Type)
SR 700*	RC 450*	RF 350*
AF 250*	RC 350*	RF 250*
HRF 2400*	RC 250*	
SR 4*		

Straight Torches

Professional (Name or Model No.)	CutSkill	FirePower
ST 2600FC*	Not Applicable	Not Applicable
ST 1000FC*		
Bulldog*		

Handles & Attachments

Professional (Product Name/Part No.)	CutSkill (Product Name/Part No.)	FirePower (Product Name/Part No.)
315FC*	WH 370FC-V	WH 370FC-FS
8-MFA-1*	WH 270FC-V	WH 270FC-FS
CA 2460*	CA 370-V	CA 370-FS
Type 55*	CA 270-V	CA 270-FS

Oxy-Fuel Cutting Tips

Professional (Size, Series, Type)	CutSkill (Size, Series, Type -no dashes)	FirePower
1-1-101	CS111011	Not Applicable
1-3-101	CS31011	
1-GPP	CSGPP1	
1-HPN	CSHPN1	

Safety Accessories

Professional (Size, Series, Type)	CutSkill	FirePower
CTR*	Not Applicable	Not Applicable
CTO		
CTF*		
Flamebuster		

Tweco®

MIG Guns

Professional (Product Name/Part No.)	WeldSkill® (Product Name)	FirePower
415116	250 Amp WeldSkill	Not Applicable
350 Amp SprayMaster	SpitFire	
Smoke Master		
Hobby		

MIG Consumable Parts

Professional (Part No.)	WeldSkill (Part No.)	FirePower
1435	WS1435	Not Applicable
52FN	WS52	
24CT	WS24CT	

Manual Products

Professional (Product Name)	WeldSkill	FirePower
A532	Not Applicable	Not Applicable
GC300		
Magnetic Ground Clamp		
T120		

Conductor Tube

Professional (Product Name/Part No.)	WeldSkill	FirePower
MS6360S	Not Applicable	Not Applicable
356060		
Flex*		

Arcair®

Manual Torches

Professional (Product Name)	CutSkill (Product Name)	FirePower
K3000	CS4000	Not Applicable
K4000		
K-5*		
Tri-Arc*		

Slice®

Professional (Product Name)	CutSkill	FirePower
Utility Pack	Not Applicable	Not Applicable
Industrial Pack		
Battery Pack		
Complete Pack		

Metal Working Chemicals

Professional (Product Name)	CutSkill	FirePower
Protex Original	Not Applicable	Not Applicable
Protex Tip Dip		
Protex Clear		
Protex Alc Clean		

Under Water Cutting

Professional (Product Name)	CutSkill	FirePower
Sea-Stinger*	Not Applicable	Not Applicable
Sea Torch*		
Arcrewater II*		

Manual Systems

Professional (Product Name)	CutSkill®	FirePower®
CUTMASTER 39 CUTMASTER 52 CUTMASTER 82 AirCut 15C PAK 200	Not Applicable	Not Applicable

Automation Systems

Professional (Series, Type*)	CutSkill	FirePower
Auto-Cut* Ultra-Cut* Auto-Cut 200 Ultra-Cut 200	Not Applicable	Not Applicable

Torches (Manual/Automated)

Professional (Name or Model No.)	CutSkill	FirePower
PCH-10* PCH-25* 1Torch SL60 PCH-51* PCM-51*	Not Applicable	Not Applicable

Consumable Parts (Manual/Automated)

Professional (Part No.)	CutSkill (Part No.)	FirePower
9-6501 9-5751 9-8215 20-1010	CS96501 CS95751	Not Applicable

Welding Supplies

Professional (Product Name)	WeldSkill® (Product Name)	FirePower
PowerMaster 500* ArcMaster 185 ACDC ArcMaster 400MST Fabstar 4030*	Fabricator 251 Dragster 85	Not Applicable

Plasma Welding

Professional (Product Name*)	WeldSkill	FirePower
Ultima 150	Not Applicable	Not Applicable

Wire Feeders

Professional (Product Name)	WeldSkill	FirePower
Portafeed VS 212* Hefty II Ultrafeed VA 4000 Ultrafeed A 2000	Not Applicable	Not Applicable

Consumable Parts (Manual/Automated)

Professional (Product Name/Part No.)	WeldSkill	FirePower
Autocraft 70S-6	Not Applicable	Not Applicable

Build Up & Joining

Carbon Steel (Product Name)	Manganese Steel (Product Name)	Mang/Carbon Steels (Product Name)	Cast Iron (Product Name)
Built Up LH Stoody Build Up Stoody 104 Thermaclad	Dynamang* Nicromang* Trackwear*	Stoody 2100 Versalloy Plus Stoody 110*	Castweld 55 Castweld Ni55-0

Metal to Metal Wear

Electrodes/Rods (Product Name)	Open Arc/Gas Shield (Product Name)	Submerged Arc (Product Name)
Stoody 1105 Stoody 1102 Rail End 932	Super Build Up Stoody 105-G Stoody 964-G	Stoody 107 Stoody 105B Stoody 102 Thermaclad 42

Metal to Earth

Electrodes/Rods (Product Name)	Open Arc/Gas Shield (Product Name)	Submerged Arc (Product Name)
Self Hardening Stoody 77 Stoody 35 Stoody 20	Stoody 965-G Stoody 121 Stoody 101HC Super 20	Stoody 103CP Stoody 143-S Stoody 145-S

Metal to Earth (Extreme Abrasion) Tungsten & Vanadium Carbide

Electrodes/Rods (Product Name)	Open Arc/Gas Shield (Product Name)	Submerged Arc (Product Name)
Borium* Van-Car*	Stoody 130 Stoody 140 Stoody 160D Van-Car*	Not Applicable

Abrasion & Corrosion (Cobalt & Nickel Base)

Electrodes/Rods (Product Name)	Open Arc/Gas Shield (Product Name)	Submerged Arc (Product Name)
Stoodyite* Stoodyite 6 Stoody 60 Stoody C	Stoodyite* Stoodyite 6 Stoody 60 Stoody C	Stoodyite* Stoodyite 6 Stoody 21 Stoody C

NOTES:

- Not all products contain marketing details. If you wish for us to add an item or items, please notify webadmin@thermadyne.com with the products in question.
- By clicking New Search, you will start your product search over from the beginning.
- To search for a phrase, use quotation marks, i.e. "300 ACDC".
- Please follow keyword search as shown above. If no space in name, do not add a space. (315FC will give a different result than 315 FC)



Victor Professional Equipment

Victor is committed to providing superior quality, reliable equipment that earn our customers' confidence. Victor equipment and services are recognizably better than those of our competitors by consistently meeting customers expectations and by providing safe, reliable performance.

Victor Professional Outfits

For Acetylene, Hydrogen & Alternate Fuels

Professional Series Welding, Cutting & Heating OUTFITS Standard Features

- Stainless steel panel toolbox

Optimum Safety

- Built-in reverse flow check valves and flashback arrestors
- Includes T grade hose for use with any fuel gas
- Self-reseating relief valve protects regulator
- Includes color coded gauges

Cutting Attachment

- Operates with any fuel gas
- Meets third party listing that conforms to CGA E-4.

Journeyman®

Applications

Capable of welding from 1/32"/.79mm up to 3"/75mm with appropriate welding nozzle and cutting from 1/8"/3mm up to 8"/200mm with appropriate cutting tip.

Journeyman Components

- Heavy Duty CSR450 Series Regulators with Stainless Steel Diaphragms and Gauge Guards
- Heavy Duty H315FC Torch Handle
- CA2460 Cutting Attachment
- Welding Nozzles, Sizes: 1, 3, 5 (see chart for welding capacities)
- MFA Heating Nozzle, Size 8
- Cutting Tip: 1-1-101 (cuts up to 3/4"/19mm)
- 25' x 1/4" T Grade Multi-fuel Hose, Soft Sided Shade 5 Goggles, Multi-wrench and Tip Cleaner



Journeyman® II

Applications

Capable of welding from 1/32"/.79mm up to 3"/75mm with appropriate welding nozzle and cutting from 1/8"/3mm up to 8"/200mm with appropriate cutting tip.

Journeyman II Components

- Heavy Duty CSR450 Series Regulators with Stainless Steel Diaphragms and Gauge Guards
- Heavy Duty 315FC Torch Handle
- CA2460 Cutting Attachment
- Welding Nozzle, Sizes: 2 (welds 1/16"/1.5mm to 1/8"/3mm)
- Cutting Tip: 1-1-101 (cuts up to 3/4"/19mm)
- 25' x 1/4" T Grade Multi-fuel Hose, Soft Sided Shade 5 Goggles, Multi-wrench and Tip Cleaner



Contender®

Applications

Capable of welding from 1/32"/.79mm up to 3"/75mm with appropriate welding nozzle and cutting from 1/8"/3mm up to 8"/200mm with appropriate cutting tip.

Contender Components

- Heavy Duty CSR350 Series Regulators with Gauge Guards
- Heavy Duty 315FC Torch Handle
- CA2460 Cutting Attachment
- 6 MFA Heating Nozzle
- Cutting Tip: 1-1-101 (cuts up to 3/4"/19mm)
- 25' x 1/4" T Grade Multi-fuel Hose and Striker



SuperRange® II

Applications

Capable of welding from 1/32"/.79mm up to 1 1/4"/31mm with appropriate welding nozzle and cutting from 1/8"/3mm up to 6"/150mm with appropriate cutting tip.

SuperRange II Components*

- Heavy Duty CSR350 Series Regulators with Gauge Guards
- Medium Duty 100FC Torch Handle
- CA1350 Cutting Attachment
- W-1 Welding Nozzles, Size: 2 (welds 1/16"/1.5mm to 1/8"/3mm)
- Cutting Tip: 0-3-101 (cuts up to 1/2"/12mm)
- 25' x 1/4" T Grade Multi-fuel Hose, Soft Sided Shade 5 Goggles, Multi-wrench and Tip Cleaner



* SuperRange II with 6MFA Optional Outfit

Performer®

Applications

Capable of welding from 1/32"/.79mm up to 1 1/4"/31mm with appropriate welding nozzle and cutting from 1/8"/3mm up to 6"/150mm with appropriate cutting tip.

Performer Components

- Medium Duty CSR250 Series Regulators with Gauge Guards
- Medium Duty 100FC Torch Handle
- CA1350 Cutting Attachment
- W-1 Welding Nozzles, Size: 0 (welds 1/32"/.8mm to 5/64"/2mm)
- Cutting Tip: 0-3-101 (cuts up to 1/2"/12mm)
- 12 1/2' x 3/16" T Grade Multi-fuel Hose, Soft Sided Shade 5 Goggles, Multi-wrench and Tip Cleaner



Journeyman® AF

Applications

Capable of cutting up to 8"/200mm with appropriate cutting tip.

Journeyman Components

- Heavy Duty CSR450 Series Regulators with Stainless Steel Diaphragms and Gauge Guards
- Heavy Duty H315FC Torch Handle
- CA2460 Cutting Attachment
- Heating Nozzle, Size 8 Type 55
- Cutting Tip: 1-GPN & 1-1-103 MP (cuts up to 3/4"/19 mm)
- 25' x 1/4" T Grade Multi-fuel Hose, Soft Sided Shade 5 Goggles and Multi-wrench



Portable Torch™

Applications

Capable of welding from 1/32"/.79mm up to 1 1/4"/31mm with appropriate welding nozzle and cutting from 1/8"/3mm up to 4"/100mm with appropriate cutting tip.

Portable Torch Components

- 150 Series Regulators with Color-coded Gauges
- Medium Duty 100FC Torch Handle
- CA1350 Cutting Attachment
- W-1 Welding Nozzles, Sizes: 1 (welds 3/64"/1.2mm to 3/32"/2.4mm)
- Cutting Tip: 0-3-101 (cuts up to 1/2"/12mm)
- Includes 10' x 3/16" T Grade Hose, Goggles and Lighter
- Cylinders Optional
- Built-in Reverse Flow Check Valves and Flashback Arrestors
- Cutting Attachment Operates with Any Fuel Gas



* Requires sufficient acetylene & oxygen supply

Professional Series SELECT CUTTING OUTFITS Standard Features

For use with any fuel gas

- One cutting torch, for use with all fuel gases with the proper cutting tip.
- Available with 75° or 90° head angle depending on your need.

Journeyman® Select

Applications

Capable of welding from 1/32"/.79mm up to 3"/75mm with appropriate welding nozzle and cutting from 1/8"/3mm up to 8"/200mm with appropriate cutting tip.

Components

- Heavy Duty CSR450 Series Regulators
- Heavy Duty 315FC Torch Handle
- CA2460 Cutting Attachment



Cutter Select™ (ST 2600FC)

Applications

Cuts 1/8"/3mm up to 8"/200mm

Components

- ST 2600FC Cutting Torch
- Heavy Duty CSR450 Series Regulators



Cutter Select™ (ST 1000FC)

Applications

Cuts 1/8"/3mm up to 5"/125mm

Components

- ST 1000FC Cutting Torch
- Heavy Duty CSR350 Series Regulators



Cutter Select™ (ST 900FC)

Applications

Cuts 1/8"/3mm up to 5"/125mm

Components

- ST 900FC Cutting Torch
- Heavy Duty CSR350 Series Regulators



**See our full line catalog
or visit us on the web
at www.victorequip.com
for more information.**

**Victor Professional &
Heavy Industry**
Gas Equipment Catalog
(Form No. 65-2007)



Ordering Information

Part No.	Description	Torch Handle	Welding Nozzle	Cutting Attachment	Cutting Tip	Heating Nozzle	Oxygen Regulators	Fuel Gas Regulator	Accessories
0384-2009	Journeyman®	H315FC	(W) 1,3,5	CA 2460	1-1-101	8-MFA	CSR 450D-540	CSR 460A-510	"T" Grade 25 X 1/4 Hose, Goggles & Lighter
0384-2011	Journeyman	H315FC	(W) 1,3,5	CA 2460	1-1-101	8-MFA	CSR 450D-540	CSR 460A-300	
0384-2020	Journeyman II	315FC	(W) 2	CA 2460	1-1-101	—	CSR 450D-540	CSR 460A-510	
0384-2021	Journeyman II	315FC	(W) 2	CA 2460	1-1-101	—	CSR 450D-540	CSR 460A-300	
0384-0834	SuperRange® II	100FC	(W-1)2	CA 1350	0-3-101	—	CSR 350D-540	CSR 360A-510	
0384-0836	SuperRange II	100FC	(W-1)2	CA 1350	0-3-101	—	CSR 350D-540	CSR 360A-300	
0384-0839	SuperRange II	100FC	(W-1)2	CA 1350	0-3-101	6-MFA-1	CSR 350D-540	CSR 360A-510	
0384-0822	SuperRange II	100FC	(W-1)2	CA 1350	0-3-101	6-MFA-1	CSR 350D-540	CSR 360A-300	"T" Grade 25 X 1/4 Hose, & Lighter
0384-0870	Contender®	315FC	—	CA 2460	1-1-101	6-MFA	CSR 350D-540	CSR 360A-510	
0384-0871	Contender®	315FC	—	CA 2460	1-1-101	6-MFA	CSR 350D-540	CSR 360A-300	"T" Grade 12-1/2 X 3/16 Hose, Goggles & Lighter
0384-0865	Performer®	100FC	(W-1)0	CA 1350	0-3-101	—	CSR 250C-540	CSR 260A-510	
0384-0867	Performer	100FC	(W-1)0	CA 1350	0-3-101	—	CSR 250C-540	CSR 260A-300	

Journeyman AF (Alternate Fuel)

Part No.	Description	Torch Handle	Welding Nozzle	Cutting Attachment	Cutting Tip	Heating Nozzle	Oxygen Regulators	Fuel Gas Regulators	Accessories
0384-2022	Journeyman AF	H315FC	—	CA 2460	1-GPN (Propane) 1-1-303MP (Propylene)	8T55	CSR 450D-540	CSR 461B-510	"T" Grade 25' x 1/4" Hose, Goggles, Lighter

Portable Torch™ Kit

Part No.	Description	Torch Handle	Welding Nozzle	Cutting Attachment	Cutting Tip	Heating Nozzle	Oxygen Regulators	Fuel Gas Regulators	Accessories
0384-0936	Portable Torch w/Cyl	100FC	(W-1) 1	CA 1350	0-3-101	—	CSR 150CR-540	CSR 160AR (MC)	"T" Grade 12-1/2' X 3/16" Hose, Goggles & Lighter
0384-0935	Portable Torch w/Cyl	100FC	(W-1) 1	CA 1350	0-3-101	—	CSR 150CR-540	CSR 160AR (MC)	

Journeyman Select

Part No.	Description	Torch Handle	Welding Nozzle	Cutting Attachment	Cutting Tip	Heating Nozzle	Oxygen Regulators	Fuel Gas Regulators	Accessories
0384-0812	Journeyman Select	315FC	—	CA 2460	—	—	CSR450D-540	CSR 460A-510	—
0384-0813	Journeyman Select	315FC	—	CA 2461	—	—	CSR450D-540	CSR 460A-510	—
0384-0814	Journeyman Select	315FC	—	CA 2460	—	—	CSR450D-540	CSR 460A-300	—
0384-0816	Journeyman Select	315FC	—	CA 2460	—	—	CSR450D-540	CSR 461B-510LP	—

Cutter Select™

Part No.	Description	Torch/Head Handle°	Oxygen Regulator	Fuel Gas Regulator	Fuel Gas
0384-0847	ST2600FC Cutter Select	ST2600FC 21" 90°	CSR450D-540	CSR 460A-510	Acetylene
0384-0848	ST2600FC Cutter Select	ST2600FC 21" 90°	CSR450D-540	CSR 460A-300	Acetylene
0384-0850	ST2601FC Cutter Select	ST2601FC 21" 75°	CSR450D-540	CSR 460A-300	Acetylene
0384-0851	ST2600FC Cutter Select	ST2600FC 21" 90°	CSR450D-540	CSR 461B-510	Propane/Natural Gas, Propylene
0384-0853	ST900FC Cutter Select	ST900FC 21" 90°	CSR350D-540	CSR 360A-510	Acetylene
0384-0854	ST900FC Cutter Select	ST900FC 21" 90°	CSR350D-540	CSR 360A-300	Acetylene
0384-0855	ST901FC Cutter Select	ST901FC 21" 75°	CSR350D-540	CSR 360A-510	Acetylene
0384-0857	ST900FC Cutter Select	ST900FC 21" 90°	CSR350A-540	CSR 361B-510	Propane/Natural Gas, Propylene
0384-0859	ST1000FC Cutter Select	ST1000FC 21" 90°	CSR350D-540	CSR 360A-510	Acetylene
0384-0860	ST1000FC Cutter Select	ST1000FC 21" 90°	CSR350D-540	CSR 360A-300	Acetylene

Victor Professional Regulators / Flowmeters

Professional Series REGULATOR Standard Features

- A wide variety of delivery ranges and gases.
- Meets third party listing that conforms to CGA E-4.

700 Series

Single & Two Stage Cylinder Type Regulators

- High Volume Heavy Duty
- Forged Brass Body
- 2½" Brass Gauges
- Delrin Bushing
- Stainless Steel Diaphragm
- ½" Outlet Connection



450 Series

Single & Two Stage Cylinder Type Regulators

- Heavy Duty
- Forged Brass Body and Housing Cap
- 2½" Brass Gauges
- Delrin Bushing
- Stainless Steel Diaphragm
- Optional Gauge Guards and Colored Gauges



350 Series

Single & Two Stage Cylinder Type Regulators

- Heavy / Medium Duty
- Forged Brass Body and Housing Cap
- 2½" Brass Gauges
- Delrin Bushing
- Optional Gauge Guards and Colored Gauges



250 Series

Single & Two Stage Cylinder Type Regulators

- Medium Duty
- Forged Brass Body and Housing Cap
- 2" Brass Gauges
- Delrin Bushing
- Optional Gauge Guards and Colored Gauges



AF 250 / CF 253

Flowgauge Regulators

- Medium Duty
- Forged Brass Body and Housing Cap
- 2" Brass Gauges
- Delrin Bushing
- Sintered Inlet Filter
- 1¼" Diaphragm



HRF 2400

Single Stage Regulator Flowmeter

- Regulator/Flowmeter Combination in One Compact Unit
- Ideal for MIG/TIG Applications
- Calibrated Tube at 25 PSIG
- Cover Tube Contains Over Pressure Protection



DFM Dual Flow

Dual Flow Regulator Flowmeter

- Designed to Monitor Two (2) Separate Processes of Gas Flow
- Brass Body
- Teflon Seat
- Sintered Inlet Filter
- Lexan Cover Tubes
- Brass Piston
- Aluminum Ball (Flowmeter Version)



SR 4

Single Stage Piston Style Regulator

- High Pressure Delivery 50 to 4500 PSI
- Machined Body and Cap
- 2½" Gauges
- Delrin Bushing



S 700 / S 350 / S 250

High Volume Station Regulators

- Heavy Duty (S 700), Medium/Heavy Duty (S 350) and Light Duty (S 250)
- Forged Brass Body and Housing Cap
- Maximum Inlet Pressure: 200 PSIG
- Delrin Bushing



L 700 / L 350 / L 250

High Volume Line Regulators

- Heavy Duty (L 700), Medium/Heavy Duty (L 350) and Light Duty (L 250)
- Forged Brass Body and Housing Cap
- Maximum Inlet Pressure: 350 PSIG
- Delrin Bushing



See page 22 for ordering information on available gauge guards.



Gas Equipment

Victor Professional Torch Handles

Professional Series TORCH HANDLE Standard Features

- Covers a full range of welding, cutting and heating needs.
- Safety - Built-in flashback arrestors and reverse flow check valves.
- Threaded assembly for economical service.
- Meets third party listing that conforms to CGA E-4.

H315FC / 315FC

Heavy Duty Torch Handles

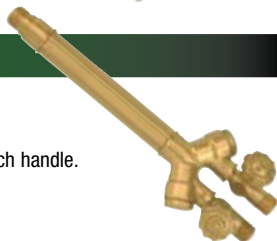
- The CA 2460 series cutting attachment is performance matched to both the H315FC and 315FC torch handle.
- H315FC is a high flow torch handle.



100FC

Medium Duty Torch Handle

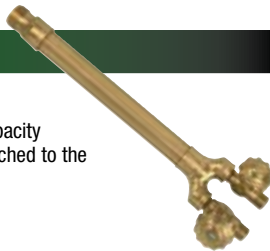
- The 1350 series cutting attachment is performance matched to the 100FC torch handle.



HD310C

Victor Heavy Industry Torch Handle

- The HD310C is compatible with high capacity heating nozzles and is performance matched to the CA 2460 series cutting attachment.



Victor Professional Cutting Attachments

Professional Series CUTTING ATTACHMENT Standard Features

For use with any fuel gas

- One cutting attachment or torch, for use with all fuel gases with the proper cutting tip.

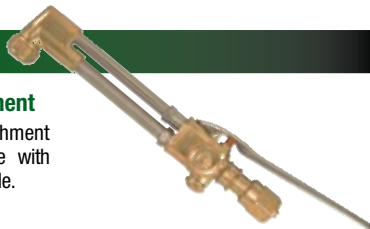
CA 2460 Series

Heavy Duty Cutting Attachment

The 2460 series cutting attachment is performance matched for use with H315FC and the 315FC torch handle.

Head Angles: 90°, 75°, 180°

Cutting Range: 8"/200mm



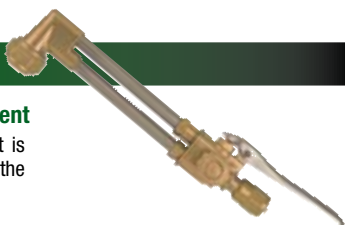
CA 1350 Series

Medium Duty Cutting Attachment

The 1350 series cutting attachment is performance matched for use with the 100FC torch handle.

Head Angles: 90°, 75°, 180°

Cutting Range: 6"/150mm



Victor Professional Nozzles

Professional Series HEATING / WELDING NOZZLE Standard Features

- Available in a wide variety of sizes.

Type MFA (Acetylene)

Heavy Duty Heating Nozzle

Multi-flame heating head for heat treating, straightening & priming.



Type MFA-1 (Acetylene)

Medium Duty Heating Nozzle

Multi-flame heating head for heat treating, straightening & priming.



Type MFN (Propane / Natural Gas)

Heavy Duty Heating Nozzle

Multi-flame heating head for heat trimming, straightening & priming. Use with HD310C torch handle and 3/8" hose.



Type 55 (All Alternate Fuel Gases)

Heavy Duty Heating Nozzle

Multi-flame heating head for heat trimming, straightening & priming. Use with HD310C torch handle and 3/8" hose.



Type W (Acetylene)

Heavy Duty Heating Nozzle

General purpose welding & pre-heating.



Type W-1 (Acetylene)

Medium Duty Heating Nozzle

General purpose welding & pre-heating.



Victor Professional Straight Cutting Torches

Professional Series STRAIGHT CUTTING TORCH Standard Features

For use with any fuel gas

- One cutting attachment for use with all fuel gases with the proper cutting tip.

ST 2600FC

Straight Cutting Torch

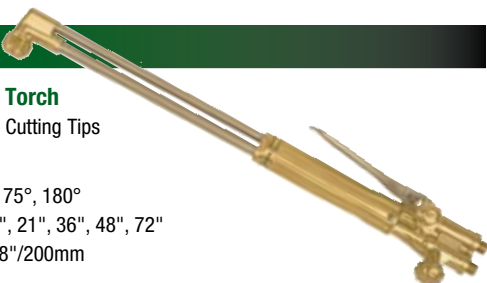
- Uses Series 1 Cutting Tips

OPTIONS

Head Angles: 90°, 75°, 180°

Torch Lengths: 17", 21", 36", 48", 72"

Cutting Capacity: 8"/200mm



ST 1000FC

Straight Cutting Torch

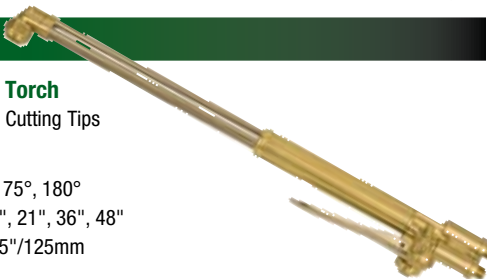
- Uses Series 1 Cutting Tips

OPTIONS

Head Angles: 90°, 75°, 180°

Torch Lengths: 17", 21", 36", 48"

Cutting Capacity: 5"/125mm



ST 900FC

Straight Cutting Torch

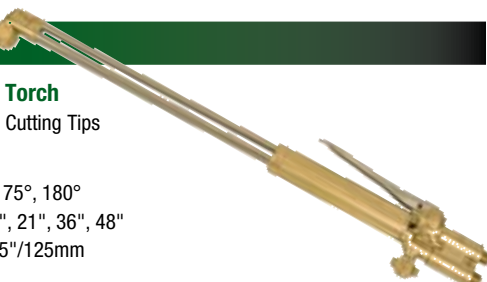
- Uses Series 1 Cutting Tips

OPTIONS

Head Angles: 90°, 75°, 180°

Torch Lengths: 17", 21", 36", 48"

Cutting Capacity: 5"/125mm



Straight Torch Users Guide

Torch Series	Gas Type	Cutting Capacity*
CST800FC	Multi-Fuel	4"
ST900FC	Multi-Fuel	5"
ST1000FC	Multi-Fuel	5"
ST2600FC	Multi-Fuel	8"
HC1100C	Propane/Natural Gas	14"
HC1200C	Propane/Natural Gas	18"
HC1400	Propane/Natural Gas	30"
HC1500C	Propane/Natural Gas	48"

*with optional tips.

The high capacity HEAVY INDUSTRY straight cutting torches in the right hand column of this page are designed for heavy cutting applications found in such industries as scrapping, demolition and foundries.

Although built to Victor's quality and safety standards, due to the cutting capacity and/or design of each torch, flashback arrestors are not manufactured into these Victor Heavy Industry Torches.

To reduce the risk of personal injury, death and/or property damage, use sufficient capacity flashback arrestors with all Victor Heavy Industry Torch Products. Alternative fuel gas only refers to Propane, Natural Gas and Propylene Gases.

Acetylene, Hydrogen and Gasoline are NOT included as an alternative gas.

