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2014 FULL-LINE CATALOG

MillerWelds.com



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**Your talent. Miller® products.
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Hard-working Miller products and the hard-working people who use them — people like you.

Together, we build anything of any size. We build close to home and in faraway places. We build free-flowing artwork, we build rigidly designed structures... and we build everything in between.

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Miller and you. **Together, we build.**



- 1 Mark Donnelly
Ironworkers Local 40
- 2 Cedric Bernard
Bolinger Shipyards, Inc.
- 3 Tony Fischer
Team Industries
- 4 Al Oberhart
Weldall Mfg., Inc.

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New from Blue

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Building an industrial system? Use our quick and accurate system configurator to get a customized solution for your unique needs. Create it all at MillerWelds.com/equiptoweld.

1 Pick the right process for the metals to be welded or cut.

Welding processes



MIG (GMAW) ★

S SS Ni AL CB

- Easiest process to learn
- High welding speeds possible
- Provides better control on thinner metals
- Cleaner welds possible with no slag
- Same equipment can be used for Flux-Cored welding

Pulsed MIG (GMAW-P) ★

S SS Ni AL CB

- Flexibility and productivity — nearly all metals can be welded in all positions
- Larger diameter electrode wires for higher deposition rates
- Virtually no spatter
- Welds thin to thick metals



Flux-Cored (FCAW) ★

S SS

- Can work as well as Stick on dirty or rusty material
- Out-of-position welding
- Deep penetration for welding thick sections
- Increased metal deposition rate



Stick (SMAW) ★★

S SS Ni CI

- Well suited for windy, outdoor conditions
- More forgiving when welding on dirty or rusty metal



TIG (GTAW) ★★★

AC AL Mg DC S SS Ni CB TI

- Provides highest quality and most precise welds
- Highly aesthetic weld beads
- Allows adjustment of heat input while welding by use of a remote control

Pulsed TIG (GTAW-P) ★★★

AC AL Mg DC S SS Ni CB TI

- More control on thin metals
- Less heat distortion on thin metals

Process Skill Level ★ Low ★★ Moderate ★★★ High

Metal Type

S Steel	AL Aluminum	TI Titanium
SS Stainless Steel	CI Cast Iron	Mg Magnesium Alloys
Ni Nickel Alloys	CB Copper/Brass	EC All Electrically Conductive



Resistance Spot ★

S SS Ni

- Simple, easy-to-operate welder for light industrial applications



Submerged Arc (SAW) ★★

S SS

- High deposition rates can enhance weld speed and production
- Excellent mechanical properties for high-quality code and X-ray requirements
- Improves welding operator comfort and appeal

Cutting processes



Plasma Arc Cutting and Gouging (PAC) ★

S SS Ni AL CI CB TI Mg EC

- Use with any electrically conductive metals
- Small and precise cut
- Small heat-affected zone which helps prevent warping or paint damage

Oxy-Fuel Cutting ★

S

- Cuts ferrous (containing iron) steels
- Requires no electricity
- Highly portable

Note: Oxy-Fuel equipment can also be used for welding, heating, brazing and soldering



Air Carbon Arc Cutting and Gouging (CAC-A) ★★

AC CB DC S SS AL CI

- Wide variety of metals
- Removes discontinuities or inferior welds

2 Evaluate your needs: input power, output power, generator power and portability.

Input power

Does your machine need to be self-powered, or will AC power be available at the location where it's primarily used?

- For locations where an electrical hookup is not practical, consider a gas- or diesel-powered engine-driven welder/generator to supply welding and generator power.
- For locations where AC power is available, you need to know its type — and whether it's a match for the machine you're considering:

Single-phase power is found in most homes and garages. Check to see if the machine you're considering requires single-phase power, and whether its voltage requirements (115 V or 230 V) are met by the electrical service at the intended location.

Three-phase power is common in industrial settings. Check to see if the machine you're considering requires three-phase power and whether its voltage requirements are met by the electrical service at the intended location.

Output power

● **Light industrial** products are suitable for the home hobbyist or occasional user. They are designed to be easy to operate, are affordably priced and typically have a 20 percent duty cycle and rated output of 230 amps or lower.

● **Industrial** products are suitable for applications that do not require high-volume production. They typically have a 40 to 60 percent duty cycle and/or rated output of 300 amps or lower. Industrial products are an appropriate choice for professional welders.

● **Heavy industrial** products are suited to high-volume production and/or welding of thicker materials. They typically have a duty cycle of 60 to 100 percent and a rated output of at least 300 amps. Heavy industrial products are designed with the arc characteristics and product features professional welders demand for code-quality work.

Note: Units listed in more than one classification share attributes of both.

About duty cycles

Duty cycle is an indication of how long a power source can continuously weld (at a specific amperage and voltage) in a 10-minute period of time before it needs to cool down. For example, a machine with a 60 percent duty cycle at 300 amps and 32 volts of welding output can be used (at 300 amps and 32 volts) for 6 minutes out of a 10-minute period. When comparing two similar-sized power supplies it is important to pay close attention to both the amperage and voltage values that determine the rated load.

Power Icons

- 1 Phase** Unit requires single-phase input power
- 3 Phase** Unit requires three-phase input power
- AC** Unit supplies alternating current weld output
- DC** Unit supplies direct current weld output

- AC/DC** Unit supplies alternating current and direct current weld output
- CC** Unit supplies constant-current weld output
- CV** Unit supplies constant-voltage weld output
- CC/CV** Unit supplies constant-current and constant-voltage weld output

Generator power

Out in the field, you may need an engine-driven welder/generator to supply 120- or 240-volt AC power to run tools and lights, or supply 12-volt DC power to charge automotive batteries and jump-start vehicles. Miller® welder/generators are packed with power; larger units even offer option packages that add 10 to 20 kW of generator power.

Portability

Can you bring the work to the machine, or does the machine need to go to the work? Check the Product Guide pages for types of portability:

- Shoulder strap, handles, running gear, carts, etc.
- Many engine-driven welding generators fit in the back of a pickup truck, enabling them to be driven to wherever the welding is needed. Heavy-duty trailers are also available for engine drives.

3 Check out the Product Guides. (Visit MillerWelds.com for most current information.)

The Product Guides (at the start of each major section) briefly describe and compare power sources within that section.

4 Go to product descriptions. (Specifications are subject to change without notice.)

Colored bullets indicate output power classification. Power icons indicate power supplied or required (see descriptions above). Listing of recommended processes.

Color-coded sections are identified by a primary process icon and title.

For more product specifications, give the product name and literature number to your distributor, visit us on the Web at MillerWelds.com or call 1-800-4-A-MILLER.

MillerMatic® 212 Auto-Set™ See literature no. DC-12.46

Welding Capability

Shielding Gas	Wire Size (in.)	Wire Speed (in./min)
Shielded Metal Arc (MMA)	1/16 to 3/32	100 to 1000
Gas Metal Arc (GMA)	1/16 to 3/32	100 to 1000

EXCLUSIVE! Auto-Set feature makes setup quick and easy. On the MillerMatic 212, Auto-Set works with .030- and .035-in. diameter solid steel wire for more info see page 73.

Infinite voltage adjustment. When used in manual mode provides broader operating range with finer control than a tap machine.

Eye-On-Demand™ testing system only operates when needed reducing power consumption.

Compatible with Spoolmatic® 200 Series spool gun with wire feed speed control on the gun. Saves time by reducing trips back to the machine. Also compatible with the more industrial Spoolmatic® 15A or 30A spool gun.

Gun-On-Demand™: Simply pull the trigger for either gun and you're ready to weld. No wasted time installing modules and using gas valve kits.

Heavy-duty aluminum, two-drive-roll system.

Processes

- MIG (GMAW) - Flux-Cored (FCW)
- MIG (GMAW) - Shielded Metal Arc (SMA)
- MIG (GMAW) - Gas Metal Arc (GMA)
- MIG (GMAW) - Gas Metal Arc (GMA) - Shielded Metal Arc (SMA)
- MIG (GMAW) - Gas Metal Arc (GMA) - Shielded Metal Arc (SMA) - Flux-Cored (FCW)
- MIG (GMAW) - Gas Metal Arc (GMA) - Shielded Metal Arc (SMA) - Flux-Cored (FCW) - Shielded Metal Arc (SMA)

Most popular accessories

- Spoolmatic 200 Series Spool Gun for aluminum welding #300 487 (pg 29)
- Push-On-Gun, Black #300 217 (pg 92)
- Shielded Gun and Cable Rack #300 353 (pg 30)
- Protective Cover #156 142 (pg 65)
- Full MGA Adapter Cord #300 517 See MillerWelds.com for your distributor for other Miller® options and accessories.

Stock Number	Weight	Dimensions	Net Weight
4484 485 (202201) (201 V)	55.2 lb	18 1/2 x 14 1/2 x 14 1/2 in.	55.2 lb
4484 173 (202201) (230 V)	55.2 lb	18 1/2 x 14 1/2 x 14 1/2 in.	55.2 lb

Brief listing of most popular accessories. Refer to pages listed for more details.



Product Guide

	Page	Class	MIG	MIG-P	Flux-Cored*	CAC-A	Portability	Weldable Metals	Welding Output Range	Special Features	Typical Applications
1-Phase	Millermatic® 140 Auto-Set™	7	●	●	●		Handle, optional running gear	Steel, stainless, aluminum	30-140 A	115 VAC input, Auto-Set™ Smooth-Start™	Up to 3/16 in.** maintenance/repair, auto body, hobby
	Millermatic® 180 Auto-Set™	7	●	●	●				30-180 A	230 VAC input, Auto-Set™ Smooth-Start™	Up to 5/16 in.*** maintenance/repair, auto body, hobby
	Millermatic® 211 Auto-Set™ w/MVP™	7	●	●	●				30-210 A	Welds on 115 or 230 VAC input, Auto-Set™ Smooth-Start™	Up to 3/8 in.*** maintenance/repair, auto body, hobby
	Millermatic® 212 Auto-Set™	8	●	●	●		Installed running gear		30-210 A	Fan-On-Demand™ Gun-On-Demand™	Up to 3/8 in.*** fabrication, farm, garage/body shops
	Millermatic® 252	8	●	●	●				30-300 A	Standard timers menu, Fan-On-Demand™ can connect MIG gun, push-pull gun, or spool gun	Up to 1/2 in.*** industrial production/fabrication, farm
Multimatic® 200 See Multiprocess section.											
1- and 3-Phase	Millermatic® 350P	9	●	●	●		Installed running gear	Steel, stainless, aluminum	25-400 A	Can connect standard MIG gun, push-pull gun, or spool gun	Up to 1/2 in.*** industrial production/fabrication, Pulsed MIG ideal for thin gauge aluminum
	Millermatic® 350P Aluminum	9	●	●	●		Installed running gear	Aluminum	25-400 A	Wire drive system optimized for feeding aluminum wire only using a push-pull gun or spool gun	Up to 1/2 in.*** industrial, aluminum production/fab, Pulsed MIG ideal for thin gauge aluminum
	AlumaFeed™ 350 Aluminum System	11	●	●	●		Handles, optional cart, MIGRunner	Aluminum	5-425 A 10-38 V	Choice of power source, Profile Pulse, lightweight feeder can be up to 100 feet from power source	Heavy industrial aluminum production/fabrication, truck trailer, shipbuilding
	Invision™ 352 MPa Plus System	13	●	●	●		Handles, optional cart, MIGRunner	Most metals	5-425 A 10-38 V	Alumination™ allows push/pull gun, optimized with 74 MPa Plus wire feeder	Manufacturing and production
XMT® Series See Multiprocess section.											
3-Phase	CP-302	12	●	●	●		Lift eye, optional running gear, MIGRunner	Most metals	14-44 V	Hi/Lo stabilizer, power efficient	Equip/auto mfg, metal fab, construction, agri equipment
	Deltaweld® 302	12	●	●	●				15-32 V	Power efficient, material-specific output terminals	Equip/auto mfg, metal fab, construction, agri equipment
	Deltaweld® 452	12	●	●	●	1/4"			15-38 V	Power efficient, material-specific output terminals	Equip/auto mfg, metal fab, construction, agri equipment
	Deltaweld® 652	12	●	●	●	3/8"			15-44 V	Power efficient, material-specific output terminals	Equip/auto mfg, metal fab, construction, agri equipment
	AlumaFeed™ 450 Aluminum System	11	●	●	●		Handles, optional cart, MIGRunner	Aluminum	15-600 A 10-38 V	Choice of power source, Profile Pulse, lightweight feeder can be up to 100 feet from power source	Heavy industrial aluminum production/fabrication, truck trailer, shipbuilding
	Invision™ 450 MPa Plus System	13	●	●	●	1/4"	Handles, optional cart MIGRunner	Most metals	15-600 A 10-38 V	Alumination™ allows push/pull gun, optimized with 74 MPa Plus wire feeder	Manufacturing and production
	Access® 300	16	●	●	●		Optional cart, MIGRunner	Most metals	10-44 V	Auto-Line™ Accu-Pulse™	Manufacturing and production
	Access® 450	16	●	●	●	1/4"			10-44 V	Auto-Line™ Accu-Pulse™	Manufacturing and production
Access® 675	16	●	●	●	3/8"	10-44 V			Auto-Line™ Accu-Pulse™	Manufacturing and production	
Dimension™ and XMT Series and PipeWorx™ Systems See Multiprocess section.											

PRODUCT KEY

CLASS: ● Light Industrial ● Industrial ● Heavy Industrial CAPABILITY: ● Designed for this process ● Capable of this process

*If using self-shielded wire on a CC/CV machine, use CV weld output. **In a single pass using self-shielded wire. ***In a single pass.

See aluminum solutions chart (page 10) and MIG packages chart (page 12) for additional information.



Millermatic®

140 Auto-Set™, 180 Auto-Set™, 211 Auto-Set™ w/MVP™

See literature no.
DC/12.42 (140)
DC/12.44 (180)
DC/12.54 (211)



Auto-Set

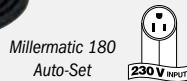
Blue light shows that Auto-Set is activated – provides exact parameters.



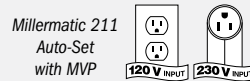
MVP on Millermatic 211



Millermatic 140 Auto-Set



Millermatic 180 Auto-Set



Millermatic 211 Auto-Set with MVP

Mild Steel Welding Capability

	140	180	211
Max.	3/16 in. (4.8 mm)	5/16 in. (7.9 mm)	3/8 in. (9.5 mm)
Model	140	180	211
Min.	24 ga. (0.8 mm)	24 ga. (0.8 mm)	24 ga. (0.8 mm)

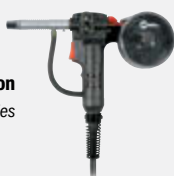
Aluminum Welding Capability

	140	180	211
Max.	14 ga. (1.9 mm)	1/4 in. (6.4 mm)	3/8 in. (9.5 mm)
Model	140	180	211
Min.	18 ga. (1.2 mm)	18 ga. (1.2 mm)	18 ga. (1.2 mm)

Aluminum welding uses optional Spoolmate 100 Series spool gun and 4043 Series aluminum wire.

Recommended Aluminum Solution

Spoolmate 100 Series (#300 371).



EXCLUSIVE! Auto-Set feature makes set up quick and easy. On the Millermatic 140 and 180, Auto-Set works with .024- and .030-inch diameter solid steel wire. On the Millermatic 211, it works with .030- and .035-inch wire (see graphic above).

The Millermatic 180 and 211 models **weld thickest material in their classes** – up to 5/16 inch (7.9 mm) in a single pass for the 180 and up to 3/8 inch (9.5 mm) for the 211!

The Millermatic 211 model features the **multi-voltage plug (MVP)** which allows connection to 115 V or 230 V receptacles without tools. 5-15P (115 V/15 A) and 6-50P (230 V/50 A) plugs are included with unit. 5-20P (115 V/20 A) plug is optional (see page 77).

Infinite voltage adjustment provides broader operating range with finer control than a tap machine.

Heavy-duty aluminum drive system is designed to provide superior feeding and durability. The toolless, quick-change reversible drive rolls and easy-to-set scaled tension knob make it the easiest to use in the industry.

Thermal overload protection. Designed to protect your investment, every Millermatic is now equipped with built-in thermal overload protection.

Smooth-Start™ technology provides smooth, spatter-free starts – no pop gun starts and no spatter to clean up.

“Tip saver” shuts down output when tip is shorted to the work. Extends contact tip life and protects internal components from damage.

Uses 4- or 8-inch (102 or 203 mm) spools.

Light industrial ● CV DC 1 Phase

Processes

MIG (GMAW) • Flux-Cored (FCAW)

Comes complete with

- 10-ft. (3 m) M-100 MIG gun and cable assembly (#248 282)
- 10-ft. (3 m) work cable with clamp
- 6-ft. (1.8 m) power cord with plug (140 and 180 models)
- 6-ft. (1.8 m) power cord and MVP adapter plugs for 115 V and 230 V (211 model)
- Factory-installed gas solenoid valve
- Dual groove quick-change drive rolls for .024-in. (0.6 mm) or .030/.035-in. (0.8/0.9 mm) wire



- Miller I Smith® regulator and gas hose, extra contact tips, Hobart® spool of solid wire, information/settings chart, setup/operation CD and material thickness gauge (#229 895)

Most popular accessories

- Spoolmate™ 100 Series #300 371 (pg 22)
- Running Gear/Cylinder Rack (pg 72) #300 425 Standard #770 187 Premium
- Protective Cover #195 149 (pg 75)
- V-knurled drive roll #202 926

See your distributor or MillerWelds.com for other Miller® options and accessories.



Scan this tag to see videos on Millermatic features.

Note: Weights and dimensions are for base machines.
*Package includes standard running gear/cylinder rack.

Model/Stock Number	Input Power	Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz				Wire Feed Speed	Wire Type and Diameter	Dimensions	Net Weight	
				115 V	120 V	230 V	KVA					KW
Millermatic 140 Auto-Set (#907 335) (#951 373)*	115 V	30-140	90 A at 18 VDC, 20% Duty Cycle	20	–	–	2.8	2.4	15-390 IPM (0.4-9.9 m/min.)	Solid Steel .024-.030 in. (0.6-0.8 mm) Stainless .024-.030 in. (0.6-0.8 mm) Flux-Cored .030-.035 in. (0.8-0.9 mm)	H: 15.75 in. (400 mm) W: 10.625 in. (270 mm) D: 17.5 in. (445 mm)	60 lb. (27 kg)
Millermatic 180 Auto-Set (#907 312) (#951 374)*	230 V	30-180	135 A at 22.5 VDC, 30% Duty Cycle	–	–	21.7	5.0	4.1	60-540 IPM (1.5-13.7 m/min.)	Solid Steel .024-.035 in. (0.6-0.9 mm) Stainless .024-.035 in. (0.6-0.9 mm) Flux-Cored .030-.045 in. (0.8-1.2 mm)	72 lb. (33 kg)	
Millermatic 211 Auto-Set with MVP (#907 422) (#951 375)*	120 VAC	30-140	90 A at 20 V at 20% Duty Cycle	–	20	–	2.9	2.5	60-540 IPM (1.5-13.7 m/min.)	Solid Steel .024-.035 in. (0.6-0.9 mm) Stainless .024-.035 in. (0.6-0.9 mm) Flux-Cored .030-.045 in. (0.8-1.2 mm)	74 lb. (33.6 kg)	
	230 VAC	30-210	150 A at 23.5 V at 30% Duty Cycle	–	–	24.3	5.5	4.8				

Millermatic® 212 Auto-Set™ See literature no. DC/12.46



Recommended aluminum solution

Spoolmate 200 Series (#300 497).

Welding Capability

Max. 3/8 in. (9.5 mm)	Max. 3/8 in. (9.5 mm)
Mild Steel	Aluminum
Min. 22 ga. (0.9 mm)	Min. 14 ga. (1.9 mm)

Aluminum welding uses optional Spoolmate 200 Series spool gun.

EXCLUSIVE! Auto-Set feature makes setup quick and easy. On the Millermatic 212, Auto-Set works with .030- and .035-in. diameter solid steel wire (for more info see page 7).

Infinite voltage adjustment. When used in manual mode provides broader operating range with finer control than a tap machine.

Fan-On-Demand™ cooling system only operates when needed reducing power consumption.

Compatible with Spoolmate™ 200 Series spool gun with wire feed speed control on the gun. Saves time by reducing trips back to the machine. Also compatible with the more industrial Spoolmatic® 15A or 30A spool gun.

Gun-On-Demand™. Simply pull the trigger for either gun and you're ready to weld. No wasted time installing modules and using gas valve kits.

Heavy-duty aluminum, two-drive-roll system.

Industrial ● **CV DC 1** Phase

Processes

- MIG (GMAW) • Flux-Cored (FCAW)

Comes complete with

- 15-ft. (4.5 m), 250-amp M-25 gun
- 10-ft. (3 m) work cable with clamp
- 7-ft. (2.1 m) power cord and plug
- Miller | Smith® argon mix regulator/flow gauge and gas hose
- Factory-installed lowered running gear/cylinder rack
- .030/.035-in. reversible dual-groove drive rolls
- Extra contact tips, setup/operation CD and material thickness gauge (#229 895)

Most popular accessories

- Spoolmate 200 Series Spool Gun for aluminum welding #300 497 (pg 22)
 - Dual EZ Cyl. Rack #300 337 (pg 72)
 - Elevated Gun and Cable Rack #300 335 (pg 72)
 - Protective Cover #195 142 (pg 75)
 - Full KVA Adapter Cord #300 517
- Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Stock Number (#907 405) 200(208)/230 V (#951 177) 200(208)/230 V with Spoolmate 200 Series, Regulator, Gas Hose and Dual Cylinder Rack	Amperage Range 30-210	Rated Output 160 A at 24.5 VDC, 60% Duty Cycle	Amps Input at Rated Output, 60 Hz				Wire Feed Speed 50-700 IPM (1.3-17.8 m/min.)	Wire Type and Diameter Solid Steel .023-.035 in. (0.6-0.9 mm) Stainless .023-.035 in. (0.6-0.9 mm) Flux-Cored .030-.045 in. (0.8-1.2 mm)	Dimensions H: 30 in. (762 mm) W: 19 in. (483 mm) D: 40 in. (1016 mm)	Net Weight 183 lb. (83 kg)
			200 V	230 V	KVA	KW				
			31	28	6.2	5.2				

Millermatic® 252 See literature no. DC/12.49



Recommended aluminum solution

Spoolmatic 15A (#195 156) or 30A (#130 831).

Welding Capability

Max. 1/2 in. (13 mm)	Max. 3/8 in. (9.5 mm)
Mild Steel	Aluminum
Min. 22 ga. (0.9 mm)	Min. 14 ga. (1.9 mm)

Aluminum welding uses optional Spoolmatic 15A or 30A spool gun.

Infinite voltage control with self-calibrating digital meters that permit presetting of voltage and wire feed speed. Ensures precise parameters and accuracy.

Integrated digital timers come complete with presettable preflow/postflow, burnback, spot and delay (stitch) timers. Independent timers for MIG and spool gun.

Superior aluminum MIG welding with direct connection of optional XR™ push-pull guns, Spoolmatic® 15A/30A/Pro and Spoolmate™ 200 Series spool guns. No extra module to buy or install.

EXCLUSIVE! Auto-Gun Detect™ automatically adjusts voltage, wire speed and timers for faster switching between MIG, push-pull and spool guns.

Heavy-duty aluminum, two-drive-roll system.

Fan-On-Demand™ cooling system only operates when needed reducing power consumption.

Industrial ● **CV DC 1** Phase

Processes

- MIG (GMAW) • Flux-Cored (FCAW)

Comes complete with

- 15-ft. (4.5 m), 250-amp M-25 gun
- 10-ft. (3 m) work cable with clamp
- 10-ft. (3 m) industrial power cord (and plug on 200/230 V model)
- Factory-installed gas solenoid
- Miller | Smith® argon mix regulator/flow gauge and gas hose
- Factory-installed lowered running gear/cylinder rack
- .030/.035-in. reversible dual-groove drive rolls
- Extra contact tips, setup/operation CD

Most popular accessories

- Spoolmate 200 Series and Spoolmatic Spool Guns for aluminum welding (pg 22)
 - XR Air-Cooled Push-Pull Guns (pg 23)
 - Dual EZ-Change™ Low Cylinder Rack #300 337 (pg 72)
 - Protective Cover #195 142 (pg 75)
- Visit MillerWelds.com or your distributor for other Miller® options and accessories.

*With Spoolmatic 30A, Regulator, Gas Hose and Dual Cylinder Rack.