Victor Heavy Industry Straight Cutting Torches

HC 1200C

Straight Cutting Torch without Built-in Flashback Arrestors. With Reverse Flow Check Valves

For Use with Propane or Pressurized Natural Gas ONLY

Features

- Cutting Capacity: 18"/457mm
- Use of High Flow Flashback Arrestors Is Recommended
- Best for High Flow Applications
- 2-tube Design



HC 1400

Straight Cutting Torch without Built-in Flashback Arrestors. Without Reverse Flow Check Valves

For Use with Propane or Pressurized Natural Gas ONLY

Features

- Cutting capacity: 30"/762mm
- Use of High Flow Flashback Arrestors is Recommended
- Use Accessory Reverse Flow Check Valves
- 2-tube Heavy Duty Design
- Ideal for Mill and Foundry Applications
- Use Genuine Victor HDNL Series Cutting Tips
- Lock Down Lever; 7/16"-14 RH Oxygen Inlet



HC 1100C



Straight Cutting Torch without Built-in Flashback Arrestors. With Reverse Flow Check Valves

For Use with Propane or Pressurized Natural Gas ONLY

Features

- Cutting capacity: 14"/355mm
- Use of High Flow Flashback Arrestors Recommended
- Torch will operate at any fuel gas pressure of 4 ounces and above
- Use Genuine Victor Series 1 Cutting Tips for Alt. Fuel (Not for Acetylene)
- Low Pressure Mixer
- Built-in Reverse Flow Check Valves on Oxygen and Fuel Gas Inlet
- Ideal for Scrap Cutting
- Available with Harris Style Head
- Use Victor Bulldog Cutting Tips for Best Performance
- 3-tube Lightweight Design



Warning

Use add-on flashback arrestors



Victor Professional Automation Equipment

Victor is committed to providing superior quality, reliable automation equipment that earn our customers' confidence. The following illustrates our offerings for quality automated gas equipment. Victor, committed to providing the best in quality, safety and reliability.

Victor Professional Machine Torches

Victor machine torches are available in two and three hose models. Three hose torches are high performance "straight through" design that minimizes turbulence and improves cut quality. Accessory reverse flow check valves are supplied for use at the torches inlet connection.

MT 200 Series

Machine Cutting Torch*

- Uses Series 1 Cutting Tips
- Two Hose Torch

OPTIONS

Gas: Acetylene, Propane, Natural Gas and other Pressurized Fuel Gases

Torch Lengths: 8½", 14"

Cutting Capacity: 7"/178mm

*Gear racks sold separately.



MT 300 Series

Machine Cutting Torch*

- Uses Series 1 Cutting Tips
- Three Hose Torch

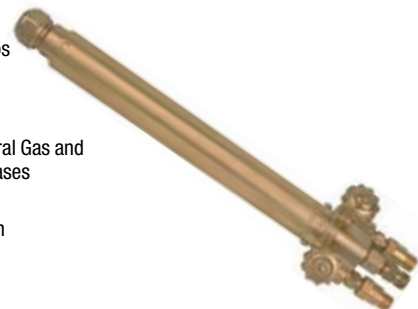
OPTIONS

Gas: Acetylene, Propane, Natural Gas and other Pressurized Fuel Gases

Torch Lengths: 14", 22½"

Cutting Capacity: 12"/305mm

*Gear racks sold separately.



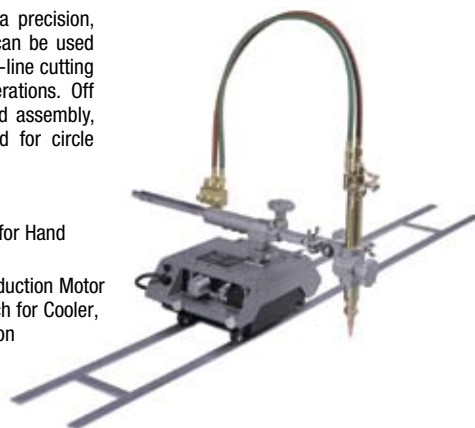
Victor Professional Cutting Machine

VCM 200 Portable Cutting Machine

The versatile VCM 200 is a precision, tractor-type machine that can be used on its own track for straight-line cutting and a variety of welding operations. Off track and with a radius rod assembly, the VCM 200 can be used for circle cutting.

Features

- Large Thumb Screws for Hand Tight Adjustments
- Constant Speed AC Induction Motor Located Opposite Torch for Cooler, More Efficient Operation
- Dual Drive Controls & Direct Speed Readout
- Cone Disc Drive
- Counter-balanced Design for Torch Racking Distance up to 18" from the Machine
- Speed Constant Over Wide Range of Temperatures
- Torch Holder Designed for 1½"/35mm Barrel Diameter Torches



Victor Professional Machine Accessories

Model BHA 2

Adjustable head adds flexibility to machine cutting torches by allowing bevel cuts without changing the position of the torch. Can be set at any angle from 0° to 90° on either side of vertical.

Uses series 1 cutting tips.

Optional **pre-heat attachment** is available for use with the BHA adjustable head attachment. The pre-heat attachment uses replacement tip ends.



Model 591

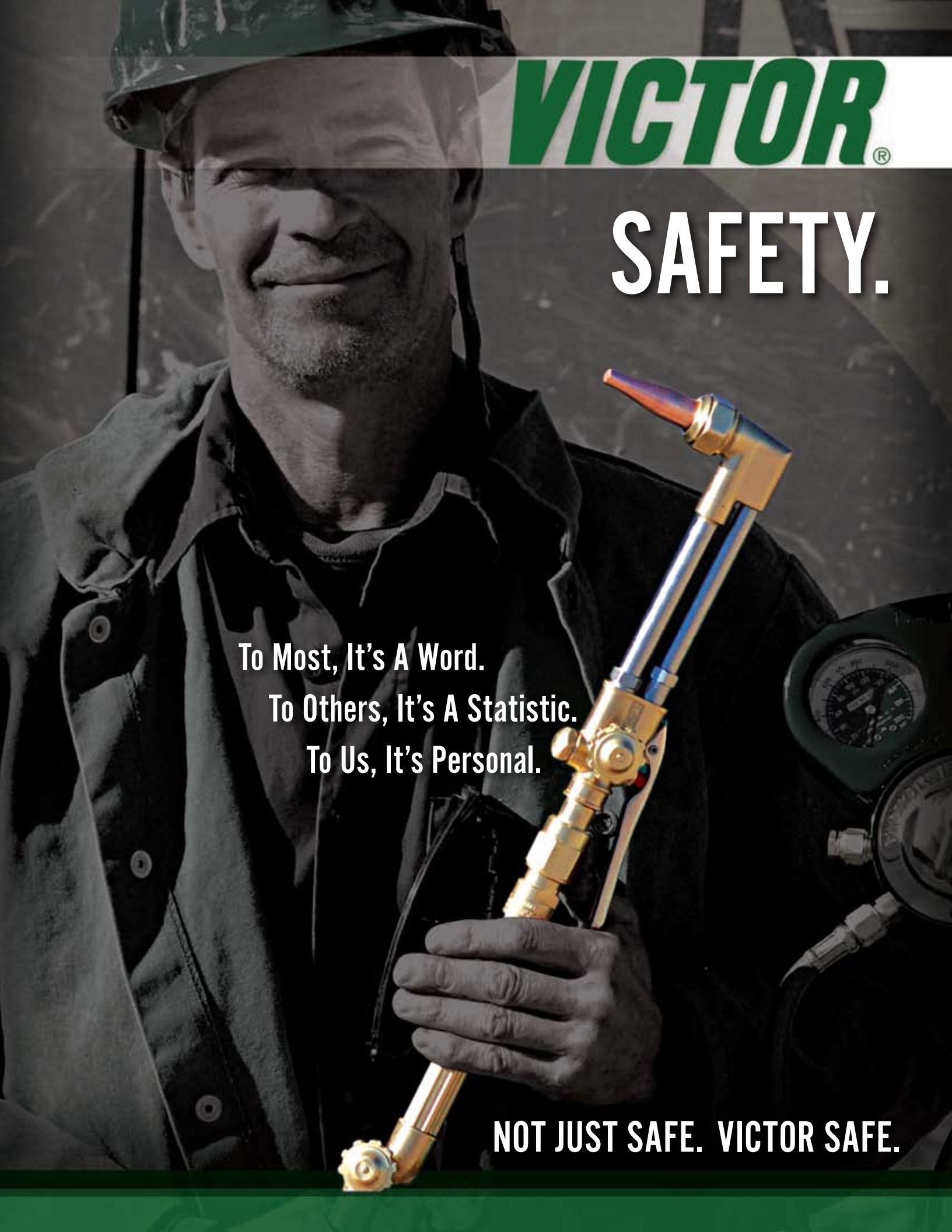
Strip cutter for use with machine cutting torches only. It is designed to accept two tips for use with a common torch. Uses series 1 cutting tips. Adjustable for cutting strips from 1¼"/32mm to 12"/305mm wide and thickness up to 3"/76mm.



Gear Racks

- For Use with MT 200 and MT 300 Series Cutting Torches
- Available in 10"/254mm and 18"/457mm Lengths
- 11 Teeth per Inch



A black and white photograph of a welder wearing a hard hat and a heavy jacket, holding a Victor welding torch. The welder is smiling slightly. The background is a dark, industrial setting. The Victor logo is in the top right corner, and the word 'SAFETY.' is in large white letters to the right of the welder. A quote is in the center, and the slogan 'NOT JUST SAFE. VICTOR SAFE.' is at the bottom right.

VICTOR®

SAFETY.

To Most, It's A Word.
To Others, It's A Statistic.
To Us, It's Personal.

NOT JUST SAFE. VICTOR SAFE.



Victor CutSkill® Equipment

Victor manufactures CutSkill products for the frequent user.
Victor CutSkill, quality products at an affordable price.

Victor CutSkill Outfits

CutSkill® Series Welding & Cutting OUTFITS Standard Features

- Toolbox
- Torch handle with built-in flashback arrestors and check valves
- Includes RM grade hose, lighter and soft-sided goggles

CutSkill 450

Applications

Capable of welding from 1/32"/.79mm up to 3"/75mm with appropriate welding nozzle and cutting from 1/8"/3mm up to 8"/200mm with appropriate cutting tip.

Components

- RC 450 Series Regulators
- WH370FC-V Torch Handle
- CA 370-V Cutting Attachment
- 2-UM Welding Nozzle (welds up to 1/8"/3mm)
- Series 1 Cutting Tip (cuts up to 3/4"/19mm)
- 25' x 1/4" RM Grade Hose



See our full line catalog
or visit us on the web at
www.victorequip.com for
more information.

Victor CutSkill & FirePower
Gas Equipment Catalog
(Form No. 70-2701)

CutSkill 350

Applications

Capable of welding from 1/32"/.79mm up to 3"/75mm with appropriate welding nozzle and cutting from 1/8"/3mm up to 8"/200mm with appropriate cutting tip.

Components

- RC 350 Series Regulators
- WH370FC-V Torch Handle
- CA 370-V Cutting Attachment
- 2-UM Welding Nozzle (welds up to 1/8"/3mm)
- Series 1 Cutting Tip (cuts up to 3/4"/19mm)
- 25' x 1/4" RM Grade Hose



CutSkill 250

Applications

Capable of welding from 1/32"/.79mm up to 1 1/4"/31mm with appropriate welding nozzle and cutting from 1/8"/3mm up to 6"/150mm with appropriate cutting tip.

Components

- RC 250 Series Regulators
- WH270FC-V Torch Handle
- CA 270-V Cutting Attachment
- 0-UM-1 Welding Nozzle (welds up to 5/64"/1.9mm)
- Series 3 Cutting Tip (cuts up to 1/2"/12mm)
- 20' x 3/16" RM Grade Hose



CutSkill Portable Tote

Applications

Capable of welding from 1/32"/.79mm up to 1 1/4"/31mm with appropriate welding nozzle and cutting from 1/8"/3mm up to 4"/100mm with appropriate cutting tip.

Components

- Rugged Patented Design Molded Plastic Carrying Case
- Built-in Flashback Arrestors and Check Valves
- SR150 CR Regulator
- SR160 AR Regulator
- WH270FC-V Welding Torch
- CA 270-V Cutting Attachment
- 2-UM-1 Welding Nozzle (welds up to 1/8"/3mm)
- 0-3-101 Cutting Tip (cuts up to 1/2"/12mm)
- 12'-1/2" x 3/16" Twin RM Grade Hose



Optional

- 10 Cu. ft. CGA 200 Acetylene Cylinder
- 20 Cu. ft. CGA 540 Oxygen Cylinder

Victor CutSkill Regulators / Flowmeters

CutSkill Series REGULATOR / FLOWMETER Standard Features

- A Wide Variety of Delivery Ranges and Gases.
- Two Year Warranty
-  Listed Conforms to CGA E-4

RC 450 Series

Single Stage Cylinder Type Regulator

- Heavy Duty
- Forged Brass Body & Housing Cap
- Stem Type Seat Mechanism
- Stainless Steel Diaphragm
- Maximum Inlet Pressure: 3000 PSIG/34 BAR
- 1/8" x 18 Outlet Connection
- Internal Relief
- 2 1/2" Gauges



RC 350 Series

Single Stage Cylinder Type Regulator

- Heavy/Medium Duty
- 2 1/2" Gauges
- Delrin Bushing
- Neoprene Diaphragm



RC 250 Series

Single Stage Cylinder Type Regulator

- Medium Duty
- 2" Gauges
- Delrin Bushing
- Neoprene Diaphragm



1400 Series

HRF Flowmeter

- Single Stage Piston Design
- Argon, Argon/CO₂ Mix & CO₂ Models
- Maximum Inlet Pressure: 3000 PSIG/204 BAR
- 25 PSIG/1.7BAR or 80 PSIG/5.4BAR Pre-set Pressure
- Up to 50 CFH/24 LPM for Argon and up to 38 CFH/18 LPM for CO₂ Delivery
- Available in CGA 320 & 580 Inlet Connections
- Option MIG Kit Available with 10' Hose



Design/Construction

- Machined Brass Body
- Teflon Seat
- 5/8"-18 RH(F) Outlet Connection Except When Noted
- 1 1/2"/38cm PSIG/KPA Gauges Except When Noted

TPR Purging Regulator

Single Stage Purging Regulator

- Forged Brass Body & Housing Cap
- Stem Type Seat Mechanism
- Neoprene Diaphragm
- Maximum Inlet Pressure: 3000 PSIG/204 BAR



150 Series "T" Handle

Single Stage T Handle Regulator

- Forged Brass Body & Housing Cap
- Stem Type Seat Mechanism
- Neoprene Diaphragm
- Maximum Inlet Pressure: 3000 PSIG/204 BAR
- Available in CGA 540 & 510 Inlet Connections
- 1/8"-18 Outlet Connection



Victor CutSkill Handles / Attachments

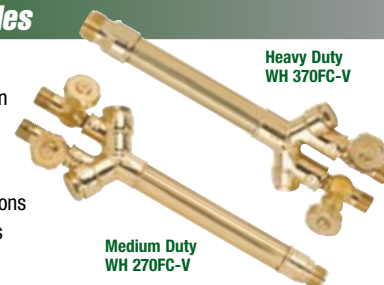
CutSkill Series TORCH HANDLES Standard Features

- For cutting attachments, welding tips and heating assemblies.
- Built-in reverse flow check valves and flashback arrestors for added operator safety.

CutSkill Torch Handles

Features

- Tube within a Tube Design
- Three Piece "Y" Rear Assembly with Threaded Connection
- 9/16" x 18 Hose Connections
- Stainless Steel Ball Valves
- Two Year Warranty



Heavy Duty
WH 370FC-V

Medium Duty
WH 270FC-V

CutSkill Series CUTTING ATTACHMENTS Standard Features

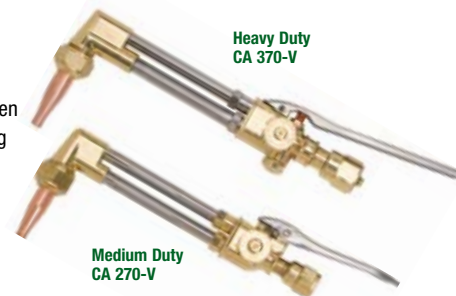
For use with any fuel gas

For use with acetylene, propane, butane, Liquid Air fuel gas, natural gas (2 PSI & above) and propylene.

CutSkill Cutting Attachments

Features

- 90° Head
- Universal Mixer
- Easy-on Cutting Oxygen
- Stainless Steel Cutting Oxygen Lever and Ball Valve
- Two Year Warranty



Heavy Duty
CA 370-V

Medium Duty
CA 270-V



Victor FirePower Equipment

Victor manufactures FirePower products for the light-duty contractor or the do-it-yourself handyman.

Victor FirePower Outfits

FirePower 350

Applications

Capable of welding from 1/32"/.79mm up to 1 1/4"/31mm with appropriate welding nozzle and cutting from 1/8"/3mm up to 6"/150mm with appropriate cutting tip.

Components

- RF 350 Heavy/Medium Duty Regulators
- WH370FC-FS Torch Handle with Built-in Flashback Arrestors and Check Valves
- CA350-FS Cutting Attachment
- 2-UM Welding Nozzle (up to 1/8"/3mm)
- Series 1 Cutting Tip (up to 3/4"/19mm)
- 25' x 1/4" R Grade Hose
- Includes Striker and Goggles



FirePower 250

Applications

Capable of welding from 1/32"/.79mm up to 1 1/4"/31mm with appropriate welding nozzle and cutting from 1/8"/3mm up to 6"/150mm with appropriate cutting tip.

Components

- RF 250 Medium Duty Regulators
- WH270FC-FS Torch Handle with Built-in Flashback Arrestors and Check Valves
- CA250-FS Cutting Attachment
- 0-UM Welding Nozzle (up to 5/64"/2mm)
- Series 3 Cutting Tip (up to 1/2"/12mm)
- 20' x 3/16" R Grade Hose
- Includes Striker and Goggles



Victor FirePower Regulators

RF 350 Series

Single Stage Cylinder Type Regulator

- Heavy/Medium Duty
- Forged Brass Body
- Stem Type Seat Mechanism
- Neoprene Diaphragm
- Internal Relief



RF 250 Series

Single Stage Cylinder Type Regulator

- Medium Duty
- Forged Brass Body
- Stem Type Seat Mechanism
- Neoprene Diaphragm
- Internal Relief

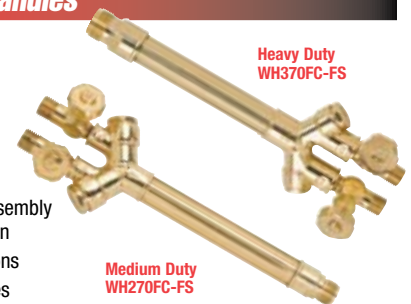


Victor FirePower Handles / Attachments

FirePower Torch Handles

Features

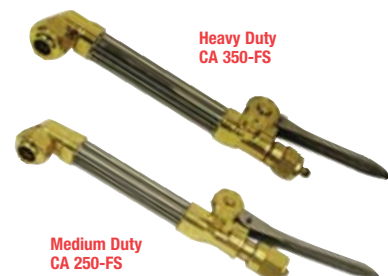
- Built-in Reverse Flow Check Valves and Flashback Arrestors
- Victor Tube within a Tube Design
- Three Piece "Y" Rear Assembly with Threaded Connection
- 3/16" x 18 Hose Connections
- Stainless Steel Ball Valves



FirePower Cutting Attachments

Features

- 90° Head
- Universal Mixer
- Triangular Tube Design
- Stainless Steel Cutting Oxygen Lever and Ball Valve





KEEP ON TRUCKIN'

BURT IS FOURTH GENERATION IN THE COMPANY HIS FAMILY STARTED IN 1898. He learned to weld from his father and uncle, and from just being around the business. His first job at Tremmel Construction was sweeping floors at age 10.

The company specializes in welding specialty metals such as brass, aluminum, copper, polished stainless steel and sheet metal. "Brass is very tricky," Burt explains. "It doesn't like to weld very well. But I know how to weld it, and I teach the other employees how to do it."

BURT HAS A DEGREE IN DRAFTING AND DESIGN, and does all of the mechanical drawings for their welding projects, along with the day-to-day running of the business.

"WE LOST EVERYTHING IN KATRINA."

Hurricane Katrina completely destroyed the shop. All equipment, paperwork, even photos dating back 100 years – gone.

But the one thing he and his co-workers didn't lose – their skills. So with a *keep on truckin'* attitude they are back in business with new equipment from THERMAL DYNAMICS, VICTOR, TWECO and ARCAIR.

BURT TREMMEL, JR.

President
Tremmel Construction Specialties, L.L.C.
Biloxi, MS

Burt carries the torch – will you?

THERMADYNE, A GLOBAL CUTTING AND WELDING LEADER, joins the American Welding Society in encouraging individuals to practice the art, craftsmanship and professions of welding, metalworking and fabrication. Victor, Thermal Dynamics, Thermal Arc, Arcair, Tweco, Stooddy, CIGWELD and TurboTorch are among the Thermadyne family of brands that you can count on for safety, reliability and quality.



www.thermadyne.com



American Welding Society
Sustaining Company Member

Acetylene

One Piece

Series 1 Type 101
Hand & machine torch cutting.

General Purpose



One Piece

Series 3 Type 101
Hand cutting.
(Series 3 for small cutting head)

General Purpose



One Piece

Series 1 Type 101^{30°}
Hand cutting & machine torch cutting. 30° angle with torch perpendicular.

General Purpose



One Piece

Series 1 Type 101L
Extra length 10" tip.

General Purpose



One Piece

Series 1 Type 108
Boiler tube removal. Short tip to insert inside tube or confined area.

Special Application



One Piece

Series 1 Type 110
Drag tip for clean metal. Plate cutting and trimming.

Special Application



One Piece

Series 3 Type 110
Drag tip for clean metal. Plate cutting and trimming.
(Series 3 for small cutting head)

Special Application



One Piece Bent

Series 1 Type 112
Cutting close to bulkheads, hand cutting of rivet heads. 45° angle with torch perpendicular.

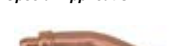
Special Application



One Piece Bent

Series 1 Type 118
Deseaming, gouging, weld preparation, removing defective welds, rivet washing.

Special Application



One Piece Bent

Series 3 Type 118
Deseaming, gouging, weld preparation, removing defective welds, rivet washing.
(Series 3 for small cutting head)

Special Application



Propylene

One Piece

Series 1 Type 303MP
Hand & machine torch cutting.

General Purpose



Two Piece

Series 1 Type GPP
Hand & machine torch cutting.

General Purpose



Two Piece

Series 3 Type GPP
Hand cutting.
(Series 3 for small cutting head)

General Purpose



Two Piece

Series 1 Type HPP
Heavy pre-heat for scrap, bevel and other heavy pre-heat requirements.

Special Application



One Piece Bent

Series 1 Type 318MP
Deseaming, gouging, weld preparation, removing defective welds, rivet washing.

Special Application



Two Piece

Series 1 Type BTMP
High performance bevel tip for use with mild steel, HSLA, T-1, HY-80

Special Application



Propane & Natural Gas

One Piece

Series 1 Type 200
Hand & machine torch cutting.

General Purpose



One Piece

Series 1 Type 200L
Extra length 10" tip.

General Purpose



Two Piece

Series 1 Type GPN
Hand & machine torch cutting.

General Purpose



Two Piece

Series 3 Type GPN
Hand torch cutting.
(Series 3 for small cutting head)

General Purpose



One Piece

Series 1 Type HDN
Mill and foundry, scrap cutting under severe conditions.

Special Application



One Piece

Series 1 Type HDNL
Extra length. Mill and foundry, scrap cutting under severe conditions.

Special Application



One Piece

Series 1 Type MCN
Coarse spline for extra heavy pre-heat and wide kerf for demolition, ripping and rail car repair.

Special Application



Two Piece

Series 1 Type CSN
Coarse spline for scrap cutting.

Special Application



Two Piece

Series 1 Type HPN
Heavy pre-heat for scrap, bevel and other heavy pre-heat requirements.

Special Application



Two Piece

Series 1 Type HWN
Heavy wall shell for extra heavy pre-heat applications.

Special Application



One Piece

Series 1 Type 207
Rivet washing.

Special Application



One Piece Bent

Series 1 Type 218
Deseaming, gouging, weld preparation, removing defective welds, rivet washing.

Special Application



One Piece Bent

Series 1 Type 234
Scarfing, gouging, weld preparation, removing defective rivets.

Special Application



One Piece Bent

Series 1 Type 244
Cutting close to bulkheads, rivet washing

Special Application



Two Piece

Series 2 Type 285N
Heavy industry cutting.

Special Application



Two Piece Bent

Series 1 Type GTB
High performance gouging tip.

Special Application



Two Piece

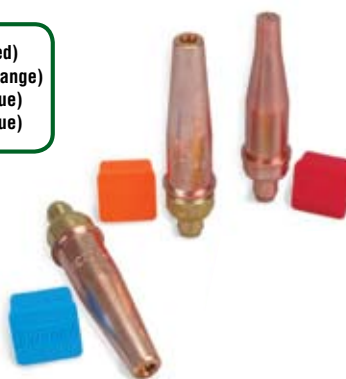
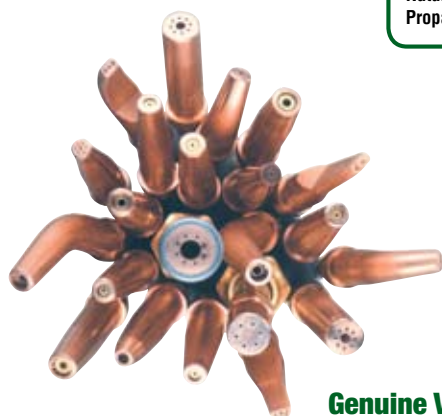
Series 1 Type BTN
High performance bevel tip for use with mild steel, HSLA, T-1, HY-80.

Special Application



Look for Victor Color Coded Packages

Acetylene (Red)
Propylene (Orange)
Natural Gas (Blue)
Propane (Blue)



Genuine Victor® Professional Tips are available in a wide variety of types and sizes.

Genuine Victor CutSkill® Tips are also available in a wide variety of competitive styles, types and sizes.

Acetylene

CUTTING TIP SERIES 1-101, 3-101 & 5-101

Metal Thickness	Tip Size	Cutting Oxygen Pressure (PSIG)	Preheat Oxygen (PSIG)	Acetylene Pressure (PSIG)	Speed I.P.M.	Kerf Width
1/8"	000	25-35	3/4	3/4	25-30	.04
1/4"	00	25-35	3/4	3/4	27-30	.06
3/8"	0	25-35	3/4	3/4	29-34	.06
1/2"	0	25-35	3/4	3/4	29-34	.06
3/4"	1	30-35	4/4	3/4	15-17	.07
1"	2	35-40	4/4	3/4	15-18	.09
2"	3	40-45	5/10	4/4	12-15	.11
3"	4	45-50	5/10	5/12	9-11	.12
4"	5	45-50	5/12	5/12	9-11	.15
6"	6**	45-50	5/12	5/12	9-11	.15
10"	7**	45-50	5/20	10/15	5-8	.34
12"	8**	45-50	7/25	10/15	3-5	.41

* Applicable for 3-hose machine cutting torches only. With a 2-hose cutting torch, preheat pressure is set by the cutting oxygen.

** For best results use ST1600C-ST1900C or ST2600FC series torches and 1/2" hose when using tip size 6 or larger. Torches with flashback arrestors require up to 25% more pressure as tip size increases (15 PSI maximum acetylene pressure).

*** All pressures are measured at the regulator using 25' x 3/8" hose for tip sizes 6 and larger.

CAUTION At no time should the withdrawal rate of an individual acetylene cylinder exceed 1/2 of the cylinder contents. If additional flow capacity is required, use an acetylene manifold system of sufficient size to supply the necessary volume.

WELDING NOZZLE FLOW DATA

Metal Thickness	Tip Size	Cut Size	Oxygen Pressure (PSIG)		Acetylene Pressure (PSIG)		Acetylene Consumption (SCFH)	
			Min.	Max.	Min.	Max.	Min.	Max.
Up to 1/8"	000	75 (.022)	3	5	3	5	1	2
1/8"-1/4"	00	70 (.028)	3	5	3	5	1 1/2	3
1/4"-3/8"	0	65 (.035)	3	5	3	5	2	4
3/8"-1/2"	1	60 (.040)	3	5	3	5	3	6
1/2"-1"	2	56 (.046)	3	5	3	5	5	10
1"-1 1/2"	3	53 (.060)	4	7	3	6	8	18
1 1/2"-1 3/4"	4	49 (.073)	5	10	4	7	10	25
1 3/4"-1 1/2"	5	43 (.089)	6	12	5	8	15	35
1 1/2"-1 1/4"	6	36 (.106)	7	14	6	9	25	45
1 1/4"-1 1/2"	7	30 (.128)	8	16	8	10	30	60
1 1/4"-2"	8	29 (.136)	10	19	9	12	35	75
2"-2 1/2"	10	27 (.144)	12	24	12	15	50	100
2 1/2"-4"	12*	25 (.149)	18	28	12	15	80	160

MFA HEATING NOZZLES

TIP SIZE	Acetylene Pressure Range (PSIG)	Oxygen Pressure Range (PSIG)	Acetylene Cubic Feet Per Hour		Oxygen Cubic Feet Per Hour		BTU Per Hour
			Min.	Max.	Min.	Max.	
4	6-10	8-12	6	20	7	22	SEE BELOW **
6	8-12	10-15	14	40	15	44	
8	10-15	20-30	30	80	33	88	
10	12-15	30-40	40	100	44	110	
12*	12-15	50-60	60	150	66	165	
15*	12-15	50-60	90	220	99	244	

* Use model HD310C torch and 3/8" hose.