Model/Stock Number	Amperage Range 30-300	Rated Output 200 A at 28 VDC, 60% Duty Cycle 250 A at 28 VDC, 40% Duty Cycle	Amps Input at Rated Output, 60 Hz				Wire Feed Speed 50-700 IPM (1.3-17.8 m/min.)	Wire Type and Diameter Solid Steel .023-.045 in. (0.6-1.2 mm) Stainless .023-.045 in. (0.6-1.2 mm) Flux-Cored .030-.045 in. (0.8-1.2 mm)	Dimensions H: 30 in. (762 mm) W: 19 in. (483 mm) D: 40 in. (1016 mm)	Net Weight 205 lb. (94 kg)
			200 V	230 V	460 V	575 V				
(#907 321) 200(208)/230 V (#951 066*) 200(208)/230 V			48	42	-	9.5 7.5				
(#907 322) 230/460/575 V (#951 065*) 230/460/575 V			-	46	23	18 9.5 7.5				



Millermatic® 350P

See literature no. DC/12.51



Recommended aluminum solution
XR-Aluma-Pro push-pull gun (see page 23).

Welding Capability

Max. 1/2 in. (13 mm)	Max. 1/2 in. (13 mm)
Mild Steel	Aluminum
Min. 24 ga. (0.8 mm)	Min. 18 ga. (1.2 mm)

Aluminum welding uses optional Aluma-Pro push-pull gun.

Built-in Pulsed MIG programs. All programmed information is restored after each power up — aluminum/steel/stainless steel/metal-cored.

EXCLUSIVE! Auto-Gun Detect™ automatically adjusts voltage, wire speed and timers for faster switching between MIG, push-pull and spool guns.

Infinite voltage control with self-calibrating digital meters that permit presetting of voltage and wire feed speed. Ensures precise parameters and accuracy.

Integrated digital timers come complete with presettable preflow/postflow and spot timers. Independent timers for MIG and push-pull guns.

Heavy-duty aluminum, four-drive-roll system (for more info see page 7).

Fan-On-Demand™ cooling system only operates when needed reducing power consumption and keeping internal components cleaner.

Industrial ● CV DC 3 1
Phase Phase

Processes

- MIG (GMAW) • Flux-Cored (FCAW)
- Pulsed MIG (GMAW-P)

Comes complete with

- 15-ft. (4.5 m) Bernard™ Q300 MIG gun with Centerfire™ consumables
- 10-ft. (3 m) work cable with clamp
- 10-ft. (3 m) industrial power cord (without plug) for single- or three-phase
- Factory-installed gas solenoid
- Miller | Smith® argon mix regulator/flow gauge with hose
- Factory-installed, low-mounted running gear/cylinder rack
- .035/.045-in. reversible V-groove drive rolls (order U-groove drive rolls for aluminum welding)
- Extra contact tips, setup/operation CD

Most popular accessories

- Spoolmatic® Spool Guns for aluminum welding (pg 22)
- XR™ Air-Cooled Push-Pull Guns (pg 23)
- Dual Cylinder Rack #195 299 (pg 72)
- Protective Cover #195 142 (pg 75)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Stock Number (#907 300) 200/230/460 V	Input Power	Amperage Range	Rated Output 300 A at 32 VDC, 60% Duty Cycle	Amps Input at Rated Output, 60 Hz					Wire Feed Speed	Wire Type and Diameter	Dimensions H: 34 in. (863 mm) W: 19 in. (483 mm) D: 41 in. (1041 mm)	Net Weight 181 lb. (82 kg)
	Three-Phase	25-400		200 V	230 V	460 V	KVA	KW				
	Single-Phase			34	30	15	11.6	11.5	MIG Gun 50-700 IPM (1.3-17.8 m/min.) Optional Spool Gun/ Push-Pull Gun 50-800 IPM (1.3-20 m/min.)	Solid Steel .023-.045 in. (0.6-1.2 mm) Stainless .030-.045 in. (0.8-1.2 mm) Aluminum .035-.047 in. (0.9-1.2 mm) Metal-Cored .035-.052 in. (0.9-1.3 mm) Flux-Cored .030-.052 in. (0.8-1.3 mm)		

Millermatic® 350P Aluminum

See literature no. DC/12.56



Welding Capability

Max. 1/2 in. (13 mm)
Aluminum
Min. 18 ga. (1.2 mm)

Aluminum welding uses optional Aluma-Pro push-pull gun. Not compatible with standard MIG gun.

Miller recommends MAXAL® aluminum wire.

True torque feed motor push-pull design provides continuous push force to the wire while the gun motor controls the speed at the gun. The motors work together to provide accurate and positive wire feed speed without wire shaving or deformation.

Electronic wire spool brake allows wire spool to free spool while welding resulting in smooth wire delivery.

Built-in aluminum Pulsed MIG programs for simplicity and improved puddle control. Pulsed welding virtually eliminates burnthrough and warping issues on thinner materials.

Synergic MIG and Synergic Pulsed MIG provide communication between power source, feeder and gun. As wire speed increases/decreases, the pulse or MIG parameters also increase/decrease to match the right amount of power needed.

Trigger schedule select allows operator to change between two sets of weld parameters.

Trigger hold for making long weldments without hand fatigue.

Standard jog and purge.

Industrial ● CV DC 3 1
Phase Phase

Processes

- Aluminum MIG (GMAW)
- Aluminum Pulsed MIG (GMAW-P)

Comes complete with

- 10-ft. (3 m) work cable with clamp
- 10-ft. (3 m) industrial power cord (without plug) for single- or three-phase
- Factory-installed gas solenoid
- Miller | Smith® argon mix regulator/flow gauge with hose
- Factory-installed, low-mounted running gear/cylinder rack
- .035-, .040- and .047-in. (0.9, 1.0 and 1.2 mm) U-groove drive rolls for aluminum welding
- Setup/operation CD

Push-Pull Gun System includes above plus

- XR™ air-cooled push-pull gun (see chart below)

Most popular accessories

- Same as Millermatic 350P above

Visit MillerWelds.com or your distributor for other Miller® options and accessories.



Scan this tag to find out how the Millermatic 350P Aluminum makes welding aluminum faster and easier.

Note: See aluminum solutions comparison chart on page 10.

Model/Stock Number	Input Power	Amperage Range	Rated Output 300 A at 32 VDC, 60% Duty Cycle	Amps Input at Rated Output, 60 Hz					Wire Feed Speed	Wire Type and Diameter	Dimensions H: 34 in. (863 mm) W: 19 in. (483 mm) D: 41 in. (1041 mm)	Net Weight 181 lb. (82 kg)
	Three-Phase	25-400		200 V	230 V	460 V	KVA	KW				
Millermatic 350P Aluminum Push-Pull Gun System (#951 451) w/15-ft. XR-Aluma-Pro™ air-cooled gun (#951 452) w/25-ft. XR-Aluma-Pro™ air-cooled gun (#951 453) w/25-ft. XR™-Pistol Pro air-cooled gun (#951 454) w/25-ft. XR-Aluma-Pro™ Lite air-cooled gun	Single-Phase			34	30	15	11.6	11.5	Optional Spool Gun/ Push-Pull Gun 50-800 IPM (1.3-20 m/min.)	Aluminum .035-.047 in. (0.9-1.2 mm)		
Millermatic 350P Aluminum (gun NOT included) (#907 474) 200/230/460 V, standard unit				69	61	30	13.1	11.2				



Choose the right industrial aluminum MIG solution.



Millermatic 350P Aluminum Push-Pull Gun Welding System shown with XR-Aluma-Pro gun (page 9).



AlumaFeed Synergic Aluminum System shown with XR-Aluma-Pro gun and AlumaPower 450 MPa (page 11).



Invision 352 MPa Plus System shown with dual-feeder Stationary Package (page 13).



Scan this tag to see videos of Aluminum System success stories.

Miller recommends MAXAL® aluminum wire.

	Millermatic® 350P Aluminum	AlumaFeed™ Synergic Aluminum System	Invision™ MPa Plus System
	Cost-effective light-industrial all-in-one MIG/Pulsed MIG solution with easy-to-use interface for aluminum welding on material up to 1/2-inch thick. Features built-in running gear for mobility.	Dedicated industrial-fabrication aluminum-welding solution with advanced welding features that can handle larger weldments. Its lightweight push-pull feeder can easily be carried up to 100 feet from the power source.	Versatile, industrial advanced system for large, high-duty-cycle aluminum and steel weldments. Features push and/or push-pull benchtop feeder for easy switchover between solid, aluminum and tubular wires.
Power Source	Millermatic 350P Aluminum (All-In-One)	AlumaPower™ 350 MPa or 450 MPa	Invision 352 MPa or 450 MPa
Feeder	All-In-One – built-in running gear with cylinder rack is easily maneuverable from area to area	Single-Wire XR-AlumaFeed – portable feeder can be carried up to 100 feet from power source	Single- or Dual-Wire 74 MPa Plus – stationary feeders can be mounted up to 100 feet from power source
Input Voltage	Single- or Three-Phase	Single- or Three-Phase (450 MPa is three-phase only)	Single- or Three-Phase (450 MPa is three-phase only)
Rated Output	300 A at 60% Duty Cycle	350 MPa: 350 A at 60% Duty Cycle 450 MPa: 450 A at 100% Duty Cycle	352 MPa: 350 A at 60% Duty Cycle 450 MPa: 450 A at 100% Duty Cycle
Primary Connection	Auto-Link® – Automatically links the power source to primary voltage being applied. Auto-link is used to link to 208 or 230 V and manually moving a link board is required to link to 460 V.	350 MPa: Auto-Line™ – Allows for any primary input voltage (208–575 V, single- or three-phase, 50 or 60 hertz) with no manual linking. Also adjusts for voltage spikes within the entire range. 450 MPa: 230/460 V manual linking	352 MPa: Auto-Line™ – Allows for any primary input voltage (208–575 V, single- or three-phase, 50 or 60 hertz) with no manual linking. Also adjusts for voltage spikes within the entire range. 450 MPa: 230/460 V manual linking
Aluminum Wire Diameters	.035–.047 in. (0.9–1.2 mm)	.035–1/16 in. (0.9–1.6 mm)	.035–1/16 in. (0.9–1.6 mm)
Gun Capability	XR-Aluma-Pro™, XR-Aluma-Pro™ Lite, or XR™-Pistol	XR-Aluma-Pro™, XR-Aluma-Pro™ Lite, or XR™-Pistol	XR-Aluma-Pro™ Plus, XR™-Pistol Plus or standard MIG Gun
MIG Modes			
Profile Pulse™	–	Yes – achieve a “stacked dime” appearance quickly and easily without gun manipulation	Yes – achieve a “stacked dime” appearance quickly and easily without gun manipulation
Synergic Pulsed MIG	Yes – “one-knob” control, only need to change wire feed speed to weld different material thicknesses	Yes – “one-knob” control, only need to change wire feed speed to weld different material thicknesses	Yes – “one-knob” control, only need to change wire feed speed to weld different material thicknesses
MIG	Spray Transfer MIG – for aluminum wires	Spray Transfer MIG – for aluminum wires	Conventional MIG – modes for aluminum, steel and other wires
Features			
Built-In Pulsed Programs	Aluminum	Aluminum	Aluminum, steel, stainless and others
Portability	Built-in running gear with cylinder rack – easily maneuverable from area to area	Lightweight, portable feeder with handle – can be carried up to 100 feet from power source	Stationary feeder – can be mounted up to 100 feet from power source
Trigger Hold	Yes – reduces operator fatigue from holding trigger	Yes – reduces operator fatigue from holding trigger	Yes – reduces operator fatigue from holding trigger
Trigger Schedule Select	Yes – allows operator to switch between two preset weld conditions by tapping the trigger	Yes – allows operator to switch between two preset weld conditions by tapping the trigger	Yes – allows operator to switch between two preset weld conditions by tapping the trigger
Program Locks	–	Yes – prevents unintended changes to the welding program weld parameters	Yes – prevents unintended changes to the welding program weld parameters
Flow Meter	–	Yes – allows flow to be set at feeder even when gas supply is a long distance away	–



AlumaFeed™ Synergic Aluminum Welding System

See literature no. DC/34

The AlumaFeed System simplifies and improves MIG and synergic Pulsed MIG aluminum welding applications.



AlumaPower 450 MPa and XR-AlumaFeed with XR-Aluma-Pro gun air-cooled package (#951 460) shown.

Miller recommends MAXAL® aluminum wire.



AlumaPower 350 model allows for any input voltage hookup (208 – 575 V) with no manual linking. 450 model is 230/460 V manual link or 575 V, three-phase only.

Synchronized, true push-pull wire feed system for precise wire feeding and arc performance.

Profile Pulse™ provides TIG appearance with MIG simplicity and productivity. Achieve “stacked dimes” without gun manipulation. Profile Pulse frequency can be changed to increase or decrease the spacing between the ripple pattern to achieve the desired weld appearance.



Synergic Pulsed MIG provides communication between the power source, feeder and gun. As wire speed increases/decreases, the pulse parameters also increase/decrease to match the right amount of power needed.

Built-in aluminum Pulsed MIG programs for simplicity and improved puddle control. Pulsed welding virtually eliminates burnthrough and warping issues on thinner materials.

Parameter and system locks enhance quality assurance and protect weld consistency.

Trigger schedule select allows operator to change between two sets of weld parameters.

Heavy industrial ●
CV DC 3 1 Phase Phase
AlumaPower 450 is 3-phase only.

Processes

- Aluminum MIG (GMAW)
- Aluminum Pulsed MIG (GMAW-P)

Most popular accessories

- XR™ Push-Pull Guns (pg 23)
- MIGRunner™ Cart #195 445 (pg 73)
- Industrial MIG 4/0 Kits (pg 75)
 - #300 405 With Dinse Connectors (350 MPa only)
 - #300 390 With Lug Connectors (450 MPa only)
- Includes Miller | Smith® regulator/flowmeter with 10-ft. (3 m) gas hose, 10-ft. (3 m) 4/0 feeder weld cable, and 15-ft. (4.6 m) work cable with a 600-amp C-clamp.
- Extension Cables (pg 80)
- 1/16-Inch (1.6 mm) Liner and Wire Kit for gun #230 708
- 1/16-Inch (1.6 mm) Drive Roll Kit for control box #195 591
- For gun and feeder remote options, please refer to spec sheet or visit MillerWelds.com.

When purchasing components separately, visit MillerWelds.com/equiptoweld or your distributor for other Miller® options and accessories.

Models/Packages



Power Source Only Stock Number	Package Stock Number*	XR-AlumaFeed Feeder	XR-Aluma-Pro™ Push-Pull MIG Gun	XR™-Pistol Grip Push-Pull MIG Gun	Industrial MIG 4/0 Kit	Coolmate™ with Coolant	Cart
AlumaPower 350 MPa (#907 420) 208-575 V (#907 420 001) 208-575 V with Auxiliary Power	(#951 147) w/350 model (#907 420)	(#300 509)	25-ft. air-cooled	–	–	–	–
	(#951 149) w/350 model (#907 420)	(#300 509)	–	30-ft. air-cooled	–	–	–
	(#951 151) w/350 model (#907 420)	(#300 509)	25-ft. air-cooled	–	–	With Dinse connectors	MIGRunner Cart
	(#951 551) w/350 model (#907 420 001)	(#300 509)	25-ft. water-cooled	–	–	–	Coolmate 3
	(#951 554) w/350 model (#907 420 001)	(#300 509)	–	30-ft. water-cooled	–	–	Coolmate 3
	(#951 555) w/350 model (#907 420 001)	(#300 509)	25-ft. water-cooled	–	–	With Dinse connectors	Coolmate 3 MIGRunner Cart
AlumaPower 450 MPa (#907 483) 230/460 V with Auxiliary Power (#907 484) 575 V with Auxiliary Power	(#951 460) w/450 model (#907 483)	(#300 509)	25-ft. air-cooled	–	–	–	–
	(#951 462) w/450 model (#907 483)	(#300 509)	–	30-ft. air-cooled	–	–	–
	(#951 459) w/450 model (#907 483)	(#300 509)	25-ft. air-cooled	–	–	With lug connectors	– MIGRunner Cart
	(#951 557) w/450 model (#907 483)	(#300 509)	25-ft. water-cooled	–	–	–	Coolmate 3
	(#951 558) w/450 model (#907 483)	(#300 509)	–	30-ft. water-cooled	–	–	Coolmate 3
	(#951 559) w/450 model (#907 483)	(#300 509)	25-ft. water-cooled	–	–	With lug connectors	Coolmate 3 MIGRunner Cart

Note: See aluminum solutions comparison chart on page 10. *Additional packages are available – visit MillerWelds.com or your distributor. All packages listed include gun drive rolls, feeder drive rolls and consumables for .035 and 3/64 inch (0.9 and 1.2 mm) wire. All systems come set up out of the box to run 3/64-inch wire. 1/16-inch consumables not included – order separately above.

**Duty cycle rating below achieved with 6-gauge input power cord (8-gauge cord supplied with unit).

Model	Input Power	Amp/Volt Ranges	Rated Output	Amps Input at Rated Load Output, 60 Hz					KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
				208 V	230 V	400 V	460 V	575 V					
AlumaPower 350 MPa	Three-Phase	CC Mode: 5 – 425 A CV Mode: 10 – 38 V	350 A at 34 VDC, 60% Duty Cycle	40.4	36.1	20.6	17.8	14.1	14.2	13.6	75 VDC	H: 17 in. (432 mm) W: 12.5 in. (318 mm) D: 24 in. (610 mm)	80 lb. (36.3 kg)
	Single-Phase	CC Mode: 5 – 425 A CV Mode: 10 – 38 V	300 A at 32 VDC, 60% Duty Cycle**	60.8	54.6	29.7	24.5	19.9	11.7	11.2			
AlumaPower 450 MPa	Three-Phase	CC Mode: 15 – 600 A CV Mode: 10 – 38 V	450 A at 36.5 VDC, 100% Duty Cycle	–	49.4	–	27.2	23.6	21.6 (23.5 on 575 V)	18.3	90 VDC	H: 17.25 in. (438 mm) W: 14.5 in. (368 mm) D: 27.125 in. (689 mm)	122 lb. (55.3 kg)
XR-AlumaFeed Wire Feeder	Input Power	Input Welding Circuit Rating	Wire Feed Speed	Wire Diameter Capacity					Maximum Spool Size Capacity	Dimensions	Net Weight		
				24 VAC, 5 A, 50/60 Hz	400 A at 100% Duty Cycle System duty cycle is limited to gun rating.	50 – 900 IPM (1.3 – 22.9 m/min.)	.035 – .062 in. (0.9 – 1.6 mm) Requires Wire Kit #230 708 for gun and Drive Roll Kit #195 591 for control box to run 1/16-in. (1.6 mm) wire.						



MIG packages for demanding industrial applications.

Power Source Welding Performance

	300 Amp				450 Amp			650 Amp		
	CP-302 with 22A (Pg 12)	Deltaweld® 302 with S-74D (Pg 12)	Invision™ 352 MPa w/S-74 MPa Plus (Pg 13)	Access® 300 w/Access Feeder (Pg 16)	Deltaweld® 452 with S-74D (Pg 12)	Invision™ 450 MPa w/S-74 MPa Plus (Pg 13)	Access® 450 w/Access Feeder (Pg 16)	Deltaweld® 652 with S-74D (Pg 12)	Access® 675 w/Access Feeder (Pg 16)	
Material	Mild Steel	●	●	●	●	●	●	●	●	
	Stainless Steel	○	○	●	○	●	●	○	●	
	Aluminum		○	●	○	●	●	○	●	
Material Thickness	Gauge (.020 - .125 in.)	●	●	●	○	●	●	○	●	
	Sheet (.125 - .375 in.)	●	●	●	●	●	●	●	●	
	Plate (.375 - 1 in.)	○	○	○	●	●	●	●	●	
	Plate (1+ in.)				○	○	●	●	●	
					○	○	○	●	●	
Wire Size	.030 in.	●	●	●	○	●				
	.035 in.	●	●	●	●	●	●	●	●	
	.045 and .052 in.	○	○	○	●	●	●	●	●	
	1/16 in.	○	○	○	●	●	●	●	●	
	5/64 in.				●	●	●	●	●	
	3/32 in.				○	○	○	●	●	
Process All machines designed for MIG Spray Transfer and Flux-Cored.	Short Circuit	★★★	★★	★★★★★	★★★★★	★★★	★★★★★	★★★★★	★★★★★	
	Pulsed Spray			★★★★★	★★★★★		★★★★★	★★★★★	★★★★★	
	Accu-Pulse®				★★★★★		★★★★★		★★★★★	
	RMD®				Optional ★★★★★		Optional ★★★★★		Optional ★★★★★	
	CAC-A			1/4 in.		1/4 in.	5/16 in.	1/4 in.	3/8 in.	3/8 in.

ICON KEY CAPABILITY: ● Designed for ○ Capable of PROCESS QUALITY: ★ Good ★★ Better ★★★ Best ★★★★★ Optimized

CP-302 and Deltaweld® Series

See literature no. DC/13.0 and DC/16.2

100 percent duty cycle industrial power sources deliver time-tested, reliable performance in semiautomatic applications for a variety of industries.



Deltaweld 452 MIGRunner package (#951 302) shown.

Available in three formats: machine only, stationary package (adds feeder, gun and MIG 4/0 kit), and MIGRunner™ package (adds running gear/cylinder rack to stationary package).

CP-302 features:

- Large analog meters with presettable voltage capability
- Internal adjustable weld stabilizer
- Solid-state weld contactor
- 15-amp, 115-VAC duplex receptacle

Deltaweld Series also features a solid-state weld contactor and duplex receptacle, plus the following:

- Digital preset meters for voltage and amperage
- Line voltage compensation
- Material-specific output studs
- Thermal overload protection and Fan-On-Demand™
- Remote voltage control and Auto Remote Sense™

Industrial ● 302 models
Hy Industrial ● 452/652 models



Processes

- MIG (GMAW) • Flux-Cored (FCAW)
- Air Carbon Arc Gouging (CAC-A) (Deltaweld 452: 1/4-in. carbons) (Deltaweld 652: 3/8-in. carbons)

Most popular accessories

- 22A/24A/70 Series Feeders (pg 24)
- Standard Running Gear (pg 73)
- Standard Cylinder Rack (pg 73)
- Industrial MIG 4/0 Kit (pg 75)

When purchasing components separately, visit MillerWelds.com/equiptoweld or your distributor for other Miller® options and accessories.

Models/Packages



Build your own system at MillerWelds.com/equiptoweld or see packages below right.



Includes MIG 4/0 kit and feeder with Bernard™ Q400 MIG gun and .035/.045 drive rolls



Includes running gear/cylinder rack, MIG 4/0 kit and feeder with Bernard™ Q400 MIG gun and .035/.045 drive rolls



Model	Power Source Only Stock Number	Stationary Package Stock Number	MIGRunner Package Stock Number
CP 302	(#903 786) 200/230/460 V	(#951 231) w/22A single-wire feeder with one gun (#300 615)	(#951 230) w/22A single-wire feeder with one gun (#300 615)
Deltaweld 302	(#903 376) 200-208/230/460 V	(#951 235) w/S-74D single-wire feeder with one gun (#300 617)	(#951 234) w/S-74D single-wire feeder with one gun (#300 617)
	(#903 392) 230/460/575 V	—	(#951 300) w/S-74D single-wire feeder with one gun (#300 617)
Deltaweld 452	(#903 377) 200-208/230/460 V	(#951 237) w/S-74D single-wire feeder with one gun (#300 617)	(#951 236) w/S-74D single-wire feeder with one gun (#300 617)
	(#903 394) 230/460/575 V	(#951 301) w/S-74D single-wire feeder with one gun (#300 617)	(#951 302) w/S-74D single-wire feeder with one gun (#300 617)
Deltaweld 652	(#903 396) 230/460/575 V	(#951 239) w/S-74D single-wire feeder with one gun (#300 617)	(#951 238) w/S-74D single-wire feeder with one gun (#300 617)

Model	Voltage Range	Rated Output	Amps Input at Rated Output, 60 Hz					Open-Circuit Voltage	Dimensions (Includes lift eye and strain relief)	Net Weight
			200 V	230 V	460 V	575 V	KVA			
CP 302	14 - 44	300 A at 32 VDC, 100% Duty Cycle	38	33	16.5	13	13.1	12.3	14 - 44 VDC	332 lb. (151 kg)
Deltaweld 302	10 - 32	300 A at 32 VDC, 100% Duty Cycle	48	42	21	17	16.9	12.9	42 VDC Max	323 lb. (147 kg)
Deltaweld 452	10 - 38	450 A at 38 VDC, 100% Duty Cycle	72	63	32	25	25.1	21.1	48 VDC Max	384 lb. (174 kg)
Deltaweld 652	10 - 44	650 A at 44 VDC, 100% Duty Cycle	—	96	48	38	38.2	34.2	54 VDC Max	472 lb. (214 kg)



Invision™ MPa Plus System

See literature no. DC/23.6

Simple, synergic pulse system, with the flexibility to push-pull aluminum.

Invision 352 MPa with S-74 MPa Plus feeder shown.



Build your own system at MillerWelds.com/equiptoweld or see packages below.

Miller recommends MAXAL® aluminum wire.



Recommended Aluminum Solution

Dedicated XR-Aluma-Pro Plus (gooseneck) and XR-Pistol Plus (pistol grip) guns work with MPA Plus feeders using tachometer feedback to coordinate wire feed speed of the gun and the feeder. See page 25 for stock numbers.

Built-in MIG and Pulsed MIG programs automatically set the optimal parameters for a wide variety of wires providing immediate productivity.

Alumination™ allows use of extended reach push-pull gun for consistent, dependable aluminum wire feeding.

Synergic Pulsed MIG. As wire speed increases/decreases, pulse parameters also increase/decrease to match the right amount of power needed.

Profile Pulse™ provides TIG appearance with MIG simplicity and productivity.



AUTOLINE™ Power Management Technology **Invision 352 model allows for any input voltage hookup (208 – 575 V) with no manual linking. 450 model is 230/460 V manual link or 575 V, three-phase only.**

Easy to set up. Select wire diameter, wire type and gas being used, set your wire speed and strike an arc.

Heavy industrial ●
 Invision 450 is 3-phase only.

Processes

- MIG (GMAW) • Flux-Cored (FCAW)
- Pulsed MIG (GMAW-P)
- Air Carbon Arc Gouging (CAC-A) (Invision 352: 1/4-in. carbons) (Invision 450: 5/16-in. carbons)

Optimized wire feeding options

- 70 Series MPa Plus Feeders (pg 25)
- 70 Series Swingarc™ with MPa Plus Control Box (pg 25)
- XR-Aluma-Pro™ Plus and XR™-Pistol Plus push-pull guns (pg 25)
- Single- and dual-remote configurations are available. For more information, see literature no. DC/23.6.

Most popular accessories

- MIGRunner™ Cart (Single Feeders only) #195 445 (pg 73)
- Running Gear Cylinder Rack #300 408 (pg 73)
- Coolmate™ 3 #043 007 (pg 73)
- Industrial MIG 4/0 Kits (pg 75) #300 405 With Dinse Connectors (352 MPa only) #300 390 With Lug Connectors (450 MPa only)
- Extension Cables (pg 80) #247 831 025 25 ft. (7.6 m) #247 831 050 50 ft. (15 m) #247 831 080 80 ft. (24.4 m)

When purchasing components separately, visit MillerWelds.com/equiptoweld or your distributor for other Miller® options and accessories.

Models/Packages



Power Source Only Stock Number	Package Stock Number*	70 Series MPa Plus Feeder with Bernard™ Q400 Push-Only MIG Gun and .035/.045 Drive Rolls	XR-Aluma-Pro™ Plus Push-Pull MIG Gun	Industrial MIG 4/0 Kit	Coolmate™ with Coolant	Cart	
Invision 352 MPa (#907 431) (#907 431 001) w/Auxiliary Power	Push-Pull	(#951 377) w/352 model (#907 431 001)	S-74 (single-wire feeder with one gun)	25-ft. water-cooled	With Dinse connectors	Coolmate 3	–
		(#951 379) w/352 model (#907 431 001)	S-74 (single-wire feeder with one gun)	25-ft. water-cooled	With Dinse connectors	Coolmate 3	MIGRunner Cart
		(#951 283) w/352 model (#907 431)	S-74 (single-wire feeder with one gun)	25-ft. air-cooled	With Dinse connectors	–	–
		(#951 502) w/352 model (#907 431)	D-74 (dual-wire feeder with two guns)	25-ft. air-cooled	With Dinse connectors	–	–
	Push Only	(#951 287) w/352 model (#907 431)	S-74 (single-wire feeder with one gun)	25-ft. air-cooled	With Dinse connectors	–	MIGRunner Cart
		(#951 501) w/352 model (#907 431)	D-74 (dual-wire feeder with two guns)	25-ft. air-cooled	With Dinse connectors	–	Running Gear Cylinder Rack
		(#951 411) w/352 model (#907 431)	S-74 (single-wire feeder with one gun)	–	With Dinse connectors	–	MIGRunner Cart
		(#951 500) w/352 model (#907 431)	D-74 (dual-wire feeder with two guns)	–	With Dinse connectors	–	Running Gear Cylinder Rack
Invision 450 MPa (#907 485) 230/460 V with Auxiliary Power (#907 486) 575 V with Auxiliary Power	Push Only	(#951 499) w/450 model (#907 485)	S-74 (single-wire feeder with one gun)	–	With lug connectors	–	MIGRunner Cart
		(#951 457) w/450 model (#907 485)	D-74 (dual-wire feeder with two guns)	–	With lug connectors	–	Running Gear Cylinder Rack

Note: See aluminum solutions comparison chart on page 10. *Additional packages are available – visit MillerWelds.com or your distributor.

**Duty cycle rating below achieved with 6-gauge input power cord (8-gauge cord supplied with unit).

Model	Input Power	Amp/Volt Ranges	Rated Output	Amps Input at Rated Load Output, 60 Hz					KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
				208 V	230 V	400 V	460 V	575 V					
Invision 352 MPa	Three-Phase	CC Mode: 5 – 425 A CV Mode: 10 – 38 V	350 A at 34 VDC, 60% Duty Cycle	40.4	36.1	20.6	17.8	14.1	14.2	13.6	75 VDC	H: 17 in. (432 mm) W: 12.5 in. (318 mm) D: 24 in. (610 mm)	80 lb. (36.3 kg)
	Single-Phase	CC Mode: 5 – 425 A CV Mode: 10 – 38 V	300 A at 32 VDC, 60% Duty Cycle**	60.8	54.6	29.7	24.5	19.9	11.7	11.2			
Invision 450 MPa	Three-Phase	CC Mode: 15–600 A CV Mode: 10 – 38 V	450 A at 36.5 VDC, 100% Duty Cycle	–	49.4	–	27.2	23.6	21.6 (23.5 on 575 V)	18.3	90 VDC	H: 17.25 in. (438 mm) W: 14.5 in. (368 mm) D: 27.125 in. (689 mm)	122 lb. (55.3 kg)



MIG

Advanced/Automated

For more detailed information, visit

MillerWelds.com/insight



Insight Core™

Knowledge to drive your business forward

Insight Core is a flexible, Internet-based industrial welding information management solution that can help your operation be more competitive and profitable by delivering accurate, decision-ready information about welding processes – so you can take steps to reduce costs, boost output, increase product quality and improve your bottom line.



Insight Core delivers accurate, up-to-date weld reports on any Web-enabled device.

Easier installation, greater compatibility, more-accessible reports

Compatible with both Axxess® and Auto-Axxess™ and with 14-pin compliant Miller® power sources, Insight Core can help you get the most out of your existing welder fleet. Current fleets can be connected to Insight Core using field upgrade modules; new Axxess and Auto-Axxess machines can be ordered with Insight Core factory installed.

Wi-Fi and wired Ethernet connectivity are built into Insight Core for flexible integration with your company's information network.

Patented USB support makes setup fast and easy, facilitating trouble-free network connectivity, data downloads and firmware updates.

No special software or applications required. Insight Core stores data in the cloud and securely delivers HTML-browser based weld data and reports to virtually any Internet-connected device in the world – including tablet computers and smartphones.



Increase productivity

Evaluate key indicators of operator productivity

- Measure arc-on time and compare to preset goals
- Measure number of arc starts
- Measure wire deposition (Axxess/Auto-Axxess only)



Manage costs

Monitor and analyze welding costs

- Understand weld cell productivity variations
- Understand the impact of continuous improvement efforts
- Understand wire deposition to determine potential over-welding (Axxess/Auto-Axxess only)



Improve weld quality

Measure important indicators of weld quality

- Identify welds outside of preset amperage and voltage thresholds
- Identify operators who may need additional training
- Weld Trace™ provided for every weld

How Insight Core works

1. As each power source is used, data is generated and automatically transmitted.
2. Data is sent to the cloud, where it's processed, organized, securely stored and made available to view.
3. Reports are delivered on the browser of any Web-enabled device.





Turn data into actionable information



Main dashboard – daily status overview

- Your first destination for a full overview of essential reports about your welding operations
- Asset tree allows you to organize your fleet in a manner that makes sense for you – by building, department and machine



Productivity dashboard

- Graphically displays arc-on times and wire deposition
- Displays are available by hour, day, week, month or a user-defined range
- Allows quick and easy comparisons and analysis of productivity



Quality dashboard

- Shows total number of welds occurring during a user-selectable time range
- Distinguishes between those welds falling inside and outside of established limits



Goals dashboard

- Allows easy evaluation of progress toward goals for arc-on time, weld deposition, weld quality and more
- Shows statistics for individual power sources, work groups, shifts or your entire weld fleet

More options for more applications: Insight Core™ and Insight Centerpoint™

Every welding operation has unique needs for information about its processes – which is why Miller offers multiple welding information management systems with a wide range of capabilities.

Insight Core is focused on monitoring outputs connected with the welding process. Insight Centerpoint brings advanced process control information into the actual weld cell to help manage the welding and fabrication process.

Which system is right for you?

Some customers benefit from a combination of both Insight Core and Insight Centerpoint, pairing each system with the welders and processes it best supports. See at right for a comparison of selected key features that can benefit your business.

	Insight Core	Insight Centerpoint
Key Performance Indicators (KPIs)		
Weld detail: amps, volts, weld duration reported by date/time, work cell, shift and machine	●	●
Productivity: arc-on time, wire deposition (on Access/Auto-Access only)	●	●
Quality: evaluates every weld compared to pre-defined threshold limits	●	●
Goals: definable targets to improve arc-on time, deposition, arc-starts	●	
Business Intelligence Tools/Reports		
Real-time notifications of key events	●	●
Comparison reports available for any combination of machines and weld cells	●	●
All reports capable of exporting to Microsoft Excel-compatible format	●	●
Capable of reporting OEE (overall equipment effectiveness)		●
Cost calculator: total cost for wire, gas, electricity, and labor per weld and part		●
Advanced Real-Time Process Control		
Part Tracking*: visually and sequentially guides operator through weld process; monitors each weld for current, voltage, wire feed speed, duration and gas flow (optional)		●
Workflow: flexible system that governs the entire welding and fabrication process by providing visual non-welding work instructions in addition to the benefits of Part Tracking		●
Energy/heat input calculation for total welded assembled parts		●
Real-time operator alerts of activities such as over-/under-welding, missing/incomplete welds, sequencing errors; sequential weld guidance for the operator		●

For more information regarding Insight Core and Insight Centerpoint visit MillerWelds.com/insight.

Insight Core wireless and wired Ethernet options

Factory-built Access and Auto-Access

#907 150 002 Access 300 with Insight Core

#907 152 002 Access 450 with Insight Core

#907 154 002 Access 675 with Insight Core

#907 151 004 Auto-Access 300 with Insight Core

#907 153 004 Auto-Access 450 with Insight Core

#907 155 006 Auto-Access 675 with Insight Core

#907 151 005 Auto-Access 300 DeviceNet with Insight Core

#907 153 005 Auto-Access 450 DeviceNet with Insight Core

#907 155 005 Auto-Access 675 DeviceNet with Insight Core



Access 300, Auto-Access 450 and Auto-Access 675 shown.

Access/Auto-Access Upgrade Module

#301 081 Access Insight Core Module



14-pin Compliant Miller® Power Source Upgrade Module

#301 072 14-pin Insight Core Module



For more information regarding DeviceNet power sources visit MillerWelds.com/advanced or see literature no. AU/8.0.



Access® and Auto-Access™ Systems

See lit. no. DC/8.0 and AU/8.0

Optimized industrial MIG systems for both hand-held and robotic applications, which improve arc performance and productivity.



For more detailed information visit

MillerWelds.com/advanced



Access 450 MIGRunner package (#951 228) shown.



Auto-Access 450 shown with required AA-40GB motor (ordered separately).



AA-40GB motor connections

Note: Products shown in this section are more complex and may require Miller factory support at additional expense to ensure the system and components needed are properly selected and installed. Consult the factory for ALL Advanced or Automated MIG applications at **1-920-954-3813**.



Allows for **any** input voltage hookup (208–575 V) with no manual linking. Assures rock-solid, consistent output on fluctuating primary lines.

Accu-Pulse® MIG process delivers precise control of the arc even over tack welds and in tight corners. Additional MIG welding processes include Accu-Curve™, conventional MIG and Metal-Cored.

Note: Look for high-speed video clips of Accu-Pulse®, Accu-Curve®, Accu-Speed™ and Front Panel Simulator at MillerWelds.com/advanced.

SureStart® technology provides consistent arc starts by precisely controlling power levels for specific wire and gas combinations.

RS-232 serial port provides access to data transfer and optional program downloads from Web at MillerWelds.com/advanced.

AA-40GB wire drive motor assembly with OCP (Over Current Protection) to protect against current surges. Direct-panel-mounted to eliminate motion stress on the motor's power and tachometer feedback wires. (Required for Auto-Access and used for Access remote configurations.)

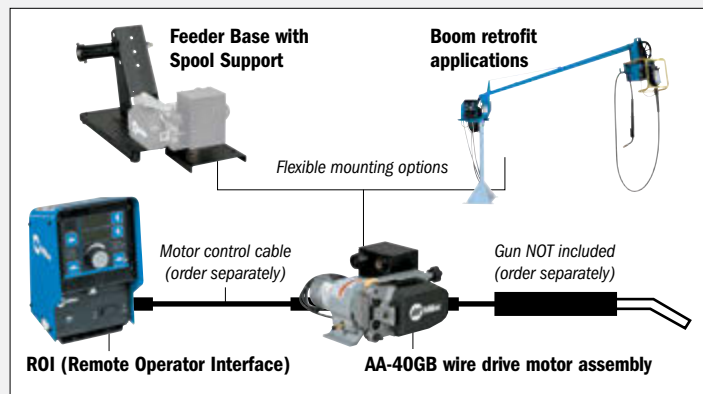
Optional welding software and processes. Accu-Speed™, RMD®, and Access® File Management for PC. Accu-Pulse™ tandem is a factory option available on Auto-Access models only.

Access additional features

Access four-drive-roll wire drive feeder is combined with operator interface leaving no controls back at the power source. Includes one Bernard Q-Gun for single-wire models (two guns for dual-wire models) and drive rolls.

Note: Each feeder requires one DeviceNet interconnecting feeder control cable. See literature no. DC/8.0 for more information and available lengths.

Various wire feeding options available. See literature no. DC/8.0 for more information.



Access Packages



Build your own system at MillerWelds.com/equiptoweld or see packages below.



Model	Package Stock Number*	Access Wire Feeder with Bernard™ Q-Gun™ and Drive Rolls	DeviceNet Interconnecting Feeder Control Cable	Industrial MIG 4/0 Kit	Cart
Access 300	(#951 227) w/300 model (#907 150)	Single-wire model with one gun	5-ft. (1.5 m) cable	With lug connectors	–
	(#951 226) w/300 model (#907 150)	Single-wire model with one gun	5-ft. (1.5 m) cable	With lug connectors	Running Gear Cylinder Rack
Access 450	(#951 229) w/450 model (#907 152)	Single-wire model with one gun	5-ft. (1.5 m) cable	With lug connectors	–
	(#951 228) w/450 model (#907 152)	Single-wire model with one gun	5-ft. (1.5 m) cable	With lug connectors	Running Gear Cylinder Rack



Multi-MIG® Welding Process Capabilities

Process	Standard Spray	Pulsed Spray	Accu-Pulse® Accu-Curve™ Accu-Speed™ (Optional)	Standard Short Circuit	RMD® Regulated Metal Deposition (Optional)
Weld Puddle Control	Flat/Horizontal		All Position Performance	Thin Materials/Gap Filling	

Note: Look for high-speed video clips of Accu-Pulse, Accu-Curve, Accu-Speed and Front Panel Simulator at MillerWelds.com/advanced.

Featured welding processes

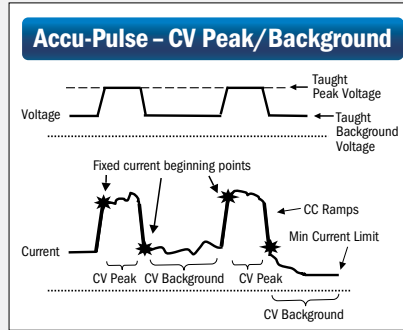
Accu-Pulse® STANDARD on all Access® models

The Accu-Pulse process allows for precise control of the pulse arc. Accu-Pulse provides optimum molten puddle control and has power to increase wire feed speeds and deposition 20 to 25 percent in many applications.

Accu-Curve™ STANDARD on all Access® models

Accu-Curve is a variation of the Accu-Pulse process. The transitions from peaks to background voltage are “curved”. The curved transitions provide a “softer” feel without sacrificing the tight arc lengths that allow for better puddle control that have become the hallmark of the Accu-Pulse process.

Note: Accu-Curve can be added to existing Access or Auto-Access systems for FREE by updating code online at MillerWelds.com/advanced. Requires Palm handheld or PC to transfer code to Access.



Optional welding processes

Accu-Speed™ Field #300 720 for PC*

Accu-Speed is a variation of the Accu-Pulse process and was developed for the type of arcs needed in automated welding applications. Accu-Speed has a tighter driving arc that can be directed into the joint, yet still remains stable at the higher travel speeds used in automated welding. In general, Accu-Speed has lower average voltage and amperage when compared to Accu-Pulse which makes it ideal when welding out of position in the manual mode.

RMD® (Regulated Metal Deposition) Field #300 721 for PC*

The RMD process is a precisely controlled short-circuit transfer. It is a method of detecting when the short is going to clear and then rapidly reacting to this data changing the current (amperage) levels. Features proactive dynamic puddle control.

*PC-based emulator and cable are NOT included.

Note: Serial number must be provided for field installation. Field kits include cable for connecting to Access, but require PC version of File Manager. FREE trial of Accu-Speed and RMD with a combined total of 16 hours included with every new Access power supply. See below for power sources with factory-installed software.

Accu-Pulse® tandem Factory option available on Auto-Access® models only

Miller® technology synchronizes pulsing between two Auto-Access power supplies to achieve two stable, independent arcs in one torch. Each wire has its own power source, wire drive, and contact tip. Accu-Pulse tandem welding unites the arc characteristics of Accu-Pulse with high deposition rates and travel speeds achievable with the tandem process.

See below for power sources with optional Accu-Pulse tandem.

*Order wire drive motor assembly and required motor control cable length separately.

Industrial ● 300 models
Hvy Industrial ● 450/675 models

CC CV DC 3 Phase Auto-Access is CV only.

Processes

Multi-MIG®

- Accu-Pulse® MIG (GMAW-P)
- Accu-Curve™
- Accu-Speed™ (optional)
- Accu-Pulse® tandem (factory option available on Auto-Access only)
- Pulsed MIG (GMAW-P)
- MIG (GMAW) • Metal-Cored
- RMD® (GMAW-SCT) (optional)
- Air Carbon Arc Gouging (CAC-A) can also be activated

Access wire feeding options

(see literature no. DC/8.0 for more information and required cables)

- Access Feeders
- #951 311 Single-wire
- #951 431 Dual-wire
- Access ROI Swingarc™ boom-mounted feeders
- Single- and dual-remote configurations

AA-40GB wire drive motor

(see literature no. DC/8.0 and AU/8.0 for more information and required cables)

- AA-40GB wire drive motor (includes 50-ft. volt-sense lead)
- #195 426 Left-hand drive
- #195 515 Right-hand drive

Note: AA-40GB wire drive motor is required for Auto-Access and used for Access remote configurations.

Most popular accessories

- Access® File Management Software for PC #300 529
- Running Gear Cylinder Rack (Access 300 and 450 only) #300 408 (pg 73)
- Industrial MIG 4/0 Kit (Access only) #300 390 (pg 75)
- The following are for Auto-Access only
- Coolant Flow Switch (pg 72)
- Receptacle/Adapter Kits (one required per machine)
- ABB (#194 793), Fanuc (#194 791), Motoman (#194 790), Panasonic (#300 056), Universal (#195 002)
- Smart Adapter #300 012 (enables semi-automatic function)
- Fanuc/Motoman Motor Bracket #300 013

When purchasing components separately, visit MillerWelds.com/equiptoweld or your distributor for Miller® options and accessories.

Model	Stock Number	Amp/Volt Ranges	Three-Phase Rated Output	Amps Input at Rated Output, 50/60 Hz							Max. Open-Circuit Voltage	Dimensions	Net Weight
				208 V	230 V	400 V	460 V	575 V	KVA	KW			
Access 300	(#907 150)	5 - 400 A, 10 - 44 V	300 A at 29 VDC, 60% Duty Cycle	33	29.7	16.9	14.6	11.6	11.7	11.2	80 VDC	H: 23 in. (584 mm) W: 17 in. (432 mm) D: 22.5 in. (572 mm)	116 lb. (52.6 kg)
Auto-Access 300*	(#907 151) Base Power Source (#907 151-00-1) w/Accu-Speed Software (#907 151-01-1) w/RMD Process Software												
Access 450	(#907 152) Base Power Source (#907 152-00-1) w/Accu-Speed Software (#907 152-01-1) w/RMD Process Software	5 - 600 A, 10 - 44 V	450 A at 36.5 VDC, 100% Duty Cycle	-	60	33.7	28.8	22.8	23.8	22.9	80 VDC	H: 31 in. (787 mm) W: 17 in. (432 mm) D: 22.5 in. (572 mm)	163 lb. (73.9 kg)
Auto-Access 450*	(#907 153) Base Power Source (#907 153-00-1) w/Accu-Speed Software (#907 153-01-1) w/RMD Process Software (#907 153-02-2) w/tandem Synchronization												
Access 675	(#907 154)	5 - 900 A, 10 - 44 V	675 A at 38 VDC, 100% Duty Cycle	-	89.7	-	43.7	34.8	35.7	34.4	80 VDC	H: 39 in. (991 mm) W: 17 in. (432 mm) D: 22.5 in. (572 mm)	208 lb. (94.3 kg)
Auto-Access 675*	(#907 155) Base Power Source (#907 155-00-3) w/Accu-Speed Software (#907 155-02-1) w/tandem Synchronization												



Automation

For more detailed information, visit

MillerWelds.com/automation



PERFORMARC™ ROBOTIC WELDING SYSTEM

A family of pre-engineered solutions integrating Miller® welding technology to solve your manufacturing challenges.

Single-station load and unload A/B-style turntable configurations



PA250M 250 lb./side
60-in. manually indexed table



PA350S 350 lb./side
66-in. servo indexing table



PA750S and PA750SW 750 lb./side
92- or 107-in. servo indexing table

Single-station load and unload H-frame configurations



Dual head and tailstock/single- or dual-robot configuration
PA550H 550 lb./side, 48-in. long by 34-in. turning diameter on 92-in. servo indexer

PA550HW 550 lb./side **PA1100HW** 1100 lb./side
60-in. long x 40-in. turning diameter on 108-in. servo indexer

Side-by-side configurations — operator walks around system



Robot between dual head and tailstock/single- or dual-robot configuration

PA1100SS 1100 lb./side
120-in. long x 44-in. turning diameter

PA2200SS 2200 lb./side
120-in. long x 60-in. turning diameter

Ferris wheel configurations — high-volume production



Dual head and tailstock/single-, dual- or triple-robot configuration

PA1100FW 1100 lb./side
118-in. long x 43-in. turning diameter

Fast installation. A fully welded frame, shipped to you pre-wired and pre-assembled, eliminates assembly time and is up and running in minutes.

Integrated controls. A centralized operator control panel and full-color teach pendant allow easy access to full system control, diagnostics and programming.

Flexibility. The fully welded frame makes it easy to relocate—simply disconnect utilities, move to the new location and reconnect utilities.

Productivity and versatility. The manually activated table allows for high output-to-investment ratio, which is ideal for companies and first-time users with a low volume of automation projects.

Safety. Designed to exceed the most rigorous safety standards, ensuring that your investment is not only productive, but keeps your employees safe. Our welding cells feature servo disconnect technology, removing drive power during fixture loading to prevent unexpected motion of the outboard axis. Fully RIA compliant programming.

Note: Products shown in this section are more complex and may require Miller factory support at additional expense to ensure the system and components needed are properly selected and installed. Consult the factory for ALL Automation and Robotic applications at 1-630-653-6819.

Components and features



Miller welding technology



Panasonic robots



Tregaskiss™ MIG guns



Hobart Brothers filler metals



TAWERS™ aluminum MIG

Servo wire feed system is ultra-stable.

Lift-start function improves arc starting.

Low-pulse function allows for oscillation between two parameters (high-low) during welding, producing the “stacked dime” weld bead appearance without backstepping.

Synchro-weave function provides true synchronous and instantaneous control of wire feed, parameter control and robot motion – while weaving between plates of unequal thicknesses.

AC MIG for added penetration control.



TAWERS™ high-deposition TIG

Touch-start function eliminates high-frequency noise during arc starts.

Wire can enter puddle from any position.

Unique filler wire arrangement reduces feeding-related issues.

Current shunt function preheats filler metal to improve deposition.

Embedded arc control function provides a synchronous control of wire feed, parameter control and robot motion. Profile Pulse™ “stacked dime” weld bead appearance without backstepping is easily achieved.