** Approximately 1470 gross BTU per cubic foot.

Propylene

CUTTING TIP CHART
CUTTING TIP SERIES GPP, HPP

Metal Thickness	Tip Size	Cutting Oxygen Pressure (PSIG)	Preheat Oxygen Pressure (PSIG)	Preheat Fuel Gas (PSIG)	Speed I.P.M.	Kerf Width
1/8"	000	25-35		5/5	24-28	.04
1/4"	00	25-35		5/5	27-30	.05
3/8"	0	25-35		5/5	29-34	.06
1/2"	0	25-35		5/5	16-22	.06
3/4"	1	30-35		5/5	15-20	.08
1"	2	35-40		5/5	14-18	.09
1 1/2"	2	40-45		4/6	13-16	.09
2"	3	40-45		4/6	10-14	.10
2 1/2"	3	45-50		5/6	9-12	.10
3"	4	45-50		5/6	9-11	.12
4"	5	45-50		6/6	7-10	.14
5"	5	50-55		6/10	6-9	.14
6"	6	45-50		6/10	5-7	.17
8"	6	50-55		6/12	4-6	.18
10"	7	55-60		6/12	3-5	.34
12"	8	60-70		10/14	3-4	.41
15"	10	50-55		10/18	3-4	-
18"	12	45-50		-	4-6	-

FOR 3-HOSE MACHINE TORCHES ONLY
SEE REVERSE SIDE

CUTTING TIP SERIES MTHP
(High Speed Machine Cutting)

Metal Thickness	Tip Size	Cutting Oxygen Pressure (PSIG)	Preheat Oxygen Pressure (PSIG)	Preheat Fuel Gas (PSIG)	Speed I.P.M.	Kerf Width
1/4"	00	45-55			23-30	.05
3/8"	00	45-55			23-29	.05
1/2"	0	45-55			20-26	.06
3/4"	0	45-55			19-26	.06
1"	1	45-55			17-24	.07
1 1/4"	1	45-55			16-22	.07
1 1/2"	1	45-55			15-18	.07
2"	2	45-55			11-15	.09
2 1/2"	2	45-55			10-13	.09
3"	2	45-55			9-11	.09
4"	3	45-55			7-10	.11
5"	3	45-55			5-6	.11
6"	3	45-55			5-7	.11
7"	4	45-55			5-6	.14
8"	4	45-55			5-6	.14
9"	5	45-55			5-6	.18
10"	5	45-55			3-5	.18

NOTICE The above data applies to all torches with the following exceptions:

Torch Series
MT 200/MT 300 Series
Preheat Oxygen (PSIG) N/A
Preheat Fuel (PSIG) 5 PSIG-UP

NOTICE These speeds and pressure settings apply only to mild steel in good condition. Torches with flashback arrestors require up to 25% more pressure as tip size increases.

CAUTION High gas withdrawal rates may require cylinder manifold. Consult your gas supplier.

Propane & Natural Gas

CUTTING TIP SERIES GPN, HPN

Metal Thickness	Tip Size	Cutting Oxygen Pressure (PSIG)	Preheat Oxygen Pressure (PSIG)	Preheat Fuel Gas (PSIG)	Speed I.P.M.	Kerf Width
1/8"	000	25-35		3/5	24-28	.04
1/4"	00	25-35		3/5	27-30	.06
3/8"	0	25-35		3/5	29-34	.06
1/2"	0	25-35		3/5	16-22	.06
3/4"	1	30-35		3/5	15-20	.08
1"	2	35-40		3/5	14-18	.09
1 1/2"	2	40-45		3/5	13-16	.09
2"	3	40-45		3/5	10-14	.10
2 1/2"	3	45-50		6/10	9-12	.10
3"	4	45-50		6/10	9-11	.12
4"	5	45-50		6/12	7-10	.14
5"	5	50-55		6/12	6-9	.14
6"	6**	45-50		10/15	5-7	.17
8"	6**	50-55		10/15	4-6	.18
12"	8**	60-70		10/15	3-5	.24

NOTICE *The above data applies to all torches with the following exceptions:

Torch Series
MT 200N Series
MT 300N Series 000-6
ST 900C Series
ST 1600C-ST 1700C Series
ST 1600C-ST 1900C Series
STN 2300C Series
Preheat Oxygen (PSIG) N/A
Preheat Fuel Gas (PSIG) 20-55 PSIG
Preheat Fuel Gas (PSIG) 5 PSIG-UP
Preheat Fuel Gas (PSIG) 1 PSIG-UP
Preheat Fuel Gas (PSIG) 2 PSIG-UP

** For best results use ST 1600C-ST 1900C or ST2600FC series torches and 1/2" hose when using tip size 6 or larger.

*** All pressures are measured at the regulator using 25' x 1/2" hose through tip size 5 and 25' x 3/8" hose for tip sizes 6 and larger. Torches with flashback arrestors require up to 25% more pressure as tip size increases.

CUTTING TIP SERIES MTHN
(High Speed Machine Cutting)

Metal Thickness	Tip Size	Cutting Oxygen Pressure (PSIG)	Preheat Oxygen Pressure (PSIG)	Preheat Fuel Gas (PSIG)	Speed I.P.M.	Kerf Width
1/4"	00	45-55			23-30	.05
3/8"	00	45-55			23-29	.05
1/2"	0	45-55			20-26	.06
3/4"	0	45-55			19-26	.06
1"	1	45-55			17-24	.07
1 1/4"	1	45-55			16-22	.07
1 1/2"	1	45-55			15-18	.07
2"	2	45-55			11-15	.09
2 1/2"	2	45-55			10-13	.09
3"	2	45-55			9-11	.09
4"	3	45-55			7-10	.11
5"	3	45-55			5-6	.11
6"	4	45-55			5-6	.14
10"	5	45-55			3-5	.18

NOTICE The above data applies to all torches with the following exceptions:

Torch Series
MT 200N Series
MT 300N Series
Preheat Oxygen (PSIG) N/A
Preheat Fuel Gas (PSIG) 10-25 PSIG
Preheat Fuel Gas (PSIG) 8oz.-UP

NOTICE Data compiled using mild steel as test material.
* Pressure is measured at the torch inlet on MTH Series Tips. Torches with flashback arrestors require up to 25% more pressure as tip size increases.

(For use only with MT400HC & MT600N Series)

Length of Bevel	Tip Size	IPM	Oxygen Pressure	Fuel Pressure	Cutting Oxy Pressure
1	4	10-18	60-75	8-10	N/A
1 1/2	4	8-16	60-75	8-10	
2	4	6-14	60-75	8-10	
2 1/2	4	5-12	60-75	8-10	
3	5	6-11	60-75	8-12	
3 1/2	5	5-10	60-75	8-12	
4	5	4-9	60-75	8-12	
4 1/2	5	4-8	60-75	8-12	
5	6	3-8	60-75	8-15	N/A
5 1/2	6	3-7	60-75	8-15	
6	6	3-6	60-75	8-15	

Length of Bevel	Tip Size	IPM	Oxygen Pressure	Fuel Pressure	Cutting Oxy Pressure
1	4	10-18	35-65	10-12	40-60
1 1/2	4	8-16	25-60	10-12	40-60
2	4	6-14	25-60	10-12	40-60
2 1/2	4	5-12	25-60	10-12	40-60
3	5	6-11	25-60	10-12	40-60
3 1/2	5	5-10	25-60	10-12	40-60
4	5	4-9	25-60	10-12	40-60
4 1/2	5	4-8	25-60	10-12	40-60
5	6	3-8	25-60	10-12	45-75
5 1/2	6	3-7	25-60	10-12	45-75
6	6	3-6	25-60	10-12	45-75

NOTE: Bevels of 30° to 75° are possible on mild and most alloy steel without a preheat attachment

Safety Accessories

Check Valves

- Help prevent gases traveling back into the fuel supply or oxygen system, creating a mixed gas condition.
- Will not stop a flashback alone.



Torch Models

CTO & CTF Torch – Check Valves Pair Pack (*Oxygen and Fuel*)

CTO Torch – Check Valve (*Oxygen*)

CTF Torch – Check Valve (*Fuel*)

Regulator Models

CRO & CRF Regulator – Check Valves Pair Pack (*Oxygen and Fuel*)

CRO Regulator – Check Valve (*Oxygen*)

CRF Regulator – Check Valve (*Fuel*)

FlameBuster™ Torch Flashback Arrestors

- Built-In Reverse Flow Check Valves
- Designed to Prevent Flashback from Torch to Hose
- For Use with **MOST** Oxy-Fuel Welding & Cutting Torches
- Greater Flow than Competitive Models

Torch Models

FB-1 Pair Pak for Torch (*Oxygen & Fuel*) Flashback Arrestors

FB-O (*Oxygen*) Torch Flashback Arrestor

FB-F (*Fuel*) Torch Flashback Arrestor



FB-1

Pair Pak for Torch Flashback Arrestors (*Oxygen & Fuel*)

FB-O

Torch Flashback Arrestor (*Oxygen*)

FB-F

Torch Flashback Arrestor (*Fuel*)

FlameBuster Regulator Flashback Arrestors

- Built-In Reverse Flow Check Valves
- Designed to Prevent Flashback from Hose to Regulator
- For Use with **MOST** Oxy-Fuel Welding & Cutting Regulators
- Greater Flow than Competitive Models



FB-OR Regulator Flashback Arrestor (*Oxygen*)



FB-FR Regulator Flashback Arrestor (*Fuel*)

Vanguard™ Replacement Cartridge

For Flashback Arrestors

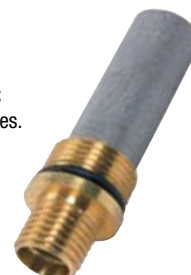
- Replacement Flashback Arrestor Cartridge (for both gases).
- Cartridges for use with Victor 315FC and 100FC Torch Handles and Victor Straight Cutting Torches.

Replacement Cartridge Models

0657-0036 Pair Pak for use with 315FC, 100FC, and CST 800 FC Torch Handles

0656-0046 Pair Pak for use with ST2600FC, ST1000FC, ST900FC

H315FC – Refer to Master Catalog



See the Victor Industrial Catalog (65-2007) for complete information.

Regulator Gauge Guards

An added safety feature designed to help protect Victor's most popular industrial regulators. Also helps reduce costly repairs of damaged gauges.

Part No.

250 Series

1429-0068 Steel Gauge Guard Green-Oxygen
1429-0069 Steel Gauge Guard Red-Acetylene

350 Series

1429-0066 Steel Gauge Guard Green-Oxygen
1429-0067 Steel Gauge Guard Red-Acetylene

Part No.

450 Series

1429-0056 Steel Gauge Guard Green-Oxygen
1429-0057 Steel Gauge Guard Red-Acetylene



Safety Accessories

Kwik-Connect™ Torch/Hose Connectors

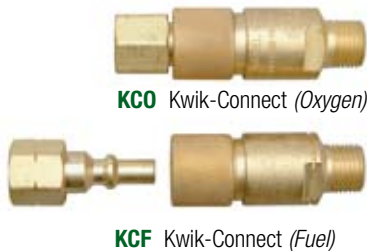
- Built-In Reverse Flow Check Valves
- Quickly and Safely Connect Torch to Hose
- Designed to Prevent Mismatching of Oxygen and Fuel
- For Use with **MOST** Oxy-Fuel Welding & Cutting Torches

Torch/Hose Models

KCO (Oxygen) Kwik-Connect

KCF (Fuel) Kwik-Connect

KC-1 Pair Pak Kwik-Connect (Oxygen and Fuel)



KC-1
Pair Pak
Kwik-Connect
(Oxygen and Fuel)

FlameBuster Plus Flashback Arrestor

with Kwik-Connect for Torches & Regulators

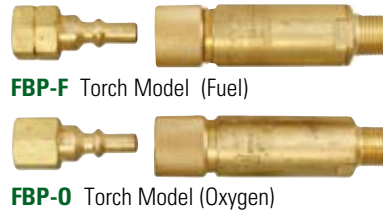
- Built-In Reverse Flow Check Valves
- Designed to Prevent Flashbacks
- For Use with **MOST** Oxy-Fuel Welding & Cutting Torches & Regulators
- Greater Flow than Competitive Models

Torch Models

FBP-0 Torch Flashback Arrestor w/ Kwik-Connect (Oxygen)

FBP-F Torch Flashback Arrestor w/ Kwik-Connect (Fuel)

FBP-1 Pair Pak Torch Flashback Arrestors w/ Kwik-Connect (Oxygen and Fuel)



FBP-1
Pair Pak
Torch Flashback Arrestor
(Oxygen & Fuel)

Regulator Models

FBP-OR Not Shown Regulator Flashback Arrestor w/ Kwik-Connect (Oxygen)

FBP-FR Not Shown Regulator Flashback Arrestor w/ Kwik-Connect (Fuel)

FBPR-1 Pair Pak – Not Shown Regulator Flashback Arrestors w/ Kwik-Connect (Oxygen and Fuel)

Regulator Design & Construction Features

Single Stage Regulators:

are recommended for applications where slight delivery pressure increases due to decreasing cylinder pressures would not affect the performance characteristics of the work or test results.

Stainless Ball in Key for easy adjustment

Adjusting Spring pretensioned for quality assurance

Die-Forged Brass Body for extra strength

Precision Machined Nozzle for optimum flow control

External Relief Valve System

Brass Adjusting Screw with forged T-handle

Debris Insert Bushing for durability, easier adjusting

Die-Forged Brass Spring Housing Cap provides greater strength and durability

Stainless Steel Diaphragm gives accurate long lasting service

Stem-Type Seat Mechanism inlet pressure acts in sealing

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Stem-Type Seat Mechanism inlet pressure acts in sealing

Two Stage Regulators Include the Single Stage Features Plus the Following:

Two Stage Regulators:

are recommended for applications that require a constant delivery pressure over a range of decreasing inlet pressures. This precise two stage regulation provides superior operating characteristics for applications where change in delivery pressure would affect performance characteristics of work or test results.

Stainless Steel Diaphragm

Adjusting Spring designed for precise preset

Stem-Type Seat Mechanism inlet pressure acts in sealing

Precision Machined Nozzle

Bronze Inlet Filter keeps out dirt & foreign materials

External Relief Valve System

Stem-Type Seat Mechanism inlet pressure acts in sealing

Precision Machined Nozzle

Bronze Inlet Filter keeps out dirt & foreign materials

External Relief Valve System

Stem-Type Seat Mechanism inlet pressure acts in sealing

Precision Machined Nozzle

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Stem-Type Seat Mechanism inlet pressure acts in sealing

Precision Machined Nozzle

Bronze Inlet Filter keeps out dirt & foreign materials

External Relief Valve System

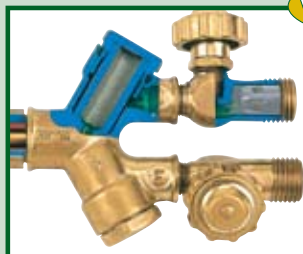
Stem-Type Seat Mechanism inlet pressure acts in sealing

Precision Machined Nozzle

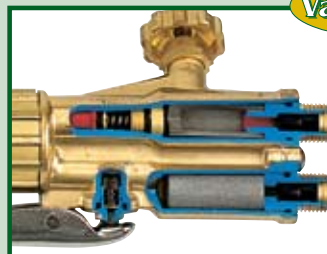
Bronze Inlet Filter keeps out dirt & foreign materials

Don't Leave Safety to Chance!

Insist on using torches with built-in Flashback Arrestors and Check Valves.

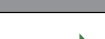


Victor Torch Handle
with built in
Flashback Arrestors
and Check Valves



Victor Straight Torch
with built in
Flashback Arrestors
and Check Valves

Victor Equipment Reference Guide

OUTFITS	REGULATORS		HANDLES	CUTTING ATTACHMENTS	CUTTING TIPS		
EXTRA / HEAVY DUTY							
Victor Professional							
Journeyman® Series Journeyman II Series Journeyman Select Series Journeyman AF	CSR450D-540	CSR460A-510 CSR460A-300 CSR461B-510	  	315FC H315FC HD310C* *HD310C – not included in any outfit, built-in flashback arrestors not included.	CA2470 90°	3-101 3-GPN 3-GPP	
Contender®	CSR350D-540	CSR360A-510 CSR360A-300			CA2460 90° CA2461 75° CA2462 180°	1-101 GPN GPP	
Victor CutSkill®							
CS450 Series	RC450-125-540	RC450-15-510 RC450-15-300	 	WH370FC-V	CA370-V 90°		
CS350 Series	RC350-125-540	RC350-15-510 RC350-15-300					
Victor FirePower®							
FP350 Series	RF350-125-540	RF350-15-510 RF350-15-300		WH370FC-FS	CA350-FS 90°		
MEDIUM DUTY							
Victor Professional							
SuperRange® II Series	CSR350D-540	CSR360A-510 CSR360A-300	 	100FC	CA1350 CA1351 CA1352	3-101 3-GPN 3-GPP	
Performer® Series	CSR250D-540	CSR260A-510 CSR260A-300					
Portable Torch™ Series	SR150CR-540	SR160AR-(MC)					
Victor CutSkill®							
CS250 Series	RC250-125-540	RC250-15-510 RC250-15-300		WH270FC-V	CA270-V		
Portable Tote Series	SR150CR-540	SR160AR-(MC)					
Victor FirePower®							
FP250 Series	RF250-125-540	RF250-15-510 RF250-15-300		WH270FC-FS	CA250-FS		
LIGHT DUTY							
Victor Professional							
Current Victor Outfits do not Contain a J-28 or J-40 Torch Handle				J-28 J-40	CA1260 90°	3-101 3-GPN 3-GPP	

Color Code:

Acetylene

Natural Gas / Propane

Propylene



WELDING / BRAZING NOZZLES, MIXERS, TIPS			HEATING NOZZLES		
  	TIPS W ET RTE TE	TIPS RTEN TEN	  	MFA MFTA TEMFA (USE APPROPRIATE MIXER / TIP TUBE)	MFN MFTN TEMFN (USE APPROPRIATE MIXER / TIP TUBE) TYPE 55 TYPE 55
	MIXERS / TIP TUBES FE DFE UN UM Mixer Series	MIXERS / TIP TUBES FE DFE UN			
  	TIPS W-1 ET ET-1 TE	TIPS TEN	  	MFA-1 TEMFA (USE APPROPRIATE MIXER / TIP TUBE)	MFN-1 TEMFN (USE APPROPRIATE MIXER / TIP TUBE)
	MIXERS / TIP TUBES UN-1 FE-1 UM-1 Mixer Series	MIXERS / TIP TUBES UN-1 FE-1			
  	TIPS W-J, ET, TE	TIPS TEN	  	TEMFA (USE APPROPRIATE MIXER / TIP TUBE)	TEMFN (USE APPROPRIATE MIXER / TIP TUBE)
	MIXERS / TIP TUBES UN-J, DFE-1 FE-J, UM-J	MIXERS / TIP TUBES UN-J, UNN-J DFE-1, FE-J			

Industrial Regulator Matrix

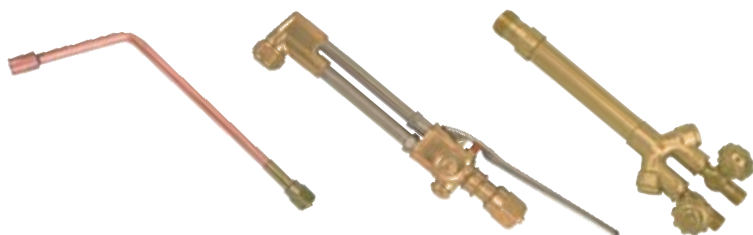
Delivery / Flow Ranges

Pressure Delivery										
PSIG	0	15	40	80	125	200	750	1500	3000	4500
SR700		•			•	•				
SR450		•	•	•	•					
VTS450		•	•		•	•				
VGS350		•	•	•						
SR350		•			•					
SR250		•	•	•	•					
VTS250		•	•	•	•					
SR5		•	•	•						
SR4							•	•	•	•
Type "O"	•				•		•			
Type "P"	•			•	•					

Pipeline							
PSIG	0	15	40	80	125	200	400
L700		•	•	•	•	•	
S700					•		
L350		•		•	•		•
S250		•	•	•	•		
L250		•	•	•	•		•

Flow Control								
SCFH	0	15	20	40	80	100	150	200
HSR		●		●	●		●	●
HVTS				●				
HRF2400				●	●			
AF250				●	●			
DFM				●			●	
SR310, 312						●	●	
FM								●

• Denotes Delivery Availability



Victor Specialty Products

Proven service to specialty gas and manifold markets for over 92 years.

Supported by manufacturing and engineering expertise of Victor Equipment Company and a recently completed, multi-million dollar, state-of-the-art assembly and testing facility, Victor Specialty Products provides unsurpassed product quality and performance in a timely manner.

With Victor Specialty Products, you will experience:

- Expanded global product offering
- Improved product performance featuring "flow straightening technology"
- Guaranteed product quality and reliability
- Service excellence
- Global Sales Support

Victor Specialty Products is committed to exceeding industry standards with ongoing certifications and programs including:

- ISO 9001 Registered.
- Helium Leak Rate Certification
- CGA compliant with all CGA E-4 testing, including E-4, 7.1 "Oxygen Ignition Test."

SG500 Series

The SG500 Series is the top range of high purity regulators. With their 316L stainless steel bodies and other wetted components, PCTFE seats and metal to metal diaphragm seals, they are suitable for all purity levels of inert gases as well as corrosive and toxic gases. Available in single stage, dual stage and line models.



GP270 Series

The GP 270 Series regulators are general purpose chrome plated forged brass body regulators for inert and other non-corrosive gases. Their neoprene diaphragms provide excellent responsiveness in many general laboratory applications including pressure testing, purging, blanketing, etc.



HP500 Series

The HP500 Series are ultra high purity brass barstock body regulators suitable for all purity levels of inert and other non-corrosive gases. The 316L stainless steel diaphragms and metal to metal diaphragm seals protect the gases being controlled from external contamination and leakage.



Laser Assist Regulator

The D1-Dome Load regulator is designed for high flow and high pressure applications such as Laser Assist Gas and other high flow applications. The benefit of self loading dome load regulator is that the flow characteristics remain constant through the full range of flow requirements with minimal droop. The self loading design of the D-1 provides outlet pressures up to 550 psig and flow capacity in excess of 10,000 scfh.



HP270 Series

The HP 270 Series regulators are medium purity chrome plated forged brass body regulators for inert and other non-corrosive gases up to a grade 4.5 (99.995% pure). The large stainless steel diaphragm and large seat provide high flow with responsiveness and excellent regulating characteristics.



PDS600 Series

The PDS600 Series manifold system is a simple high purity switchover designed to provide a continuous supply of high purity gas to the laboratory or process plant. Available in brass or 316 stainless steel, the PDS600 is the solution to supplying pure gases to critical applications. Designed for use with one cylinder per side or with a multi-cylinder manifold.



See our full line catalogs for high purity instrumentation (Form No. 56-0874) and gas manifolds (Form No. 81-2104) or visit us on the web at www.victorhpi.com for more information.

VM Series Manifold

The VM Series manifolds are truly the most versatile available for industrial, medical, flammable and oxidizing gases. The high flow capacity and ease of operation make the VM manifolds the choice for a multitude of applications. Standard with local visual alarms and optional remote audio/visual alarms that provide notification when the reserve side is in operation and cylinders need to be changed.



VHP2000 Series

The VHP2000 is an enclosure style pressure differential manifold ideal for indoor or outdoor installation. The standard system comes with a local visual alarm and optional remote alarms that provide visual and audible alarms anywhere an alarm signal is desired. Brass or stainless steel construction makes the VHP2000 an extremely versatile system suitable for a variety of high purity gases.



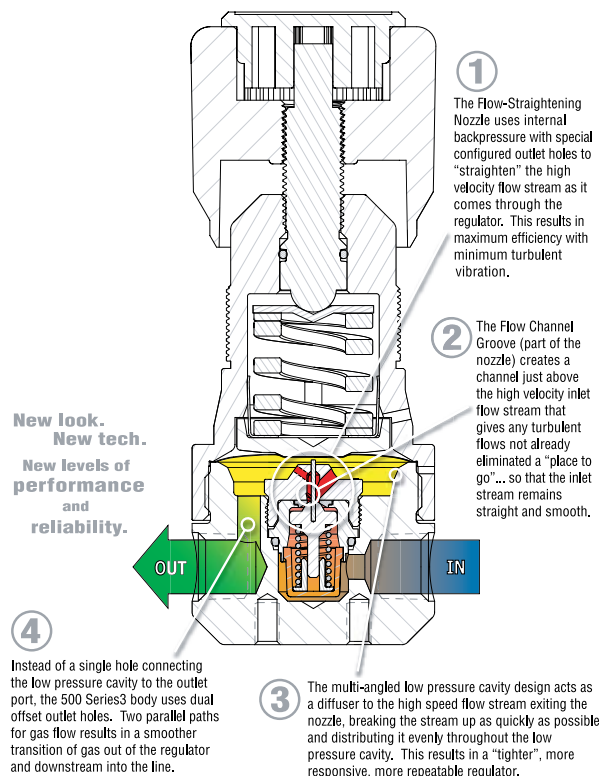
Configurator

Victor Specialty Products has recently implemented a dramatic improvement in the way that HP&I are ordered with the introduction of a product configurator.

The new approach eliminates the need for the 8-digit part numbers that we previously used. The part number is now derived from a configured string that completely describes the regulator. The configured string has always been part of the description and that will not change. The configured string, derived from our part number matrix will simply become the part number. This will dramatically improve delivery and simplify order processing.

When a customer needs a special regulator, the configurator provides a means create a bill of materials and instantly provide pricing and availability.

500 Series³ High Purity Regulator



NEW Model Number System

Series	Delivery	Inlet Fitting	Outlet Fitting	Options
XXX500	XXX	XXX	XXX	XX
HPS Brass Single Stage	15 (2-15 psig)	CGA 240, 330, 350, 540, 580, 660, 705	BV 1/4" Shut-off valve	00 Bare body
HPT Brass Two Stage	40 (2-40 psig)	4F 1/4" Female NPT	DK 1/4" DRK valve	01 Cross purge
HPL Brass Line (4-Port Body)	80 (4-80 psig)	4M 1/4" Male NPT	4M 1/4" Male fitting	02 Helium Leak Certification
SGS Stainless Steel Single Stage	125 (5-125 psig)	Inlet Protocol Option	4F 1/4" Female port	03 Certification
SGT Stainless Steel Two Stage	200 (10-200 psig)	B1P 1 Pigtail	2S 1/8 Swagelok®	04 Captured Vent
SGL Stainless Steel Line (4-Port Body)	300 (10-300 psig)	B2P 2 Pigtail	4S 1/4" Swagelok®	05 Panel mount kit
	500 (20-500 psig)		FM Flowmeter	06 W/O gauges
				07 Relief Valve

Ordering Examples: **SGS500/125/580/DK**

SGS500 regulator w/125 psig delivery pressure
CGA 580 inlet fitting, 1/4" Diffusion Resistant Valve
outlet fitting. No options selected.

SGS500/500/4F/2S/02, 04

SGS500 regulator w/500 psig delivery pressure
1/4" Female NPT inlet port, 1/8" Swagelok® outlet fitting
Helium Leak Certification option, Captured Vent option.



Victor Medical

Leader in medical oxygen market, delivering quality and outstanding service at a fair price.

O2n Demand IV Conserver

The O2n Demand IV is a pulse style conserving device designed to deliver a controlled pulse dose of oxygen at the beginning of inspiration, regardless of breath rate. The single lumen design allows the use of standard single lumen cannulas. Its single lumen pulse design makes it the quietest and most accurate conserver on the market, making it less irritating to the patient. With a conserving ratio of up to 6:1 the O2n Demand IV maximizes ambulatory time while maintaining peak levels of oxygenation. The unit also offers the highest number of conserving and continuous flow settings available, making it suitable for a broader range of patients.



O2n Demand V Conserver

The O2n Demand V is a demand style dual cannula conserver for the active patient to make mobility a little easier and more convenient. No batteries are required for operation. Thus, the unit can operate in various temperatures and conditions without fear of failure. With its pneumatic operating system, the patient receives oxygen during the entire inhalation cycle of the breathing cycle; not during exhalation. With 22 flow settings (11 conserve & 11 continuous) the O2n Demand V is suitable for a broad range of patients. The lighter weight (13.6 OZ.) and smaller size (4 3/4" long) of the O2n Demand V will cause less fatigue and the 4:1 conserving ratio allows longer cylinder life than other comparable conserving devices.



Slimlite II[®] Series

The SLIMLITE II Series of regulators are sleek and light. The combination of anodized aluminum and full brass core construction with unibody design, incorporates a flow control regulator with a built-in yoke for durability and convenience.



Respi-lite I Series

The Respi-lite I Series of regulators are lightweight compact medical oxygen regulators featuring an anodized aluminum exterior with brass internal components. The click style adjustment (0-8 LPM or 0-15LPM) and integral CGA870 yoke make these regulators ideally suited for respiratory patients at home or in a healthcare facility.



VMG Series Regulators

The VMG-Series of flow gauge regulators provides superior performance. Pediatric flow gauges are scribed in both LPM & CC/M. All VMG models are built with high impact resistant Noryl[®] bonnets and contoured ABS adjusting knobs. High visibility gauges with enlarged numbers provide dependable and precise flow rate settings throughout the entire flow range.



Victor Medical Flowmeters

Victor Medical flowmeters are made of highly durable medical grade Lexan[™] to minimize breakage.

- Large numerals for adjustment ease
- Lexan[™] inner and outer tubes avoid breakage
- Calibrated at 50 PSIG inlet pressure



VM Series Manifold

The VM2100 (High Pressure) and VM1100 (Liquid Cylinder) manifolds are truly the most versatile medical gas manifolds available. The high flow capacity and ease of operation make the VM manifolds the choice for Hospitals, Surgical Centers, Urgent Care Facilities and Veterinary Hospitals. These fully automatic systems come standard with local visual alarms and optional remote audio/visual alarms that provide notification when the reserve side is in operation and cylinders need to be changed. The VM2100 & VM1100 Series manifolds meet all requirements of NFPA99.



See our full line catalog (Form No. 68-9902) or visit us on the web at www.victormed.com for more information.



WORLD WIDE WELDER

From Africa to the Eiffel Tower to the Mississippi River — Sow Ibrahim's twenty years as a welder has been a global adventure.

Sow learned how to weld at his father's company. That was over 20 years ago in Senegal, a small country on the African continent. Ever since, he has done welding around the globe.

He spent 15 years welding in the Italian countryside. His job even brought him to France's Eiffel Tower where he applied his craft.

Today Sow works in the U.S. at Cash's Scrap Metal where he cuts big river barges into scrap for recycling. Cash's has been featured twice on the Discovery Channel's Dirty Jobs.

Sow is a welding specialist with a fierce passion for the job. His boss said he loves welding so much, he must be told to leave at the end of his shift. "I want to be busy all the time. A hardworking environment is the best way to keep my skills growing," he says with pride.

WELDING IS A DANGEROUS JOB. SOW USES VICTOR TORCHES AND EQUIPMENT TO SHARPEN HIS SKILLS, STAY SAFE, AND CONTINUE HIS DYNAMIC CAREER.

SOW IBRAHIMA

Scrap Metal and Iron Worker

Sow carries the torch – will you?

THERMADYNE, A GLOBAL CUTTING AND WELDING LEADER, joins the American Welding Society in encouraging individuals to practice the art, craftsmanship and professions of welding, metalworking and fabrication. Victor, Thermal Dynamics, Thermal Arc, Arcair, Tweco, Stooddy, Cigweld and TurboTorch are among the Thermadyne family of brands that you can count on for safety, reliability and quality.

VICTOR®

www.thermadyne.com



American Welding Society
Sustaining Company Member



KEY APPLICATIONS

HVAC
REFRIGERATION
MAINTENANCE
AND REPAIR
PLUMBING

VIPER™

**TurboTorch's
NEW complete
line of premium
brazing alloys,
solders
and fluxes.**

Self Lighting Torches & Tips



TX-500 (0386-1299)

ProPak with TX-504
Self-Lighting Torch, and
TX-504 and TX-503 Tips.



STK-99 (0386-0851)

STK-99 Self Lighting
Hand Torch

EXTREME®

Swirl Combustion Tip
Concentrates Heat – Reduces
Brazing Time by

40%



TX-503 (0386-1297)

EXTREME Self Lighting
Hand Torch



PL-3A (0386-0874)

Air/Acetylene
Self Lighting Tip



PL-8A (0386-0819)

Air/Acetylene
Self Lighting Tip



TX-504 (0386-1293)

EXTREME Self Lighting
Hand Torch



PL-5A (0386-0818)

Air/Acetylene
Self Lighting Tip



T-503 EXTREME (0386-1298)

Replacement Tip for TX-503
Self Lighting Hand Torch

Self Lighting Torches					Self Lighting Tips					
MODEL	TX-500	TX-503	TX-504	STK-99	PL-3A	PL-5A	PL-8A	PL-12A	T-504	T-503
GAS	Disposable Propane Tanks				Air Acetylene					
BASIC BRAZING	•	•	•	•	•	•	•	•	•	•
HANDYMAN	•	•	•	•	•	•	•	•	•	•
HVAC	•	•	•	•	•	•	•	•	•	•
MAINTENANCE & REPAIR	•	•	•	•	•	•	•	•	•	•
PLUMBING	•	•	•	•	•	•	•	•	•	•
REFRIGERATION	•	•	•	•	•	•	•	•	•	•
BRAZE/WELD	3/4" - 4"	1/8" - 3"	3/4" - 4"	1/4" - 3"	1/4" - 1"	3/4" - 1 1/2"	1" - 2"	2" - 4"	3/4" - 4"	1/8" - 3"

TURBOTORCH Website Keyword Search Tip –
In addition to the product name and part number, you can search using keywords such as air fuel brazing, soldering, acetylene, totes, torches, self lighting and tx.

See our full line catalog (Form No. 56-1252) or visit us on the web at www.turbotorch.com for more information.

Swirl Air Acetylene Kits & Tips



X-3B
(0386-0335)
Flexible kit brazes light
medium gauge steel.



A-3
(0386-0101)



**PL-8ADLX-MC
KIT**
(0386-0834)



X-5B
(0386-0338)
Flexible lighter duty kit.



**PL-5ADLX-MC
KIT**
(0386-0832)



**PL-12ADLX-B
KIT**
(0386-0836)

Manual Lighting Torches & Tips



STK-1
(0386-0408)
Manual Lighting
Hand Torch



STK-11
(0386-1283)
Manual Lighting
Hand Torch



ST-3 EXTREME
(0386-0171)
Size 3 Hand Torch Tip



STK-9
(0386-0403)
Manual Lighting
Hand Torch

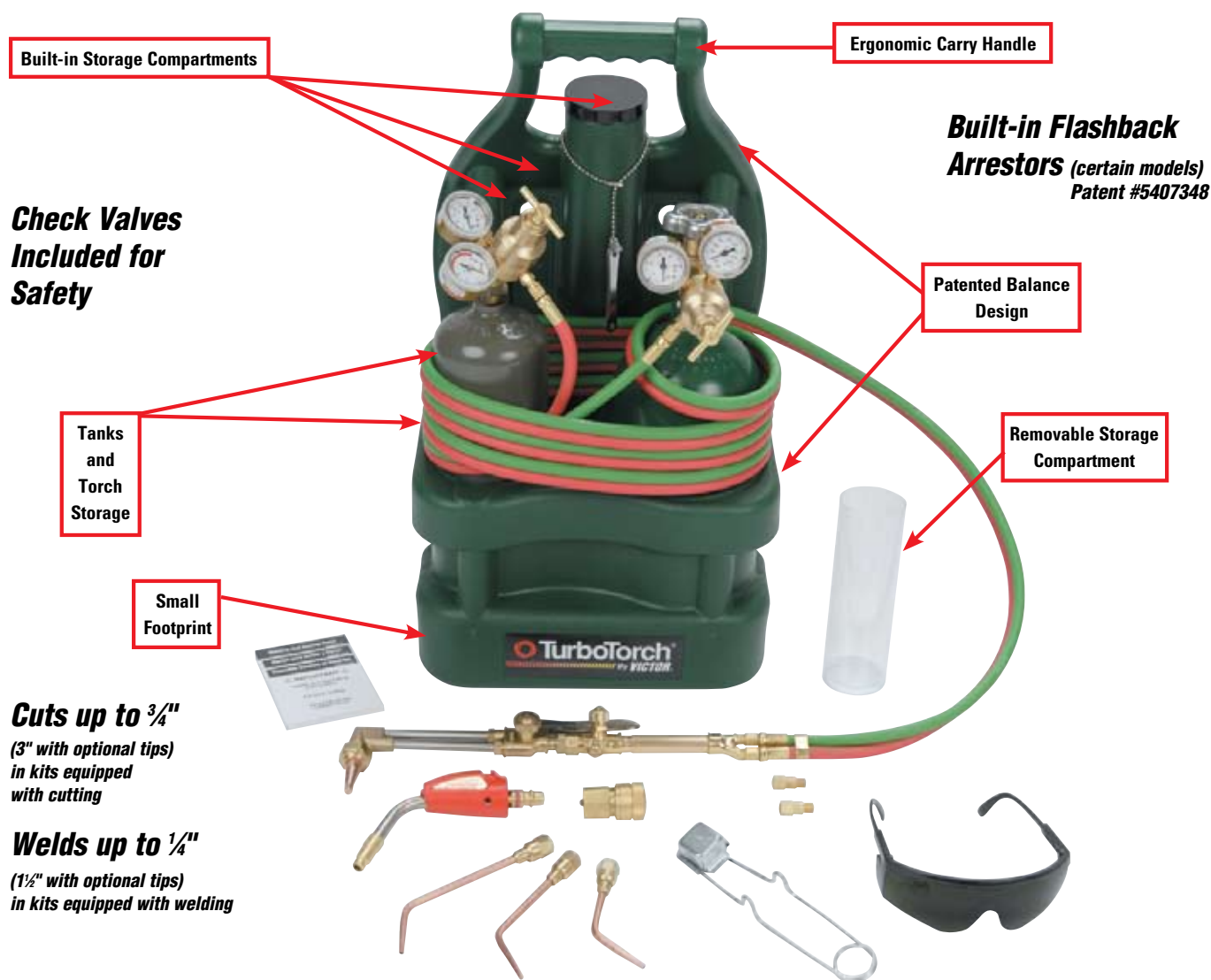


ST-1 EXTREME
(0386-0170)
Size 1 Hand Torch Tip



ST-11 EXTREME
(0386-1282)
Double Barrel Hand
Torch Tip

Swirl Air Acetylene Kits & Tips						Manual Lighting Torches & Tips					
MODEL	X-3B	X-5B	PL-5ADLX	PL-8ADLX	PL-12ADLX	STK-1	STK-9	STK-11	ST-1	ST-3	ST-11
GAS	Air Acetylene					Manual Lighting Torches & Tips					
BASIC BRAZING	•	•	•	•	•	•	•	•	•	•	•
HANDYMAN	•	•	•	•	•	•	•	•	•	•	•
HVAC	•	•	•	•	•	•	•	•	•	•	•
MAINTENANCE & REPAIR	•	•	•	•	•	•	•	•	•	•	•
PLUMBING	•	•	•	•	•	•	•	•	•	•	•
REFRIGERATION	•	•	•	•	•	•	•	•	•	•	•
BRAZE/WELD	1 5/8" - 3"	2" - 3 1/2"	3/4" - 1 1/2"	1" - 2"	2" - 3 1/2"	1 1/8" - 3/8"	3/8" - 2 1/2"	1 1/8" - 7/8"	1 1/8" - 7/8"	3/16" - 3/4"	3/16" - 3/4"



TurboTorch by VICTOR													
MODEL	TTV-100-C	TTV-100-CP	TTV-100-CPT	TTV-J-A	TTV-J-AP	TTV-J-APT	TTV-J-AM	TTV-J-ST	TTV-J-STP	TTV-J-STPT	TTV-J-AC	TTV-J-ACP	TTV-J-ACPT
DESCRIPTION	Medium Duty Oxy-Fuel Cutting, Brazing, Heating Equipment Only	Medium Duty Oxy-Fuel Cutting, Brazing, Heating Plastic Tote Without Tanks	Medium Duty Oxy-Fuel Cutting, Brazing, Heating Plastic Tote With Tanks	Light Duty Oxy-Fuel and Air-Fuel Brazing, Heating Equipment Only	Light Duty Oxy-Fuel and Air-Fuel Brazing, Heating Plastic Tote Without Tanks	Light Duty Oxy-Fuel and Air-Fuel Brazing, Heating Plastic Tote With Tanks	Light Duty Oxy-Fuel and Air-Fuel Brazing, Heating Metal Tote Without Tanks	Light Duty Oxy-Fuel and Air-Fuel Brazing, Heating Specialty Equipment Only	Light Duty Oxy-Fuel and Air-Fuel Brazing, Heating Specialty Plastic Tote Without Tanks	Light Duty Oxy-Fuel and Air-Fuel Brazing, Heating Specialty Plastic Tote With Tanks	Light Duty Oxy-Fuel Cutting, Brazing, Heating Equipment Only	Light Duty Oxy-Fuel Cutting, Brazing, Heating Plastic Tote Without Tanks	Light Duty Oxy-Fuel Cutting, Brazing, Heating Plastic Tote With Tanks
NEW PART NO.	0386-1337	0386-1335	0386-1336	0386-1340	0386-1338	0386-1339	0386-1341	0386-1344	0386-1342	0386-1343	0386-1347	0386-1345	0386-1346
OLD MODEL/PN#	D.N.E.	110-01FP 0386-0038	110-01FPT 0386-0479	D.N.E.	CWK-5 0386-0055	CWK-5T 0386-0058	D.N.E.	D.N.E.	D.N.E.	D.N.E.	D.N.E.	D.N.E.	D.N.E.
BASIC BRAZING	•	•	•	•	•	•	•	•	•	•	•	•	•
HANDYMAN				•	•	•					•	•	•
HVAC	•	•	•	•	•	•	•						
MAINTENANCE & REPAIR								•	•	•	•	•	•
PLUMBING								•	•	•	•	•	•
REFRIGERATION				•	•	•	•	•	•	•			
Cut	3/4"	3/4"	3/4"								3/8"	3/8"	3/8"
Braze/Weld	5/64" - 2 5/8"	5/64" - 2 5/8"	5/64" - 2 5/8"	1/4" - 1/2"	1/4" - 1/2"	1/4" - 1/2"	1/4" - 1/2"	1/8" - 7/8"	1/8" - 7/8"	1/8" - 7/8"	3/16" - 3/4"	3/16" - 3/4"	3/16" - 3/4"



Check out pages 34-35
for a reference chart on
our favorite, top of the line MIG guns.

Or see our full line catalog or visit us on the
web at www.tweco.com for more information.

Tweco Arc Welding Accessories

Tweco, a brand of St. Louis-based Thermadyne Industries Inc., is the world's largest supplier of welding and cutting products. The Tweco line includes an extensive array of products from the basic manual welding tools and accessories to MIG guns, consumables, and a complete selection of products for precision robotic welding applications. Tweco is an ISO 9001 registered company.



Tweco & Arcair Professional
Arc Welding / Gouging Equipment
& Consumables Catalog
(Form No. 64-2103)

Smoke Master® MIG Guns

250 & 450 AMP AIR-COOLED
60% Duty Cycle, CO₂ Gas

- Efficiently Removes up to 90% of Smoke from the Welding Zone
- Features Tweco Eliminator® Style Consumable Parts
- Tough Outer Jacket Made of Full Length Leather for Increased Flexibility and Enhanced Cable Life
- Cleaner, More Efficient Smoke Removal

250 AMP



Smoke Master

FUME REMOVAL SYSTEM

- Compatible with Tweco Smoke Master MIG Guns
- Efficiently Removes Welding Fumes
- High Efficiency Filter
- Separately Air-cooled Motor
- Automatic Start-Stop Function Standard
- 120V / 60 Hz.



EVERY FAMILY HAS A KNUCKLEHEAD. MEET OURS.

Pete is a welding engineer and works for Thermadyne. He's also a skilled welder and he's pretty excited about the new technology from Tweco called KNUCKLEHEAD, that allows welders to work more efficiently from all angles. Tweco is among the family of brands from Thermadyne. Pete's a member of our family too. Both knuckleheads are worth getting to know.

We mean this in the most affectionate sense of the word. Like your ingenious cousin Joey, who looks like a numskull but can fix anything, the makers of the world's most popular MIG guns, Tweco, has developed a new product using a patent pending mechanical ball and socket joint design that enables users to virtually infinite adjustments and firm positioning. According to tests performed by the Tweco engineering lab, the KNUCKLEHEAD flexible conductor tube outperforms the leading competitor by a factor of ten. Don't be a blockhead. Work smarter with the KNUCKLEHEAD by Tweco.

PETE ANDERSON
Thermadyne
Louisville, KY
www.tweco.com

Knucklehead™

Tested 100% better than the leading competitor

Thermadyne, A GLOBAL CUTTING AND WELDING LEADER, joins the American Welding Society in encouraging individuals to practice the art, craftsmanship and professions of welding, metalworking and fabrication. Victor, Thermal Dynamics, Thermal Arc, Arcair, Tweco and Stoddy are among the Thermadyne family of brands that you can count on for safety, reliability and quality.

Tweco Professional

www.thermadyne.com

American Welding Society
Sustaining Company Member

The leading competitor's flexible conductor tube showed signs of failure after as few as 348 cycles.* After 700 cycles the competition failed completely.

*According to laboratory tests, performed by the Tweco engineering lab in Denton, Texas.

Competitor	Cycles to Failure
Leading competitor	at 348 cycles
Leading competitor	at 421 cycles
Leading competitor	at 700 cycles



	Mini	#1	#2	#3
Application	light duty, hobby	light duty, hobby	light duty, maintenance & repair	medium duty, industrial
Amps	160 amp air cooled	180 amp air cooled	200 amp air cooled	300 amp air cooled
Duty Cycle Rating	60% CO2 gas	60% CO2 gas	60% CO2 gas	60% CO2 gas
Available Lengths	10', 12', 15', 20'	10', 12', 15', 20'	10', 12', 15', 20', 25'	10', 12', 15', 20', 25'
Rear Plug Connections	Tweco, Miller®, Lincoln®, Euro-Kwik	Tweco, Miller, Lincoln, Euro-Kwik	Tweco, Miller, Lincoln, Euro-Kwik	Tweco, Miller, Lincoln, Euro-Kwik
Options / Features	• Knucklehead™	• quick change • swivel conductor tube • Knucklehead™	• metal jacketed conductor tube • Knucklehead™	• metal jacketed conductor tube
Nozzle Series	21 series	21 series	22 series	23 series
Tip Series	11 series	11 series	14 series	14 series
Diffuser Series	35-50	51 series	52 series	54 series
Nozzle Insulator	none (self insulated nozzle)	none (self insulated nozzle)	32 series	none (self insulated nozzle)
Conductor Tube Series	35-60, 45 & 60°	61 series 45 & 60°	62J series 45 & 60°	63J series 45 & 60°
Liner Series	40 series	42 series	42 series	44 series



	WS150	WS250	WS400	SpitFire® 180
Application	light duty, hobby	light duty, industrial & repair	heavy duty, manufacturing	light duty, hobby
Amps	150 amps air cooled	250 amps air cooled	400 amps air cooled	180 amps air cooled
Duty Cycle Rating	60 % CO2 gas	60 % CO2 gas	60 % CO2 gas	80% CO2 gas
Available Lengths	10', 12', 15'	10', 12', 15', 20', 25'	10', 12', 15', 20', 25'	10', 15', 20', 25'
Rear Plug Connections	Tweco, Miller, Lincoln, Euro-Kwik	Tweco, Miller, Lincoln, Euro-Kwik	Tweco, Miller, Lincoln, Euro-Kwik	Tweco, Miller, Lincoln, Euro-Kwik
Options / Features	• metal jacketed conductor tube • front & rear steel spring strain relief	• metal jacketed conductor tube • front & rear steel spring strain relief	• metal jacketed conductor tube • front & rear steel spring strain relief	• metal jacketed & swivel conductor tube • front & rear steel spring strain relief • ergonomic
Nozzle Series	WS 21-50	WS22-50	WS24A62	21 series
Tip Series	WS11 series	WS14 series	WS14 series	11 series
Diffuser Series	WS51	WS52	WS54	WS51 series
Nozzle Insulator	none (self insulated nozzle)	none (self insulated nozzle)	WS34A	63J3 series
Conductor Tube Series	WM150J Series 45 & 60°	WM250J Series 45 & 60°	64J-60 or 64J-45 (20' and 25' models)	TS62J Series 45 & 60°
Liner Series	WS42 Series	WS44 Series	WS44 Series	WM42 Series

Miller is a registered trademark of Illinois Tool Works, Inc. Lincoln is a registered trademark of Lincoln Electric Co. The afore mentioned trademarks are in no way affiliated with Tweco or Thermadyne Industries, Inc.

TWECO Website Keyword Search Tip –
In addition to the product name and part number, you can search using keywords such as arc welding accessories, MIG guns, a532, twecolong, electrode holders and contact tips. (See Index on pages 6-7 for more info.)

Tweco®
Professional

Tweco®
Professional



MIG Guns

	#4	Spray Master® 250	Spray Master® 350	Spray Master® 450
Application	heavy duty, industrial	heavy duty, pulse & spray	heavy duty, pulse & spray	heavy duty, pulse & spray
Amps	400 amp air cooled	250 amps air cooled	350 amps air cooled	450 amps air cooled
Duty Cycle Rating	60% CO2 gas	80% Duty Cycle with Argon Mixed gas	80% Duty Cycle with Argon Mixed gas	80% Duty Cycle with Argon Mixed gas
Available Lengths	10', 12', 15', 20', 25'	10', 12', 15', 20', 25'	10', 12', 15', 20', 25'	10', 12', 15', 20', 25'
Rear Plug Connections	Tweco, Miller, Lincoln, Euro-Kwik	Tweco, Miller, Lincoln, Euro-Kwik	Tweco, Miller, Lincoln, Euro-Kwik	Tweco, Miller, Lincoln, Euro-Kwik
Options / Features	- metal jacketed conductor tube - Knucklehead™	- metal jacketed & swivel conductor tube - Knucklehead™ - ergonomic	- metal jacketed & swivel conductor tube - dual schedule - locking trigger - Knucklehead™ - ergonomic	- metal jacketed & swivel conductor tube - dual schedule - locking trigger - long tubes - Knucklehead™ - ergonomic
Nozzle Series	24 series	HD22 Series	EL22CT Series	HD24 Series
Tip Series	14 series	11 series	16 Series	16 series
Diffuser Series	54 series	HD52-11	EL52CT series	MS54, HD54 Series
Nozzle Insulator	34 series	none (self insulated nozzle)	none (self insulated nozzle)	none (self insulated nozzle)
Conductor Tube Series	64J series 45 & 60°	MS63 series, 45, 60 180°	MS64H series, 45, 60, 180°	MS64H series, 45, 60, 180°
Liner Series	44 series	42 series	44 series	44 series

** This info is related to std. gun configurations**

Tweco®
WeldSkill®



	SpitFire® 250	SpitFire® 450
Application	light duty, industrial, repair	heavy duty, manufacturing
Amps	250 amps air cooled	450 amps air cooled
Duty Cycle Rating	80% CO2 gas	80% CO2 gas
Available Lengths	10', 15', 20', 25'	10', 15', 20', 25'
Rear Plug Connections	Tweco, Miller, Lincoln, Euro-Kwik	Tweco, Miller, Lincoln, Euro-Kwik
Options / Features	- metal jacketed & swivel conductor tube - front & rear steel spring strain relief - ergonomic	- metal jacketed & swivel conductor tube - front & rear steel spring strain relief - ergonomic
Nozzle Series	HD22 Series EL22 Series	HD24 Series EL24 Series
Tip Series	11H series EL16 Series	16S Series EL16 Series
Diffuser Series	TS52HD Series EL52HD Series	HD54 Series EL54 Series
Nozzle Insulator	63J3 series	63J3 series
Conductor Tube Series	TS62J Series 45 & 60°, standard & eliminator	TS64J Series 45 & 60°, standard & eliminator
Liner Series	WM42 Series	WM44 Series

Part No.	Stock No.	Description
TWECO PROFESSIONAL		
3515K4	10001602	MINI-MIG 160, 15' 3035 NH480
M3515K4	10001607	MINI-MIG 160, 15' M, 3035 NH480
1123035K4	10101630	NO. 1, 12', 3035, NH480
M1153035K4	10101625	NO. 1, 15', M, 3035, NH480
2154045K4	10201660	NO. 2, 15', 4045, NH480
M2154045K4	10201661	NO. 2, 15', M, 4045, NH480
4153545K3	10401685	NO. 4, 15', 3545, NH360
4153545K4	10401686	NO. 4, 15', E, 3545, NH480
M4153545K3	10401687	NO. 4, 15', 3545, NH360
M4153545K4	10401688	NO. 4, 15', M, 3545, NH480
L4153545K4	10401689	NO. 4, 15', L, 3545, NH480
X4153545K4	10401690	NO. 4, 15', E, 3545, NH480
MS212M3545K4	10231013	SM 250, 12', M, 3545, NH480
MS2153545K4	10231011	SM 250, 15', 3545, NH480
MS215M3545K4	10231014	SM 250, 15', M, 3545, NH480
MS315116K4	10361715	SM 350, 15', 116, NH480
MS315M116K4	10361716	SM 350, 15', M, 116, NH480
MS315L116K4	10361717	SM 350, 15', L, 116, NH480
MS415116K4	10401530	SM 450, 15', 116, NH480
MS415M116K4	10401531	SM 450, 15', M, 116, NH480
MS415L116K4	10401533	SM 450, 15', L, 116, NH480
MS415X116K4	10401532	SM 450, 15', E, 116, NH480
TWECO WELDSKILL		
WM250154045K4	10271060	WS 250, 15', 4045, NH480
WM250M154045K4	10271061	WS 250, 15', M, 4045, NH480
WM40015116K4	10401170	WS 400, 15', 116, NH480
WM400L15116K4	10401172	WS 400, 15', L, 116, NH480
WM400M15116K4	10401171	WS 400, 15', M, 116, NH480
WSP2253545K3	10271381	WS SPOOL GUN 225, 15', 3545, NH360
TS1153035K4	10131115	SPITFIRE 180, 15', 3035, NH480
TS115M3035K4	10131116	SPITFIRE 180, 15', M, 3035, NH480
TS2154045K4	10231166	SPITFIRE 250, 15', 4045, NH480
TS215M4045K4	10231167	SPITFIRE 250, 15', M, 4045, NH480
TS415116K4	10401220	SPITFIRE 450, 15', 116, NH480
TS415M116K4	10401221	SPITFIRE 450, 15', M, 116, NH480
TS415L116K4	10401222	SPITFIRE 450, 15', L, 116, NH480

Consumables

Tips, Diffusers, Nozzles, Conductor Tubes and Wire Conduit to meet all your MIG gun needs. Here is just a sampling of our complete line. . .

Contact Tips

Eliminator® Style Contact Tips



Standard Contact Tips for Traditional and Spray Master® Guns Standard, Tapered & Heavy Duty Styles



Chrome Zirconium Copper "RZ" Contact Tips



Copper-Silver Tweco Robotics "RS" Contact Tips



Diffusers

Eliminator Style Diffusers



Diffusers for Traditional Style Guns



Heavy Duty Diffuser for Spray Master Guns

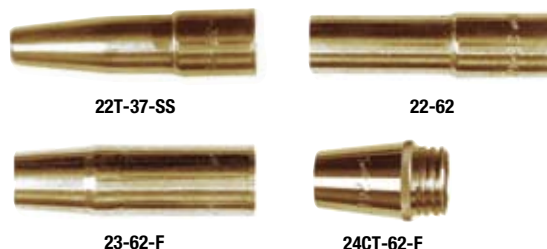


Nozzles

Eliminator Style Nozzles



Standard Nozzles for Traditional and Spray Master Guns Standard, Tapered & Heavy Duty Styles



Optional Nozzles

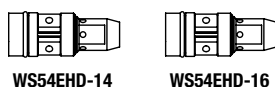


Competitive Style Diffusers

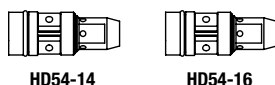
BERNARD® Style Diffusers



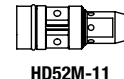
ESAB® Style Diffusers



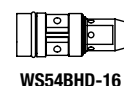
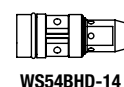
TREGASKISS® Style Diffusers



MILLER® Style Diffuser



OXO® Style Diffusers



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Wire Conduit

Wire Conduits for All Guns

Eliminator®, Traditional & Spray Master®



42-3035-15

Conductor Tubes

Conductor Tubes for Eliminator, Traditional & Spray Master Guns
45° and 60° Tube Angles



MS63-60S



64EX-45



35-60-60



64J-60

Flexible Conductor Tubes



Knucklehead™

Model	Part Number	Footnote Code	Stock Number
Mini	3560SFX480	2	16001141
#1	61SFLX480	2	16101105
#2	62SFLX360	1	16201105
	62SFLX480	2	16201106
#4	64SFLX360	1	16401112
	64SFLX480	2	16401113
	64SFLX360LR	1*	16401121
	64SFLX480LR	2*	16401122
MS250-MS350	MS62SFLX360	1	16201341
	MS62SFLX480	2	16201342
	MS63SFLX360	1	16301197
	MS63SFLX480	2	16301198
MS450	MS64SFLX360	1	16401307
	MS64SFLX480	2	16401308
	MS64SFLX360LR	1*	16401309
	MS64SFLX480LR	2*	16401310

1 - Three connector design - bends up to 60°

2 - Four connector design - bends up to 80°

* - Extended reach design - 2 inches longer

- Improved Weld Quality
- Less Welder Fatigue
- Lasts Longer Than Any Design on the Market Today
- Eliminates Downtime Caused by Changing Conductor Tubes
- Increased Productivity
- Improved Gun Ergonomics

NEW & Improved Tweco Website

Visit our new website, same address, newer look, more features. Website now allows the user to look up specific part numbers for detailed specifications, including images and literature available. Stop by and check it out.

www.tweco.com

WHERE TO BUY SERVICE & SUPPORT

THERMADYNE CORPORATE THERMADYNE BRANDS

PROCESSES/APPLICATIONS BY THERMADYNE

GAS APPARATUS **VICTOR**

WELDING EQUIP **Tweco**

PLASMA CUTTING **BERNARD DYNAL**

ARC GROUTING & CUTTING **ARC AIR**

POWER SUPPLIES **THERMAL ARC**

HARDFACING & ALLOYS **STODDY**

WELDING & CUTTING **ECOWELD**

BRAZING & SOLDERING **TURBOFORCH**

Tweco Professional

PRODUCTS | ABOUT US | LITERATURE | RESOURCE CENTER | NEWS | PRODUCT SPOTLIGHT | PROMOTIONS | HOME

TWECO is the leader in MIG ARC WELDING guns, gun kits and accessories.