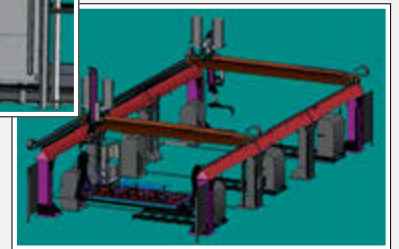
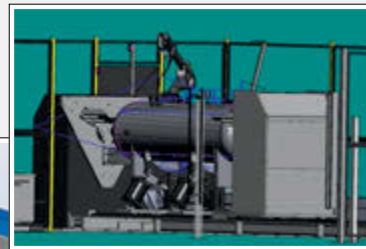
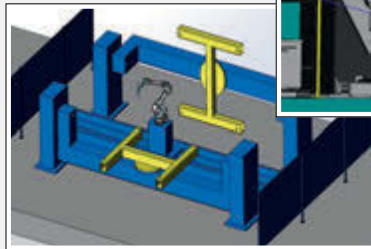
Compact torch design.

Arc voltage height-control option.



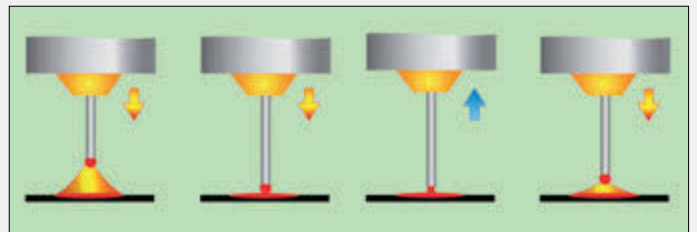
Miller® Welding Automation turnkey custom systems – extensive integration network to meet all your complex manufacturing challenges

Miller Welding Automation is committed to providing value to our customers. Through building deep partnerships with select integrators, Miller Welding Automation provides end users a more complete and technically superior solution. Application of items such as touch sensing, seam tracking, heavy plate software and offline programming bring value-added solutions to manufacturing.



Advanced welding technology – TAWERS™ active wire feed process

Active wire feed process (AWP) is an advanced process combining waveform control and wire feed control technology together. Welding wire is continuously fed back and forth, nearly eliminating spatter, even with CO₂ gas. Stable weld quality, large torch angle window, and high-quality welding on thin material.

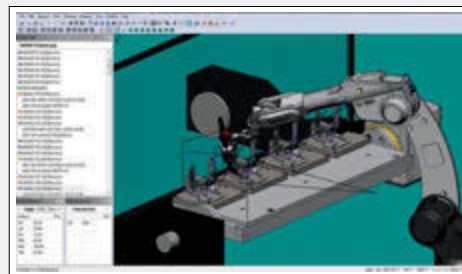


Desktop Programming and Simulation (DTPS) – offline programming and services

Software allows the development of programs offline, minimizing robot downtime and maximizing throughput and productivity.

Specialized software generates programs and simulates the actual taught paths from your desktop.

Cutting edge technology and innovation to manage the challenges of manufacturing and create customer success in metal fabrication.



Miller® Welding Automation robotic rental program

Worried about the capital expense of a robot? Why not rent it?

We'll help you make it work. Miller specialists available for training, installation, applications and offline programming.

Rent it only for the time you need it. Great for short run jobs. Return the system if your job ends.

Grow with a trusted partner. Build residual value faster when you use Hobart® wire and Tregaskiss™ consumables.



Wire Feeders

Also see Advanced/Automated MIG section for Pulsed MIG wire feeding options.

For more detailed information, visit

MillerWelds.com/wirefeeders



Product Guide

	Page	Class	MIG	MIG-P*	Flux-Cored**	Portable	Power Source Required	Hard	Flux-Cored Dual-Shld	Flux-Cored Self-Shld	Alum	Wire Diameters	Special Features	Typical Applications
Constant-Speed	SuitCase® 12RC	21	●	●	●	●	CV	●	●	●	●	12RC: .023–5/64 in. (0.6–2.0 mm)	Portable, self-enclosed case, remote control	Construction, field maintenance, site fabrication
	22A	24	●	●	●	●	CV	●	●	●	●	.023–5/64 in. (0.6–2.0 mm)	Two quick-change drive rolls	Manufacturing, fabrication
	24A	24	●	●	●	●	CV	●	●	●	●	.023–3/32 in. (0.6–2.4 mm)	Four quick-change drive rolls	Manufacturing, fabrication
	70 Series S/D/DX – Singles and Duals	24	●	●	●	●	CV	●	●	●	●	.023–1/8 in. (0.6–3.2 mm) Low-speed option recommended for 1/8-in. wires	Four drive roll, adjustable weld control	Heavy and light manufacturing, fabrication
	70 Series MPA Plus – Singles and Duals	25	●	●	●	●	CV	●	●	●	●	.035–5/64 in. (0.9–2.0 mm)	Alumination™ allows push/pull gun, optimized w/MPA inverter power sources	Manufacturing requiring multiple wire types
	70 Series Swingarc™ – Singles and Duals	25	●	●	●	●	CV	●	●	●	●	.023–5/64 in. (0.6–2.0 mm)	8-, 12- and 16-ft. booms, four drive roll, adjustable weld control	Heavy and light manufacturing, fabrication
Volt-Sensing	SuitCase® X-TREME™ 8VS	21	●	●	●	●	CC/CV	●	●	●	●	.023–5/64 in. (0.6–2.0 mm)	Lightweight, portable, 8-in. diameter spool capacity	Shipbuilding, construction, site fabrication
	SuitCase® X-TREME™ 12VS	21	●	●	●	●	CC/CV	●	●	●	●	.023–5/64 in. (0.6–2.0 mm)	Lightweight, portable, 12-in. diameter spool capacity	Shipbuilding, construction, site fabrication
Aluminum	Spoolmate™ 100 Series	22	●	●	●	●	CV	●	●	●	●	.023–.035 in. (0.6–0.9 mm)	Economical, 135 A	Light-duty aluminum fabrication
	Spoolmate™ 200 Series	22	●	●	●	●	CV	●	●	●	●	.023–.035 in. (0.6–0.9 mm)	Economical, 160 A	Light-duty aluminum fabrication
	Spoolmate™ 3035	22	●	●	●	●	CV	●	●	●	●	.023–.035 in. (0.6–0.9 mm)	Economical, 150 A	Light-duty aluminum fabrication
	Spoolmatic® 15A/30A/Pro	22	●	●	●	●	CC/CV	●	●	●	●	.023–1/16 in. (0.6–1.6 mm)	Portable, 4-in. spool, 15- or 30-ft. cable lengths	Aluminum fabrication
	XR™ Pistol	23	●	●	●	●	CC/CV	●	●	●	●	.030–1/16 in. (0.8–1.6 mm)	Push-pull system	Heavy aluminum fabrication
	XR™ Pistol-Pro	23	●	●	●	●	CC/CV	●	●	●	●	.030–1/16 in. (0.8–1.6 mm)	Push-pull system, easy-to-rotate, self-seating head tube	Heavy aluminum fabrication
	XR-Aluma-Pro™ Lite	23	●	●	●	●	CC/CV	●	●	●	●	.030–3/64 in. (0.8–1.2 mm)	Lightweight, air-cooled push-pull gun	Aluminum fabrication
	XR-Aluma-Pro™	23	●	●	●	●	CC/CV	●	●	●	●	.030–1/16 in. (0.8–1.6 mm)	High-amperage gun	All aluminum fabrication needs
	XR™ Controls	23	●	●	●	●	CC/CV	●	●	●	●	.030–1/16 in. (0.8–1.6 mm)	Push-pull system	Heavy aluminum fabrication

PRODUCT KEY

CLASS: ● Light Industrial ● Industrial ● Heavy Industrial CAPABILITY: ● Designed for this process ● Capable of this process

New! or Improved! products appear in blue type. *Requires MPA inverter power source or optional Optima control with a recommended inverter power source.

**Certain self-shielded wires require CV output. Miller recommends a CV power source whenever possible.



SuitCase® X-TREME™ 8VS and 12VS

See literature no. M/6.42

Taking portable welding to the extreme – available in two sizes, these voltage-sensing feeders have every feature you need.



Portable!

SuitCase X-TREME 12VS

Improved!

SuitCase X-TREME 8VS shown with Bernard Q300.



Models include Bernard Q300 MIG gun (8VS/12VS) with reversible dual size (.045 and 1/16 in.) VK drive rolls or Dura-Flux Flux-Cored gun (12VS) with reversible dual size (.068/.072 and 5/64 in.) VK drive rolls! For more options, visit MillerWelds.com/equiptoweld.

Portable wire feeding at its best, the X-TREME 8VS and 12VS provide wire feed speed that is accurate and consistent from the start of the weld to the finish, and from one weld to the next. Consistent wire feed speed is very important with large-diameter cored wire, because small changes in wire feed speed make large changes in deposition rates.

Smaller 8VS size is ergonomically sound, lightweight, and well balanced for ease of carrying to remote welding sites. Fits through a 14-inch manhole/manway.

Polypropylene case with built-in slide rails has door for changing wire with the feeder in a vertical position.

Potted and trayed main printed circuit board for the harshest environments adds exceptional reliability. Board has full-trigger isolation so a shorted gun trigger will not affect feeder operation.

Digital meters with SunVision™ technology can display voltage, wire feed speed, and also amperage if desired. Meters can be seen clearly even in direct sunlight. (8VS: meters are optional.)

Wide voltage range for small and large wires with no contactor chatter or arc outages.

Double-filtered gas valve helps keep dirt from clogging and affecting gas flow.

Industrial **CC CV DC**

Use with CC/CV, DC power sources.

Processes

- MIG (GMAW) • Flux-Cored (FCAW)

Suggested power sources

- Dimension™ Series (pg 37)
- Dimension™ NT 450 (pg 37)
- XMT™ Series (pg 38)
- XMT™ MPa Series (pg 40)
- Bobcat™ Series (pg 46)
- Trailblazer® Series (pg 48)
- Big Blue® 300 Pro (pg 50)
- Big Blue® 400/500 (pg 52)

Suggested guns

- Bernard™ Q300 (GMAW) (pg 76)
- Bernard™ Dura-Flux™ (FCAW) (pg 76)
- Roughneck® (GMAW) (pg 76)
- Ironmate™ FC-1260 (FCAW) (pg 76)

Most popular accessories

- Flowmeter Kit #300 343
- Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model	Stock Number	Input Power	Input Welding Circuit Rating	Wire Feed Speed	Wire Type and Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
SuitCase X-TREME 8VS	(#951 583) w/Bernard Q300 Gun	Operates on open-circuit voltage and arc voltage: 14 - 48 VDC / 110 Max. OCV	330 A at 60% Duty Cycle	50 - 780 IPM (1.3 - 19.8 m/min.) Actual range in CC mode is dependent on arc voltage applied	Solid Wire .023 - .052 in. (0.6 - 1.4 mm)	8 in. (203 mm), 14 lb. (6.4 kg)	H: 12.75 in. (324 mm) W: 7.25 in. (184 mm) D: 18 in. (457 mm)	28 lb. (13 kg)
	(#951 582) w/Bernard Q300 Gun and Meters				Flux-Cored .030 - 5/64 in. (0.8 - 2.0 mm)			
SuitCase X-TREME 12VS	(#951 543) w/Bernard Q300 Gun and Meters	Operates on open-circuit voltage and arc voltage: 14 - 48 VDC / 110 Max. OCV	425 A at 60% Duty Cycle	50 - 780 IPM (1.3 - 19.8 m/min.) Actual range in CC mode is dependent on arc voltage applied	Solid Wire .023 - .052 in. (0.6 - 1.4 mm)	12 in. (305 mm), 45 lb. (20 kg)	H: 15.5 in. (394 mm) W: 9 in. (229 mm) D: 21 in. (533 mm)	35 lb. (15.9 kg)
	(#951 544) w/Bernard Dura-Flux Gun and Meters				Flux-Cored .030 - 5/64 in. (0.8 - 2.0 mm)			

SuitCase® 12RC See literature no. M/6.5

The SuitCase 12RC offers remote voltage control, light weight and small size, with superior durability needed to stay in service and meet production schedules.



Portable!



Models include Bernard Q300 MIG gun with reversible dual size (.045 and 1/16 in.) VK drive rolls! For more options, visit MillerWelds.com/equiptoweld.

The SuitCase 12RC door opens with feeder in upright position and has built-in slide rails.

Remote voltage control – standard for exceptional weld quality.

Ergonomically sound, lightweight, modular design is well balanced, and allows improved mobility and ease of carrying to remote welding sites and for serviceability.

Totally enclosed, impact-resistant, flame-retardant case provides strength and durability, and protects components and welding wire from moisture, dust and other contaminants.

Drive roll accessibility makes it easy to install wire, adjust tension and change drive rolls.

Industrial **CV DC**

Use with CV, DC power sources.

Processes

- MIG (GMAW) • Flux-Cored (FCAW)

Suggested power sources

- Deltaweld® 302 (pg 12)
- Invision™ MPa (pg 13)
- XMT™ Series (except VS model) (pg 38)
- XMT™ MPa Series (pg 40)
- Trailblazer® Series (pg 48)

Suggested guns

- Bernard™ Q300 (GMAW) (pg 76)
- Bernard™ Dura-Flux™ (FCAW) (pg 76)
- Roughneck® (GMAW) (pg 76)
- Ironmate™ (FCAW) (pg 76)

Most popular accessories

- 12RC Meter Kits (pg 75)
- Extension Cables (1 required) (pg 80)
- Shielding Gas Filter #195 189
- Flowmeter Kit #300 343
- Volt/Current Sensor Kit #195 194

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Note: Supplied power cable (14-pin) and weld cable is only 12 inches long. Required remote extension cord must be ordered separately (see at right).

Stock Number	Input Power	Input Welding Circuit Rating	Wire Feed Speed	Wire Type and Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
(#951 189) w/Bernard Q300 Gun, Meters, Remote Voltage and Trigger Hold	24 VAC, 10 A, 50/60 Hz	500 A at 100% Duty Cycle	75 - 700 IPM (1.9 - 17.8 m/min.)	Solid Wire .023 - 5/64 in. (0.6 - 2.0 mm) Flux-Cored .030 - 5/64 in. (0.8 - 2.0 mm)	12 in. (305 mm), 44 lb. (20 kg)	H: 15.5 in. (394 mm) W: 9 in. (229 mm) D: 21 in. (533 mm)	25.5 lb. (11.6 kg)

Spool Guns



Spoolmate 100 Series – includes carrying case, extra contact tips and nozzle.

Also Available – Spoolmate 3035 (#195 016)

See literature no. M/1.5
Visit MillerWelds.com or your distributor for more information.



Miller recommends MAXAL® aluminum wire.

Reliable and economical spool guns designed for home hobbyists and light fabricators.

Spoolmate 100 Series See literature no. M/1.45

Light industrial gun rated at 135 amps at 30 percent duty cycle.

12-foot direct-connect cable with heavy-duty strain relief provides extended reach and accessibility to your work.

Dual V-knurled drive rolls with adjustable tension control for consistent feeding of different types of wire.

Spoolmate 200 Series See literature no. M/1.47

Light industrial gun rated at 160 amps at 60 percent duty cycle.

20-foot weld/control cables with strain relief and sheath provides extended reach and accessibility to your work.

Wire feed speed adjustment on the gun – not the machine – for easy setup.

Easy access to drive assembly and drive rolls.

Two-stage trigger with built-in gas valve allowing preflow and postflow.

Toolless head tube removal for easy replacement. Three optional head tubes.

The professional's choice for aluminum welding in industrial and commercial applications.

Spoolmatic See literature no. M/1.73

Quick-change, single-turn contact tip provides excellent performance and ease of replacement.

Head tubes are Roughneck® and Bernard™ Centerfire™ compatible.

Easy access to drive assembly and removable head tube reduces service time.

Wire feed speed adjustment on the gun handle and reversible drive rolls save time and money.

Built-in gas valve eliminates the need to purge long gas lines.

Two-stage trigger includes gas preflow.

Spool canister rotates 180 degrees.

Spoolmatic Pro See literature no. M/1.76

Aluminum-series-specific tension setting ensures smooth wire feeding performance with 4000 or 5000 series aluminum wires.

Improved motor and drive design improves feedability and arc consistency over longer distances while helping reduce downtime and maintenance costs.

Easy-to-rotate, self-seating head tube allows for better access into tight spots, preventing leaks and providing excellent current transfer. Head tubes are common with the XR-Aluma-Pro gooseneck-style guns.

Head tube options in several different lengths and bend configurations are available for use when a standard head tube doesn't fit the application.

Light industrial ● Spoolmate models
Industrial ● Spoolmatic models

CC CV DC Spoolmates can only be used with CV, DC power sources.

Processes

- MIG (GMAW) with aluminum and other soft alloy wires
- MIG (GMAW) with hard wires
- Pulsed MIG (GMAW-P) with optional pulsing power source (Spoolmatic models only)

Suggested power sources

For Spoolmate 100 Series

- Millermatic® 140 Auto-Set™ (pg 7)
- Millermatic® 180 Auto-Set™ (pg 7)
- Millermatic® 211 Auto-Set™ with MVP™ (pg 7)
- Multimatic™ 200 (pg 36)

For Spoolmate 200 Series

- Millermatic® 212 Auto-Set™ (pg 8)
- Millermatic® 252 (pg 8)

For Spoolmatic models

- Millermatic® 212 Auto-Set™ (pg 8)
- Millermatic® 252 (pg 8)
- Millermatic® 350P/350P Aluminum (except Spoolmatic Pro) (pg 9)
- Shopmate™ 300 DX (pg 36)
- Bobcat™ Series (pg 46) – (requires WC-115A with contactor)

These power sources require WC-24

- AlumaPower™ MPa (pg 11)
- CP-302 (pg 12)
- Dimension™ Series (pg 37)
- XMT® Series (except VS model) (pg 38)
- XMT® MPa Series (pg 40)
- Trailblazer® Series (pg 48)
- Big Blue® 300 Pro (pg 50)

Most popular accessories

For Spoolmate 200 Series

- 45-Degree Head Tube #300 591
- 9-Inch Extension Head Tube #300 592
- Heavy-Duty Head Tube #300 593
- Spoolmatic Adaptor Cable #195 287 Allows connection to older Millermatic 210 and 212 (non-Auto-Set)

For Spoolmatic models

- WC-115A #137 546 (pg 80)
- WC-115A (with contactor) #137 546-01-1 (pg 80)
- WC-24 #137 549 (pg 80)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model/Stock Number	Welding Current Rating	Wire Feed Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
Spoolmate 100 Series (#300 371)	135 A at 30% Duty Cycle	5–365 IPM (Millermatic 140) 65–625 IPM (Millermatic 180, 211) 35–425 IPM (Multimatic 200)	.030–.035 in. (0.8–0.9 mm) aluminum .023–.035 in. (0.6–0.9 mm) steel and stainless steel	4 in. (102 mm)	H: 11.5 in. (291 mm) W: 3 in. (76 mm) L: 13 in. (330 mm)	6 lb. (2.7 kg) with cable assembly 9 lb. (4.1 kg) with case
Spoolmate 200 Series (#300 497)	160 A at 60% Duty Cycle, 200 A at 60% Duty Cycle with optional Heavy-Duty Head Tube	70–875 IPM			H: 9 in. (229 mm) W: 2.5 in. (64 mm) L: 14.5 in. (368 mm)	11 lb. (5 kg) with cable assembly
Spoolmatic (#195 156) 15-ft. (4.5 m) cable (#130 831) 30-ft. (9 m) cable	200 A at 100% Duty Cycle	70–875 IPM (1.8–22.2 m/min.) Wire speed dependent on control or Millermatic used.	.030–1/16 in. (0.8–1.6 mm) aluminum Hard wire up to .045 in. (1.1 mm)	4 in. (102 mm)	H: 10.25 in. (260 mm) W: 2.5 in. (64 mm) L: 15.125 in. (384 mm)	2.9 lb. (1.3 kg) gun only
Spoolmatic Pro (#301 147) 15-ft. (4.5 m) cable (#301 148) 30-ft. (9 m) cable					H: 10.25 in. (260 mm) W: 2.5 in. (64 mm) L: 15.125 in. (384 mm)	3.0 lb. (1.4 kg) gun only



Push-Pull Guns

XR-Aluma-Pro™ and XR™-Pistol guns work in conjunction with XR-Controls, XR-AlumaFeed or select Millermatic machines to provide an outstanding solution for push-pull applications.



Portable!



Miller recommends MAXAL® aluminum wire.

XR-Aluma-Pro Lite See literature no. M/1.75
Compact 175-amp, 60-percent duty cycle gun with Bernard™ Centerfire™ consumables—ideal for industrial applications.

Lightweight gun reduces hand and welder fatigue.
Rear trigger allows operators to easily access hard-to-reach welds.

XR-Aluma-Pro See literature no. M/1.71
Robust 300-amp, 100-percent duty cycle gun with Miller® Fastip™ consumables—made for heavy industrial applications.
Rotatable, self-seating head tube for various welding positions, reducing operator fatigue.

XR-Pistol See literature no. M/1.73
Quick-change, single-turn contact tip provides excellent performance and ease of replacement.

Wire feed speed adjustment on the gun handle and reversible drive rolls save time and money.

XR-Pistol-Pro See literature no. M/1.74
4000/5000-specific tension setting ensures smooth wire feeding performance.
More powerful motor and new drive design improves feedability and arc consistency.
Head tube options in several different lengths and bend configurations are available for use when a standard head tube doesn't fit the application.

*Dependent on control box or Millermatic used. **Wire kit #230 708 required to run 1/16-in. (1.6 mm) wire.

Industrial ● XR-Aluma-Pro Lite
Heavy Industrial ● XR-Aluma-Pro and all Pistol models

CC CV DC Use with CC/CV, DC power sources.

Processes

- MIG (GMAW) with aluminum wire (capable of other wires with optional hardwire kits)
- Pulsed MIG (GMAW-P) with optional pulsing power source

Suggested power sources

- Millermatic® 252 (pg 8)
- Millermatic® 350P/350P Aluminum (pg 9)

These power sources require XR-Control below or XR-AlumaFeed™ (pg 11)

- AlumaPower™ MPa (pg 11)
- Deltaweld® Series (pg 12)
- Invision™ MPa (pg 13)
- XMT® Series (except VS model) (pg 38)
- XMT® MPa Series (pg 40)
- Trailblazer® Series (pg 48)

Most popular accessories

- Hardwire Liner Kit #198 377

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model	Cable Length				Welding Current Rating	Wire Feed Speed*	Wire Diameter Capacity	Dimensions	Net Weight (Gun only)
	15-ft. (4.6 m)	25-ft. (7.6 m)	30-ft. (9 m)	35-ft. (10.6 m)					
XR-Aluma-Pro Lite (Air-Cooled)	—	(#300 948)	—	—	175 A at 60% Duty Cycle	70–900 IPM (1.8–23 m/min.)	.030–.047 in. (0.8–1.2 mm) aluminum wire	H: 4 in. (102 mm) W: 1.9 in. (48 mm) L: 15 in. (381 mm)	2.0 lb. (0.9 kg)
XR-Aluma-Pro (Air-Cooled)	(#300 000)	(#300 001)	—	(#300 264)	300 A at 100% Duty Cycle	70–900 IPM (1.8–23 m/min.)	.030–1/16 in. (0.8–1.6 mm) aluminum wire**	H: 5 in. (127 mm) W: 2.5 in. (64 mm) L: 17 in. (432 mm)	2.5 lb. (1.1 kg)
XR-Aluma-Pro (Water-Cooled)	(#300 003)	(#300 004)	—	(#300 265)	400 A at 100% Duty Cycle	70–900 IPM (1.8–23 m/min.)	.030–1/16 in. (0.8–1.6 mm) aluminum wire	H: 5 in. (127 mm) W: 2.5 in. (64 mm) L: 17 in. (432 mm)	2.9 lb. (1.3 kg)
XR-Pistol (Air-Cooled)	(#198 127)	—	(#198 128)	—	200 A at 100% Duty Cycle	70–875 IPM (1.8–22.2 m/min.)	.030–1/16 in. (0.8–1.6 mm) aluminum wire	H: 7.375 in. (187 mm) W: 1.875 in. (48 mm) L: 10.625 in. (270 mm)	2.2 lb. (1 kg)
XR-Pistol (Water-Cooled)	(#198 129)	—	(#198 130)	—	400 A at 100% Duty Cycle	70–875 IPM (1.8–22.2 m/min.)	.030–1/16 in. (0.8–1.6 mm) aluminum wire	H: 7.375 in. (187 mm) W: 1.875 in. (48 mm) L: 10.625 in. (270 mm)	2.4 lb. (1.1 kg)
XR-Pistol-Pro (Air-Cooled)	(#300 782)	(#300 783)	—	(#300 784)	200 A at 100% Duty Cycle	70–900 IPM (1.8–23 m/min.)	.030–1/16 in. (0.8–1.6 mm) aluminum wire**	H: 7.375 in. (187 mm) W: 1.875 in. (48 mm) L: 10.625 in. (270 mm)	2.2 lb. (1 kg)
XR-Pistol-Pro (Water-Cooled)	(#300 786)	(#300 787)	—	(#300 788)	400 A at 100% Duty Cycle	70–900 IPM (1.8–23 m/min.)	.030–1/16 in. (0.8–1.6 mm) aluminum wire**	H: 7.375 in. (187 mm) W: 1.875 in. (48 mm) L: 10.625 in. (270 mm)	2.4 lb. (1.1 kg)

XR™-S and XR™-D Controls

See literature no. M/1.7
Unsurpassed performance and reliability for feeding aluminum and other difficult-to-feed wire types. The perfect choice for use with basic CV MIG power sources.