- MIG GUNS
- GROUTING TORCHES
- ELECTRODE HOLDERS
- GROUND CLAMPS
- ROBOTICIZED ARC WELDING

Decrease Welder Fatigue

Tweco Flexi-MIG™
Conductor Tube

LEARN & WIN

ARC WELDING PRODUCTS AND ACCESSORIES

TEST your knowledge and enter TO WIN A \$100 Bass Pro Shops gift card.

[CLICK HERE](#)

Current News

[Adapter/Gas Diffuser for Bernard Style MIG Guns](#)

[Tweco® Switchable Magnetic Ground Clamps](#)

16052 Swingle Ridge Rd. : Suite 300 : St. Louis, MO 63017

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Manual Arc Welding Equipment

TwecoTong® Electrode Holders

200, 250, 300, 350, 400 & 500 AMP

- Copper Alloy Body
- Reversible Top and Bottom Insulators
- Efficient 6-position Jaw Patterns
- Fully Insulated/Protected Springs
- Ball-point Cable Connection

A-532
(200A)



A-316
(250A)



A-732
(300A)



A-14
(350A)



A-14-HD
(400A)



A-38-HD
(500A)



Tweco-Tite® Electrode Holder

400 AMP

4TT
(400A)



Ground Clamps

Steel, Copper & Flat Ground Clamps

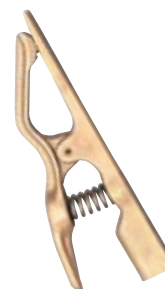
- Steel Ground Clamp (300A & 500A)
- Copper Ground Clamp (200A, 300A & 500A)
- Flat Ground Clamp (200A & 300A)



SGC-500
(500A)



GC-300
(300A)



FGC-500
(500A)

Heavy Duty Rotary Ground Devices

400, 600, 800, 1500 & 2000 AMP

- Available with 1, 2 or 3 Heads
- Simple Tension Adjusting Bolt for Maximum Efficiency
- No Brushes, Springs or Mercury
- 2" Shaft



RG-440
(1500A)



GCRG-140
(400A)

Roto-Work Grounding Clamps

500, 600, 1200 & 2000 AMP

- Work in Conjunction with Rotary Ground Devices
- Large Tightening Screws and Ample Contact Surface Area for Efficient Operation



WCGR-1200
(1200A)



GC-600-75
(Clamp Only)

Switchable Magnetic Ground Clamps

Do you want to save time and money? Add convenience in welding with the Switchable Magnetic Ground Clamp from Tweco. Designed for use in flat and pipe applications, Switchable Magnetic Ground Clamps are easy to operate, easy to mount and can withstand heat up to 176° F (80° C). Turn the knob clockwise and you instantly have a secure grip.



Part Number	Description
SMGC200	200 Amp
SMGC300	300 Amp
SMGC600	600 Amp



Terminals and TwecoLugs

Screw-on Terminals

- Fit 1/2" (12.7mm) Terminal Size
- 3 Sizes Available

2-SF-50



Female Terminals

- 17/32" (13.5mm) Stud Hole Size
- Various Configurations Available

1-AF



1-OF



Cable Connectors

MPC & Whip Cable Connectors

- Positive Cam Action Optimizing Interfacing
- Heat and Oil Resistance Covers
- Zinc Plated Cover and Ball-point Cable Screws
- Various Cable Capacities & Packages Available



4-MPC



2-1-MPC

Ball-Point Connection Type Lugs

- 17/32" (13.5mm) Stud Hole Size
- Various Configurations Available

40-180



10-45



10-45C



40-180C



Heavy Duty Type Lugs

- Mechanical Ball-Point
- Various Configurations Available

140-HD-180



240-HD-180



140-HD-180C



TwecoLugs[®]

Crimp & Solder Type

- 150A, 225A, 250A & 325A Rating
- 50A, 70A & 90A Rating (Power Cable Lugs)
- Various Cable Sizes Available

T-40HD
(325A)



T-120
(225A)



T-46
(90A)





Tweco Robotics Quick Robotics

Welcome to world class Tweco Robotics MIG guns and accessories. The engineers at Tweco have worked overtime to continue the tradition of delivering best in class robotics MIG guns and accessories that will provide the reliability and value you expect from Tweco.

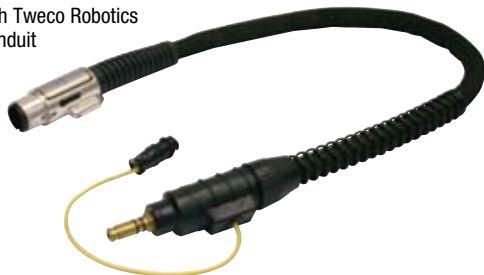
Robotic MIG Guns and Accessories

QRL Series Robotic MIG Gun

400 Amp Lightweight Air-Cooled MIG Gun

The new Tweco Robotics Quick Robotic Light Weight MIG Gun (QRL) offers the ideal MIG gun for "Table Top" robots. It is designed for ever day applications that require a lighter weight and smaller profile for robotic welding MIG gun functions.

- Quick Conductor Tube Lock for Easy Conductor Tube Replacement
- 40% Lighter Than the QRA Series MIG Gun
- E-stop Cable with Connections
- Smaller Physical Profile
- Compatible with Existing Mount Arms, and Uses Current conductor tubes and Consumables
- External Protective Sleeve
- Precision Front Case Assembly (gives high repeatability to mount and conductor tube)
- Furnished with Tweco Robotics R45-3545 Conduit



QRA Series Robotic MIG Gun

600 Amp Air-cooled MIG Gun

Tweco Robotics QRA series air-cooled MIG gun body and cable assemblies provide many features that will enhance your robotic welding application. MIG gun body and cable assemblies are furnished with these standard features:

- Improved Quick Tube Locking
- Standard 1 1/4" (41.28mm) Ø Mounting Cartridge Sleeve
- Precision Front Case Assembly (gives high repeatability to mount and conductor tube)
- Inch Switch Mounted in a Molded Housing on the Front MIG Gun Case
- E-stop Cable with Connections
- Both Front and Rear Heavy Cable Support Springs
- Kevlar®/Nylon Outer Protective Cable Cover
- Internal Protective Sleeve
- Internal Purge Hose for Spraying Protex® Antispatter Compound Through the Conductor Tube and Nozzle
- Furnished with Tweco Robotics R45-116 Conduit
- Furnished with a Tweco®, Miller® and Lincoln® Rear Connector Plug

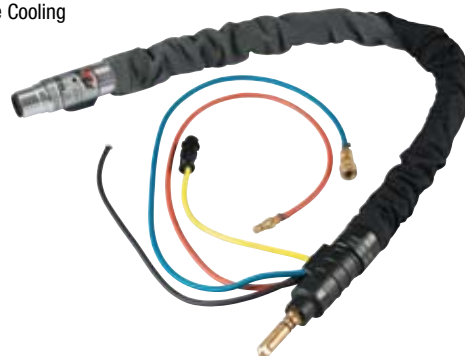


QRW / QRWA Series Robotic MIG Gun

600 Amp Water-cooled & Water/Air-Cooled MIG Gun

Tweco Robotics water-cooled MIG gun body and cable assemblies are offered in two (2) configurations. The QRW series features a water-cooled cable assembly while the QRWA series features an air-cooled cable assembly. Both accept the QTRW series water-cooled conductor tube. The QRWA series provides maximum cooling at the conductor tube end with a rugged, trouble free cable assembly.

- Water Shut-off Valves Located in the MIG Gun Body Assembly
- Color Coded "Water-in" and "Water-out" Hoses for Easier Hook-up
- Water Hose Quick Connections
- High Flow Rate – QRWA Series – for Improved Conductor Tube Cooling
- Larger Water Lines – QRW – for Improved Conductor Tube Cooling



RDM Series Deflection Mount

RDM 2000 Series

Tweco Robotics® RDM-2000 series — is a safety device designed to act as a switch between the conductor tube and the robot.

- Available in Three (3) models:
Part No. RDM-2000-S (Stock No. 3500-1155) – Light Duty
Part No. RDM-2000-M (Stock No. 3500-1156) – Medium Duty
Part No. RDM-2000-H (Stock No. 3500-1157) – Heavy Duty
- Units come standard with an air assist feature allowing the robot technician to increase the break-away pressure when required.
- E-Stop Cable Assembly- 18" long - Part No. RDM2000-JC (Stock No. 3044-1842) comes standard with the unit.



QRC™-2000 Nozzle Cleaning Station

The QRC Nozzle Cleaning Station has an advanced Rotary Impact Drive (RID) system which removes the spatter, allowing the cleaned MIG gun nozzle to continue the welding process. It also has a unique self-exhaust PDE cleaning system that keeps debris from the reamer blade area. The revolutionary clamp mechanism on the QRC-2000 system provides precise clamping on the nozzle.

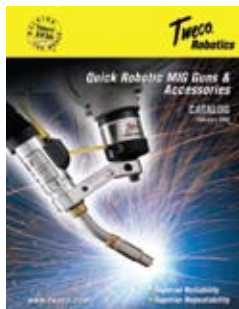
- Rotary Impact Drive (RID) System
- Dual Stage Pneumatic Clamping Device Ensures Positive, Secure Clamping on the Nozzle
- Easy to Program
- Two-Stage Cam Plate (2.5" cylinder) is a Solid Block with Universal Arm
- Pneumatic Drive Exhaust (PDE) System Blows Air Through Vent Holes on the Incline Housing Which Helps Prevent Slag Buildup in Shaft Area
- Uses Only Half the Air Consumption of Other Cleaning Stations
- Total Stroke Inside Nozzle 2" (50.8mm)
- Reamer Blade (QRC-100), Five Clamp Blocks and Programming Tools Included with the Unit



QRC-2000

**See our full line catalog
or visit us on the web
at www.tweco.com for
more information.**

Tweco Robotics
Quick Robotic MIG Guns
& Accessories Catalog
(Form No. 64-2203)



Cleaning Station Accessories

QWT-3 Wire Trim Unit

For use with QRC-2000



QWT-3

QRM-3 Anti-Spatter Mist Applicator

For use with QRC-2000



QRM-3

QRM-100 Anti-Spatter Mist Applicator

Reduce spatter build up in your MIG nozzle. Removal of spatter made easier. Provide better gas flow and improved weld quality.



QRM-100

Tweco Water Coolers

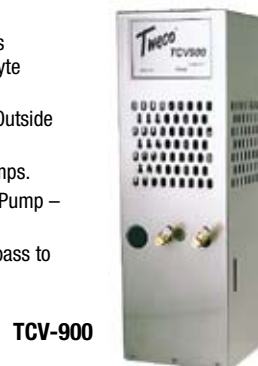
TC900 & TCV-900 Series

Enhance your water-cooled MIG welding process by incorporating a water-cooler from Tweco Products.

- Vertical or Horizontal Models Available
- Designed for MIG Guns up to 800 Amps and TIG Torches up to 500 Amps
- Stainless Steel Construction Eliminates Coolant Contamination Due to Electrolyte and Chemical Reactions
- High Efficiency Radiator Design Pulls Outside Air Through Radiator
- Available with Either Gear or Vane Pumps.
- Pump Bypass to Tank on Rotary Gear Pump – Keeps Pump from Overheating
- Vance Pumps are Equipped with a Bypass to Eliminate Excessive Pump Wear



TC-900



TCV-900



Tweco Robotics Fixed Automation

Tweco Robotics offers a complete line of automation MIG guns with or without cable assemblies. The product line consists of both air-cooled and water-cooled MIG guns and cable assemblies.

QF — TAM — RA — WRS

Each series offers something different that will meet your specific MIG fixed automation welding application specifications.

Thermadyne is excited to offer you incredible choices and innovation in fixed automation MIG welding equipment. Only the quality you come to expect from Tweco.

Fixed Automation MIG Guns and Accessories

QF Series Fixed Automation MIG Gun

QFA Air-cooled / QFW Water-Cooled

This series of Automation MIG guns is offered with and without cable assemblies. The series incorporates some of the same features found on the Tweco Robotics QR series MIG gun assemblies. Offered for use in MIG air-cooled and water-cooled welding applications.

Welding applications using the air-cooled QF series MIG guns can take advantage of the eight different bend configurations of air-cooled QTR66 conductor tubes. Welding applications requiring the water-cooled QF series MIG guns utilizes the water-cooled QTRW series conductor tubes, which are available in three different amperage ranges (300, 400, and 600), and eight different degrees of bend configurations.



TAM Series Fixed Automation MIG Gun

400 Amp & 500 Amp Air-Cooled

This series of Automation MIG guns is offered with and without a cable assembly. The series is only offered for air-cooled welding applications. There are two amperage ranges available, 400 and 500 ampere @ 60% duty cycle, both are offered with and without a cable assembly.

Mounting of this particular series is directly to the 1 1/8" (28.58mm) outside diameter of the MIG gun barrel. The outer surface of the MIG gun body is insulated from the inner tube by a polyester molding compound providing excellent di-electric properties.

TAM series with cable assemblies are offered in lengths of 2 ft. (.61m) to 15 ft. (5m).



RA Series Fixed Automation MIG Gun

400 Amp & 600 Amp Air-Cooled

This series of Automation MIG guns are offered only with a cable assembly and strictly for air-cooled welding applications. There are two amperage ranges to choose from, 400 and 600 ampere @ 60% duty cycle. Mounting surface is the outer diameter of the 1 5/8" (41.28mm) plastic case.

Five different bend configuration conductor tubes are available to choose from in each amperage range. The conductor tubes are keyed into the brass body of the assembly allowing a conductor tube to be replaced and the adjustments to be minimal when going from one tube configuration to another.



**See our full line catalog
or visit us on the web
at www.tweco.com for
more information.**

Tweco Robotics

Fixed Automation Arc Welding
Equipment & Consumables Catalog
(Form No. 64-2603)

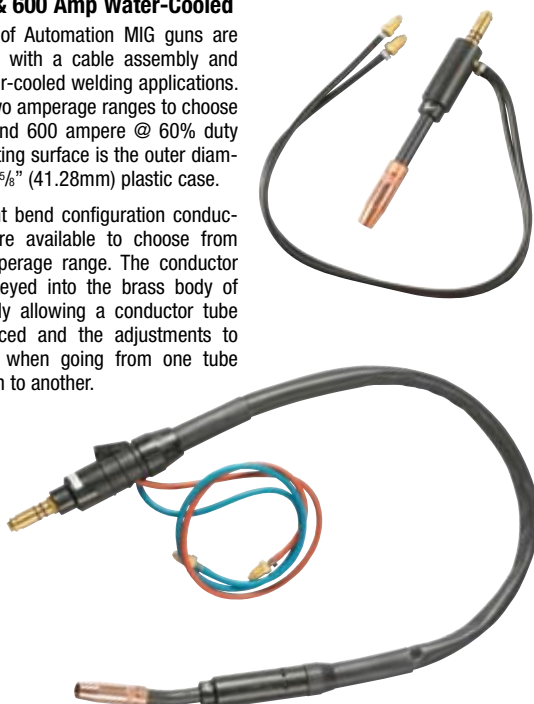


WRS Series Fixed Automation MIG Gun

400 Amp & 600 Amp Water-Cooled

This series of Automation MIG guns are offered only with a cable assembly and strictly for air-cooled welding applications. There are two amperage ranges to choose from, 400 and 600 ampere @ 60% duty cycle. Mounting surface is the outer diameter of the 1 $\frac{5}{8}$ " (41.28mm) plastic case.

Five different bend configuration conductor tubes are available to choose from in each amperage range. The conductor tubes are keyed into the brass body of the assembly allowing a conductor tube to be replaced and the adjustments to be minimal when going from one tube configuration to another.



Tweco Water Coolers

TC900 & TCV-900 Series

Enhance your water-cooled MIG welding process by incorporating a water-cooler from Tweco Products.

- Vertical or Horizontal Models Available
- Designed for MIG Guns up to 800 Amps and TIG Torches up to 500 Amps
- Stainless Steel Construction Eliminates Coolant Contamination Due to Electrolyte and Chemical Reactions
- High Efficiency Radiator Design Pulls Outside Air Through Radiator
- Available with Either Gear or Vane Pumps.
- Pump Bypass to Tank on Rotary Gear Pump – Keeps Pump from Overheating
- Vane Pumps are Equipped with a Bypass to Eliminate Excessive Pump Wear



TCV-900



TC-900

TJ-2 Tri-Just

An ideal holding fixture that provides a means to locate and hold your MIG gun in place.



TJ-2 TRI-JUST

TJ2-KB Keyed Bracket

MIG gun bracket for use with TJ-2 TRI-JUST.



TJ2-KB

QRM-100 Anti-Spatter Mist Applicator

Reduce spatter build up in your MIG nozzle. Removal of spatter made easier. Provide better gas flow and improved weld quality.



QRM-100



Arcair Air Carbon Arc Gouging

Arcair provides a complete line of air-carbon arc products for the wide-ranging gouging needs of fabrication plants, shipyards, railroads and farms to name a few. Arcair is proud to be an ISO 9001 registered company.

Arc Gouging Equipment



Angle-Arc® Gouging Torches

Light to Extra Heavy Duty Manual Gouging Torches

- Natural 15° Torch Angle
- 360° Swivel Cable
- Positive Grip Handle
- Reduced Weight
- High Quality Cable Hoses
- Rugged Construction



K5000
(Extra Heavy Duty)



K4000
(Heavy Duty)



K3000
(Medium Duty)



K2000
(Light Duty)

K-Series Gouging Torches

Medium & Extra Heavy Duty Straight Handle Manual Gouging Torches

- Reliable Torch Design
- Swivel Cable
- Positive Grip Handle
- Reduced Weight
- High Quality Cable Hose
- Rugged Construction



K-5
(Extra Heavy Duty)



K-3
(Medium Duty)

Tri-Arc Gouging Torch

Foundry Gouging Torch

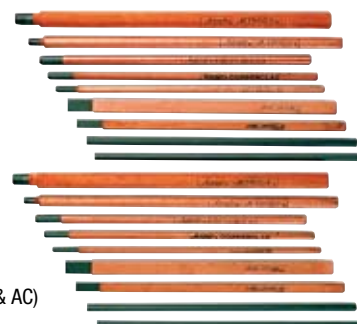
- No Torch Air Valve
- 340° Swivel Cable
- Positive Grip Handle
- Optimum Weight
- High Quality Cable Hose
- Rugged Construction



Gouging Electrodes

Electrodes for Any Application

- Excellent Arc Stability
- Superior Metal Removal Rate
- Cool Operation
- Uniform Diameter
- Clean Machine-Like Grooves or Cuts
- Copperclad and Plain
- Jointed, Flat or Pointed (DC & AC)



Protex® Metalworking Chemicals

For Various Applications

- Anti-Spatter
- Alclean Aluminum Cleaner
- Tip-Dip
- Zinc Rich Cold Galvanizing
- Available in convenient container sizes from ounces to 55 gallon drums to meet your needs



Slice® Exothermic Cutting Systems

Slice Utility Pack

Part No. 63-991-026

The SLICE Utility Pack permits you to use the exothermic cutting process to cut virtually any metallic, non-metallic or composite material. The package has the basic items needed to do a cutting job packed in a rugged tool box. Just supply oxygen and an ignition source and you are ready to cut.



Slice Cordless Striker Pack

Part No. 63-991-032

The SLICE Cordless Striker Pack uses two small lead-acid batteries to supply a current surge sufficient enough to ignite both the 1/4" (6.4mm) and 3/8" (9.5mm) bare SLICE Cutting Rods. It includes one ignitor and charger. Available in 120 volt, AC only.



Slice Industrial Pack

Part No. 63-991-021

The Industrial SLICE Pack provides the versatility of exothermic cutting and accommodates a larger oxygen cylinder to extend your cutting time. The industrial cart is capable of carrying a 9" (229mm) diameter cylinder. The Industrial SLICE Pack includes SLICE torch and striker assemblies with 10 ft./3M oxygen hose and power cables.



Slice Complete Pack

Part No. 63-991-002

The SLICE Complete Pack comes in an aluminum carrying case with everything needed to quickly complete an exothermic cutting job. This model is well suited to the emergency type cutting situations where seconds count. With this unit you get the torch, rods, striker, 12-volt battery with charger, 6" (152mm) collet extension and shield, regulator and an empty 55 cubic foot oxygen bottle.



Slice Battery Pack

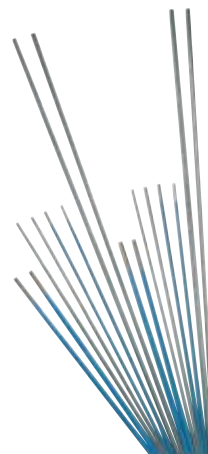
Part No. 63-991-003

The SLICE Battery Pack comes in a rugged tool box. As with the Utility Pack, you get all the basic items needed to do a cutting job such as torch, striker and rods. Also included in the Battery Pack is a 12-Volt rechargeable SLICE Battery Box Assembly.



Slice Exothermic Cutting Rods

- Flux Coated and Uncoated
- 1/4" and 3/8" Diameter
- Varying Lengths
- Design Specifically for use with Slice Cutting Systems



See our full line Tweco & Arcair Professional catalog (Form No. 64-2103) or visit us on the web at www.thermadyne.com/arcair for more information.

Automated Metal-Removal Systems

Arcair-Matic® N6000

The Arcair-Matic N6000 Metal-Removal System was designed to provide the best levels of control, uniformity and productivity in automated gouging of steels and other metals with the air carbon arc process. Usage of the N6000 System has expanded to a wide variety of new and unique jobs. The N6000 system measures minute variations in the arc voltage or amperage, compares them with preset standards, and takes immediate action through its feedback control maintaining the precise arc gap for optimum gouging.

Groove depth is maintained within a tolerance $\pm 0.025"$ (0.635mm). The N6000 System is ideally suited for metal fabrication, particularly in weld joint preparation, where it is used to prepare uniform "U" or "J" grooves. The System is also used extensively for backgouging of seams and for removing defective welds and cracks.

- Gouging that is five times faster than hand held torches.
- Gouges more accurate and consistent.
- Automatic grooves that require less grinding than manually made grooves.
- Economical J-groove and U-groove edge preparations.



Titan® Machine Carriage

N6000 Grooving Kits Packages Include:

- | | |
|--------------------------------|------------------------------------|
| • Titan Machine Carriage | • Torch Head |
| • Lifting bracket | • Air Regulator |
| • One 10' Track Assembly | • 2 each 4' (1.2M) Power Cables |
| • Three Magnet & Support Bars | • 14" (356mm) Interconnect Cable |
| • Cable & Hose Clamp Assembly | • 10' (3M) Remote Pendant Assembly |
| • Horizontal Rack Assembly | • 3' (1M) Motor Cable Assembly |
| • Vertical Adjustment Assembly | • 4' (1.2M) Air Hose Assembly |
| • Automatic Controller | • Pertinent Fasteners |
| • 1600 amp Contactor | • Clamps and Hardware Package |

The Grooving Kit is designed for flat work only such as deck plates. It is completely self-contained and easily moved as a single unit with a forklift or crane from workpiece to workpiece.

The Outtrigger Kit is specifically designed to travel along the web plate on fabricated bridge girders used for railroad and highway bridges.



Arcair CutSkill® Arc Gouging Equipment

CutSkill Arc Gouging Torches

CS3000 & CS4000 Gouging Torches

- Two Designs; Select the One You Need
- 7' and 10' Cables, Available with Torch Body & Separately for Both the CS4000 and CS3000
- Rugged, Lasting Reliability
- Ideal for Most Metals
- Speeds Up Weld Removal, Backgouging, Edge Preparation, Defect Repair & Many Other Metal Removal Jobs
- 360° Swivel Promotes Free Movement to Position the Torch, More Efficient Natural Angles, and a More Natural Movement of the Arm and Wrist
- Ergonomically Designed Handle



CS3000

Arcair®
CutSkill®

CutSkill Arc Gouging Carbons

Arcair is now proud to introduce the Arcair CutSkill line of carbons. Arcair CutSkill carbons are your alternative if you are looking for quality and value. Arcair CutSkill carbons have been developed by the same engineers who have made the Arcair "Redbox" Professional carbon electrode the world's leading carbon for over fifty years.

- Pointed Carbons
- Jointed Carbons
- Hollow Carbons



The Arcair CutSkill Advantage:

- Faster Gouging
- Leading Metal Removal Rates
- Reduced Slag
- Cool Operation
- Minimized Environmental Impact
- Different Types of Electrodes to Fit Your Application
- Easy to Operate
- Versatile

Arcair®
CutSkill®

Arcair®

Professional

***SLICE® FIRE AND RESCUE
CUTTING SYSTEM***

LET NOTHING STAND IN YOUR WAY.

***YOUR ALL-PURPOSE TOOL FOR FAST
ENTRY AND RESCUE. QUICKLY CUTS THROUGH***

***STEEL DOORS, FRAME WALLS, IRON BARS & GRATINGS, REBAR,
METAL ROOFING, BRICK, CONCRETE, ALUMINUM & STAINLESS STEEL***



Thermal Dynamics Offers a Full Line of Automation Equipment to Meet The Most Demanding Applications.



NEW CUTMASTER® A-Series Automation

With all the advantages of the 1Torch® and proven CUTMASTER reliability, the new CUTMASTER A-Series delivers the best in productivity, precision, and performance in Automation. Systems feature CNC interface, 1Torch with ATC® Quick Disconnect and Diagnostic LED's to a name a few.

A40

- 1/4" (6mm) Production Capacity
- 20-40 Amps, 60 Amps Max, Adjustable
- Duty Cycle: 80% @ 40A
100% @ 50A
- SL100 SV 1Torch with SureLok® Technology
- CNC Interface



A60

- 3/8" (10mm) Production Capacity
- 20-60 Amps, 80 Amps Max, Adjustable
- Duty Cycle: 80% @ 60A
100% @ 55A
- SL100 SV 1Torch with SureLok® Technology
- CNC Interface



A80

- 1/2" (12mm) Production Capacity
- 30-80 Amps, 100 Amps Max, Adjustable
- Duty Cycle: 80% @ 80A
100% @ 90A
- SL100 SV 1Torch with SureLok® Technology
- CNC Interface



A120

- 5/8" (15mm) Production Capacity
- 30-120 Amps, 120 Amps Max, Adjustable
- Duty Cycle: 80% @ 120A
100% @ 110A
- SL100 SV 1Torch with SureLok® Technology
- CNC Interface



Auto-Cut® Series Conventional Automation

The Thermal Dynamics Auto-Cut Series delivers premium cut performance on both mild steel and non-ferrous materials. The power supplies are designed for reliable, low cost operation. Features like the XT™-301 consumable parts cartridge and the Machines Status Message Center make the Auto-Cut units easy to operate.