Portable!

Includes both .035- and factory-installed 3/64-in. drive rolls. Order 1/16-in. control box drive roll kit (#195 591) separately.

True torque feed motor push-pull design provides continuous push force to wire while gun motor controls speed at the gun, providing accurate and positive feed speed without wire shaving or deformation.

Digital wire feed speed readout, standard jog and purge plus trigger hold for making long weldments without hand fatigue.

Adjustable wire run-in control allows arc start fine tuning. Reduces wire stubbing or arc flaring which can result in contact tip burnback.

XR-D model additional features

Digital weld voltage readout, remote voltage control plus basic programmable weld sequencing for **preflow, postflow, start, and crater** provide higher quality welds.

Heavy Industrial ● **CC CV DC**
 Use with CC/CV, DC power sources.

Processes

- MIG (GMAW) with aluminum and other soft alloy wires
- Pulsed MIG (GMAW-P) with optional pulsing power source

Suggested power sources

- See list above in push-pull guns for power sources requiring XR-Control

Suggested guns

- Push-pull guns (see above)

Most popular accessories

- Optima™ MIG Pulse Control (pg 75)
- Extension Cables (pg 80)
- PSA-2 Control (pg 80)
- Gas Flowmeter Kit #246 127

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Stock Number	Input Power	Wire Feed Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
(#300 601) XR-S (#300 687) XR-D	24 VAC, 50/60 or 100 Hz	50–900 IPM (1.3–23 m/min.)	.030–1/16 in. (0.8–1.6 mm) aluminum wire Drive roll kit #195 591 required to run 1/16-in. (1.6 mm) wire.	12 in. (305 mm)	H: 16 in. (406 mm) W: 9.25 in. (235 mm) D: 21.25 in. (540 mm)	42.5 lb. (19.2 kg)

22A and 24A See literature no. M/11.0

Simple, economical and flexible for industrial manufacturing and fabricating.



Models include Bernard Q300 MIG gun and .035/.045-in. drive rolls and Centerfire™ contact tips! For more options, visit MillerWelds.com/equiptoweld.

Includes Bernard Q300
15-foot MIG welding gun!

Both wire feeders are ideal for most high-duty-cycle applications requiring day-in/day-out trouble-free operation.

Trigger hold reduces operator fatigue on extended welds.

Two gear-driven drive rolls on 22A for smooth, positive wire feed. Four gear-driven drive rolls on 24A for larger wire sizes.

On-board burnback and motor ramp control for excellent starting and stopping performance.

Heavy-duty 16-gauge metal enclosure for extra durability.

Remote voltage and adjustable run-in are standard on 24A.

Includes 10-foot 14-pin interconnecting cord.

Optional presettable voltage and wire feed speed on most power sources for 22A.

Industrial CV DC

Use with CV, DC power sources.

Processes

- MIG (GMAW) • Flux-Cored (FCAW)

Suggested power sources

- CP-302 (22A only) (pg 12)
- Deltaweld® Series (pg 12)
- Invision™ MPa (pg 13)
- XMT® Series (except VS model) (pg 38)
- XMT® MPa Series (pg 40)

Suggested guns

- Bernard™ (pg 76)
- Roughneck® (GMAW) (pg 76)

Most popular accessories

- Digital Display #186 498
- Prewflow/Postflow and Spot Control #186 496
- Voltage Control (22A) #194 211

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model/Stock Number	Input Power	Wire Feed Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
22A (#951 190) (#951 191) w/Run-In Control (#951 192) w/Digital Display and Voltage Control	24 VAC, 7 A, 50/60 Hz	75–750 IPM (1.9–19 m/min.)	22A .023–5/64 in. (0.6–2.0 mm) 24A .023–3/32 in. (0.6–2.4 mm)	60-lb. (27 kg) coil with optional Wire Reel Assembly #108 008	H: 11 in. (279 mm) W: 10.75 in. (273 mm) D: 23.5 in. (597 mm)	22A 36 lb. (15.4 kg) 24A 40 lb. (18 kg)
24A (#951 193) (#951 194) w/Digital Display (#951 195) w/Digital Display and Pre/Post Flow						

70 Series See literature no. M/3.0

Heavy-industrial-class wire feeder available in three models to fit your needs.



Models include Bernard Q400 MIG gun (two with D-74 models), .035/.045-in. drive rolls and Centerfire™ contact tips! For more options, visit MillerWelds.com/equiptoweld.

Includes Bernard Q400
15-foot MIG welding gun!

Toolless rotatable drive assembly allows operator to rotate the drive housing, allowing a straight path for wire flow.

Automatic run-in control significantly improves arc starts. Run-in can be independently set on the DX model.

Trigger hold allows the operator to make long welds without having to hold the trigger continuously. Reduces operator fatigue.

Includes 10-foot 14-pin interconnecting cord.

DX Model additional features

Dual schedule control allows the operator to switch between two welding parameters without readjusting the machine, saving time and enhancing quality.

Sequence control gives the operator complete control of the welding parameters: preflow, run-in, weld time, crater, burnback and postflow.

Welding process range control locks parameters at a set percentage of welding parameters to ensure welding procedures and quality standards are maintained.

Four weld programs allow the operators to store four independent welding parameters reducing weld setup time.

Heavy industrial CV DC

Use with CV, DC power sources.

Processes

- MIG (GMAW) • Flux-Cored (FCAW)

Suggested power sources

- Deltaweld® Series (pg 12)
- Invision™ MPa (pg 13)
- Dimension™ Series (pg 37)
- Dimension™ NT 450 (pg 37)
- XMT® Series (except VS model) (pg 38)
- XMT® MPa Series (pg 40)

Suggested guns

- Bernard™ (pg 76)

Most popular accessories

- Feeder Cart #142 382 (pg 72)
- Extension Cables (pg 80)
- Spool Adapter #047 141 (pg 80)
- Turntable Assy #146 236 (pg 80)
- Wire Straightener (pg 80)
- Hanging Bail #058 435
- Wire Reel Assembly #108 008
- Spool Covers
 - #057 607 For S-74 and left side of D-74 models
 - #090 389 For right side of D-74 models
- Single- and dual-remote configurations are available. For more information, see literature no. M/3.0.

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Models	
74S	Standard
74D	Digital meters and remote voltage control
74DX	Deluxe—digital full feature

*See page 25 for single- and dual-wire 74 MPa Plus feeders that operate synergically with Invision MPa or XMT MPa power sources.

Stock Number*	Input Power	Wire Feed Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
Single-Wire Models S-74S (#951 196) S-74S (#951 197) w/High-Speed Motor S-74D (#951 198) S-74D (#951 199) w/High-Speed Motor S-74DX (#951 200)	24 VAC, 10 A, 50/60 Hz	50–780 IPM (1.3–19.8 m/min.) Optional Low Speed: 20–400 IPM (0.5–10.2 m/min.) Optional High Speed: 92–1435 IPM (2.3–36.6 m/min.)	.023–1/8 in. (0.6–3.2 mm) Low-speed motor option is recommended when using 1/8 in. (3.2 mm) wire.	60-lb. (27 kg) coil with optional Wire Reel Assembly #108 008	Single H: 14 in. (356 mm) W: 12.5 in. (318 mm) D: 28 in. (711 mm) Dual H: 14 in. (356 mm) W: 21 in. (533 mm) D: 35 in. (889 mm)	Single 58 lb. (26 kg) Dual 87 lb. (39.5 kg)
Dual-Wire Models D-74S (#951 203) D-74D (#951 204) D-74D (#951 205) w/High-Speed Motor D-74DX (#951 206) D-74DX (#951 207) w/High-Speed Motor						
S-74DX (#951 201) w/High-Speed Motor S-74DX (#951 202) w/Low-Speed Motor						

70 Series MPa Plus See literature no. M/3.0

**Includes Bernard Q400
15-foot MIG welding gun!**

Heavy-industrial-class wire feeder with the added capability of push-pull aluminum. Optimized with the Invision MPa or XMT MPa power sources.



Models include Bernard Q400 MIG gun (two with D-74 models), .035/.045-in. drive rolls and Centerfire™ contact tips! For more options, including remote configurations, visit MillerWelds.com/equiptoweld.



Recommended Aluminum Solution

Dedicated XR-Aluma-Pro Plus (gooseneck) and XR-Pistol Plus (pistol grip) guns work with MPa Plus feeders using tachometer feedback to coordinate wire feed speed of the gun and the feeder. See stock numbers at right.

Alumination™ technology gives you the ability to use the extended reach of a push-pull system for consistent, versatile and dependable aluminum wire feeding. Alumination gives you the versatility to handle whatever aluminum welding job you want to tackle.

Trigger schedule select saves time when switching between two settings by simply tapping the gun trigger.

Accu-Mate™ properly seats the power pin for best feeding performance and prevents Accu-Mate grooved MIG guns from sliding in the casting.

Additional features when used with Invision MPa or XMT MPa power sources

Synergic Pulsed MIG operation allows changing settings with one knob, decreasing training time and increasing productivity.

Profile Pulse™ provides TIG appearance with MIG simplicity and productivity.

Heavy industrial

Use with CV, DC power sources.

Processes

- MIG (GMAW) • Flux-Cored (FCAW)
- Pulsed MIG (GMAW-P) with optional MPa power source

Suggested power sources

- Same as 70 Series

Suggested guns

- Bernard™ (pg 76)
- XR-Aluma-Pro™ Plus
 - #300 000 001 15 ft., air-cooled
 - #300 001 001 25 ft., air-cooled
 - #300 264 001 35 ft., air-cooled
 - #300 003 001 15 ft., water-cooled
 - #300 004 001 25 ft., water-cooled
 - #300 265 001 35 ft., water-cooled
- XR™-Pistol Plus
 - #300 753 15 ft., air-cooled
 - #300 754 25 ft., air-cooled
 - #300 755 35 ft., air-cooled
 - #300 756 15 ft., water-cooled
 - #300 757 25 ft., water-cooled
 - #300 758 35 ft., water-cooled

Most popular accessories

- Same as 70 Series
- Single- and dual-remote configurations are available. For more information, see literature no. M/3.0.

Model/Stock Number	Input Power	Wire Feed Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
Single-Wire Model S-74 MPa Plus (#951 291)	24 VAC, 10 A, 50/60 Hz	50 - 780 IPM (1.3 - 19.8 m/min.)	Hard Wire .035 - 5/64 in. (0.9 - 2.0 mm) Aluminum .035 - 1/16 in. (0.9 - 1.6 mm) Wire kit #230 708 required to run 1/16-in. (1.6 mm) aluminum wire.	60-lb. (27 kg) coil with optional Wire Reel Assembly #108 008	H: 14 in. (356 mm) W: 12.5 in. (318 mm) D: 28 in. (711 mm)	58 lb. (26 kg)
Dual-Wire Model D-74 MPa Plus (#951 292)					H: 14 in. (356 mm) W: 21 in. (533 mm) D: 35 in. (889 mm)	87 lb. (39.5 kg)

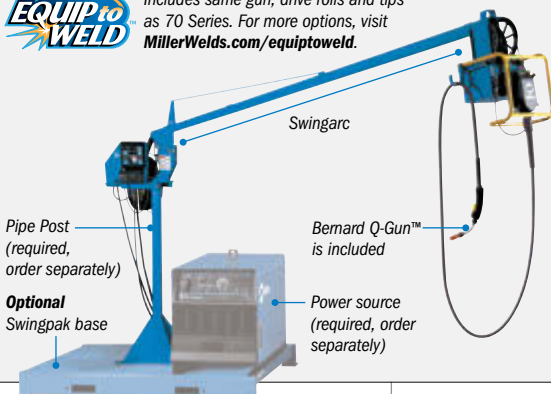
70 Series Swingarc™ See literature no. M/13.11

**Includes Bernard Q400
15-foot MIG welding gun!**

Swingarc boom-mounted wire feeders bring an extra dimension of flexibility and efficiency to weld stations dealing with large weldments, or wherever operator mobility is required.



Includes same gun, drive rolls and tips as 70 Series. For more options, visit MillerWelds.com/equiptoweld.



MPa Plus Swingarcs. Optimized for the Invision MPa and XMT MPa power sources and available with single or dual feeders in three boom lengths.

Models in 8-, 12- or 16-foot lengths maximize output. The **unique counterbalance design** makes it easy and convenient to position boom exactly where it is needed.

360-degree rotation and 60-degree lift angle maximizes work area (16-, 24- or 32-foot diameter work area).

Includes 10-foot 14-pin interconnecting cord.

In-boom cable routing organizes hoses and cables for a safer work environment.

Heavy industrial

Use with CV, DC power sources.

Processes

- MIG (GMAW) • Flux-Cored (FCAW)

Suggested power sources/guns

- Same as 70 Series

Most popular accessories

- Swingpak™ Base #183 997
- Pipe Post with 18-in. Base 4-ft. #149 838 / 6-ft. #149 839
- **Single/Dual Spool Carrier** (Pipe Post not included)
 - #300 353 For 4-ft. Post
 - #300 352 For 6-ft. Post
 Designed to put spool hub assembly at 36 inches from base for easier wire spool installation.



Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model	Stock Number with Single-Wire Feeders	Stock Number with Dual-Wire Feeders	Input Power	Wire Feed Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Net Weight with Feeder
8-ft. (2.4 m) Boom	SS-74S8 (#951 522) w/S-74S	DS-74S8 (#951 531) w/D-74S	24 VAC, 10 A, 50/60 Hz	50 - 780 IPM (1.3 - 19.8 m/min.) Consult factory for low- and high-speed motor options on non-MPa feeders.	.023 - 5/64 in. (0.6 - 2.0 mm)	60-lb. (27 kg) coil with optional Wire Reel Assembly #108 008	Single-Wire Feeder 110 lb. (50 kg)
	SS-74D8 (#951 525) w/S-74D	DS-74D8 (#951 534) w/D-74D					Dual-Wire Feeder 134 lb. (61 kg)
	SS-74DX8 (#951 528) w/S-74DX	DS-74DX8 (#951 537) w/D-74DX					
12-ft. (3.7 m) Boom	SS-74MPa Plus-8 (#951 437) w/S-74 MPa Plus	DS-74MPa Plus-8 (#951 440) w/D-74 MPa Plus					Single-Wire Feeder 160 lb. (73 kg)
	SS-74S12 (#951 523) w/S-74S	DS-74S12 (#951 532) w/D-74S					Dual-Wire Feeder 207 lb. (94 kg)
	SS-74D12 (#951 526) w/S-74D	DS-74D12 (#951 535) w/D-74D					
	SS-74DX12 (#951 529) w/S-74DX	DS-74DX12 (#951 538) w/D-74DX					
16-ft. (4.9 m) Boom	SS-74MPa Plus-12 (#951 438) w/S-74 MPa Plus	DS-74MPa Plus-12 (#951 441) w/D-74 MPa Plus					Single-Wire Feeder 210 lb. (95 kg)
	SS-74S16 (#951 524) w/S-74S	DS-74S16 (#951 533) w/D-74S					Dual-Wire Feeder 280 lb. (127 kg)
	SS-74D16 (#951 527) w/S-74D	DS-74D16 (#951 536) w/D-74D					
	SS-74DX16 (#951 530) w/S-74DX	DS-74DX16 (#951 539) w/D-74DX					
16-ft. (4.9 m) Boom	SS-74MPa Plus-16 (#951 439) w/S-74 MPa Plus	DS-74MPa Plus-16 (#951 442) w/D-74 MPa Plus					



Product Guide

	Page	Class	Stick	DC TIG	DC TIG-P	Flux-Cored*	CAC-A	Portability	Weldable Metals	Welding Amperage Range	Special Features	Typical Applications
1-Phase	Thunderbolt® XL 225 AC	26	●	●				Optional running gear	Steel, stainless	30-235 AC	Infinite control	Education, maintenance/repair, farm
	Thunderbolt® XL 225 AC/150 DC	26	●	●						30-235 AC 30-160 DC	Infinite control	Education, maintenance/repair, farm
	Maxstar® 150 S	26	●	●				Shoulder strap, optional case		20-150 DC	115-230 V Auto-Line™ MVP™ plugs	MRO, ship installation/repair, farm/ranch
1- & 3-Ph	Maxstar® 200 STR	27	●	●	●			Shoulder strap, handle, optional cart	Most metals	1-200 DC	115-460 V Auto-Line™ Stick/TIG machine	Construction, fabrication, pipe, steel erection, shipbuilding
	CST™ 280	27	●	●	●			Handle, optional cart		5-280 DC	High output, portable at 41 lb., also available in multi-unit rack	Construction, fabrication, pipe, steel erection, shipbuilding
3-Ph	Gold Star® 452	27	●	●	●	●	5/16"	Lift eye, optional running gear	Most metals	20-590 DC	Built-in arc control	Steel erection, pipe, fab, shipbuilding, foundries
	Gold Star® 652	27	●	●	●	●	3/8"			50-850 DC	Built-in arc control	Steel erection, pipe, fab, shipbuilding, foundries

PRODUCT KEY

CLASS: ● Light Industrial ● Industrial ● Heavy Industrial CAPABILITY: ● Designed for this process ● Capable of this process
 *Constant-current (Stick) machines can utilize voltage-sensing wire feeders for some Flux-Cored applications.

Thunderbolt® XL 225 AC and 225 AC/150 DC

See literature no. AC/2.0 for AC model and AD/8.0 for AC/DC model



Thunderbolt XL 225 AC shown.

Economical Stick machines with precise, dependable control.

- Accu-Set™ amperage indicator.
- Unit allows higher duty cycle when amperage decreases.
- Infinite current control.
- Output selector switch on AC/DC units.
- Certified by Canadian Standards Association to both the Canadian and U.S. Standards.

Light industrial ●
CC AC DC 1 Phase 225 AC model is AC only.
Process • Stick (SMAW)
Comes complete with

- 15-ft. (4.5 m) No. 4 electrode cable with heavy-duty electrode holder
- 10-ft. (3 m) work cable with clamp
- Power cord with plug

Visit MillerWelds.com or your distributor for Miller® options and accessories.

Model	Stock Number	Welding Amperage Ranges	Rated Output at 20% Duty Cycle, 60 Hz (15% Duty Cycle, 50 Hz)	Rated Output at 100% Duty Cycle	Amps Input at Rated Output 220 V	230 V	Max. Open-Circuit Voltage	Dimensions	Net Weight
Thunderbolt XL 225 AC (CSA)	(#903 641) 230 V, 50/60 Hz	AC 30-235	AC 225 A at 25 VAC	AC 100 A	—	47.5	80	H: 18.75 in. (476 mm) W: 12.75 in. (323 mm) D: 17.5 in. (445 mm)	85 lb. (39 kg)
Thunderbolt XL 225 AC/150 DC (CSA)	(#903 642) 230 V, 50/60 Hz	AC 30-235 DC 30-160	AC 225 A at 25 V DC 150 A at 25 V	AC 100 A DC 65 A	—	47.5	80		104 lb. (47 kg)

Maxstar® 150 S

See literature no. DC/27.0

Best in class—provides maximum portability and performance in the most compact Stick package in the industry. Packs dependability and performance all in one machine.



Maxstar 150 S with X-CASE (#907 134-01-2) shown.

Multi-voltage plug (MVP™) allows connection to 115 or 230 V receptacles without tools—choose the plug that fits the receptacle and connect it to the power cord.



Auto-Line™ circuitry automatically connects to 115-230 VAC, single-phase power without removing the covers to relink the power source.

Portable with adjustable shoulder strap. At 13.2 pounds you can take it anywhere.

Adaptive Hot Start™ for Stick arc starts prevents electrode from sticking.

Single amperage range allows operator to accurately set amperage on both 115 or 230 V primary power.

Light industrial ● **CC DC 1** Phase
Process • Stick (SMAW)
#907 134 comes complete with

- 10-ft. (3 m) primary cord and MVP™ plugs
- 13-ft. (4 m) electrode cable with holder and 25-mm Dinse connector
- 10-ft. (3 m) work cable with clamp and 25-mm Dinse connector

#907 134-01-2 includes above plus

- Protective X-CASE™

Most popular accessories

- MVP™ Plugs (pg 77)
- Protective X-CASE™ #300 184 (pg 77)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Note: See page 29 in the TIG section for Maxstar 150 STL and STH.
 *Sense voltage for Stick and Lift-Arc™ TIG.

Stock Number	Input Power	Welding Amperage Range	Rated Output	Amps Input at Rated Output, 50/60 Hz	KVA at Duty Cycle	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
(#907 134) 115-230 VAC, 50/60 Hz	115 VAC	20-100	100 A at 24 VDC, 35% Duty Cycle	26.4	3.0	3.0	90 (12-16 VDC*)	H: 9 in. (229 mm) W: 5.5 in. (140 mm) D: 13.25 in. (337 mm)	13.2 lb. (6.0 kg)
(#907 134-01-2) 115-230 VAC, 50/60 Hz w/Case	230 VAC	20-150	150 A at 26 VDC, 30% Duty Cycle	21.6	4.9	4.7			



Maxstar® 200 STR See literature no. DC/29.5



Note: See page 30 in the TIG section for Maxstar 200 Series.

Maximum flexibility with automatic connection to any input power while maintaining the best DC Stick/TIG welding performance in its product class.

Auto-Line™ allows for any input voltage hook-up (115–460 V, single- or three-phase) with no manual linking.

Low OCV Stick™ model reduces open-circuit voltage to 9–14 VDC. This eliminates the need for add-on voltage reducers.

Lift-Arc™ start for TIG arc starts without the use of high frequency.

Excellent for thin/medium wall pipe welds.

Remote amperage control.

Adaptive Hot Start™ for Stick arc starts.

Portable with adjustable shoulder strap.

*Sense voltage for Stick and Lift-Arc TIG.

Industrial ● CC DC 3 1
Phase Phase

Processes

- Stick (SMAW) • TIG (GTAW)

Comes complete with

- 8-ft. (2.4 m) primary cord
- Two 50-mm Dinse connectors

Most popular accessories

- Protective Cover #195 321 (pg 79)
- Remote Controls (pg 79)
- Air-Cooled TIG Torch Adapter (pg 80)
- Weldcraft® A-150V TIG Torch (#WP-17V-12-R)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Stock Number	Welding Process	Input Power	Welding Amperage Range	Rated Output	Amps Input at Rated Load Output, 50/60 Hz						Max. Open-Circuit Voltage	Dimensions	Net Weight
					115 V	230 V	400 V	460 V	KVA	KW			
#907 036 Low OCV #907 036-00-1 Normal OCV	Stick	Three-Phase	1-200	150 A at 26 V, 60% Duty Cycle	–	13.1	7.4	6.4	5.2	5.0	70 VDC (9-14 VDC*)	H: 13.5 in. (343 mm) W: 7.5 in. (191 mm) D: 17.5 in. (445 mm)	32 lb. (14.5 kg)
		Single-Phase	1-200 (1-90 on 115 VAC)	150 A at 26 V, 60% Duty Cycle 125 A at 25 V, 50% Duty Cycle	–	21.7	–	–	5.0	5.0			
	TIG	Three-Phase	1-200	175 A at 17 V, 60% Duty Cycle	–	10.5	6.0	5.2	4.2	4.0	70 VDC (9-14 VDC*)		
		Single-Phase	1-200 (1-150 on 115 VAC)	175 A at 17 V, 60% Duty Cycle 150 A at 16 V, 70% Duty Cycle	–	17.4	–	–	4.0	4.0			
					29.7	14.1	–	–	3.4	3.4			

CST™ 280 See literature no. DC/29.55



See page 78 for wireless remote controls.

Durable power source designed for the construction industry. Ideal for Stick electrodes up to 3/16-inch and TIG welding of pipe and plate.

Easy voltage changeover between voltage ranges through a two-position manual switch located on the rear panel. Simplifies voltage change in racks.

Process selector knob automatically sets proper DIG setting on E6010 and E7018 electrodes for better performance.

Lift-Arc™ start for TIG arc starts without the use of high frequency.

Fan-On-Demand™ saves energy.

Remote amperage control through the 14-pin connector.

Optional 4- or 8-pack rack (page 43) available for multioperator applications.

Note: Primary input current draw is limited to 50 amps.