Auto-Cut 100

- 5/8" (15mm) Production Cut
- 3/4" (20mm) Maximum Cut
- 1" (25mm) Edge Start
- Duty Cycle: 100% @ 100A @ 160V
- 10-100 Amps
- XT-301 Torch and Leads
- Water Mist Secondary
- CE, CSA, CCC



Auto-Cut 200

- 1" (25mm) Production Cut
- 1 1/4" (30mm) Maximum Cut
- 2" (50mm) Edge Start
- Duty Cycle: 100% @ 200A @ 160V
- 10-200 Amps
- XT-301 Torch and Leads
- Water Mist Secondary
- CE, CSA, CCC



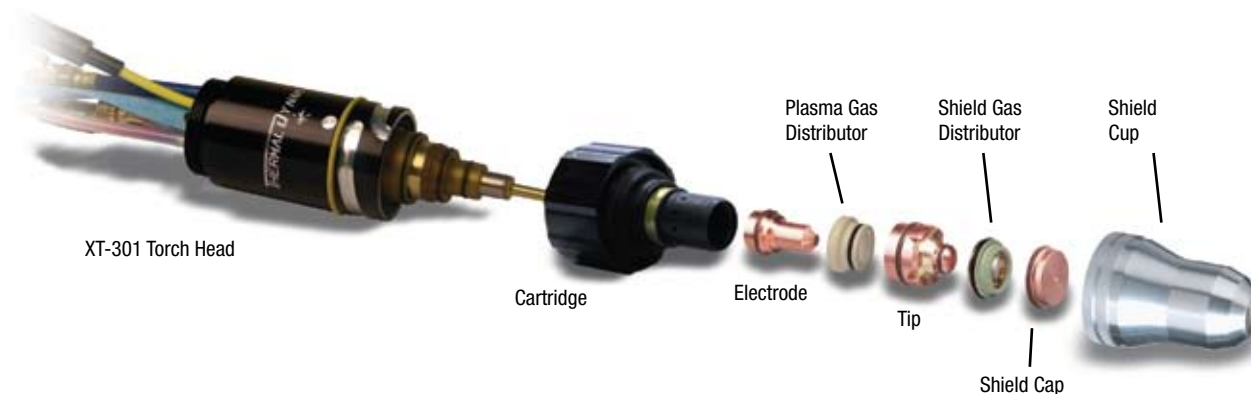
Auto-Cut 200₂

- 1" (25mm) Production Cut
- 1 1/2" (40mm) Maximum Cut
- 2" (50mm) Edge Start
- Duty Cycle: 100% @ 200A @ 180V
- 10-200 Amps
- XT-301 Torch and Leads
- Water Mist Secondary
- High Speed Oxygen Cutting
- CE, CSA, CCC



XT™ Torch Technology for Maximum Performance

Patented XT Torch Technology brings plasma cutting to new levels of precision and productivity. The design of the XT-301 torch and consumable cartridge ensure precise relocation of components after a process change.



Auto-Cut® 300

- 1¼" (30mm) Production Cut
- 1½" (40mm) Maximum Cut
- 2¾" (70mm) Edge Start
- Duty Cycle: 100% @ 300A @ 180V
- 10-300 Amps
- XT-301 Torch and Leads
- Water Mist Secondary (WMS®)
- CE, CSA, CCC



GCM-1000 – Gas Control

Plasma and secondary gas pressures and WMS (Water Mist Secondary) flows are precisely controlled at the power supply with dedicated regulators.



Auto-Cut 300₂

- 1½" (40mm) Production Cut
- 1¾" (45mm) Maximum Cut
- 3" (75mm) Edge Start
- Duty Cycle: 100% @ 300A @ 180V
- 10-300 Amps
- XT-301 Torch and Leads
- Water Mist Secondary (WMS)
- High Speed Oxygen Cutting
- CE, CSA, CCC



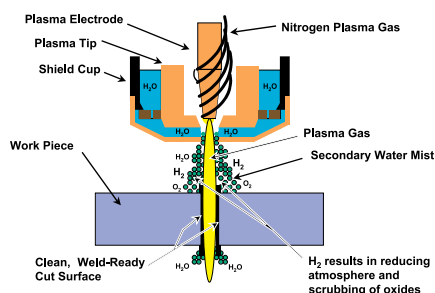
GCM-2000 – Gas Control

Digitally controlled plasma and secondary gases with dedicated regulators, pressure gauges and flowmeters.



Water Mist Secondary (WMS)

- Low Operating Costs
- Dross-Free Cutting
- Oxide Free Surface
- Easy to Use



XT-301 Torch

- 'Leakless' Torch Head Design
- Self-Centering Components
- Excellent Cuts on All Metals
- Longer Parts Life with MaximumLife® Consumables
- Keyless Consumables Cartridge
- Revolutionary SpeedLok™ Cartridge Design Allows Quick Change-Overs



Ultra-Cut® Series High Precision Automation

The Thermal Dynamics Ultra-Cut Series delivers premium precision and heavy-duty conventional plasma cutting on mild steel and non-ferrous alloys. With consumable parts for both precision and conventional plasma cutting from gage to 3" (75mm) it's the only plasma system you will need. Select precision consumable parts for high precision cutting on mild steel. Or select conventional consumable parts for faster and more economical cutting with air plasma.

Control Modules

GSM-2010 Gas Control Module

- Plasma and Secondary Gas Control
- Dedicated Regulators, Flowmeters and Gauges
- Digitally Controlled

RAS-1000 Remote Arc Starter

- Water-cooled Negative HF Coil
- Rated to 300 Amps



XT-300 Torch

- 'Leakless' Torch Head Design
- Self-Centering Components
- Precision Cuts on All Metals
- Extreme Parts Life with XTL™ Consumables
- Keyless Consumables Cartridge
- Revolutionary SpeedLok™ Cartridge Design Allows Quick Change-Overs



Ultra-Cut 100

- 1/2" (12mm) Production Cut
- 5/8" (15mm) Maximum Cut
- 3/4" (20mm) Edge Start
- Duty Cycle: 100% @ 100A @ 180V
- 10-100 Amps
- XT™-300 Torch and Leads
- Water Mist Secondary
- CE, CSA, CCC



Ultra-Cut 200

- 1" (25mm) Production Cut
- 1 1/2" (40mm) Maximum Cut
- 2 1/2" (62mm) Edge Start
- Duty Cycle: 100% @ 200A @ 180V
- 10-200 Amps
- XT-300 Torch and Leads
- Water Mist Secondary
- CE, CSA, CCC



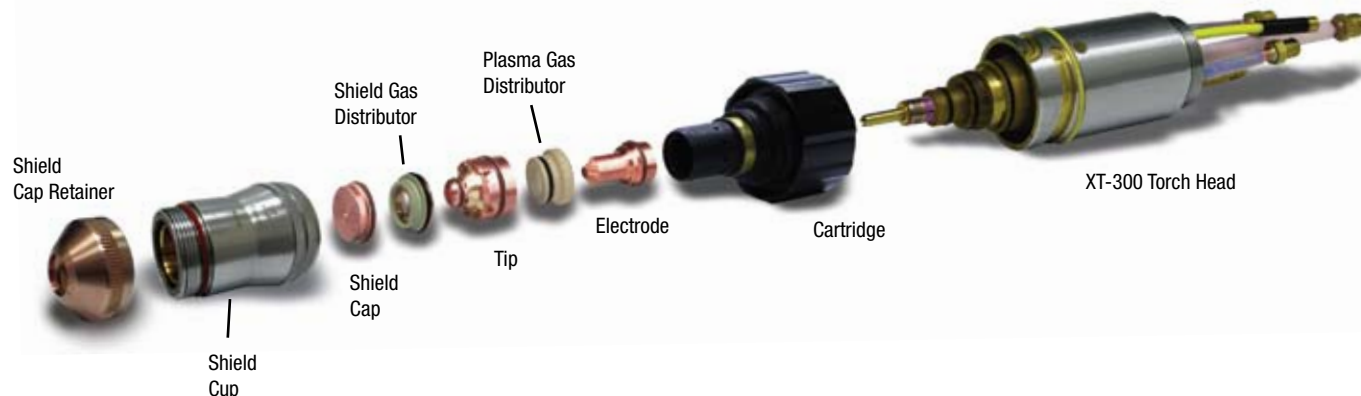
Ultra-Cut 300

- 1 1/2" (40mm) Production Cut
- 1 3/4" (45mm) Maximum Cut
- 3" (75mm) Edge Start
- Duty Cycle: 100% @ 300A @ 180V
- 10-300 Amps
- XT-300 Torch and Leads
- Water Mist Secondary
- CE, CSA, CCC



Unique 'Keyless' Consumables Cartridge

The unique Consumables Cartridge houses consumable parts only, no built-in head/torch body to drive replacement costs up. Changing cartridges is fast and easy - a couple of twists and the unique 'rapid engagement' retaining collar threads release the cartridge. Down-time is reduced to seconds and you can change from one process to another or from one application to another quickly and easily.



PAK® 45

- 3" (75mm) Maximum Cut
- 3/4" (20mm) Piercing
- Duty Cycle: 100% @ 400A @ 200V
- 10 – 400 Amps
- Liquid Cooled Torch
- N2, Ar-H2, Plasma
- CE, CSA, CCC

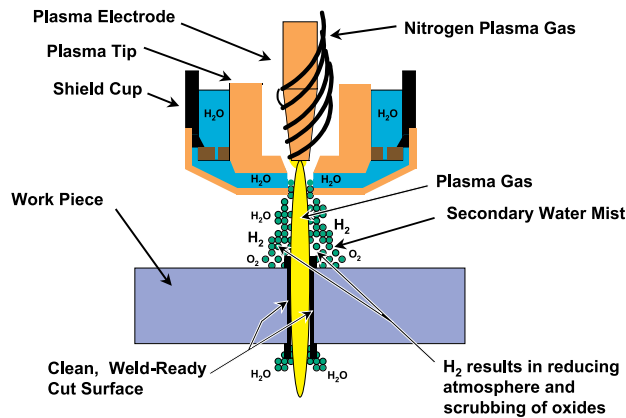


TA-500/1000

- 6" (150mm) Maximum Cut
- 2" (50mm) Piercing
- Duty Cycle: 100% @ 500A/1000A @ 200V
- Paralleled to 1000 Amps
- Liquid Cooled Torch
- N2 Plasma
- Heavy Non-Ferrous



The **TA-500 System** is specifically designed for high-performance, machines-mounted production cutting.



Water Mist Secondary

Water Mist Secondary (WMS®) optimizes non-ferrous cutting; delivering excellent cut quality on non-ferrous materials with low cost of operation by using N2 as plasma and ordinary tap water as the secondary. A reducing atmosphere is produced in the cut by the release of hydrogen from the secondary water. This reducing atmosphere decreases oxidation on the cut surface. WMS is recommended for materials up to 1" (25mm) thick.

- Low Operating Costs
- Dross-Free Cutting
- Oxide Free Surface
- Easy to Use

NEW & Improved Thermal Dynamics Website

Visit our new website, same address, newer look, more features. Website now allows the user to look up specific part numbers for detailed specifications, including images and literature available. Stop by and check it out.

www.thermal-dynamics.com





CUTMASTER, Why TRUE?

The new CUTMASTER® TRUE™ Series has been designed with the idea that the recommended cut capacity should also be the TRUE cut capacity.

The True Series eliminates the concept of having to “buy up” – purchasing a machine larger than you actually need.

With the introduction of the CUTMASTER TRUE Series, a machine with a recommended cut capacity of ½" (12mm) will cut ½" material ALL DAY EVERY DAY.

TRUTHS

- #1: True Confidence** – Powered by an internal microprocessor, the front panel LED's provide status conditions during setup and trouble shooting.
- #2: True Strength** – The CUTMASTER TRUE Series allows you to work all day at our recommended cut capacity. But when you need that extra punch, you can be confident that it is there. The ¼" (6mm) system can power through ½" (15mm) material when needed – up to 150% more punch when necessary.
- #3: True Protection** – As if a **4 YEAR** unlimited warranty on the power supply wasn't enough, the CUTMASTER TRUE Series is the only line of plasma cutting machines offering True Guard – a rugged roll bar for added durability.
- #4: True Tip** – The Thermal Dynamics CUTMASTER Series plasma system offers the only 60 Amp drag cutting tip available on the market today.
- #5: True Flexibility** – The new CUTMASTER TRUE Series offers **MULTI-VOLTAGE** and the patented 1Torch®. With the 1Torch, there's only one set of consumable parts for the entire range of machines. Adding lead extensions allows you to cut up to 100' from the power supply. It also allows you to move from a hand to a mechanized torch quickly.
- #6: True Portability** – The CUTMASTER TRUE Series offers lighter, more portable machines without compromising performance. The powerful 52 weighs in at a mere 43 lbs.

CUTMASTER 39

- ¼" (6mm) Recommended Cut Capacity
- ½" (15mm) Maximum Cut
- Auto Pilot Restart for Expanded Metal
- 20-30 Amp, Adjustable
- Duty Cycle: 35% @ 30A
- SL60® 1Torch
- Weighs 39 lbs.
- Applications: Plumbing / HVAC, Auto Body / Marine Repair, Home Shop, Rental Fleets, Metal Building & Roof Construction



CUTMASTER 52

- ½" (12mm) Recommended Cut Capacity
- 1½" (30mm) Maximum Cut
- Auto Pilot Restart for Expanded Metal
- 60 Amp Drag Tip
- 20-60 Amp, Adjustable
- Duty Cycle: 40% @ 60A
- SL60 1Torch
- Weighs 43 lbs.
- Applications: Construction, Maintenance/Repair, Fabrication



CUTMASTER 82

- ¾" (20mm) Recommended Cut Capacity
- 1½" (40mm) Maximum Cut
- Auto Pilot Restart for Expanded Metal
- 20-80 Amp, Adjustable
- Duty Cycle: 40% @ 80A
- SL60 1Torch
- Weighs 43 lbs.
- Applications: Heavy Fabrication, Manufacturing, Contractors



CUTMASTER 102

- 1" (25mm) Recommended Cut Capacity
- 1¾" (45mm) Maximum Cut
- Auto Pilot Restart for Expanded Metal
- 20-100 Amp, Adjustable
- Duty Cycle: 40% @ 100A
- SL100® 1Torch
- Weighs 62 lbs.
- Applications: Heavy Fabrication, Manufacturing



CUTMASTER 152

- 1¼" (30mm) Recommended Cut Capacity
- 2" (50mm) Maximum Cut
- Auto Pilot Restart for Expanded Metal
- 20-120 Amp, Adjustable
- Duty Cycle: 60% @ 120A
- SL100 1Torch
- Weighs 62 lbs.
- Applications: Heavy Fabrication, Manufacturing



Superior Performance Features

Lightweight design improves portability (Reduced nearly 50%).

Color Coded LEDs indicate pressure status and setup errors.

TRUE GUARD™ roll bar provides easy transportation and protects the front and rear of the power supply for unmatched durability.

Universal selectable input power from 208 to 460 VAC ± 10%, single or three phase, 50 or 60 Hz.

The Industry's only 60 Amp Drag Tip

Convenient storage compartment for spare and consumable parts

Multiple Torch Capability (Hand, Mechanized, Automation)

Trigger feature prevents hand fatigue during long cuts. Auto Pilot Restart feature instantly reignites the pilot arc while cutting expanded metals.

All user controls are conveniently located on the front panel.

Note: Features apply to 52, 82, 102 and 152 models only.

Ordering Information

Product Description	Catalog No.		Catalog No.	
	110/230V 1 ph	CE		
CUTMASTER® 39 with SL60° 75° hand torch, 20 ft. (6.1m) lead	1-3830	1-4630	* Systems include machine torch with 1-3/8" (34.9mm) diameter/32 pitch, rack mounting tube, hand pendant control and pinch block. Pinion assembly to be ordered as an accessory.	
	208/230-460V 1/3 ph	Other	208/230-460V 1/3 ph	Other
CUTMASTER 52 with SL60 75° hand torch, 20 ft. (6.1m) lead	1-5130-1	1-5130-V	CUTMASTER 82 with SL60 75° hand torch, 20 ft. (6.1m) lead	1-1130-1 1-1130-V
CUTMASTER 52 with SL60 75° hand torch, 50 ft. (15.2m) lead	1-5131-1	1-5131-V	CUTMASTER 82 with SL60 75° hand torch, 50 ft. (15.2m) lead	1-1131-1 1-1131-V
CUTMASTER 52 with SL100° 180° machine torch, 25 ft. (7.6m) lead*	1-5132-1	1-5132-V	CUTMASTER 82 with SL100 180° machine torch, 25 ft. (7.6m) lead*	1-1132-1 1-1132-V
CUTMASTER 52 with SL100 180° machine torch, 50 ft. (15.2m) lead*	1-5133-1	1-5133-V	CUTMASTER 82 with SL100 180° machine torch, 50 ft. (15.2m) lead*	1-1133-1 1-1133-V
CUTMASTER 102 with SL100 75° hand torch, 20 ft. (6.1m) lead	1-1330-1	1-1330-V	CUTMASTER 152 with SL100 75° hand torch, 20 ft. (6.1m) lead	1-1730-1 1-1730-V
CUTMASTER 102 with SL100 75° hand torch, 50 ft. (15.2m) lead	1-1331-1	1-1331-V	CUTMASTER 152 with SL100 75° hand torch, 50 ft. (15.2m) lead	1-1731-1 1-1731-V
CUTMASTER 102 with SL100 180° machine torch, 25 ft. (7.6m) lead*	1-1332-1	1-1332-V	CUTMASTER 152 with SL100 180° machine torch, 25 ft. (7.6m) lead*	1-1732-1 1-1732-V
CUTMASTER 102 with SL100 180° machine torch, 50 ft. (15.2m) lead*	1-1333-1	1-1333-V	CUTMASTER 152 with SL100 180° machine torch, 50 ft. (15.2m) lead*	1-1733-1 1-1733-V

V = Voltage (2 = 3ph 460V, 3 = 3ph 400V, 4 = 3ph 400V CE, 5 = 600V)

AirCut® 15C

- 1/8" (3mm) Recommended Cut Capacity
- 3/16" (5mm) Maximum Cut
- Built-in Air Compressor
- 15 Amp, Fixed
- Duty Cycle: 35% @ 15A
- PCH-10 Torch
- Light Duty – 29 lbs.



PAK® 200

- 1 1/2" (40mm) Recommended Cut Capacity
- 2 3/4" (70mm) Maximum Cut
- 35-200 Amp, Adjustable
- Duty Cycle: 100% @ 200A
- PCH-200 Torch
- Liquid-Cooled Torch
- Dual Gas Capacity



1Torch® RPT® Torches

1Torch – the most innovative and reliable, high performance replacement torch available today. No other torch performs so well with so many major brands of power supplies, often with cutting results better than the original manufacturer's torch:

- easily attached to virtually all manufacturers' systems with superior performance
- includes the SureLok® electrode locking system permitting quick, precise changes of consumables
- out-of-the-box ready for all modes of operation including Drag Shield Cutting, Standoff Cutting and Drag Tip Cutting
- no moving consumable parts
- standard set of consumables for all power supplies

All you need is the 1Torch RPT torch and the appropriate Adapter Kit. Each torch comes complete with easy-to-install instructions.

ATC® Quick Disconnect Option

If you need additional flexibility, the 1Torch RPT torch is also available with ATC (Advanced Torch Connector). This quick disconnect enables you to change out a damaged torch, convert from a hand to machine torch, or put on a different sized torch in a matter of seconds. And no tools are required to complete the task. You can also customize the length of your leads by adding ATC Lead Extensions in 15 ft. (4.6m), 25 ft. (7.6m) or 50 ft. (15.2m) lengths.



1Torch SL60® (Lincoln Pro-Cut 55 Compatible)

(Brochure #63-2217 / 63-2530 for SL55)

- Light / Medium Duty Torch
- 30-80 Amp Capacity
- Available in 75° Torch Head Configuration
- Standard Connection or ATC Quick Disconnect Available (not for SL55)



1Torch SL100® (Lincoln Pro-Cut 80 Compatible)

(Brochure #63-2217 / 63-2530 for SL80)

- Medium / Heavy Duty Torch
- 40-120 Amp Capacity
- Available in 75° or 180° (not for SL80) Torch Head Configurations
- Standard Connection or ATC Quick Disconnect Available (not for SL80)



Torch Adapter Kits

The model of the plasma cutting system must be known to determine the adapter kit required.

Manufacturer		Manufacturer	
Power Supply Model	Cat No.	Power Supply Model	Cat No.
AIRCO®/BOC®		LINCOLN®	
PCS-43	7-3425	Pro-Cut® 40	7-3486
PCS-53, PCS-80, PCS-90	7-3435	Pro-Cut® 55	see 63-2530 for details
CEBORA®		Pro-Cut® 60	7-3431
50	7-3438	Pro-Cut® 80	see 63-2530 for details
Pocket 25	7-3476	MARQUETTE®	
CENTURY®		12/150, 12/200	7-3476
82020*, 82050*, M2050*	7-3476	MATCO®	
82100	7-3430	2020*, 2050*	7-3476
DAIHEN®		MILLER®	
SC-60P	7-3432	Plazcut 60†/Zipcut	7-3432
MRAT-70	7-3437	Spectrum® 250D, 500, 750	7-3433
DAYTON®		Spectrum® 700, 1000‡, 1250, PLUS	7-3430
3W722A*, 5Z031B*	7-3476	Spectrum® 3080*	7-3456
ESAB® (yellow)		Spectrum® 650*, 701*, 2050*	7-3457
PCM-SMi, 500i, 625i, PCS-43	7-3425	Spectrum® 300*	7-3476
PCS-53, 80, 90	7-3435	Spectrum® 375*	7-3477
ESP-100i	7-3426	Spectrum® 625*	7-3478
PCM-750i, 875, 1000i, 1125	7-3429	MULTIQUIP MQ®	
Sidewinder 30, 55, 105	7-3434	PCX50SS	7-3437
Powercut® 650	7-3464	NU-TECSYS®	
Powercut® 875, 1125	7-3465	Omnicut 375	7-3438
Powercut® 1250, 1500	7-3462	PCA-30/60, 65	7-3441
HARRIS®		OTC	
System 50, 65, 100	7-3439	Panasonic® D-5000, D-7000	7-3437
HOBBART®		P-TRON®	
Smoothcut 30, 625	7-3425	P-Tron 75, 100	7-3437
Smoothcut 50 (single gas), 100	7-3426	POWCON®	
Smoothcut 50 (dual gas)	7-3428	Starcut	7-3430
Smoothcut II 35A, 60A, 100A	7-3427	SMITH®	
Fab Shop	7-3440	Powerpro 55, 75	7-3487
Cybercut 2050*	7-3457	SPC-30, 20-50, 40-80	7-3442
HYPERTHERM®		SNAP-ON®	
Max® 40, HT® 40 (H/F Start), Max® 70, Max® 80, Max® 100 w/ & w/o Q.D.	7-3430	YA-3230, YA-3440	7-3430
Max® 42*, 43*, 40cs*, powermax® 600*, 800*, 900* w/ Q.D.	7-3454	YA-2230*, YA-5550*, YA-5550A*	7-3476
powermax® 1100*	7-3455	SOLAR®	
powermax® 1000*, 1250*	7-3461	SOL 2020* (118-009, 118-010),	7-3476
Max® 40cs* (w/o Q.D.)	7-3476	SOL 2050* (118-015, 118-016)	7-3430
powermax® 380*	7-3477	SOL 2105, SOL 2106	7-3430
powermax® 600* w/o Q.D.	7-3480	THERMAL DYNAMICS®	
powermax® 800*, 900* w/o Q.D.	7-3481	PAK® 3XR, 5XT, 5XR, 6XR, 7XR,	7-3446
powermax® 1650*	7-3483	625XR, 750XR	7-3434
powermax® 350*	7-3484	PAK® 8XR, 10XR, 1000XR, 1250XR,	7-3447
powermax® 190C*	7-3485	PakMaster® 75, 100	7-3447
L TEC® (green)		PakMaster® 50XL/XLP, 75XL/XLP,	7-3447
PCM-31, SMi, 32i/34i, VPi,	7-3425	PakMaster® 100XL/XLP,	7-3443
PCM-500i, 625i, PCS-80i	7-3426	CUTMASTER® 50, 75, 80XL, 100	7-3443
PCM-50A, 70, 80, 52i/54i, 82i/84i,	7-3426	PakMaster® 25, 38XL,	7-3443
ESP-100i, PCM-50, PCM-100 (Single Gas)	7-3426	EconoPAK® 25, Drag-Gun® 38,	7-3445
PCM-50, PCM-100 (Dual Gas)	7-3426	PAK® 4Xi, 6Xi, 2XT, Dynapak® 110	7-3445
PCS-40	7-3430	PakMaster® 50	7-3445
PCM-750i, 1000i	7-3435	w/ Smart Torch (Q.D.)	7-3449
PCM-101	7-3436	EconoPAK® 50	7-3449
		EconoPAK® 100	7-3450
		PAK® 5	7-3444
		PAK® 10	7-3436

* Non-HF Systems.

† The Miller PlazCut 60 machines with Serial Numbers beginning JE are not compatible with 1Torch® RPT® Torches.

‡ The Miller Spectrum 1000 machines with Serial Numbers beginning LF are not compatible with 1Torch RPT Torches.

NOTES: Each Adapter Kit includes connection fitting, electrical connectors and installation instruction sheets for the selected power supply.

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1Torch® Consumable Parts Application Guide

For SL60® / SL100® Manual Cutting and Gouging Operations.

Drag Tip Cutting

The preferred method of cutting light gauge metal up to 3/16" (4.8mm) thickness. Produces the best cut quality, narrowest kerf width, fastest cutting speeds, with little to no distortion. For best results, use the Shield Cup with the torch tip in direct contact with the work (up to 60 Amps).

Standoff Cutting

The preferred method for cutting metal thicker than 3/16" (4.8mm) and at current levels above 60 Amps. Provides maximum visibility and accessibility. Use the single-piece Shield Cup for 'standoff' cutting (with the torch tip 1/8" to 1/4" from the workpiece). Use the Shield Cup Body together with the Deflector for extended parts life and improved resistance to reflected heat. This combination provides cutting results similar to the single piece Shield Cup, as well as easy changeover to gouging or drag shield cutting.

Drag Shield Cutting

This is an operator-friendly method of cutting between 70 to 120 Amps while maintaining a constant standoff distance. For metal thicknesses greater than 3/16" (4.8mm) simply drag the Shield Cap in contact with the workpiece. Use the Shield Cup Body with the appropriate Drag Shield Cap matching the current level being used. This method is not recommended for cutting light-gauge sheetmetal.

Gouging

A simple method of metal removal by angling the torch to a lead angle of 35-45 degrees and using a gouging tip. While maintaining a constant standoff distance, this allows for only a partial penetration into the work, thus removing metal from the surface. The amount of current, travel speed, standoff distance, lead angle and tip size will determine the amount of material removed and the profile of the gouge. Can use the Shield Cup Body with either the Gouging Shield Cap or the Shield Deflector. Can also use the single piece Shield Cup.

	Gouging Profiles				
Drag Tip Cutting	Output Range	Depth	Width	Profile	
	Tip A	40 Amps (MAX)	Shallow	Narrow	
Standoff Cutting	Tip B	50-100 Amps	Deep	Narrow	
	Tip C	60-120 Amps	Moderate	Moderate	
Drag Shield Cutting	Tip D	60-120 Amps	Shallow	Wide	
	Gouging				

1Torch Consumable Parts Selection Guide

For SL60 / SL100 Manual Cutting and Gouging Operations. Various front-end parts are available for different applications. The electrode and start cartridge remain the same for all applications.



Current Range	Mode Of Operation	Amps	Electrode	Start Cartridge	Tip	Shield Cup	Shield Cup Body	Drag Shield Cup	Deflector	Gouging Shield Cap
20-40 Amps	Drag Tip / Cutting	20A	9-8215	9-8213	9-8205	9-8218	9-8237		9-8243	
		30A			9-8206	9-8218				
		40A			9-8207	9-8218				
	Standoff Cutting	20A			9-8205	9-8218	9-8237		9-8243	9-8241
		30A			9-8206					
Gouging	40A	9-8207								
50-60 Amps	Drag Tip Cutting	60A			9-8252	9-8218				
	Standoff Cutting	50-55A			9-8209	9-8218	9-8237		9-8243	
		60A			9-8210	9-8218				
		50-55A			9-8209					
	Drag Shield Cutting	60A	9-8210							
	Gouging	50-55A	9-8209	9-8237	9-8235		9-8241	9-8241	9-8241	
		60A	9-8210	9-8237	9-8235					
Tip B		9-8226	9-8237							
70-100 Amps	Standoff Cutting	70A	9-8215	9-8213	9-8231	9-8218	9-8237		9-8243	
		80A			9-8211	9-8218				
		90A-100A			9-8212	9-8218				
		70A			9-8231					
		80A			9-8211					
	Drag Shield Cutting	90A-100A	9-8212							
		70A	9-8231	9-8237	9-8236					
		80A	9-8211	9-8237	9-8236					
	Gouging	90A-100A	9-8212							
120 Amps	Standoff Cutting	Tip B			9-8226	9-8237	9-8237		9-8243	9-8241
		Tip C			9-8227	9-8237				
	Gouging	Tip D			9-8228	9-8237				
		Tip E								

Accessories

Thermal Dynamics® offers accessories to help improve cutting performance.

Torch Cutting Guides / Guide Kits

Cutting Guide Kit (Deluxe)

Cat. No. 7-8910

Cuts circles from 2.125" (54mm) to 41.5" (1054mm) with proper cutting attachments.

This kit includes easy add-on attachments to fit most Thermal Dynamics torches for precise straight line, circle cutting and beveling. Includes Carrying Case, Radius/Roller Kit (7-7501), Circle Cutting Guide Kit (7-3291), Magnetic Pivot, Suction Pivot.



Circle Cutting Guide Kit

Cat. No. 7-3291

Cuts 2.125" (54mm) to 27.75" (705mm) circles (using magnetic attachment) when cutting or beveling is required. For use with most Thermal Dynamics torches. Guide shown with optional pivot (7-3148).



Radius / Roller Cutting Guide Kit

Cat. No. 7-7501

This easy-to-use guide cut circles from 3" (76mm) up to 28.75" (730mm). Maintains a consistent height off the work piece whether you are using the circle cutting attachment for cutting circles or the roller guide feature to improve your straight-line cutting.

Both novices and experts will see noticeable improvement in quality, speed and parts life. Can be used with most Thermal Dynamics torches.



Torch Guide / Circle Cutting Attachment

Cat. No. 7-7505

Cuts 3.5" (89mm) to 29" (737mm) circles. Designed for use with the PCH/M-120 Torch, this accessory can be used as either a Roller Guide or a Circle Cutting Guide.



Straight Line Cutting Guide

Cat. No. 7-8911

Introducing a new cutting guide accessory suitable for all hand torches, PCH-10 through PCH-102. This versatile, straight line cutter is for hand held systems and it cuts vertical, 90°, or bevel cuts. Its consistent standoff improves cut quality and maximizes overall performance. Produces more efficient straight line cuts. Lightweight, minimum set up time and no power required. Magnetic mounts ensure placement and ease of use. Optional suction plates available for non-magnetic applications (i.e. aluminum and stainless steel). The Cutting Guide Kit includes: 4 ft. (1.2m) standard rail Torch Holder and Busing Heavy Duty Magnets (2 ea.) Slide Assembly Wheels and Fasteners. Optional 4 ft. (1.2m) extensions (9-7971) available.



Torch Cutting Guides (cont.)

Universal Standoff Cutting Guide

Cat. No. 9-8422

A great new standoff guide specifically designed to fit all shield cup designs for PCH-62, PCH-102, SL60® and SL100® RPT® torches. Adjustable standoff height.



CUTMASTER® TRUE™ Series Standoff Cutting Guides

Cat. No. 9-8281 (CUTMASTER 52, 82, 102 & 152)

New standoff guides designed to fit the SL60 & SL100 torches specific to the CUTMASTER TRUE Series systems. The standoff is preset.



Miscellaneous Torch Accessories

Leather Leads Cover

15 ft. (4.6m)	9-1258
20 ft. (6.1m)	9-1260
25 ft. (7.6m)	9-1270
50 ft. (15.2m)	9-1280



These leads covers are suitable for both 1Torch® and SureLok® leads. Snaps make it easy to install. Snap two covers together for wider torches.

Torch Protector

Cat. No. 9-8135 for 70° Torch,

Cat. No. 9-8136 for 90° Torch

For use with the PCH-120 Torch. Rugged protector easily snaps onto torch providing excellent protection against damage caused by excessive heat or metal sparks. Great accessory for your gouging project.



Trigger Guard Kits

SureLok Torches (PCH-62 & PCH-102)

Cat. No. 9-8418 - Short Trigger Guard,

Cat. No. 9-8419 - Long Trigger Guard

1Torch (SL60 & SL100)

Cat. No. 9-8420 - Short Trigger Guard,

Cat. No. 9-8421 - Long Trigger Guard

These guards offer additional protection from accidental activation or damage to the torch switch.



Remote Pendant Control

Cat. No. 7-3460 - 20 ft. (6.1m)

Remote Pendant Control for your mechanized application.



Hand Pendant Extension

Cat. No. 7-7744 - 25 ft. (7.6m)

ATC® Lead Extensions*

15 ft. (4.6m)	7-7544
25 ft. (7.6m)	7-7545
50 ft. (15.2m)	7-7552

Available for any system using 1Torch with ATC Quick Disconnect. Leads Extensions enable you to customize your lead length to suit the cutting job.



* Note: For use with hand & mechanized torches only. Will not work with automation torch & leads.

Miscellaneous Torch Accessories (cont.)

1Torch® Leads Packages

(For CUTMASTER® TRUE™ Series and A-Series)

HAND

SL60®	20 ft. (6.1m) Torch/Leads	7-5204
	50 ft. (15.2m) Torch/Leads	7-5205
SL100®	20 ft. (6.1m) Torch/Leads	7-5206
	50 ft. (15.2m) Torch/Leads	7-5208

AUTO

SL100 SV 180°	25 ft. (7.6m) Torch/Leads	7-4001
	35 ft. (10.7m) Torch/Leads	7-4002
	50 ft. (15.2m) Torch/Leads	7-4003

MECHANIZED

SL100 180°	5 ft. (1.5m) Torch/Leads	7-5213
	10 ft. (3.0m) Torch/Leads	7-5214
	25 ft. (7.6m) Torch/Leads	7-5215
	50 ft. (15.2m) Torch/Leads	7-5216

Air Filter/Air Filter Kits

For improved consumable parts life and overall performance, Thermal Dynamics recommends Air Filter Kits be used on all plasma cutting systems.

Single Stage Air Filter Kit

Cat. No. 7-7507 (Filter Body 9-7740, Hose 9-7742, Filter Element 9-7741)

For use with shop compressed air systems, this in-line filter will not allow moisture or water to pass through the filter element even if it becomes completely saturated. This hi-tech filter element actually blocks the absorption of water to increase performance and improve consumable parts life.



Two Stage Air Filters

Cat. No. 7-7502

For PakMaster 150XL Systems

Cat. No. 7-7500

For CUTMASTER 1Series™ and PakMaster® Systems

Cat. No. 9-9387

For CUTMASTER TRUE Series and A-Series

The Two Stage Air Filter will remove moisture and contaminants from the air stream when using compressed air. The filter is capable of filtering to at least 5 microns. The filter assembly is pre-assembled at the factory and need only be installed on the power supply.



First Stage Element
Cat. No. 9-1021

Second Stage Element
Cat. No. 9-1022

Automation Accessories

Automation Interface Kit*

Cat. No. 9-8311 - For CUTMASTER TRUE Series and A-Series

* Note: Required for SC-11 torch height control

CNC Harness Cable

Cat. No. 9-9385 - For CUTMASTER TRUE Series (Manual & Mechanized)

CNC Interface Cable

25 ft. (7.6m)	9-8312
50 ft. (15.2m)	9-8313
75 ft. (22.8m)	9-8315
100 ft. (30.5m)	9-8316
125 ft. (38.0m)	9-8317

Pinion Assembly

Cat. No. 7-2827 (1 3/8" / 35mm Diameter)

Portable Gear

Multi-Purpose Cart

Cat. No. 7-8888

Designed for most portable manual cutting systems such as the CUTMASTER 39, 52, 82 or any other similar sized systems.

This rugged steel cart has easy rolling 8" (203mm) diameter wheels along with 3" (76mm) front mounted casters. This cart also serves as an excellent showroom display stand.



Miscellaneous Accessories

Dust Covers

Cat. No. 9-7072

(for CUTMASTER 39, 52, 82, 102, & 152 Systems)



Tool Boxes

Cat. No. 8-3141 - Small, Cat. No. 9-4173 - Large

Plastic boxes with handy compartments for storage of your torch consumables. Small (8.375" x 4.25" x 1.75" / 213mm x 108mm x 44mm), Large (17.5" x 7.75" x 3" / 445mm x 197mm x 76mm)



Welding Gloves

Cat. No. 9-1250



Torch Coolant

Extra Cool™ Coolant

Cat. No. 7-3580

Resists freezing down to +10°F (-12°C)



Ultra Cool™ Coolant

Cat. No. 7-3581

Resists freezing down to -27°F (-33°C)

Extreme Cool™ Coolant

Cat. No. 7-3582

Resists freezing down to -65°F (-51°C)

De-I Cool™ Coolant

Cat. No. 7-3583

De-ionized water mixture for use where freezing protection is not required.



Inverter Arc Welders (WeldSkill)

WeldSkill® Dragster® Series

Dragster 85

- 115 VAC, 1 Phase, 60 Hz.
- 5-85 Amps Welding Output
- Simple Amperage Control and Operator Interface
- Lightweight and Portable – 11 lbs.
- Complete Packages Available



THERMAL ARC
WeldSkill®

Thermal Arc Welding Systems

Thermal Arc is on the move! The Thermal Arc family of arc welding products has been completely overhauled, re-engineered and expanded to meet your expectations in performance, reliability and value.



Most newly redesigned Thermal Arc arc welding power supplies come with a powerful 5 year warranty on parts, 3 years on labor.

Inverter Arc Welders

Professional ArcMaster® Series

ArcMaster 160S

- 115/230V or 460V, 1ph, 60 Hz.
- 5-85A (115V), 5-160A (230/460V)
- STICK and Lift TIG Welding
- Lightweight, Compact & Portable
- Complete Packages Available



ArcMaster 160TS

- 115/230V, 1 Phase, 60 Hz.
- 5-85A (115V), 5-160A (230V)
- STICK and DC HF/Lift TIG
- Rapid Pulse Output
- Complete Packages Available



ArcMaster 185 ACDC

- 208/230V, 1 Phase, 50/60 Hz.
- 5-185A (DC/TIG), 10-185A (AC/TIG)
- 5-160A (DC/STICK), 10-160A (AC/STICK)
- AC/DC STICK, HF/Lift TIG
- Job Save and Load
- Complete Packages Available



ArcMaster 200 ACDC

- 208-230/460V, 1/3ph, 50/60 Hz.
- 5-200A (DC/TIG), 10-200A (AC/TIG)
- 5-160A (DC/STICK), 10-160A (AC/STICK)
- AC/DC STICK, HF/Lift TIG
- Job Save and Load
- Complete Packages Available



ArcMaster 300 ACDC

- 208-230/460V, 1/3ph, 50/60 Hz.
- 5-300A (DC), 10-300A (AC/TIG)
- AC/DC STICK, HF/Lift TIG
- Job Save and Load
- Complete Packages Available



ArcMaster 300S

- 208-230/460V, 1/3ph, 50/60 Hz.
- 5-300 Amps Welding Output
- DC STICK, Lift TIG
- Complete Packages Available



ArcMaster 300TS

- 208-230/460V, 1/3ph, 50/60 Hz.
- 5-300 Amps Welding Output
- DC STICK, HF/Lift TIG
- Job Save and Load
- Complete Packages Available



* Limited warranty, refer to warranty schedule for details.

Professional ArcMaster® Series

ArcMaster 400MST

- 208-230/460V, 1/3ph, 50/60 Hz.
- 5-400A, 10-36V
- DC STICK, HF/Lift TIG, MIG
- Job Save and Load
- Complete Packages Available



ArcMaster 400MSTP

- 208-230/460V, 1/3ph, 50/60 Hz.
- 5-400A, 10-36V
- DC STICK, HF/Lift TIG, MIG, Pulse MIG
- Job Save and Load
- Complete Packages Available



MIG Arc Welders

WeldSkill® Fabricator® Series

Fabricator 140

- 120 VAC, 1 Phase, 60 Hz.
- 30-140 Amps Welding Output
- DC Flux Cored, MIG
- 2 Roll Wire Feed System
- Complete Packages Available



Fabricator 180

- 230 VAC, 1 Phase, 60 Hz.
- 30-180 Amps Welding Output
- DC Flux Cored, MIG
- 2 Roll Wire Feed System
- Complete Packages Available



Fabricator 190

- 230 VAC, 1 Phase, 60 Hz.
- 30-190 Amps Welding Output
- DC Flux Cored, MIG
- 2 Roll Wire Feed System
- Complete Packages Available



Fabricator 210

- 208/230V, 1 Phase, 60 Hz.
- 20-250 Amps Welding Output
- DC Flux Cored, MIG
- 2 Roll Wire Feed System
- Complete Packages Available



Fabricator 251

- 208/230V, 1 Phase, 60 Hz.
- 20-300 Amps Welding Output
- DC Flux Cored, MIG
- 2 Roll Wire Feed System
- Complete Packages Available



Fabricator 281

- 208/230, 1 Phase, 60 Hz.
- 20-300 Amps Welding Output
- DC Flux Cored, MIG
- 2 Roll Wire Feed System
- Includes Removable Wire Feeder



THERMAL ARC
WeldSkill®

Professional PowerMaster® Series

PowerMaster 500

- 208/230/400/460V, 3ph, 50/60 Hz.
- 5-560 Amps Welding Output
- DC STICK, Lift TIG, Flux Cored, MIG, CAG
- Compact and Portable
- Complete Packages Available



PowerMaster 500P

- 208/230/400/460V, 3ph, 50/60 Hz.
- 5-560 Amps Welding Output
- DC STICK, Lift TIG, Flux Cored, Pulse MIG, MIG, CAG
- Pulse and AVC Pulse MIG
- Complete Packages Available



Professional Synergic Pulse Series

PowerMaster 320SP

- 208/230/400/460V, 1ph, 50/60 Hz.
- 5-320 Amps Welding Output
- DC STICK, TIG, MIG, SmartMIG™, PulseMIG, TwinPulse®, CAG
- Built-in Wirefeeder
- Complete Packages Available



PowerMaster 400SP

- 208/230/400/460V, 1/3ph, 50/60 Hz.
- 5-400 Amps Welding Output
- DC STICK, TIG, MIG, SmartMIG, PulseMIG, TwinPulse, CAG
- Integrated or Remote Wirefeeder
- Complete Packages Available
- Available with Remote Wirefeeder
- Automation Model Available



PowerMaster 500SP

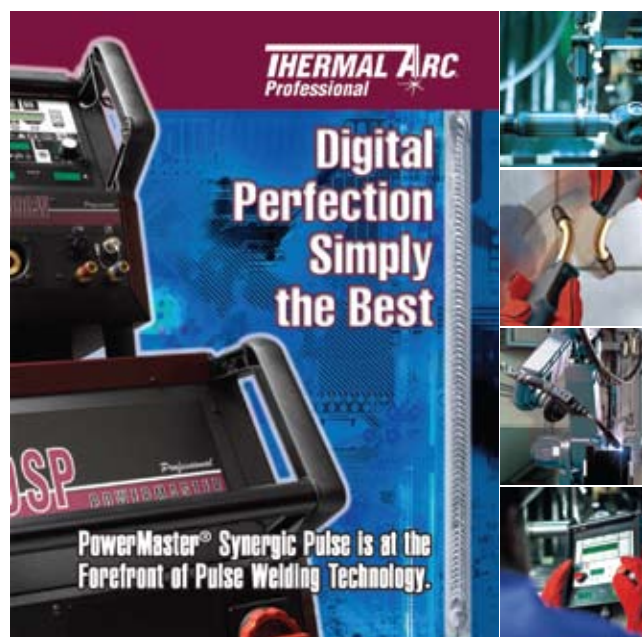
- 208/230/400/460V, 1/3ph, 50/60 Hz.
- 5-500 Amps Welding Output
- DC STICK, TIG, MIG, SmartMIG, PulseMIG, TwinPulse, CAG
- Remote Wirefeeder
- Complete Packages Available
- Automation Model Available



Professional Fabstar® System

Fabstar 4030

- 208/230/460/600V, 3ph, 60 Hz.
- 40-400 Amps Welding Output
- DC MIG, Flux Cored
- CV, Output Voltage Regulation
- Solid State Contactor
- Single Range Voltage Control



Plasma Arc Welders

Professional Series

Ultima® 150

- 208-460V, 1/3ph, 50/60 Hz.
- 0.5-15A (Low), 5-150A (High)
- DC Plasma Arc Welding
- Smooth DC Arc
- Pilot Arc, Current Limiter
- Preview Set Current
- Simple Interface
- Includes Unit, Quick Change Torch, Spare Parts Kit, Coolant



WC-100B Console

- Pilot Arc Starting
- Automatic/Manual Operation
- LED Display Amp/Volt Display
- Shield Gas Flowmeters
- Hi/Lo Pilot Current Switch



HE-100A Coolant Recirculator

- For Thermal Arc Torches up to 300A
- High Efficiency, Non-Ferrous Internal Construction
- Reusable Metal Filter
- 1.75 gal. (6.6L) Coolant Capacity



WC-1 Controller

- Compact Micro-processor system
- For Use with Ultima 150 or WC-100B
- Accurate & Repeatable Parameter Control
- Pulser Controls Warpage, Penetration and Weld Puddle
- Sloper Function
- Two Programmable Outputs (Plasma Power Source & Cold Wire Feed Motor Drive Control)
- 32 User Selectable Weld Schedules



WF-100 Wire Capstan Feeder

- Compact, Lightweight Precision Feeder
- Robotic or Automation Fixture Applications
- Weighs Less Than 6 lbs.
- Better Wire Drive Contact by Wrapping Wire Around Wire Drive Wheel



Wire Feeders

Professional Ultrafeed® Series

Ultrafeed A 2000

- 115 VAC, 50/60 Hz., CV
- 1.5 Amps Max Input Current
- 30-650 IPM (0.76-16.6m/min.) Wire Speed
- 0.024"-5/64" (0.6-2.0mm) Wire Size
- 2 Gear Driven Feed Rolls
- 60 lb. (27.3kg) Max Spool Size



Ultrafeed VA 2000

- 115 VAC, 50/60 Hz., CV
- 4 Amps Max Input Current
- 70-660 IPM (1.8-16.8m/min.) Wire Speed
- 0.024"-5/64" (0.6-2.0mm) Wire Size
- 2 Gear Driven Feed Rolls
- 60 lb. (27.3kg) Max Spool Size



Ultrafeed VA 4000

- 115 VAC, 50/60 Hz., CV
- 4 Amps Max Input Current
- 50-875 IPM (1.25-22.1m/min.) Wire Speed
- 0.024"-1/8" (0.6-3.2mm) Wire Size
- 4 Gear Driven Feed Rolls
- 60 lb. (27.3kg) Max Spool Size



Professional Portafeed® System

Portafeed VS 212

- 15-100VDC, 50/60 Hz., VS
- 8 Amps Max Input Current
- 50-800 IPM (1.27-20.32m/min.) Wire Speed
- 0.024"-5/64" (0.6-2.0mm) Wire Size
- 2 Gear Driven Feed Rolls
- 44 lb. (20kg) Max Spool Size



Professional HMC-410 System

HMC-410

- 120 VAC, 50/60 Hz., CS
- 4 Amps Max Input Current
- 60-888 IPM (1.5-22.6/min.) Wire Speed
- Wire Sizes:
 - 0.024"-1/8" (0.6-3.2mm) Hard
 - 0.030"-1/8" (0.8-3.2mm) Tubular
 - 0.035"-3/32" (0.9-2.8mm) Soft
- 4 Gear Driven Feed Rolls
- 60 lb. (27.3kg) Max Spool Size



Autocraft™ 70S-6



Gas Metal Arc Welding (MIG) Wires

AWS: ER70S-6



Classifications

AWS A5.18	ER70S-6
ASME-SFA-5.18	ER70S-6

Typical Mechanical Properties

Tensile strength, psi (MPa)	78,000 (538)
Yield strength, psi (MPa)	63,000 (434)
Elongation, %	30
CVN (Charpy V-notch) Impact	
ft. lbs @ -20°F	83
J @ -29°C	112.5

Higher Manganese & Silicon.

Excellent choice for welding through mill scale, rust or dirt.

Copper Coated.

Improves arc starting and contact tip life.

Operates on wide range of shielding gases.

CO₂ and Argon based shielding gases.

Precision wound spools.

Layer level wound for improved feedability.

Multi application.

Suitable for all position Gas Metal Arc Welding (GMAW) of mild steel and low alloy steels, used in general fabrication and structural work.

Typical Wire Analysis, %

C: 0.06 Mn: 1.45 Si: 0.85 S: 0.012 P: 0.014 Cu: 0.050

Recommended Shielding Gases

Argon + 10-25% CO ₂
100% CO ₂
Argon + 2-5% O ₂

Suggested Welding Parameters: Ranges developed using DCEP polarity with CO₂ and mixed gases.

Wire Diameter in. (mm)	Wire Feed Speed ipm (mpm)	Voltage	Amperage	Electrical Stickout in. (mm)
.024 (0.6)	200-700 (5.1-17.8)	15-24	60-140	1/4-3/8 (6-10)
.030 (0.8)	100-575 (2.5-14.6)	16-26	50-200	1/4-3/8 (6-10)
.035 (0.9)	120-570 (3.0-14.5)	17-28	70-240	3/8-5/8 (10-16)
.045 (1.2)	120-570 (3.0-14.5)	18-33	100-330	3/8-5/8 (10-16)



NO MORE BOUNDARIES.

WITH THE FABRICATOR® 281 YOU CAN REALLY GO PLACES.

INTRODUCING the FABRICATOR 281.

More Freedom. More Mobility. More Production.

TAKE YOUR ARC WELDING TO NEW HEIGHTS...up to 41 feet without moving the power source!

Now you can easily work across the shop, on top of equipment, or around large projects without dragging the welding power source with you.

Fabricator 281 features a completely separate wire feeder that can be placed 26 feet from the power source. Plus, a Tweco® MIG gun is included to give you another 15 feet of distance. An optional spool gun for aluminum welding connects directly to the wire feeder extending the power source to work piece reach another 25 feet.

The 2-roll swivel base wire feeder mounts neatly attached to the power source. But when you need to 'go the distance' the caster wheeled wire feeder easily lifts off the mount to move closer to your project. There's nothing else like it!

When you want more mobility, performance, and safety, no other portable welder comes close. Fabricator 281 will go the distance.

For more info and to find a distributor, visit: www.thermalarc.com



THERMAL ARC

Signature Products Selection Guide

Wear Mode	Product	Base Metal	General Use	PROCESS			
				GTAW	SMAW	FCAW	GMAW
Build-up & Joining Alloys	Stoody Build-up	Carbon steel	Build-up			●	●
	Stoody Build-up LH	Carbon steel	Build-up		●		
	Nicromang™	Manganese steel	Build-up & Joining		●	●	●
	Versalloy™ Plus	Carbon & Manganese steel	Build-up, repair & joining (Joining Carbon Steel to Stainless steel)		●		
	Stoody 110	Carbon & Manganese steel	Build-up & repair			●	●
	Stoody 2110	Carbon & Manganese steel	Build-up & repair		●		
	Castweld 55	Cast iron	Joining, Build-up & repair		●	●	
	Castweld 99	Cast iron	Joining, Build-up & repair		●		
Metal to Metal Alloy	Stoody 1105	Carbon & Low alloy steel	Metal to Metal wear		●		
	Super Build-up	Carbon & Low alloy steel	Metal to Metal wear			●	●
Metal to Earth Alloy "Moderate Abrasion"	Stoody 19	Carbon & Low alloy, and Manganese steel	Severe abrasion, low impact		●		
	Stoody 965	Carbon & Low alloy, and Manganese steel	Moderate abrasion, high impact			●	●
	Stoody 31	Carbon & Manganese steel	Moderate abrasion, moderate impact		●		
	Stoody 101HC	Carbon & Low alloy and Manganese steel	Severe abrasion, low impact			●	
	Stoody 121	Carbon & Low alloy and Manganese steel	Moderate to severe abrasion, & moderate impact			●	●
Metal to Earth Alloy "Extreme Abrasion"	Stoody 130	Carbon & Low alloy steel	Extreme Abrasion & low impact			●	
	Vancar™	Carbon & Low alloy steel	Extreme Abrasion & low impact		●	●	●
	Acetylene Tube Borium (ATB Bare)	Carbon & Low alloy steel	Extreme Abrasion & low impact	Oxy-Acetylene			
Temperature Abrasion Corrosion	Stoodite 6	Carbon & Low alloy and Stainless Steel	High temperature abrasion & corrosion resistance	●	●		●
	Stoodite 21	Carbon & Low alloy and Stainless Steel	High temperature abrasion & corrosion resistance	●	●		●

See our full line signature products catalog (Form No. 2102A) or visit us on the web at www.stoody.com for more information.
(part numbers, data sheets, etc.)

We've made it simple

	AVAILABLE SIZES		APPLICATIONS
	Wire	Electrodes	(Partial Listing)
	.045", 1/16", 3/32", 7/64"		Hammers, Carbon Steel Shovel Pads, Shaft, Rolls, Pump Parts
		1/8", 5/32", 3/16", 1/4"	Tractor Rollers, Steel Shovel Pads, Tractor Idlers, Sprockets, Shafts
	.045", 1/16", 3/32"	1/8", 5/32", 3/16", 1/4"	Dredge Pumps Parts, Crusher Jaws, Impact Breaker Bars, Hammers
		3/32", 1/8", 5/32"	General purpose Stainless, good for joining Stainless to dissimilar metals
	.045", 1/16", 3/32", 7/64"		Shovel Teeth, Turbine Cone, Shovel Pads, Crusher Rolls, Drive Tumblers
		1/8", 5/32", 3/16", 1/4"	Steel Frogs, Switch Points, Hammers, Shovel Teeth, Roll Crushers
	1/16", 3/32"	3/32", 1/8", 5/32"	Joining build-up, and repair of cast iron parts Pump Impellers, Pump Castings, Housings, Engine blocks and Heads
		3/32", 1/8", 5/32"	Similar applications as Castweld 55 with focus on hairline cracks
		1/8", 5/32", 3/16", 1/4"	Tractor Rollers & Idlers, Idler Sprockets, Drive Tumblers, Churn Drills
	.045", 1/16", 7/64"		Gear Teeth, Sprockets, Steel Shovel Pads, Carbon Steel Shafts
		1/8", 5/32", 3/16", 1/4"	Crusher Rolls, Dredge Parts, Pump Shells, Impellers, Impact Breaker Scrappers
	.045", 1/16"		Tillage Tools, Dredge Parts, Shedder Knives, Extruder Screws
		1/8", 5/32", 3/16", 1/4"	Bucket Arms, Chain Links, Rolling Mill Guides, Pulley, Scrappers, Blades
	.045", 1/16", 5/64"		Bucket Slides & Lips, Blades, Clam Shell bucket, Augers, Scraper Sides
	.045", 1/16", 5/64"		Scraper Slides, Scraper Cutters Vibrator Ditcher Shanks, Pot Hole Augers
	1/16", 7/64"		Muller Plows, Chisel Plow, Ammonia Injectors, Raymond Mill Plows
	1/16", 3/32", 7/64"	5/32", 3/16"	Farm Drill Points, Dry Cement Pump Screws, Drill Pipe Stabilizer, Paddles
		1/8", 5/32", 3/16", 1/4"	Plow Points, Cane Knives, Teeth, Tool Drill Bits
	.045", 1/16", 3/32"	1/8", 5/32", 3/16", 1/4", 5/16" (also in bare rod)	Valves Trim, Pump Sleeves, Engine Valves, Pulp Digester Blades, Dies
	.045", 1/16"	1/8", 5/32", 3/16", 1/4", 5/16" (also in bare rod)	Cavitation Applications, Hot Working Dies, Turbine Runners, Valve Seat



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Stoody is the world's leader in the production of welding wires and electrodes used to combat various types of wear and corrosion. Our extensive family of products includes iron, nickel, cobalt, tungsten and vanadium based alloys. Some of the major industries we serve are power generation, mining, construction, railroad, steel, foundry, oil and gas production and exploration as well as the pulp and paper industry.

Stainless Steel Flux Cored Wires

BRILLIANT 410NiMo T-1 AP

Stoody AP stainless steel wires are designed for welding in all positions with Argon/CO₂ gas mixtures. These wires exhibit a spray like arc transfer, easy slag removal and can be welded within a wide range of parameters. AWS classification A5.22-95 410NiMoTi-4.

Stoody 410NiMoT-1 AP wires can be used to join martensitic stainless steels such as 410 used in valve and pump manufacturing. These wires can also be used for the repair and joining of CA-6NM castings.

Typical Composition:

Carbon, Manganese, Silicon, Chromium, Nickel, Molybdenum

Typical Deposit Characteristics:

Tensile Strength, Ksi (MPa)	134 (880)
Yield Strength, Ksi (Mpa)	118 (776)
Elongation (%)	19
Charpy V-Notch Toughness @ 32°F (0°C)	25ft-lbs (34 Joules)

Part Number	Packaging	Wire Diameter in. mm	Shielding Gas	Welding Parameters Amps Volts
11921000	33# WB, VP	1/16 1.6	75% Ar, 25% CO ₂	190-250 26-27

BRILLIANT 2209 T-1 AP

Stoody AP stainless steel wires are designed for welding in all positions with either 100% CO₂ (X=1) or Argon/CO₂ (X=4) gas mixtures. These wires exhibit a spray like arc transfer, easy slag removal and can be welded within a wide range of parameters.