Industrial ● CC DC 3 1
Phase Phase

Processes

- Stick (SMAW) • TIG (GTAW)

Comes complete with

- One set of male connectors (Dinse-style model only)

Most popular accessories

- CST 280 Rack (pg 43)
- Remote Controls (pg 79)
- For TIG torches see literature no. DC/29.55

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Stock Number	Welding Process	Input Power	Welding Amperage Range	Rated Output	Amps Input at Rated Load Output, 50/60 Hz							Max. Open-Circuit Voltage	Dimensions	Net Weight		
					208 V	220 V	230 V	400 V	440 V	460 V	575 V				KVA	KW
#907 244 Dinse-style 220-230/460-575 V #907 244-01-1 Tweco-style 220-230/460-575 V	Stick/TIG	Three-Phase	5-280	280 A at 31.2 V, 35% Duty Cycle 200 A at 28 V, 100% Duty Cycle	–	35.0	34.2	–	–	17.8	14.7	14.6	10.2	77 VDC	H: 13.5 in. (343 mm) W: 7.5 in. (191 mm) D: 18 in. (457 mm)	41 lb. (18.6 kg)
		Single-Phase	5-200	200 A at 28 V, 50% Duty Cycle 150 A at 26 V, 100% Duty Cycle	–	43.9	43.0	–	–	–	–	10.1	6.6			
#907 251 Dinse-style 208-230/400-460 V #907 251-01-1 Tweco-style 208-230/400-460 V	Stick/TIG	Three-Phase	5-280	280 A at 31.2 V, 35% Duty Cycle 200 A at 28 V, 100% Duty Cycle	36.0	33.0	28.8	19.8	18.0	17.5	–	14.0	10.2			
		Single-Phase	5-200	200 A at 28 V, 50% Duty Cycle 150 A at 26 V, 100% Duty Cycle	43.9	43.3	43.0	–	–	–	–	9.9	6.5			
					35.0	33.9	32.9	–	–	–	–	7.6	4.8			

Gold Star® Series See literature no. DC/8.1



See page 78 for wireless remote controls.

Rugged, reliable performance and superior arc characteristics.

- Hot Start™ and built-in arc control.
- Enclosed circuit board.
- Thermal overload protection with light.
- Fan-On-Demand™
- 15 A, 115 VAC duplex receptacle.
- Power efficient.
- Remote control capability.
- Optional digital volt and amp meters.

Gold Star 452 shown.

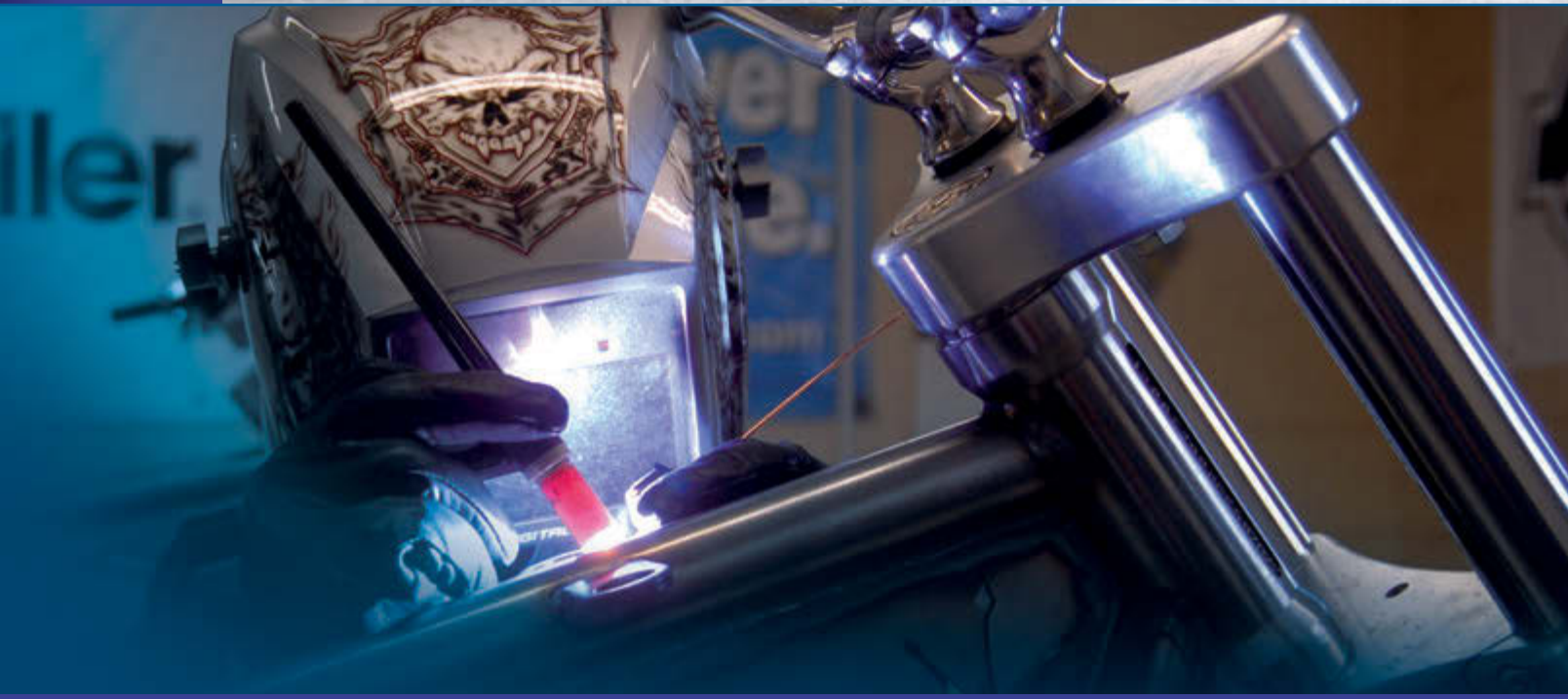
Heavy Industrial ● CC DC 3
Phase

Processes

- Stick (SMAW) • TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (Carbons – 452: 5/16 in., 652: 3/8 in.)
- Flux-Cored (FCAW)
- MIG Spray Transfer (GMAW) with voltage-sensing feeder

Visit MillerWelds.com or your distributor for Miller® options and accessories.

Model	Stock Number	Amperage Range in CC Mode	Rated Output	Amps Input at Rated Output, 60 Hz				KVA	KW	Max. Open-Circuit Voltage	Dimensions (Includes lift eye and strain relief.)	Net Weight
				200 V	230 V	460 V	575 V					
Gold Star 452	#903 374 200(208)/230/460 V #903 400 230/460/575 V	20-590	450 A at 38 VDC, 60% Duty Cycle	102	89	45	36	35.5	23.3	72 VDC	H: 30 in. (762 mm) W: 23 in. (585 mm) 450 D: 38 in. (966 mm) 675 D: 38 in. (966 mm)	404 lb. (183 kg) 505 lb. (229 kg)
Gold Star 652	#903 402 230/460/575 V	50-850	650 A at 44 VDC, 60% Duty Cycle	–	124	62	50	49.4	36	72 VDC		



Power Source Welding Performance

		DC					AC/DC							
		Maxstar® 150 (Pg 29)	Maxstar® 200 (Pg 30)	Maxstar® 280 (Pg 30)	Maxstar® 350 (Pg 30)	Maxstar® 700 (Pg 30)	Dynasty® 200 (Pg 30)	Dynasty® 280 (Pg 30)	Dynasty® 350 (Pg 30)	Dynasty® 700 (Pg 30)	Syncrowave® 250 DX (Pg 32)	Syncrowave® 350 LX (Pg 32)	Syncrowave® 210 (Pg 33)	Diversion™ 180 (Pg 33)
Output	Min. - Max. (Amps)	5-150 A	1-200 A	1-280 A	3-350 A	5-700 A	5-200 A (AC) 1-200 A (DC)	2-280 A (AC) 1-280 A (DC)	3-350 A	5-700 A	3-310 A	3-400 A	5-210 A	10-180 A
AC TIG Material Thickness	Min. - Max. (Aluminum/Magnesium)	–	–	–	–	–	.020-1/4 in.	.012-3/8 in.	.015-5/8 in.	.020-1 in.	.015-3/8 in.	.015-1/2 in.	.020-1/4 in.	.030-3/16 in.
DC TIG Material Thickness	Min. - Max. (Mild Steel/Stainless Steel/Exotic Metals)	.020-3/16 in.	.004-1/4 in.	.004-3/8 in.	.012-5/8 in.	.020-1 in.	.004-1/4 in.	.004-3/8 in.	.012-5/8 in.	.020-1 in.	.012-1/2 in.	.012-5/8 in.	.020-1/4 in.	.025-3/16 in.
Stick Max. Electrode Diameter	E6010-6011	1/8 in.	3/16 in.	7/32 in.	5/16 in.	5/16 in.	3/16 in.	7/32 in.	5/16 in.	5/16 in.	1/4 in.	5/16 in.	5/32 in.	–
	E6013	1/8 in.	3/16 in.	3/16 in.	5/16 in.	5/16 in.	3/16 in.	3/16 in.	5/16 in.	5/16 in.	1/4 in.	5/16 in.	1/8 in.	–
	E7018	1/8 in.	5/32 in.	3/16 in.	1/4 in.	5/16 in.	5/32 in.	3/16 in.	1/4 in.	5/16 in.	7/32 in.	1/4 in.	1/8 in.	–
	E7024	3/32 in.	1/8 in.	3/16 in.	1/4 in.	5/16 in.	1/8 in.	3/16 in.	1/4 in.	5/16 in.	3/16 in.	1/4 in.	3/32 in.	–
Stick Process Quality	E6010-6011	★6011*	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★	★★	★★★★	–
	E6013	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★	★★	★★★★	–
	E7018	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★	★★	★★★★	–
	E7024	★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★	★★	★★★★	–
Carbon Arc Gouging	Max. Electrode Diameter	–	5/32 in.	3/16 in.	1/4 in.	3/8 in.	5/32 in.	3/16 in.	1/4 in.	3/8 in.	3/16 in.	1/4 in.	–	–
	Balance Control						●	●	●	●	●	●	●	
Features	AC Frequency						●	●	●	●			Expandable	
	Pulse Capability	0.5, 1, 2.5, 60 PPS (STH Model)	0.1-500 PPS (DX Model)	0.01-250 PPS (Base) 0.01-500 PPS (DX)	0.1-5000 PPS	0.1-5000 PPS	0.1-500 PPS (DX Model)	0.01-250 PPS (Base, DC) 0.01-500 PPS (DX)	0.1-500 PPS (AC) 0.1-5000 PPS (DC)	0.1-500 PPS (AC) 0.1-5000 PPS (DC)	0.25-10 PPS (Optional)	0.25-10 PPS	0.1-50 PPS Expandable	–
	Generator Power Requirement	5 kW	5.5 kW	8 kW	12 kW	32 kW	8.5 kW	11 kW	13 kW	35 kW	22 kW	30 kW	6 kW	5.5 kW

ICON KEY

PROCESS QUALITY: ★ Good ★★ Better ★★★ Best
 New! or Improved! products appear in blue type. *For best results choose 6011.



New from TIG



Maxstar 280 base model and Dynasty 280 DX shown.

Maxstar® 280 and Dynasty® 280 (pg 30)

Base and DX models available for each.

- Base models have an operator-friendly control panel with essential TIG and Stick functions
- DX models add extended ranges to sequencer and full trigger options, preflow and pulser functions



Syncrowave® 210 (pg 33)

Welding simplified to 1-2-3-WELD!

- Easy-to-use squarewave unit with upgradeable and expandable software features
- Pro-Set™ provides pre-set weld parameters



Weldcraft A-150 and W-250 shown.

Weldcraft® TIG Torches and Accessories (pg 34)

Miller now offers a complete line of TIG torches as the Weldcraft brand transitions to Miller.

- Versatile air- and water-cooled TIG torches with multiple configurations available
- Tungstens, accessory kits and more

Maxstar® 150 STL and STH DC TIG and Stick

See literature no. DC/27.1 and DC/27.2

Maximum portability and performance provided in one compact TIG/Stick package.



Welding Capability

Max. 3/16 in. (4.8 mm)

Steel

Min. 0.020 in. (0.5 mm)

Maxstar 150 STH TIG/Stick package with Remote Fingertip Control, and X-CASE (#907 136-01-7) shown.

Two models available.

STL: DC TIG/Stick with Lift-Arc™ starting without the use of high frequency.

STH: DC TIG/Stick with high frequency and Lift-Arc™ starting, plus built-in pulsing with a selection of four fixed-pulse frequencies.

Multi-voltage plug (MVP™) allows connection to 115 or 230 V receptacles without tools—choose the plug that fits the receptacle and connect it to the power cord.

AUTO-LINE™ Power Management Technology Allows for any input voltage hook-up (115–230 V) with no manual linking, providing convenience in any job setting.

Portable with adjustable shoulder strap.

Easy to transport at 13.7 pounds.

Built-in gas solenoid eliminates the need for bulky torch with a gas valve.

Light industrial ● CC DC 1 Phase

Processes

- TIG (GTAW) • Stick (SMAW)
- Pulsed TIG (GTAW-P) w/STH model

Maxstar 150 STL and STH comes with

- 10-ft. (3 m) primary cord and MVP™ plugs
- 13-ft. (4 m) electrode cable with holder and 25-mm Dinse connector
- 10-ft. (3 m) work cable with clamp and 25-mm Dinse connector

TIG/Stick package includes above plus

- Weldcraft® A-150 TIG torch (#WP1712RDI25)
- Protective X-CASE™
- Miller I Smith® flow gauge regulator with hose
- Remote Fingertip Control (only in packages #907 135-01-7 and #907 136-01-7)

Most popular accessories

- Protective X-CASE™ #300 184 (pg 77)
- RCCS-6M Remote Fingertip Control #195 184 (pg 79)
- RFCS-6M Remote Foot Control #195 183 (pg 79)
- Remote Controls (pg 79)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Note: See page 26 in the Stick section for Maxstar 150 S. *Sense voltage for Stick and Lift-Arc™ TIG.

Model / Stock Number	Welding Process	Input Power	Welding Amperage Range	Rated Output	Amps Input at Rated Output, 50/60 Hz	KVA at Duty Cycle	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
Maxstar 150 STL (#907 135) Machine only (#907 135-01-6) TIG/Stick Package (#907 135-01-7) TIG/Stick Package with Remote Fingertip Control	TIG	115 VAC	5-150	150 A at 16 VDC, 30% Duty Cycle	28.0	3.4	3.1	90 VDC (12-16 VDC*)	H: 9 in. (229 mm) W: 5.5 in. (140 mm) D: 13.25 in. (337 mm)	13.7 lb. (6.2 kg)
		230 VAC	5-150	150 A at 16 VDC, 30% Duty Cycle	14.2	3.2	3.1			
Maxstar 150 STH (#907 136) Machine only (#907 136-01-7) TIG/Stick Package with Remote Fingertip Control	Stick	115 VAC	20-100	100 A at 24 VDC, 35% Duty Cycle	26.4	3.0	3.0			
		230 VAC	20-150	150 A at 26 VDC, 30% Duty Cycle	21.6	4.9	4.7			



Maxstar® Series

DC TIG and Stick

Dynasty® Series

AC/DC TIG and Stick

Providing increased productivity, improved weld quality, reduced energy costs and greater portability. For those seeking the added ability to weld aluminum, upgrade to Dynasty.

Maxstar and Dynasty Features

Feature	200			280		350	700
	SD	DX	LX ¹	-	DX		
Auto-Line (115-460 V)	●	●	●				
Auto-Line (208-575 V)				●	●	●	●
DIG (Arc Force)				● ²	● ²		
Digital Meters	●	●	●	●	●	●	●
Trigger Options	●	●	●	⊙	⊙		
Preflow	●	●	●				
Pulsar				⊙ ²	⊙ ²		
Sequencer		●					
Meter Calibration				●	●	●	●
Cooler Aux. Power				● ³	● ³		
Program Memory						●	●
Automation Connection			●				

Dynasty Only Features	200		280		350	700
	SD	DX	-	DX		
AC Waveforms	●	●	⊙	●	●	●
AC Balance	●	●	⊙	●	●	●
AC Frequency	●	●	⊙	●	●	●
AC Amplitude/Amperage					●	●

● Standard ⊙ Limited ⊕ Optional
¹Maxstar only. ²Pro-Set capable parameter. ³For select models.

Steel and Aluminum* Welding Capability

	1/4 in. (6.4 mm)	3/8 in. (9.5 mm)	5/8 in. (15.9 mm)	1 in. (25.4 mm)
Maximum				
Maxstar				
Dynasty	200	280	350	700
Steel				
Minimum	0.004 in. (0.1 mm)	0.004 in. (0.1 mm)	0.012 in. (0.3 mm)	0.020 in. (0.5 mm)
Aluminum				
Minimum	0.020 in. (0.5 mm)	0.012 in. (0.3 mm)	0.015 in. (0.38 mm)	0.020 in. (0.5 mm)

*Aluminum welding is with Dynasty models only.



See page 78 for wireless remote controls.

Dynasty 280 DX package (#951 469) shown.



Allows for any input voltage hookup with no manual linking, providing convenience in any job setting.

Blue Lightning™ high-frequency arc starter for more consistent non-contact starts and greater reliability compared to traditional HF arc starters.

Lift-Arc™ start provides AC or DC arc starting without the use of high frequency.

Hot Start™ adaptive control provides positive arc starts.

Fan-On-Demand™ cooling system only operates when needed to reduce noise, energy use and contaminants pulled through the machine.

Auto-postflow calculates the length of postflow time based on the amperage setting. Eliminates need to independently set postflow time.

Dynasty welders add AC TIG capabilities and the following features

AC waveforms include advanced squarewave, soft squarewave, sine wave and triangular wave.

AC balance controls the amount of oxide etching enabling high-quality TIG welds on aluminum.

AC frequency can increase arc stability and control arc width.

AC amplitude/amperage allows EP and EN amperages to be set independently to precisely control heat input to the work and electrode. (Dynasty 350 and 700 only.)

For your convenience Miller offers a variety of Maxstar and Dynasty packages.

Whether you need an air-cooled or water-cooled package, these packages provide everything operators need for high-precision DC and AC/DC TIG welding. As the world's leading manufacturer of TIG torches and accessories, Miller | Weldcraft® high-quality products are included in our packages to optimize your TIG welding performance.



Model	Air-Cooled Packages (Machine/Contractor Kit)		Water-Cooled Complete Packages (Machine/Cart/Cooler/Remote/Torch Kit)		
	Fingertip Control	Foot Control	Fingertip Control	Foot Control	Wireless Foot Control
Maxstar 200 DX	(#951 173)	(#951 172)	(#951 138)	(#951 137)	(#951 396)
Dynasty 200 DX	(#951 175)	(#951 174)	(#951 140)	(#951 139)	(#951 397)
Dynasty 280	-	-	-	(#951 466)	-
Dynasty 280DX	-	-	-	(#951 468)	(#951 469)
Maxstar 350	-	-	-	(#951 399)	(#951 400)
Dynasty 350	-	-	-	(#951 401)	(#951 402)
Dynasty 700	-	-	-	(#951 403)	(#951 404)



Maxstar/Dynasty 200 See literature no. DC/32.0 and AD/4.8

Multiple models available. SD model provides basic TIG and Stick functions. DX model adds pulser and sequencer functions. LX model (Maxstar only) adds pulser and sequencer functions and an automation connection.

Note: See page 27 in the Stick section for Maxstar 200 STR.

Portable with adjustable shoulder strap. Easy to transport at 37 or 45 pounds.

Note: Coolmate 1 used with the Maxstar/Dynasty 200 must be plugged into a 115 V source (wall).



Maxstar and Dynasty 200 DX shown.

Industrial ● 200/280 models
Heavy industrial ● 350/700 models



Maxstar is DC only

Processes

- TIG (GTAW) ▪ Stick (SMAW)
- Pulsed TIG (GTAW-P) except 200 SD model
- Air Carbon Arc (CAC-A)

Maxstar/Dynasty 200, 280 and 350 come with

- 8-ft. (2.4 m) power cord (no plug)
- Two 50-mm Dinse connectors
- Setup video (200/350 models only)
- Reference guide (Dynasty 280/350 models only)

Maxstar/Dynasty 700 comes with*

- Thread-lock torch adapter
- Two thread-lock weld cable connectors
- Setup video and reference guide

*Power cord is NOT included, must be ordered separately.

Most popular accessories

- Carts (pg 72/73)
- Coolers and Coolant (pg 73)
- Wireless Foot Control (pg 78)
- Torch Kits (pg 79)
- Remote Controls (pg 79)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

NEW! **Maxstar/Dynasty 280** See literature no. DC/35.0 and AD/4.9

Two models available. Base model provides essential TIG and Stick functions. DX model adds extended ranges to sequencer and full trigger options, preflow and pulser functions.



Dynasty 280 front panel

Dynasty 280 DX front panel

Portable with adjustable shoulder strap. Easy to transport at 47 or 52 pounds.

Sleep timer conserves energy by powering down system if left idle for a user-adjustable amount of time.

Pro-Set™ provides the speed, convenience and confidence of preset parameters for balance, frequency, pulse and DIG.

Memory card port for easy software upgrades.



Maxstar 280 and 280 DX shown.

Maxstar/Dynasty 350 and 700 See literature no. DC/24.0 and AD/5.0

120 V auxiliary power dual receptacle to power cooling system or small tools.

Program memory features nine program memories that maintain/save your parameters.

High-speed DC TIG pulse controls capable of 5000 pulses per second.



Dynasty 350 and 700 shown.

Note: Duty cycle for Maxstar/Dynasty 200 is limited on 115 V power.

*Refer to Owner's Manual for Maxstar/Dynasty 200 (115 and 208 V ratings) and 280 (208 V ratings).

**Sense voltage for Low OCV Stick and Lift-Arc™ TIG.

Model	Welding Process	Input Power	Welding Amp Range*	Rated Output*	Amps Input at Rated Load Output, 50/60 Hz 208 V 230 V 400 V 460 V 575 V KVA KW	Max. Open-Circuit Voltage	Machine Only Dimensions	Machine Only Net Weight
Maxstar 200 SD (#903 701) DX (#903 701-01-1) LX (#903 701-01-2)	TIG	3-Phase	1-200	175 A at 17 V, 60% Duty Cycle	— 11 6 5 — 4.2 4.0	80 VDC (9-14 VDC**)	H: 13.5 in. (343 mm) W: 7.5 in. (191 mm) D: 17.5 in. (445 mm)	37 lb. (16.8 kg)
		1-Phase			— 17 — — — 4.0 4.0			
	Stick	3-Phase	1-200	150 A at 26 V, 60% Duty Cycle	— 13 7 6 — 5.2 5.0			
		1-Phase			— 22 — — — 5.0 5.0			
Dynasty 200 SD (#907 099) DX (#907 099-01-1)	TIG	3-Phase	1-200	150 A at 16 V, 60% Duty Cycle	— 10 6 5 — 3.8 3.6	80 VDC (5-10 VDC**)	H: 13.5 in. (343 mm) W: 7.5 in. (191 mm) D: 21.5 in. (546 mm)	45 lb. (20.5 kg)
		1-Phase			— 16 — 8 — 3.6 3.6			
	Stick	3-Phase	1-200	130 A at 25 V, 60% Duty Cycle	— 13 8 6 — 4.8 4.6			
		1-Phase			— 20 — 10 — 4.7 4.7			
Maxstar 280 (#907 538) Maxstar 280 DX (#907 539)	TIG	3-Phase	1-280	235 A at 19 V, 60% Duty Cycle	17 15 9 7 6 6.2 6.0	60 VDC (11 VDC**)	H: 13.6 in. (346 mm) W: 8.6 in. (219 mm) D: 22.5 in. (569 mm)	47 lb. (21.3 kg)
		1-Phase			28 26 15 13 10 6.0 6.0			
	Stick	3-Phase	5-280	200 A at 28 V, 60% Duty Cycle	20 18 10 9 7 7.2 7.0			
		1-Phase			30 27 15 13 10 6.2 6.2			
Dynasty 280 (#907 537) Dynasty 280 DX (#907 514)	TIG	3-Phase	1-280	235 A at 19 V, 60% Duty Cycle	19 17 10 9 7 7.0 6.7	75 VDC (10-15 VDC**)	H: 13.6 in. (346 mm) W: 8.6 in. (219 mm) D: 22.5 in. (569 mm)	52 lb. (23.6 kg)
		1-Phase			33 30 17 15 12 6.9 6.8			
	Stick	3-Phase	5-280	200 A at 28 V, 60% Duty Cycle	22 20 11 10 8 8.2 7.9			
		1-Phase			34 31 17 15 12 7.1 7.0			
Maxstar 350 (#907 334)	TIG/ Stick	3-Phase	3-350	300 A at 32 V, 60% Duty Cycle	33 30 17 15 12 12.0 11.5	75 VDC (10-15 VDC**)	H: 24.75 in. (629 mm) W: 13.75 in. (349 mm) D: 22 in. (559 mm)	135 lb. (61 kg)
		1-Phase	3-350	225 A at 29 V, 60% Duty Cycle	41 37 — 19 15 8.6 8.2			
Dynasty 350 (#907 204)	TIG/ Stick	3-Phase	3-350	300 A at 32 V, 60% Duty Cycle	35 32 16 16 13 12.7 12.1	60 VDC (11 VDC**)	H: 24.75 in. (629 mm) W: 13.75 in. (349 mm) D: 22 in. (559 mm)	135 lb. (61 kg)
		1-Phase	3-350	225 A at 29 V, 60% Duty Cycle	47 43 — 21 17 9.8 9.1			
Maxstar 700 (#907 103)	TIG/ Stick	3-Phase	5-700	600 A at 44 V, 60% Duty Cycle	89 80 46 40 32 32 31	75 VDC (10-15 VDC**)	H: 34.5 in. (876 mm) W: 13.75 in. (349 mm) D: 22 in. (559 mm)	198 lb. (90 kg)
		1-Phase	5-700	450 A at 38 V, 60% Duty Cycle	106 96 — 48 38 22 21			
Dynasty 700 (#907 101)	TIG/ Stick	3-Phase	5-700	600 A at 44 V, 60% Duty Cycle	97 88 51 44 35 35 34	75 VDC (10-15 VDC**)	H: 34.5 in. (876 mm) W: 13.75 in. (349 mm) D: 22 in. (559 mm)	198 lb. (90 kg)
		1-Phase	5-700	450 A at 38 V, 60% Duty Cycle	115 104 — 52 42 24 22			



Syncrowave® 250 DX and 350 LX

AC/DC TIG and Stick See literature no. AD/4.2

The world's first conventional squarewave TIG power source with decades of premium performance.