Stoody 2209T-1 AP wires can be used to weld duplex stainless steels which contain approximately 22% chromium. The composition is balanced to achieve a microstructure of approximately 50% ferrite and 50% austenite in the weld deposit. AWS classification A5.22-95 E2209TO-X.

Typical Deposit Chemistry:

Carbon, Manganese, Silicon, Chromium, Nickel, Molybdenum, Nitrogen

Typical Deposit Characteristics:

Tensile Strength, Ksi (MPa)	122 (842)
Yield Strength, Ksi (Mpa)	101 (670)
Elongation (%)	27.5
Charpy Impact Toughness @ -40°F (-40°C)	33ft-lbs (20 Joules)

Part Number	Packaging	Wire Diameter in. mm
11892000	33# WB, LLW	.045 1.2
11892100	33# WB, LLW	1/16 1.6

.045" (1.2mm)

Amps	130 ¹	165 ¹	190 ¹	220 ²
Volts	24	26	26	27
WFS	in/min	227	315	445
	(m/min)	(5.8)	(8.7)	(11.3)

.1/16" (1.6mm)

Amps	170 ¹	210 ¹	250 ¹	300 ²
Volts	25	26	27	28
WFS	in/min	115	195	245
	(m/min)	(3.9)	(4.9)	(6.2)

Notes:

Electrical stick-out 1/2" 1. Flat and vertical welding 2. Flat welding only

308L T-1 AP

Stoody AP stainless steel wires are designed for welding in all positions with either 100% CO₂ (X=1) or Argon/CO₂ (X=4) gas mixtures. These wires exhibit a spray like arc transfer, easy slag removal and can be welded within a wide range of parameters.

Stoody 308LT-1 AP wires can be used to join AISI 301, 302, 304 commonly used in the chemical industry and food processing applications. AWS classification A5.22-95 E308LT1-X.

Typical Deposit Chemistry:

Carbon, Manganese, Silicon, Chromium, Nickel

Typical Deposit Characteristics:	75 AR/25 CO ₂	100% CO ₂
Tensile Strength, Ksi (MPa).....	88 (610)	86 (600)
Elongation (%).....	39	41
Yield Strength, Ksi (Mpa).....	63 (435)	60 (415)

Part Number	Packaging	Wire Diameter	
		in.	mm
11953600	25# WB	.035	0.9
11819000	33# WB	.045	1.2
11819100	33# WB	1/16	1.6

.035" (0.9mm)

Amps	100 ¹	120 ¹	150 ¹	170 ²
Volts	25	26	27	27
WFS	in/min (m/min)	275 (6.9)	374 (9.5)	480 (12.2)
				600 (15.3)

.045" (1.2mm)

Amps	130 ¹	165 ¹	190 ¹	220 ²
Volts	24	26	26	27
WFS	in/min (m/min)	227 (5.8)	315 (8.7)	445 (11.3)
				565 (14.4)

.1/16" (1.6mm)

Amps	170 ¹	210 ¹	250 ¹	300 ²
Volts	25	26	27	28
WFS	in/min (m/min)	115 (3.9)	195 (4.9)	245 (6.2)
				320 (8.2)

Notes:

Electrical stick-out 1/2" 1. Flat and vertical welding 2. Flat welding only

308L T-1 FH

Stoody FH stainless steel , flux cored wires are designed for flat and horizontal welding applications, using either 100% CO₂ (X=1) or Argon/CO₂ (X=4) gas mixtures. These wires exhibit a spray like arc transfer with very low levels of spatter, a slag system that is essentially self-releasing, a smooth evenly ripped bead appearance, and deposition rates which are obtained at lower levels of heat input than competitive products.

Stoody 308LT-1 FH wires can be used to join AISI 301, 302, 304 commonly used in the chemical industry and food processing applications. AWS classification A5.22 E308LT0-X.

Typical Deposit Chemistry:

Carbon, Manganese, Silicon, Chromium, Nickel

Typical Deposit Characteristics:	75 AR/25 CO ₂	100% CO ₂
Tensile Strength, Ksi (MPa).....	87 (600)	84 (573)
Elongation (%).....	37	38
Yield Strength, Ksi (Mpa).....	62 (430)	60 (415)

Part Number	Packaging	Wire Diameter	
		in.	mm
11703100	35# WB, VP	.035	0.9
11869400	33# WB, VP	.045	1.2
11869300	33# WB, VP	1/16	1.6

.035" (0.9mm)

	Low	Optimum	High
Amps	120	150	180
Volts	24	25/26	28
WFS	in/min (m/min)	375 (9.5)	460 (11.7)
			550 (14.0)

.045" (1.2mm)

	Low	Optimum	High
Amps	135	200	250
Volts	23	26	31
WFS	in/min (m/min)	200 (5.0)	350 (8.9)
			450 (11.4)

.1/16" (1.6mm)

	Low	Optimum	High
Amps	200	250	300
Volts	24/26	26/28	28/30
WFS	in/min (m/min)	175 (4.5)	250 (6.4)
			325 (8.3)

Notes:

- 3/8" - 1/2" (10-12mm) electrical stickout
- When using Argon / Carbon Dioxide mixtures, voltage may be reduced by up to one volt to improve weldability and bead appearance.

309L T-1 AP

Stoody AP stainless steel wires are designed for welding in all positions with either 100% CO₂ (X=1) or Argon/CO₂ (X=4) gas mixtures. These wires exhibit a spray like arc transfer, easy slag removal and can be welded within a wide range of parameters.

Stoody 309LT-1 AP wires can be used to join AISI 309 steels. It is also used to join AISI 304 to carbon and low alloy steels. AWS classification A5.22 E309LT1-X.

Typical Deposit Chemistry:

Carbon, Manganese, Silicon, Chromium, Nickel

Typical Deposit Characteristics:	75 AR/25 CO ₂	100% CO ₂
Tensile Strength, Ksi (MPa)	88 (610)	86 (600)
Elongation (%).....	34	38
Yield Strength, Ksi (Mpa).....	69 (480)	64 (440)

Part Number	Packaging	Wire Diameter	
		in.	mm
11953400	25# WB	.035	0.9
11819300	33# WB	.045	1.2
11819400	33# WB	1/16	1.6

.035" (0.9mm)

Amps	100 ¹	120 ¹	150 ¹	170 ¹
Volts	25	26	27	27
WFS	in/min	275	374	480
	(m/min)	(6.9)	(9.5)	(12.2)
			(15.3)	

.045" (1.2mm)

Amps	130 ¹	165 ¹	190 ¹	220 ²
Volts	24	26	26	27
WFS	in/min	227	315	445
	(m/min)	(5.8)	(8.7)	(11.3)
			(14.4)	

.1/16" (1.6mm)

Amps	170 ¹	210 ¹	250 ²	300 ²
Volts	25	26	27	28
WFS	in/min	115	195	245
	(m/min)	(3.9)	(4.9)	(6.2)
			(8.2)	

Notes:

- 3/8" - 1/2" (10 - 12mm) Electrical stick-out. 1. Flat and vertical welding
2. Flat welding only

309L T-1 FH

Stoody FH stainless steel, flux cored wires are designed for flat and horizontal welding applications, using either 100% CO₂ (X=1) or Argon/CO₂ (X=4) gas mixtures. These wires exhibit a spray like arc transfer with very low levels of spatter, a slag system that is essentially self-releasing, a smooth evenly ripped bead appearance, and deposition rates which are obtained at lower levels of heat input than competitive products.

Stoody 309LT-1 FH wires can be used to join AISI 309 steels. It is also used to join AISI 304 to carbon and low alloy steels. AWS classification A5.22 E308LTO-X.

Typical Deposit Chemistry:

Carbon, Manganese, Silicon, Chromium, Nickel

Typical Deposit Characteristics:	75 AR/25 CO ₂	100% CO ₂
Tensile Strength, Ksi (MPa)	84 (585)	83 (580)
Elongation (%).....	34	33
Yield Strength, Ksi (Mpa).....	61 (420)	61 (420)

Part Number	Packaging	Wire Diameter	
		in.	mm
11703400	25# WB, VP	.035	0.9
11869600	33# WB, VP	.045	1.2
11869500	33# WB, VP	1/16	1.6

.035" (0.9mm)

	Low	Optimum	High
Amps	120	150	180
Volts	24	25/26	28
WFS	in/min	375	460
	(m/min)	(9.5)	(11.7)
			(14.0)

.045" (1.2mm)

	Low	Optimum	High
Amps	135	200	250
Volts	23	26	31
WFS	in/min	200	350
	(m/min)	(5.0)	(8.9)
			(11.4)

.1/16" (1.6mm)

	Low	Optimum	High
Amps	200	250	300
Volts	24/26	26/28	28/30
WFS	in/min	175	250
	(m/min)	(4.5)	(6.4)
			(8.3)

Notes:

- 3/8" - 1/2" (10-12mm) electrical stickout
- When using Argon / Carbon Dioxide mixtures, voltage may be reduced by up to one volt to improve weldability and bead appearance.

316L T-1 AP

Stoody AP stainless steel wires are designed for welding in all positions with either 100% CO₂ (X=1) or Argon/CO₂ (X=4) gas mixtures. These wires exhibit a spray like arc transfer, easy slag removal and can be welded within a wide range of parameters.

Stoody 316LT-1 AP wires can be used to join AISI 316 and 316L commonly used in the rubber, chemical, petrochemical and dye industries. AWS classification A5.22 E308LT1-X.

Typical Deposit Chemistry:

Carbon, Manganese, Silicon, Chromium, Nickel, Molybdenum

Typical Deposit Characteristics:	75 AR/25 CO ₂	100% CO ₂
Tensile Strength, Ksi (MPa).....	88 (610)	86 (600)
Elongation (%).....	36	39
Yield Strength, Ksi (Mpa).....	66 (460)	62 (430)

Part Number	Packaging	Wire Diameter	
		in.	mm
11953500	25# WB	.035	0.9
11819600	33# WB	.045	1.2
11819700	33# WB	1/16	1.6

.035" (0.9mm)

Amps	100 ¹	120 ¹	150 ¹	170 ¹
Volts	25	26	27	27
WFS	in/min	275	374	480
	(m/min)	(6.9)	(9.5)	(12.2)

.045" (1.2mm)

Amps	130 ¹	165 ¹	190 ¹	220 ¹
Volts	24	26	26	27
WFS	in/min	227	315	445
	(m/min)	(5.8)	(8.7)	(11.3)

.1/16" (1.6mm)

Amps	170 ¹	210 ¹	250 ¹	300 ¹
Volts	25	26	27	28
WFS	in/min	115	195	245
	(m/min)	(3.9)	(4.9)	(6.2)

Notes:

1/2" Electrical stick-out. 1. Flat and vertical welding 2. Flat welding only

316L T-1 FH

Stoody FH stainless steel , flux cored wires are designed for flat and horizontal welding applications, using either 100% CO₂ (X=1) or Argon/CO₂ (X=4) gas mixtures. These wires exhibit a spray like arc transfer with very low levels of spatter, a slag system that is essentially self-releasing, a smooth evenly ripped bead appearance, and deposition rates which are obtained at lower levels of heat input than competitive products.

Stoody 316LT-1 FH wires can be used to join AISI 316 and 316L commonly used in the rubber, chemical, petrochemical and dye industries. AWS classification A5.22 E316LT0-X.

Typical Deposit Chemistry:

Carbon, Manganese, Silicon, Chromium, Nickel, Molybdenum

Typical Deposit Characteristics:	75 AR/25 CO ₂	100% CO ₂
Tensile Strength, Ksi (MPa).....	88 (610)	82 (570)
Elongation (%).....	35	36
Yield Strength, Ksi (Mpa).....	65 (450)	60 (415)

Part Number	Packaging	Wire Diameter	
		in.	mm
11703700	25# WB, VP	.035	0.9
11869700	33# WB, VP	.045	1.2
11869800	33# WB, VP	1/16	1.6

.035" (0.9mm)

	Low	Optimum	High
Amps	120	150	180
Volts	24	25/26	28
WFS	in/min	375	460
	(m/min)	(9.5)	(11.7)

.045" (1.2mm)

	Low	Optimum	High
Amps	135	200	250
Volts	23	26	31
WFS	in/min	200	350
	(m/min)	(5.0)	(8.9)

.1/16" (1.6mm)

	Low	Optimum	High
Amps	200	250	300
Volts	24/26	26/28	28/30
WFS	in/min	175	250
	(m/min)	(4.5)	(6.4)

Notes:

- 3/8" - 1/2" (10-12mm) electrical stickout
- When using Argon / Carbon Dioxide mixtures, voltage may be reduced by up to one volt to improve weldability and bead appearance.

Nickel Flux Cored Wires

STOODY 82-T1

Stoody 82-T1 is a gas shielded All Position Flux Cored Wire that meets the requirements of AWS A5.34, Class ENiCr3TX-Y.

Applications: Joining nickel-chromium-iron alloys, Clad side of joints in steels clad with nickel-chromium-iron weld metal, Surfacing steel with nickel-chromium-iron weld metal, Joining Inconel 600, 601 and Incoloy 800 to themselves or to stainless and carbon steels

Typical Deposit Chemistry:

Carbon, Manganese, Silicon, Chromium, Iron, Niobium, Sulfur, Phosphorus, Nickel

Typical Deposit Characteristics:

Tensile Strength89 ksi (614 Mpa)
Yield Strength58 ksi (400 Mpa)
Elongation.....26 %

Part Number	Packaging	Wire Diameter		Shielding Gas	Welding Parameters		
		in.	mm		Wire Ext.	Amps	Volts
11872700	33# WB	.045	1.2	75% AR-25% CO2 or 100%CO2	1/2	150-200	25-26
11872600	33# WB	1/16	1.6	75% AR-25% CO2 or 100%CO2	1/2	200-250	26-27

STOODY 182-T1

Stoody 182-T1 is a gas shielded All Position Flux Cored Wire that meets the requirements of AWS 5.34 ENiCrFe3TX-Y.

Applications: Joining nickel-chromium-iron alloys, Clad side of joints in steels clad with nickel-chromium-iron weld metal, Surfacing steel with nickel-chromium-iron weld metal, Joining Alloys 600, 601 and Incoloy 800 to themselves or to stainless and carbon steels

Typical Deposit Chemistry:

Carbon, Manganese, Silicon, Chromium, Iron, Niobium, Sulfur, Phosphorus, Nickel

Typical Deposit Characteristics:

Tensile Strength94 ksi (649 Mpa)
Yield Strength58 ksi (400 Mpa)
Elongation.....35 %

Part Number	Packaging	Wire Diameter		Shielding Gas	Welding Parameters		
		in.	mm		Wire Ext.	Amps	Volts
11916200	33# WB	.045	1.2	75% AR-25% CO2 or 100%CO2	1/2	150-200	25-26
11916100	33# WB	1/16	1.6	75% AR-25% CO2 or 100%CO2	1/2	200-250	26-27

STOODY A-T1

Stoody A-T1 is a gas shielded All Position Flux Cored Wire that meets the requirements of AWS 5.34 ENiCrFe2TX-Y.

Applications: Joining nickel-chromium-iron alloys, Joining nickel steels, Joining Inconel 600, 601 and Incoloy 800 to themselves or to stainless and carbon steels

Typical Deposit Chemistry:

Carbon, Manganese, Silicon, Chromium, Iron, Molybdenum, Niobium, Sulfur, Phosphorus, Nickel

Typical Deposit Characteristics:

Tensile Strength89.5 ksi (595 Mpa)
Yield Strength51.0 ksi (340 Mpa)
Elongation.....45 %
Charpy Impact Toughness.67 Ft.-lbs. (92 Joules)
at -320°F (-196°C)
Lateral Expansion.....46 mils (1.2mm) at
-320°F (-196°C)

Part Number	Packaging	Wire Diameter		Shielding Gas	Welding Parameters		
		in.	mm		Wire Ext.	Amps	Volts
11896500	33# WB, LLW	.045	1.2	75% AR-25% CO2 or 100%CO2	1/2	150-200	25-26
11896700	33# WB, LLW	1/16	1.6	75% AR-25% CO2 or 100%CO2	1/2	200-250	26-27



STOODY 625-T1

Stoody 625-T1 is a gas shielded All Position Flux Cored Wire that meet the requirements of AWS 5.34 ENiCrMo3TX-Y.

Applications: Joining nickel-chromium-molybdenum alloys, Clad side of joints in steels clad with nickel-chromium-molybdenum weld metal, Surfacing steel with nickel-chromium-molybdenum weld metal, Joining steels to nickel based alloys, Joining 9% nickel steel for cryogenic applications

Typical Deposit Chemistry:

Carbon, Manganese, Silicon, Chromium, Molybdenum, Iron*, Niobium, Sulfur, Phosphorus, Nickel

*For Iron <1%, please request Stoody 625LI-T1 (PDS SP-029)

Typical Deposit Characteristics:

Tensile Strength112 ksi (773 Mpa)
Yield Strength72 ksi (497 Mpa)
Elongation.....38 %

Part Number	Packaging	Wire Diameter		Shielding Gas	Welding Parameters		
		in.	mm		Wire Ext.	Amps	Volts
11872500	33# WB, LLW	.045	1.2	75% AR-25% CO2 or 100%CO2	1/2	150-200	25-26
11872400	33# WB, LLW	1/16	1.6	75% AR-25% CO2 or 100%CO2	1/2	200-250	26-27

STOODY C276-T1

Stoody C276-T1 is a gas shielded All Position Flux Cored Wire that meet the requirements of AWS 5.34 ENiCrMo4TX-Y.

Applications: Joining nickel-chromium-molybdenum alloys, Clad side of joints in steels clad with nickel-chromium-molybdenum weld metal, Surfacing steel with nickel-chromium-molybdenum weld metal, Joining higher molybdenum - high nitrogen containing stainless steels

Typical Deposit Chemistry:

Carbon, Manganese, Silicon, Chromium, Molybdenum, Iron, Tungsten, Sulfur, Phosphorus, Nickel

Typical Deposit Characteristics:

Tensile Strength106 ksi (705 Mpa)
Yield Strength68 ksi (452 Mpa)
Elongation.....42 %

Part Number	Packaging	Wire Diameter		Shielding Gas	Welding Parameters		
		in.	mm		Wire Ext.	Amps	Volts
11953700	33# WB, LLW	.045	1.2	75% AR-25% CO2 or 100%CO2	1/2	150-200	25-26
	33# WB, LLW	1/16	1.6	75% AR-25% CO2 or 100%CO2	1/2	200-250	26-27

STOODY 622-T1

Stoody 622-T1 is a gas shielded All Position Flux Cored Wire that meet the requirements of AWS 5.34 ENiCrMo10TX-Y.

Applications: Joining nickel-chromium-molybdenum alloys, Clad side of joints in steels clad with nickel-chromium-molybdenum weld metal, Surfacing steel with nickel-chromium-molybdenum weld metal, Joining higher molybdenum - high nitrogen containing stainless steels

Typical Deposit Chemistry:

Carbon, Manganese, Silicon, Chromium, Molybdenum, Iron, Tungsten, Sulfur, Phosphorus, Nickel

Typical Deposit Characteristics:

Tensile Strength103 ksi (685 Mpa)
Yield Strength70 ksi (470 Mpa)
Elongation.....27 %

Part Number	Packaging	Wire Diameter		Shielding Gas	Welding Parameters		
		in.	mm		Wire Ext.	Amps	Volts
11953800	33# WB, LLW	.045	1.2	75% AR-25% CO2 or 100%CO2	1/2	150-200	25-26
	33# WB, LLW	1/16	1.6	75% AR-25% CO2 or 100%CO2	1/2	200-250	26-27



STATEMENT OF WARRANTY

(as of November 1, 2008)

LIMITED WARRANTY: THERMADYNE warrants that its products will be free of defects in workmanship or material. Should any failure to conform to this warranty appear within the time period applicable to the THERMADYNE products as stated below, THERMADYNE shall, upon notification thereof and substantiation that the product has been stored, installed, operated, and maintained in accordance with THERMADYNE's specifications, instructions, recommendations and recognized standard industry practice, and not subject to misuse, repair, neglect, alteration, or accident, correct such defects by suitable repair or replacement, at THERMADYNE's sole option, of any components or parts of the product determined by THERMADYNE to be defective.

THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

LIMITATION OF LIABILITY: THERMADYNE shall not under any circumstances be liable for special or consequential damages, such as, but not limited to, damage or loss of purchased or replacement goods, or claims of customers of distributor (hereinafter the "Purchaser") for service interruption. The remedies of the Purchaser set forth herein are exclusive and the liability of THERMADYNE with respect to any contract, or anything done in connection therewith such as the performance or breach thereof, or from the manufacture, sale, delivery, resale, or use of any goods covered by or furnished by THERMADYNE whether arising out of contract, negligence, strict tort, or under any warranty, or otherwise, shall not, except as expressly provided herein, exceed the price of the goods upon which such liability is based.

THIS WARRANTY BECOMES INVALID IF REPLACEMENT PARTS OR ACCESSORIES ARE USED WHICH MAY IMPAIR THE SAFETY OR PERFORMANCE OF ANY THERMADYNE PRODUCT.

THIS WARRANTY IS INVALID IF THE PRODUCT IS SOLD BY NON-AUTHORIZED PERSONS.

This warranty is effective for the time stated in the Warranty Schedule beginning on the date that the authorized distributor delivers the products to the Purchaser.

Warranty repairs or replacement claims under this limited warranty must be submitted by an authorized THERMADYNE repair facility within thirty (30) days of the repair. No transportation costs of any kind will be paid under this warranty. Transportation charges to send products to an authorized warranty repair facility shall be the responsibility of the Purchaser. All returned goods shall be at the Purchaser's risk and expense. This warranty supersedes all previous THERMADYNE warranties.

WARRANTY SCHEDULE

The warranty is effective below for the time stated in the Warranty Schedule beginning on the date that the authorized distributor delivers the products to the purchaser. THERMADYNE reserves the right to request documented evidence of date of purchase.

GAS WELDING AND CUTTING EQUIPMENT	Parts / Labor
Victor® Professional	5 years / NA
Victor CutSkill®	2 years / NA
Victor FirePower®	1 years / NA
Victor Medical	6 years / NA
Victor VSP	2 years / NA
HP&I Brass Regulators/Manifolds	2 years / NA
HP&I Stainless Regulators/Manifolds	1 year / NA
HP&I Corrosive Gas Regulators/Manifolds	90 days / NA
Aluminum Cylinders	10 years / NA
Steel Cylinders	1 year / NA
Oxygen Conservers	2 years / NA
Cutting Machine Motors	1 year / NA
TurboTorch®	3 years / NA
Transformers	5 years / NA
Parts Used in Rental Applications	1 year from date sold by seller to authorized distributor
ARC ACCESSORIES, ARC GOUGING & SLICE EQUIPMENT	Parts / Labor
TC and TCV Water Coolers	1 year / NA
TSC-96 Smoke Collector	1 year / NA
ESG-1, EPG-CR1, EPG-CR2 Control Boxes for Eliminator Spool & Pull Guns	1 year / NA
QRC-2000 Nozzle Cleaning Stations	1 year / 1 year
Arcair® N6000	1 year / NA
Eliminator® Spool and Pull Guns	90 days / NA
Robotic Deflection Mounts	90 days / NA
QRM-100 Anti-Spatter Applicator	90 days / NA
All other products 30 days from date purchaser including but not limited to: • MIG Guns • Arc Gouging Equipment • Slice Equipment	30 days / NA
PLASMA CUTTING SYSTEMS	Parts / Labor
CUTMASTER® TRUE Series	4 years / 4 years
PakMaster® XL PLUS	3 years / 1 year
CUTMASTER 1Series™	3 years / 3 years
AirCut™ 15C	1 year / 1 year
Drag-Gun® Plus	2 years / 1 year
Drag-Gun	1 year / 1 year
PAK 200	2 years / 1 year
Automated Plasma	2 years / 1 year
Torches	1 year / 1 year
Consoles, Control Equipment, Heat Exchangers and Accessory Equipment	1 year / 1 year



ENGINE DRIVEN WELDERS	Parts / Labor
Scout®, Raider®, Explorer™	
Original Main Power Stators and Inductors	5 years / 3 years
Original Main Power Rectifiers, Control P.C. Boards	3 years / 3 years
All Other Original Circuits and Components Including, but not Limited to, Relays, Switches, Contactors, Solenoids, Fans, Power Switch Semi-Conductors	1 year / 1 year
Engines and Associated Components are NOT Warranted by Thermal Arc®, Although Most are Warranted by the Engine Manufacturer. SEE THE ENGINE MANUFACTURERS' WARRANTY FOR DETAILS.	See the Engine Manufacturers' Warranty for Details
GMAW/FCAW (MIG) WELDING EQUIPMENT	Parts / Labor
Fabricator® 140, 180, 190, 210, 251, 281; Fabstar® 4030; PowerMaster® 350, 350P, 500, 500P; Excel-Arc® 6045; Wire Feeders: Ultrafeed®, Porta-feed®	
Original Main Power Transformer and Inductor	5 years / 3 years
Original Main Power Rectifiers, Control P.C. Boards, Power Switch Semi-Conductors	3 years / 3 years
All Other Original Circuits and Components Including, but not Limited to, Relays, Switches, Contactors, Solenoids, Fans, Electric Motors	1 year / 1 year
GTAW (TIG) & MULTI-PROCESS INVERTER WELDING EQUIPMENT	Parts / Labor
160TS, 300TS, 400TS, 185AC/DC, 200AC/DC, 300AC/DC, 400GTSW, 400MST, 300MST, 400MSTP	
Original Main Power Magnetics	5 years / 3 years
Original Main Power Rectifiers, Control P.C. Boards, Power Switch Semi-Conductors	3 years / 3 years
All Other Original Circuits and Components Including, but not Limited to, Relays, Switches, Contactors, Solenoids, Fans, Electric Motors	1 year / 1 year
PLASMA WELDING EQUIPMENT	Parts / Labor
Ultima® 150	
Original Main Power Magnetics	5 years / 3 years
Original Main Power Rectifiers, Control P.C. Boards, Power Switch Semi-Conductors	3 years / 3 years
Welding Console, Weld Controller, Weld Timer	3 years / 3 years
All Other Original Circuits and Components Including, but not Limited to, Relays, Switches, Contactors, Solenoids, Fans, Electric Motors, Coolant Recirculators	1 year / 1 year
SMAW (Stick) WELDING EQUIPMENT	Parts / Labor
Dragster™ 85	
Original Main Power Magnetics	1 year / 1 year
Original Main Power Rectifiers, Control P.C. Boards	1 year / 1 year
All Other Original Circuits and Components Including, but not Limited to, Relays, Switches, Contactors, Solenoids, Fans, Power Switch Semi-Conductors	1 year / 1 year
160S, 300S, 400S	
Original Main Power Magnetics	5 years / 3 years
Original Main Power Rectifiers, Control P.C. Boards	3 years / 3 years
All Other Original Circuits and Components Including, but not Limited to, Relays, Switches, Contactors, Solenoids, Fans, Power Switch Semi-Conductors	1 year / 1 year
GENERAL ARC EQUIPMENT	Parts / Labor
FirePower® MIG Welders	5-2-1 years / NA
Water Recirculators	1 year / 1 year
Plasma Welding Torches	180 days / 180 days
Gas Regulators (Supplied with Power Sources)	180 days / NA
MIG and TIG Torches (Supplied with Power Sources)	90 days / NA
Replacement Repair Parts	90 days / NA
MIG, TIG and Plasma Welding Torch Consumable Items	NA / NA



KEEPS ME WORKING ALL DAY.

Jim Shepard has always had an affinity for how things work. It began in childhood when he deconstructed bikes and built erector sets for fun.

He learned metalworking in high school and furthered his education with an Associate's Degree in Machine Technology.

At the young age of twenty-four, he opened Shepard Machine Co., where he built and repaired all kinds of intricate devices. His company crafted over 100 machines mainly for the food industry, many taking 2-3 months of 18-hour days. With blueprints and thousands of tiny pieces, Jim and his team built the machines from the ground up, making tweaks to enhance their reliability.

After years of success, Jim was able to retire from the business, but metalworking is still in his blood. Now he considers himself a hobbyist – working on all sorts of metal projects in his 60 by 80 foot 'hobby' shop.

And his tool of choice? The new Thermal Dynamics® CUTMASTER® 52 TRUE™ Series plasma cutting system. "It cuts so smooth and the 1Torch is comfortable to use. Makes me want to keep working all day long."

"I'M STILL BUILDING THINGS. AND THERMAL DYNAMICS KEEPS IT FUN."

JIM SHEPARD

Welder/Fabricator

Jim carries the torch – will you?

THERMADYNE, A GLOBAL CUTTING AND WELDING LEADER, joins the American Welding Society in encouraging individuals to practice the art, craftsmanship and professions of welding, metalworking and fabrication. Victor, Thermal Dynamics, Thermal Arc, Arcair, Tweco, Stooddy, CIGWELD and TurboTorch are among the Thermadyne family of brands that you can count on for safety, reliability and quality.

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