Syncrowave 250 machine only

Syncrowave 350 Complete Package



See page 78 for wireless remote controls.

Steel Welding Capability

	1/2 in. (12.7 mm)	5/8 in. (15.9 mm)
Maximum		
Syncro	250	350
Minimum	0.012 in. (0.3 mm)	0.012 in. (0.3 mm)

Aluminum Welding Capability

	3/8 in. (9.5 mm)	1/2 in. (12.7 mm)
Maximum		
Syncro	250	350
Minimum	0.015 in. (0.4 mm)	0.015 in. (0.4 mm)

Squarewave output with AC balance control features adjustable cleaning action while increasing arc stability on various aluminum alloys, and helps eliminate tungsten spitting and arc rectification.

120 V auxiliary power receptacle for cooling system or small tools.

Syncro Start™ technology for customized arc starts. Allows more precise arc starts and fine-tuning based on tungsten diameter and material thickness.

HF arc starting provides non-contact arc starting that eliminates tungsten or material contamination.

Dual digital meters allow for quick and easy viewing of actual and preset values of amperage and voltage.

Adjustable postflow of 0 – 50 seconds protects the electrode and area near the termination of the weld.

Coolmate™ 3X cooler (shown in Complete Package). Three-gallon cooling system features a flow indicator to visually indicate system is working and an external filter to stop objects from entering the water-cooled torch cable.

Last procedure recall automatically recalls the last procedure set-up when switching polarity.

Line voltage compensation keeps power source constant regardless of fluctuations in input power (±10 percent).

Lift-Arc™ start provides DC arc starting without the use of high frequency.

Heavy industrial ● CC AC/DC 1 Phase

Processes

- TIG (GTAW) • Stick (SMAW)
- Pulsed TIG (GTAW-P) (optional on 250 DX)
- Air Carbon Arc (CAC-A)

Syncrowave 250 DX and 350 LX come with*

- Two 50-mm Dinse connectors
- *Power cord is NOT included, must be ordered separately.

Syncrowave 250 DX and 350 LX Complete Packages come with*

- No. 37 Running Gear
- Coolmate™ 3X cooler
- Coolant (four gallons)
- 25-ft. (7.6 m) water-cooled torch (Syncro 250: Weldcraft® W-250) (Syncro 350: Weldcraft® W-310)
- 15-ft. (4.6 m) work lead with clamp
- RFCS-14 remote foot control
- Two 50-mm Dinse connectors
- Regulator/flowmeter with hose
- Torch accessory kit with tungsten
- Cable cover

*Power cord is NOT included, must be ordered separately.

Most popular accessories

- Wireless Remote Foot Control #300 429 (pg 78)
- Pulser Module #300 548 (250 DX ONLY, standard on 350 LX) For welding thin materials. Provides a heating and cooling effect of the weld puddle to reduce heat input and control distortion of the material. Provides 0.25 to 10 pulses per second.
- Sequencer Module #300 547 (250 DX/350 LX) Provides a starting current higher or lower than the welding current. Provides final slope and final current for trailing the weld. Provides a spot timer for TIG spot application.

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

*Add 12.75 inches to height with Complete Package. **Add 139 pounds with Complete Package.

Model	Stock Number (Additional packages are available – visit MillerWelds.com or your distributor.)	Welding Amperage Range	Rated Output	Amps Input at Rated Output, 50/60 Hz					Max. Open-Circuit Voltage	Dimensions*	Net Weight**
				230 V	460 V	575 V	KVA	KW			
Syncrowave 250 DX	#907 195) 230/460/575 V, 50/60 Hz, Machine only #951 118) 230/460/575 V, 50/60 Hz, Complete	3–310	200 A at 28 VAC, 60% Duty Cycle	77	38	31	17.6	8.6	80 VDC	H: 36.25 in. (921 mm) W: 22.5 in. (572 mm) D: 25 in. (635 mm)	378 lb. (172 kg)
			250 A at 30 VAC, 40% Duty Cycle	96	48	38	21.98	11.76			
Syncrowave 350 LX	#907 199) 230/460/575 V, 50/60 Hz, Machine only #951 120) 230/460/575 V, 50/60 Hz, Complete	3–400	300 A at 32 VAC, 60% Duty Cycle	110	55	42	25	10.6	80 VDC	H: 36.25 in. (921 mm) W: 22.5 in. (572 mm) D: 25 in. (635 mm)	496 lb. (225 kg)
			350 A at 34 VAC, 40% Duty Cycle	128	65	50	29.5	13.7			



Syncrowave® 210 AC/DC TIG and Stick See literature no. AD/4.6

Continuing the tradition of innovation through advanced inverter technology for light-industrial and personal users.

NEW!



Welding Capability

Max. 1/4 in. (6.4 mm)
Steel/Aluminum
 Min. 0.020 in. (0.5 mm)



See page 78 for wireless remote controls.

Easy to use. 1) Turn power on. 2) Select the process. 3) Set amperage based on material thickness or stick electrode diameter. **Then weld! It's easy as 1,2,3.**

Pro-Set™ feature (professional settings) eliminates the guesswork when setting weld parameters. Use Pro-Set when you want the speed, convenience and confidence of pre-set controls.



Multi-voltage plug (MVP™) allows connection to 115 or 230 V receptacles without tools.

Upgradeable and expandable. Front panel memory card data port provides the ability to easily upgrade software and expand product features.

Squarewave output with AC balance control features adjustable oxide cleaning for creating the highest quality aluminum welds.

Pulse control enhances weld bead and puddle control for improved appearance and quality. Use it to reduce burn through, coordinate the addition of filler material, and decrease distortion by reducing the average heat input.

Light Industrial ● CC AC/DC Phase 1

Processes

- AC/DC TIG (GTAW) • DC Stick (SMAW)
- Pulsed TIG (GTAW-P)

Comes complete with

- 10-ft. power cord with MVP™ plugs for 115 V and 230 V
- 12.5-ft. (3.8 m), Weldcraft® A-150 TIG torch (#WP1712MFD150)
- 12.5-ft. (3.8 m) work cable with clamp and Dinse connector
- Electrode holder with Dinse connector
- RFCS-14 remote foot control
- Regulator/flow gauge with hose
- Factory-installed running gear with EZ-Change™ Low Cylinder Rack

Most popular accessories

- Wireless Remote Foot Control #300 429 (pg 78)
- RCC-14 Remote Control #151 086 (pg 79)
- Memory Card Expansion #301 128 DC Pulse Expansion #301 127 AC Frequency Expansion

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Stock Number (#907 596)	Input Power	Welding Process	Welding Amperage Range	Rated Output (R.M.S.)	Amps Input at Rated Output	Max. Open-Circuit Voltage	Dimensions	Net Weight
	115 V	DC TIG	5–125 A	95 A at 13.8 V, 60% Duty Cycle	17.4 (.58 while idling)	47 VDC	H: 31.5 in. (800 mm) W: 18.5 in. (470 mm) D: 43 in. (1092 mm)	Runner package: 133.5 lb. (61 kg)
		AC TIG	5–125 A	90 A at 13.6 V, 60% Duty Cycle	12.4 (.58 while idling)			
		DC Stick	20–90 A	70 A at 22.8 V, 60% Duty Cycle	20.5 (.58 while idling)			
	230 V	DC TIG	5–210 A	125 A at 15 V, 60% Duty Cycle	11.9 (.35 while idling)			
		AC TIG	5–210 A	114 A at 14.6 V, 60% Duty Cycle	8.62 (.35 while idling)			
		DC Stick	20–150 A	90 A at 23.6 V, 60% Duty Cycle	11.9 (.35 while idling)			

Diversion™ 180 AC/DC TIG See literature no. AD/1.5

Professional-grade arc in a package designed specifically for personal users. Contains all of the features you need – simplicity combined with superior performance and value.



Welding Capability

Max. 3/16 in. (4.8 mm) Max. 3/16 in. (4.8 mm)
Steel Aluminum
 Min. 0.025 in. (0.6 mm) Min. 0.030 in. (0.75 mm)

Easy-to-understand operator interface. Power up, select material type, set material thickness range and start welding!

Multi-voltage plug (MVP™) allows connection to 115 or 230 V receptacles without tools.

Inverter-based, AC/DC power source provides a more consistent welding arc while using less power.

HF arc starting provides non-contact arc starting that eliminates tungsten or material contamination.

Fan-On-Demand™ cooling system only operates when needed to reduce noise and maintenance.

Portable. Easy to transport at 50 pounds.

Auto-postflow protects the weld end zone and electrode by optimizing postflow time based on welding amperage.

Advanced squarewave AC provides a fast freezing weld puddle and deeper penetration.

Weldcraft® A-150 torch with Diamond Grip™ puts the control at your fingertips with built-in remote controls.

Light Industrial ● CC AC/DC Phase 1

Process • TIG (GTAW)

Comes with

- Power cord with MVP™ plugs for 115 V and 230 V
- RFCS-RJ45 remote foot control
- 12.5-ft. (3.8 m), Weldcraft® A-150 TIG torch
- 12-ft. (3.7 m) work lead with clamp
- Argon regulator/flow gauge with hose
- TIG Welding for Dummies book

Most popular accessories

- Premium Running Gear/Cylinder Rack #770 187 (pg 72)
- Protective Cover #300 579 (pg 79)
- RCCS-RJ Remote Fingertip Control #301 146 (pg 79)
- Weldcraft® Flexible Torch Body Kits (requires handle #105Z55R) A-125F (#WP-9F) A-150F (#WP-17F)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

*While idling.

Stock Number (#907 627)	Input Power	Welding Amperage Range	Rated Output	Amps Input at Rated Output	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
	115 VAC	10–125	125 A at 15 V, 35% Duty Cycle	26.5 (.88*)	3.1 (.1*)	3.0 (.03*)	80	H: 17 in. (433 mm) W: 9.875 in. (251 mm) D: 23.875 in. (608 mm)	50 lb. (23 kg)
			150 A at 16 V, 20% Duty Cycle	16 (.44*)	3.7 (.1*)	3.6 (.03*)			
	230 VAC	10–180	180 A at 17.2 V, 10% Duty Cycle	20.5 (.44*)	4.7 (.1*)	4.6 (.03*)			



Weldcraft® TIG Torches

Synonymous with versatility and performance, Weldcraft TIG torches can handle the most intricate to the most demanding TIG welding challenges. From 125-amp hand-held micro-TIG torches to 900-amp machine-held water-cooled models, there's a Weldcraft torch for nearly every TIG application. For more information or to see the entire Weldcraft product offering, visit MillerWelds.com/tigtorches.

NEW! To the Miller Product Offering!



A-150 (WP-17)

A-150V (WP-17V)

A-150FV (WP-17FV)

A-200V (WP-26V)

W-250 (WP-20)

W-280 (WP-280)

W-310 (CS-310)

W-350 (WP-18)

Flexible necks. Most models feature flexible neck options to improve access to hard-to-reach weld joints.

Gas valves. Most models feature fingertip adjustable gas valves for optimal shielding gas control.

Efficient cooling. High-quality components keep the torches cool under the most demanding environments.

Multiple configurations. Most models feature various head, neck and handle options to meet the specific requirements of nearly any application.

Note: A = air-cooled, W = water-cooled.

Model	Stock Number	Type	Cable Length	Rated Output (DC)	Rated Duty Cycle	Electrode Range
A-150	WP-17-12-R	Air-Cooled	12.5 ft. (3.8 m)	150 Amps	60%	.020-1/8 in. (0.5-3.2 mm)
	WP-17-25-R	Air-Cooled	25 ft. (7.6 m)	150 Amps	60%	.020-1/8 in. (0.5-3.2 mm)
A-150 Valve	WP-17V-25-R	Air-Cooled	25 ft. (7.6 m)	150 Amps	60%	.020-1/8 in. (0.5-3.2 mm)
A-150 Flex Valve	WP-17FV-25-R	Air-Cooled	25 ft. (7.6 m)	150 Amps	60%	.020-1/8 in. (0.5-3.2 mm)
A-200 Valve	WP-26V-25-R	Air-Cooled	25 ft. (7.6 m)	200 Amps	60%	.020-5/32 in. (0.5-4.0 mm)
	WP-26-25-2	Air-Cooled	25 ft. (7.6 m)	200 Amps	60%	.020-5/32 in. (0.5-4.0 mm)
W-250	WP-20-12-R	Water-Cooled	12.5 ft. (3.8 m)	250 Amps	100%	.020-1/8 in. (0.5-3.2 mm)
	WP-20-25-R	Water-Cooled	25 ft. (7.6 m)	250 Amps	100%	.020-1/8 in. (0.5-3.2 mm)
W-280	WP-280-25-R	Water-Cooled	25 ft. (7.6 m)	280 Amps	100%	.020-1/8 in. (0.5-3.2 mm)
W-310	CS310-25	Water-Cooled	25 ft. (7.6 m)	310 Amps	100%	.020-1/8 in. (0.5-3.2 mm)
W-350	WP-18-25-R	Water-Cooled	25 ft. (7.6 m)	350 Amps	100%	.020-5/32 in. (0.5-4.0 mm)

Most popular accessories



▪ **Accessory Kit #AK-150MFC**
Allows welding operators to customize their standard A-150 TIG torch for their specific application.



▪ **Accessory Kit**
#AK2C For A-150
#AK3C For A-200, W-350
#AK4C For W-250, W-280, W-310
Includes one back cap, three collets, three collet bodies, three alumina nozzles, and three 7-inch 2% ceriated tungsten electrodes.



▪ **Cable Cover**
#WC-3-10 10 ft. (3.0 m)
#WC-3-22 22 ft. (6.7 m)



▪ **Tungsten Electrodes – 7-in. Length**
2% Ceriated and 2% Lanthanated available in five diameters (.040, 1/16, 3/32, 1/8, 5/32 in.). Pure and Rare Earth available in three diameters (1/16, 3/32, 1/8 in.).

Visit MillerWelds.com or your distributor for other Miller® options and accessories.



For more detailed information visit

MillerWelds.com/multiprocess

Multiprocess



Power Source Welding Performance

		150 A	250 A	300 Amp		350 Amp		450 Amp				650 Amp	
		Multimatic™ 200 (1-Phase) (Pg 36)	Shopmate™ 300 DX (1-Phase) (Pg 36)	Dimension™ 302 (Pg 37)	XMT® 304 CC/CV (Pg 38)	XMT® 350 VS (Pg 38)	XMT® 350 CC/CV (Pg 38)	XMT® 350 MPa (Pg 40)	Dimension™ 452 (Pg 37)	Dimension™ NT 450 (Pg 37)	XMT® 450 CC/CV (Pg 38)	XMT® 450 MPa (Pg 40)	Dimension™ 652 (Pg 37)
Material	Mild Steel	●	●	●	●	●	●	●	●	●	●	●	●
	Stainless Steel	●	●	⊙	●	●	●	●	⊙	●	●	●	●
	Aluminum*	⊙	⊙	⊙	●	●	●	●	⊙	●	●	●	⊙
Material Thickness	Gauge (.020 - .125 in.)	●	●	●	●	●	●	●	⊙	●	●	●	
	Sheet (.125 - .375 in.)	●	●	●	●	●	●	●	●	●	●	●	⊙
	Plate (.375 - 1 in.)								●	●	●	●	●
	Plate (1+ in.)								⊙	⊙	⊙	⊙	●
Wire Size	.023 in.	●	●	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	
	.030 in.	●	●	●	●	●	●	●	⊙	●	●	●	
	.035 in.	●	●	●	●	●	●	●	●	●	●	●	
	.045 in.	⊙	●	⊙	⊙	⊙	⊙	⊙	●	●	●	●	●
	.052 in.			⊙	⊙	⊙	⊙	⊙	●	●	●	●	●
	1/16 in.			⊙	⊙	⊙	⊙	⊙	●	●	●	●	●
	5/64 in.								●	●	●	●	●
	3/32 in.								⊙	⊙	⊙	⊙	●
Process	Short Circuit	★★★★	★★★★	★★	★★★★	★★★★	★★★★	★★★★	★★	★★★★	★★★★	★★★★	
	Pulsed Spray				Optional ★★		Optional ★★	★★★★			Optional ★★	★★★★	
	Stick	★★	★★★★	★★	★★★★	★★★★	★★★★	★★★★	★★	★★★★	★★★★	★★★★	★★
	TIG	★★★★	★★★★	★	★★★★	★★★★	★★★★	★★★★	★	★★★★	★★★★	★★★★	★
	CAC-A		3/16 in.	1/4 in.	1/4 in.	5/16 in.	5/16 in.	5/16 in.	5/16 in.	5/16 in.	3/8 in.	3/8 in.	3/8 in.

ICON KEY

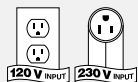
CAPABILITY: ● Designed for ⊙ Capable of
*XR Push-Pull System recommended for best results.

PROCESS QUALITY: ★ Good ★★ Better ★★★ Best ★★★★ Optimized



Multimatic™ 200

See literature no. DC/12.57



See page 78 for wireless remote controls.



Scan this tag to see the Multimatic 200 in action.



Recommended aluminum solution

Spoolmate 100 Series (#300 371).

Welding Capability

Max. 3/8 in. (9.5 mm)	Max. 1/4 in. (6.4 mm)	Max. 3/16 in. (4.8 mm)
MIG Mild Steel	MIG Aluminum	TIG Mild Steel
Min. 24 ga. (0.8 mm)	Min. 18 ga. (1.2 mm)	Min. 0.020 in. (0.5 mm)

Aluminum welding uses optional Spoolmate 100 Series spool gun and 4043 Series aluminum wire. TIG welding uses optional TIG Contractor Kit.

The only all-in-one, portable, multiprocess power source from Miller® is our most versatile machine to date. Weighing only 29 pounds (13.2 kg) and running on either 120 or 230 V, the Multimatic 200 can go anywhere you need to MIG, TIG or Stick weld.



Multi-voltage plug (MVP™) allows connection to 120 or 230 V receptacles without tools.

Auto-Set™ Elite can be used on multiple materials and multiple processes with the ability to fine-tune your settings. Simple to set up and use!

Excellent arc characteristics! Unit offers positive arc starts and an extremely stable arc with minimal spatter on both mixed gases and straight CO₂.

Impact-resistant case provides strength and durability while protecting the internal components and welding wire.

Light industrial ● CC CV DC 1 Phase

Processes

- MIG (GMAW) • Flux-Cored (FCAW)
- DC Stick (SMAW) • DC TIG (DC GTAW)

Comes complete with

- 10-ft. (3 m) Bernard™ Q150 MIG gun
- 13-ft. (4 m) cable with electrode holder and 25-mm Dinse connector
- 10-ft. (3 m) work cable with clamp and 25-mm Dinse connector
- Power cord and MVP™ plugs for 120 V and 230 V
- Miller I Smith® argon and AR/CO₂ mix regulator/flow gauge with gas hose
- Dual groove quick-change drive rolls for .024-in. (0.6 mm) or .030/.035-in. (0.8/0.9 mm) wire
- Extra contact tips, information/settings chart, setup/operation DVD and material thickness gauge (#229 895)

Most popular accessories

- Spoolmate™ 100 Series #300 371 (pg 22)
- TIG Contractor Kit #301 130 (pg 79)
- 14-Pin to 6-Pin Adapter Cord #300 507 (pg 79)
- RCCS-6M Remote Fingertip Control #195 184 (pg 79)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Stock Number	Welding Mode/Process	Input Power	Amperage Range	Rated Output	Amps Input at Rated Output, 50/60 Hz				Wire Feed Speed	Max. Open-Circuit Voltage	Dimensions	Net Weight
					120 V	230 V	KVA	KW				
#907 518) 120/230 V #951 586) 120/230 V w/TIG Contractor Kit (see page 79 for kit contents)	CV: MIG/Flux Cored	120 VAC	30-140	90 A at 18.5 V, 60% Duty Cycle	18	—	2.2	2	70-425 IPM (1.8-10.8 m/min.)	90 VDC	H: 14.5 in. (368 mm) W: 9.75 in. (248 mm) D: 17 in. (432 mm)	29 lb. (13.2 kg)
				110 A at 19.5 V, 20% Duty Cycle	20	—	2.7	2.6				
	230 VAC	30-200	150 A at 21.5 V, 20% Duty Cycle	—	17.5	4.0	3.8					
			CC: TIG	120 VAC	5-150	150 A at 16 V, 30% Duty Cycle	27	—	3.3	3.2	90 VDC (22-25 VDC, sense voltage for Stick and Lift-Arc™ TIG.)	
	230 VAC	5-150	150 A at 16 V, 30% Duty Cycle	—	13.8	3.2	3.0					
	CC: Stick	120 VAC	20-150	100 A at 24 V, 35% Duty Cycle	24	—	2.9	2.8				
230 VAC		20-150	150 A at 26 V, 30% Duty Cycle	—	20.8	4.8	4.5					

Shopmate™ 300 DX

See literature no. DC/12.7

An economical single-phase DC multiprocess power source that provides versatility and outstanding arc performance in CV mode (MIG) and CC mode (Stick and TIG).



Shopmate 300 DX MIG package shown.

Process selector switch is an "operator-friendly" single process switch that eliminates the confusion of several switch combinations.

Digital meters for presetting or monitoring voltage and amperage.

Built-in 10-pin connector for direct hookup of Spoolmatic® spool guns.

Built-in 14-pin connector provides direct connection for 14-pin, 24 VAC Miller wire feeders and accessories.

Fan-On-Demand™ cooling system operates only when needed.

Line voltage compensation keeps welding parameters constant.

Arc control adjusts inductance in MIG mode and DIG in Stick mode to optimize weld performance.

Lift-Arc™ start provides DC TIG arc starting without the use of high frequency. Starts the arc without contaminating the weld with tungsten.

Light industrial ● CC CV DC 1 Phase

Processes

- MIG (GMAW) • Flux-Cored (FCAW)
- DC Stick (SMAW) • DC TIG (DC GTAW)

MIG Pkg comes complete with

- Power source
- 22A wire feeder with Bernard™ gun
- MIG kit

Most popular accessories

- Shopmate Running Gear/ Dual Cylinder Rack #300 145 (pg 73)
- Shopmate 300 Kit #300 150 (pg 75)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Stock Number	Amperage Range	Voltage Range	Rated Output	Amps Input at Rated Load Output, 60 Hz				Max. Open-Circuit Voltage	Dimensions (includes lift eye)	Net Weight		
				208 V	230 V	460 V	575 V				KVA	KW
#907 315) 200(208)/230 V #907 316) 230/460/575 V #951 076) 200(208)/230 V w/MIG Pkg #951 077) 230/460/575 V w/MIG Pkg	5-400	10-35	250 A at 30 VDC, 60% Duty Cycle	66	57	29	23	13	11.2	80 VDC	H: 24.5 in. (622 mm) W: 19 in. (483 mm) D: 25.5 in. (648 mm)	177 lb. (80.3 kg)



Dimension™ Series and NT 450

See literature no. DC/19.2 and DC/19.5

100 percent duty cycle industrial power sources deliver time-tested, reliable performance in demanding multiprocess applications for a variety of industries.



See page 78 for wireless remote controls. Not available with NT 450 model.

Dimension NT 450 stationary package (#951 279) shown.

Dimension Series and Dimension NT 450 are available in three formats: machine only, stationary package (adds feeder, gun and MIG 4/0 kit), and MIGRunner™ package (adds running gear/cylinder rack to stationary package).

All models feature:

- **DC multiprocess** versatility with excellent arc performance.
- **Digital meters** for presetting or monitoring voltage or amperage (Dimension Series allows preset voltage only).
- **Line voltage compensation** for input voltage variations.
- **Power efficiency** for exceptional return on your investment.
- **15-amp, 115-VAC duplex receptacle.**

Dimension Series adds the following features:

- **Hot Start™** makes it easier to start difficult stick electrodes.
- **Arc control** for added flexibility in tight stick locations.

Dimension NT 450 adds the following features:

- **Electronic arc and inductance controls** for better control no matter what electrode you are using.
- **Lift-Arc™** start provides arc starting that minimizes contamination of the electrode without the use of high frequency.

Heavy industrial **3 Phase**

Processes

- MIG (GMAW) • Flux-Cored (FCAW)
- Stick (SMAW) • TIG (GTAW)
- Air Carbon Arc Gouging (CAC-A)
(Dimension 302: 1/4-in. carbons)
(Dimension 452: 5/16-in. carbons)
(Dimension 652: 3/8-in. carbons)
(Dimension NT 450: 5/16-in. carbons)

Most popular accessories

- SuitCase® X-TREME™ Wire Feeders (pg 21)
- 70 Series Wire Feeders (pg 24)
- Standard Running Gear #042 886 (pg 73)
- Standard Cylinder Rack #042 887 (pg 73)
- Industrial MIG 4/0 Kit with Lug Connectors #300 390 (pg 75)
Includes Miller I Smith® regulator/flowmeter with 10-ft. (3 m) gas hose, 10-ft. (3 m) 4/0 feeder weld cable, and 15-ft. (4.6 m) work cable with 600-amp C-clamp.
- Extension Cables (pg 80)
- Bernard™ MIG Guns

When purchasing components separately, visit MillerWelds.com/equiptoweld or your distributor for other Miller® options and accessories.

Models/Packages



Build your own system at MillerWelds.com/equiptoweld or see packages below right.



Includes MIG 4/0 kit and feeder with Bernard™ Q400 MIG gun and .035/.045 drive rolls



Includes running gear/cylinder rack, MIG 4/0 kit and feeder with Bernard™ Q400 MIG gun and .035/.045 drive rolls



Model	Power Source Only Stock Number	Stationary Package Stock Number	MIGRunner Package Stock Number
Dimension 302	(#903 216) 230/460/575 V	(#951 272) w/S-74D single-wire feeder with one gun (#300 617)	(#951 276) w/S-74D single-wire feeder with one gun (#300 617)
Dimension 452	(#903 254) 200-208/230/460 V	(#951 273) w/S-74D single-wire feeder with one gun (#300 617)	–
	(#903 255) 230/460/575 V	–	–
Dimension 652	(#903 379) 230/460/575 V	(#951 274) w/S-74D single-wire feeder with one gun (#300 617)	(#951 278) w/S-74D single-wire feeder with one gun (#300 617)
Dimension NT 450	(#907 256) 230/460/575 V	(#951 275) w/S-74D single-wire feeder with one gun (#300 617)	(#951 279) w/S-74D single-wire feeder with one gun (#300 617)

*While idling.

Model	Welding Mode	Amperage/Voltage Range	Rated Output	Amps Input at Rated Output, 60 Hz						Open-Circuit Voltage	Dimensions (Includes lift eye and strain relief)	Net Weight
				200 V	230 V	460 V	575 V	KVA	KW			
Dimension 302	CC	15–375 A	300 A at 32 VDC, 100% Duty Cycle	57.5	50	25	20	20	12.9	60 VDC	H: 30 in. (762 mm) W: 23 in. (585 mm) D: 30.5 in. (775 mm)	361 lb. (164 kg)
	CV	10–32 V		69	60	30	24	23.7	13.4	36 VDC		
Dimension 452	CC	20–565 A	450 A at 38 VDC, 100% Duty Cycle	91	79	39	31	31.4	22	65 VDC	H: 30 in. (762 mm) W: 23 in. (585 mm) D: 38 in. (966 mm)	424 lb. (192 kg)
	CV	10–38 V		104	90	45	36	35.3	22.3	43 VDC		
Dimension 652	CC	50–815 A	650 A at 44 VDC, 100% Duty Cycle	–	126	63	50.4	50	34.8	72 VDC	H: 32.5 in. (826 mm) W: 23 in. (585 mm) D: 38 in. (966 mm)	545 lb. (247 kg)
	CV	10–65 V		–	–	–	–	–	–	67 VDC		
Dimension NT 450	CC	5–500 A	450 A at 38 VDC, 100% Duty Cycle	–	57	29	23	22.6	21.0	80 VDC	H: 32.5 in. (826 mm) W: 23 in. (585 mm) D: 38 in. (966 mm)	376 lb. (171 kg)
	CV	10–38 V		–	2.18*	1.04*	0.84*	0.87*	0.29*			



Multiprocess

XMT® Series

304 CC/CV – see literature no. DC/18.8
350 CC/CV, 350 VS and 450 CC/CV – see literature no. DC/18.83

The proven best performer in portable multiprocess applications.



XMT 350 CC/CV
MIGRunner package
(#951 327) shown.



See page 78
for wireless
remote controls.
Not available with
350 VS model.



XMT 350 model allows for any input voltage hookup (208–575 V) with no manual linking. 304 model uses Auto-Link® which automatically links the power source to primary voltage being applied (230/460 VAC, single- or three-phase). 450 model is 230/460 V manual link or 575 V, three-phase only.

Wind Tunnel Technology™ protects electrical components and PC boards from contamination.

Fan-On-Demand™ cooling system operates only when needed, reducing noise, energy use and amount of contaminants pulled through machine.

Lift-Arc™ allows TIG starting without use of high-frequency. Starts the arc without contaminating weld with tungsten.

Adaptive Hot Start™ increases the output amperage at the start of a weld if necessary, eliminating electrode sticking.

Reduced OCV operation. An internal dip switch enables reduced open-circuit Stick welding capability. OCV is typically below 15 volts. 350 CC/CV and 450 CC/CV models only.

Process selector switch reduces the number of control setup combinations without reducing any features.

Large, dual digital meters are easy to view and presettable to ease setting weld output.

Ultra-tough, polycarbonate-blended cover for control panel protects front controls from damage.

Pulsed MIG with optional Optima™ control reduces spatter and distortion, allows better out-of-position puddle control, and provides potential reduction of fume particle emissions. Pulsed MIG is not available on VS model.

Heavy Industrial **DC 3 1** XMT 450
Phase Phase is 3-phase only.

Processes

- MIG (GMAW) • Pulsed MIG (GMAW-P)*
- Stick (SMAW) • TIG (GTAW)
- Flux-Cored (FCAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (Carbons—304: 1/4 in., 350: 5/16 in., 450: 3/8 in.)

*XMT CC/CV models with optional control. Not available on VS model.

Most popular accessories for non-VS models

- XR-AlumaFeed™ Feeder for aluminum #300 509 (pg 11)
- Spoolmatic®/WC-24 (pg 22)
- XR™-Controls (pg 23)
- 22A and 24A Feeders (pg 24)
- 70 Series Feeders (pg 24)
- Optima™ MIG Pulse Control #043 389 (pg 75)

Most popular accessories for VS model

- Spoolmatic®/WC-115A (with contactor) (pg 22)

Most popular accessories for all models

- SuitCase® X-TREME™ VS (pg 21)
- MIGRunner™ Cart #195 445 (pg 73)
- Running Gear Cylinder Rack #300 408 (pg 73)
- Coolmate™ Coolant System (pg 73)
- Industrial MIG 4/0 Kits (pg 75)
- Gas Valve Kit #195 286 XMT 350 #300 928 XMT 450

When purchasing components separately, visit MillerWelds.com/equiptoweld or your distributor for other Miller® options

Models/Packages



Model	Power Source Only Stock Number	Package Stock Number	Feeder with Bernard™ MIG Gun and Drive Rolls	Industrial MIG 4/0 Kit	Cart
XMT 304 CC/CV	(#903 471) 208-230/460 V	(#951 343) w/304 model (#903 471)	22A with Bernard Q300 gun	With Dinse connectors	MIGRunner Cart
XMT 350 CC/CV	(#907 161) 208–575 V (#907 161-01-1) 208–575 V w/Aux. Pwr.	(#951 549) w/350 model (#907 161)	SuitCase X-TREME 12VS with Bernard Q300 gun	–	–
		(#951 327) w/350 model (#907 161)	22A with Bernard Q300 gun	With Dinse connectors	MIGRunner Cart
		(#951 314) w/350 model (#907 161)	S-74D with Bernard Q400 gun	With Dinse connectors	MIGRunner Cart
XMT 350 VS*	(#907 224) 208–575 V	–	–	–	–
XMT 450 CC/CV	(#907 481) 230/460 V (#907 482) 575 V	–	–	–	–

*No remote control, order mating Tweco connectors separately. **Duty cycle rating below achieved with 6-gauge input power cord (8-gauge cord supplied with unit).

Model	Input Power	Amperage/Voltage Ranges	Rated Output	Amps Input at Rated Load Output, 60 Hz						Max. Open-Circuit Voltage	Dimensions	Net Weight	
				208 V	230 V	400 V	460 V	575 V	KVA				KW
XMT 304 CC/CV (with Dinse)	3-Phase 1-Phase	CC Mode: 5–400 A CV Mode: 10–35 V	300 A at 32 VDC, 60% Duty Cycle	33.7	30.5	–	18.9	–	12.2	11.6	90 VDC	H: 17 in. (432 mm) W: 12.5 in. (318 mm) D: 24 in. (610 mm)	79.5 lb. (36.1 kg)
			225 A at 29 VDC, 60% Duty Cycle	52.4	47.4	–	24.5	–	11.3	7.6			
XMT 350 CC/CV (with Dinse)	3-Phase 1-Phase	CC Mode: 5–425 A CV Mode: 10–38 V	350 A at 34 VDC, 60% Duty Cycle	40.4	36.1	20.6	17.8	14.1	14.2	13.6	75 VDC		80 lb. (36.3 kg)
			300 A at 32 VDC, 60% Duty Cycle**	60.8	54.6	29.7	24.5	19.9	11.7	11.2			
XMT 350 VS* (with Tweco®)	3-Phase 1-Phase	CC Mode: 5–425 A CV Mode: 10–38 V	350 A at 34 VDC, 60% Duty Cycle	40.4	36.1	20.6	17.8	14.1	14.2	13.6	75 VDC		80 lb. (36.3 kg)
			300 A at 32 VDC, 60% Duty Cycle**	60.8	54.6	29.7	24.5	19.9	11.7	11.2			
XMT 450 CC/CV (with 1/2 in. Stud)	3-Phase	CC Mode: 15–600 A CV Mode: 10–38 V	450 A at 38 VDC, 100% Duty Cycle	–	51	–	27.6	24.4	22	18.9	90 VDC	H: 17.25 in. (438 mm) W: 14.5 in. (368 mm) D: 27.125 in. (689 mm)	122 lb. (55.3 kg)



XMT® Weld Cable Control System

See literature no.
DC/18.87

Weld Cable Control (WCC) provides remote control at the wire feeder without needing a control cable.

Improved!

Now with built-in weld cable control technology and new, optional multiprocess wire feeder.



XMT Weld Cable Control family of products shown. A system consists of one of the two XMT WCC power sources and one of the three SuitCase X-TREME WCC feeders (see features below for info on multiprocess feeder). Order products separately, see stock numbers in chart below.

Note: See page 38 for XMT power source features. See page 21 for SuitCase X-TREME VS feeder features. Feeders include Bernard S-Gun or Q300 MIG gun with reversible dual size (.045 and 1/16 in.) VK drive rolls.

Provides remote voltage control when using a voltage-sensing (VS) WCC feeder. Simplifies system setup and improves productivity. With a WCC-equipped SuitCase® VS feeder and power source you can change the output voltage at the feeder and save a trip to the power supply. No extra control cable to purchase, maintain, string or unstring – saving time and money. WCC also extends remote control capability beyond the reach of a control cable system (+100 feet).

Built specifically for the construction and shipbuilding industries where the power source and feeder are separated by hundreds of feet.

Ez-Bind™ feature

- Easily create a remote control connection. Prior to welding, hold the gun trigger for five seconds to establish a connection between the feeder and power supply via the weld cable.
- Connects the SuitCase VS WCC to any WCC-equipped power source or WCC Control for remote voltage control. Feeders and power supplies can be mixed and matched.
- Works with multiple WCC systems connected to the same workpiece.

*Duty cycle rating below achieved with 6-gauge input power cord (8-gauge cord supplied with unit).

Improves productivity and quality control. Allows welders to easily adjust and set optimal voltage at the point of use. Reduces the need to leave the work area and travel back to the power source.

Improves safety and eliminates wear and damage problems associated with the control cable.

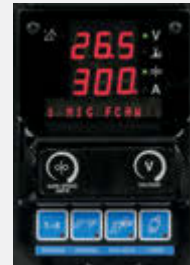
NEW! Multiprocess feeder features

Polarity indicator illuminates if system is electrode negative.

Process indicator. Additional 12-character LED display indicates active process and program number, selectable from the feeder.

Amperage control is available for Stick and Air Carbon Arc gouging.

Programmability. Process, arc control and weld sequence adjustments (preflow, postflow, soft start and burnback) are all adjustable from the feeder enabling the operator to fine tune individual program characteristics. Four programs are also available, allowing operators to recall up to four previously used processes and their weld settings.



Heavy industrial
3 Phase DC 3 1 XMT 450
Phase Phase is 3-phase only.

Processes

- MIG (GMAW)
- Stick (SMAW)
- TIG (GTAW)
- Flux-Cored (FCAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (Carbons – 350: 5/16 in., 450: 3/8 in.)

Most popular accessories

- SuitCase X-TREME 8VS and 12VS Feeders (pg 21)
- XMT® Rack (pg 43)
- Cable Connectors and Adapters (pg 72)
- Cylinder Cart #042 537 (pg 72)
- Universal Cart and Cylinder Rack (XMT 350 only) #042 934 (pg 72)
- MIGRunner™ Cart #195 445 (pg 73)
- Running Gear Cylinder Rack #300 408 (pg 73)
- Protective Cover (XMT 350 only) #195 478 (pg 79)
- Bernard™ S-Gun™ and Q-Gun™ MIG Guns

When purchasing components separately, visit MillerWelds.com/equiptoweld or your distributor for other Miller® options and accessories.

Model/Stock Number	Input Power	Amp Range in CC Mode	Volt Range in CV Mode	Rated Output	Amps Input at Rated Load Output, 60 Hz						Max. Open-Circuit Voltage	Dimensions	Net Weight	
					208 V	230 V	400 V	460 V	575 V	KVA	KW			
XMT 350 VS Weld Cable Control (#907 224 002) 208-575 V	Three-Phase	5-425 A	10-38 V	350 A at 34 VDC, 60% Duty Cycle	40.4	36.1	20.6	17.8	14.1	14.2	13.6	75 VDC	H: 17 in. (432 mm) W: 12.5 in. (318 mm) D: 24 in. (610 mm)	80 lb. (36.3 kg)
	Single-Phase	5-425 A	10-38 V	300 A at 32 VDC, 60% Duty Cycle*	60.8	54.6	29.7	24.5	19.9	11.7	11.2			
XMT 450 VS Weld Cable Control (#907 481 002) 230/460 V	Three-Phase	15-600 A	10-38 V	450 A at 38 VDC, 100% Duty Cycle	—	51	—	27.6	—	22	18.9	90 VDC	H: 17.25 in. (438 mm) W: 14.5 in. (368 mm) D: 27.125 in. (689 mm)	122 lb. (55.3 kg)
Model/Stock Number	Input Power	Input Welding Circuit Rating	Wire Feed Speed	Wire Type and Diameter Capacity	Maximum Spool Size Capacity		Dimensions		Net Weight					
SuitCase X-TREME 8VS WCC (#951 588) with S-Gun (#951 584) with Q300 Gun	Operates on open-circuit voltage and arc voltage: 14-48 VDC/110 Max. OCV	330 A at 60% Duty Cycle	50-780 IPM (1.3-19.8 m/min.) Actual range in CC mode is dependent on arc voltage applied	Solid Wire .023-.062 in. (0.6-1.6 mm) Flux-Cored .030-.062 in. (0.8-1.6 mm)	8 in. (203 mm), 14 lb. (6.4 kg)		H: 12.75 in. (324 mm) W: 7.25 in. (184 mm) D: 18 in. (457 mm)		28 lb. (13 kg)					
		425 A at 60% Duty Cycle		Solid Wire .023-5/64 in. (0.6-2.0 mm) Flux-Cored .030-5/64 in. (0.8-2.0 mm)	12 in. (305 mm), 45 lb. (20 kg)		H: 15.5 in. (394 mm) W: 9 in. (229 mm) D: 21 in. (533 mm)		35 lb. (15.9 kg)					
SuitCase X-TREME 12VS Multiprocess WCC (#951 590) with S-Gun														



Multiprocess

XMT[®] MPa Series See literature no. DC/18.84

The proven best performer in portable multiprocess applications, with the added benefit of the Pulsed MIG process.



XMT 350 MPa

XMT 450 MPa



See page 78 for wireless remote controls.



XMT MPa Series takes the features of the XMT 350 and 450 CC/CV multiprocess inverters and adds built-in Pulsed MIG capabilities.

- Easy-to-use Pulsed MIG, including programs for exotic alloys
- Eliminates need for separate pulse control pendant or other pulse controls
- Pulsed MIG works with voltage sensing, remote control and benchtop wire feeders

MPa – MIG; Pulsed; advanced Arc Control. Easy-to-use advanced arc control enables an improved Pulsed MIG welding arc.

Built-in Pulsed MIG programs contain optimal parameters for steel, metal-cored, stainless, aluminum, nickel, silicon bronze and copper nickel wire. Just dial in wire and gas type. As easy to use as traditional MIG, the MPa's intuitive programming virtually eliminates the Pulsed MIG learning curve for experienced MIG operators.

SharpArc[®] controls the arc in Pulsed MIG mode and gives total control over the arc cone shape, puddle fluidity and bead profile.

Synergic Pulsed MIG – Adding a 70 Series MPa Plus feeder for steel or an XR-AlumaFeed[™] feeder for aluminum welding gives you the benefit of a Synergic Pulsed MIG system. As you increase/decrease the wire feed speed, the pulse parameters increase/decrease, matching the right amount of power output to match the wire speed. Additional systems are available – visit MillerWelds.com.

AUTOLINE[™] Power Management Technology **XMT 350 model allows for any input voltage hookup (208 – 575 V) with no manual linking.** 450 model is 230/460 V manual link or 575 V, three-phase only.

Dinse- or Tweco[®]-style weld disconnects provide high-quality weld cable connections. 450 model has studs.

Note: Two Dinse connectors are supplied with each Dinse machine. Tweco connectors must be ordered separately.

Optional 115 VAC auxiliary power provides 10 amps of circuit-breaker-protected power for water circulators, etc.

Heavy Industrial **DC 3 1** XMT 450
Phase Phase is 3-phase only.

Processes

- MIG (GMAW)
- Pulsed MIG (GMAW-P)
- Stick (SMAW)
- TIG (GTAW)
- Flux-Cored (FCAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (Carbons – 350: 5/16 in., 450: 3/8 in.)

Most popular accessories

- XR-AlumaFeed[™] Feeder for aluminum #300 509 (pg 11)
- SuitCase[®] X-TREME[™] VS Feeders (pg 21)
- SuitCase[®] 12RC Feeder (pg 21)
- Spoolmatic[®]/WC-24 (pg 22)
- XR[™]-Controls (pg 23)
- 22A and 24A Feeders (pg 24)
- 70 Series Feeders (pg 24)
- 70 Series MPa Plus Feeders (pg 25)
- XMT[®] Rack (pg 43)
- Cylinder Cart #042 537 (pg 72)
- Universal Cart and Cylinder Rack (XMT 304/350 only) #042 934 (pg 72)
- MIGRunner[™] Cart #195 445 (pg 73)
- Running Gear Cylinder Rack #300 408 (pg 73)
- Coolmate[™] Coolant System (pg 73)
- Protective Cover (XMT 304/350 only) #195 478 (pg 79)
- Gas Valve Kit #195 286 XMT 350 #300 928 XMT 450
- Bernard[™] Q-Gun[™]

When purchasing components separately, visit MillerWelds.com/equiptoweld or your distributor for other Miller[®] options and accessories.

**Duty cycle rating below achieved with 6-gauge input power cord (8-gauge cord supplied with unit).*

Model	Stock Number	Input Power	Amp/Volt Ranges	Rated Output	Amps Input at Rated Load Output, 60 Hz					KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
					208 V	230 V	400 V	460 V	575 V					
XMT 350 MPa (with Dinse except where noted)	#907 366) 208-575 V (#907 366-01-1) 208-575 V w/Aux. Pwr. (#907 366-01-4) 208-575 V w/Twoeco	Three-Phase	CC Mode: 5-425 A CV Mode: 10-38 V	350 A at 34 VDC, 60% Duty Cycle	40.4	36.1	20.6	17.8	14.1	14.2	13.6	75 VDC	H: 17 in. (432 mm) W: 12.5 in. (318 mm) D: 24 in. (610 mm)	80 lb. (36.3 kg)
		Single-Phase	CC Mode: 5-425 A CV Mode: 10-38 V	300 A at 32 VDC, 60% Duty Cycle*	60.8	54.6	29.7	24.5	19.9	11.7	11.2			
XMT 450 MPa (with 1/2 in. Stud)	#907 479) 230/460 V (#907 479 001) 230/460 V w/Aux. Pwr. (#907 480) 575 V (#907 480 001) 575 V w/Aux. Pwr.	Three-Phase	CC Mode: 15-600 A CV Mode: 10-38 V	450 A at 36.5 VDC, 100% Duty Cycle	–	51	–	27.6	23.6	21.6 (23.5 on 575 V)	18.3	90 VDC	H: 17.25 in. (438 mm) W: 14.5 in. (368 mm) D: 27.125 in. (689 mm)	122 lb. (55.3 kg)



PipeWorx Welding System

See literature no. PWS/2.0

Heavy industrial ● CC CV DC 3 Phase

Optimized for pipe fabrication shops

PipeWorx Welding System (#951 381) shown with Accessory Kit (#300 568). Feeder includes drive rolls. Filler metal and shielding gas sold separately.



See page 78 for wireless remote controls.

FREE! PipeWorx Welding System CD showcases the features and benefits of PipeWorx Welding System and new pipe welding techniques. Visit PipeWorx page at MillerWelds.com/pipeworxcd to order your CD today.

Simple process setup

- The front panel was designed by welders for welders
- Requires just a few basic steps to set up a new weld process, resulting in less training time and minimizing errors from incorrect setups
- Memory feature stores four programs for each selection: Stick, DC TIG, and MIG (left and right side of feeder). Eliminates the need to remember parameters

True multiprocess machine

- Weld processes are optimized to deliver superior arc performance and stability specifically for root, fill, and cap passes on pipe
- RMD® and Pulsed MIG increase quality and productivity

Quick process changeover

- Simply push a process selection button to choose a welding process
- Eliminates set-up time and reduces the risk of weld reworks due to incorrect cable connections
- PipeWorx "Quick Select" technology automatically selects the welding process, the correct polarity, cable outputs, gas solenoid, and user programmed welding parameters

Single-system design

- One machine designed to perform all of your pipe welding needs
- Simplified and optimized specifically for pipe welding

Processes

- Stick (SMAW)
- DC TIG (GTAW) (HF and Lift-Arc™)
- MIG (GMAW) • Flux-Cored (FCAW)
- RMD® (GMAW MSC)
- Pulsed MIG (GMAW-P)

PipeWorx Welding System comes complete with

- Power source with cable hangers #907 382 or #907 384
- Running gear with gas cylinder rack and handles #300 368
- Dual feeder with drive rolls #300 366
- Cable kit with 25-ft. (7.6 m) work sense lead #300 367
- Two 15-ft. (4.6 m) PipeWorx 300 guns #195 400

Most popular accessories

- PipeWorx Accessories Kit for Dual Feeder #300 568
Includes 25-ft. work cable, EG500 work clamp, two Miller | Smith® regulator/flowmeters, and two 4-ft. gas hoses.
- Cable Kit #300 367
For feeder used on power source. Includes feeder cable, weld cable and 25-ft. work sense lead.
- Composite Cable Kit #300 454 25 ft. (7.6 m) #300 456 50 ft. (15.2 m)
For remote feeder applications. Includes composite cable which encases feeder cable, gas hose and weld cable in protective sheath, and either 25- or 50-ft. work sense lead.
- PipeWorx Running Gear #300 368
Includes gas cylinder rack and handles.
- Feeder Cart with Drawer #300 467
For remote feeder applications.
- PipeWorx Cooler #300 370
- PipeWorx Remote Feeder Interface with Gun Triggers and Cable #300 597
- Spool Covers #057 607 Single/dual feeder (left) #090 389 Dual feeder (right)
- DSS-9 Dual Schedule Switch #071 833
- RFCS-14 HD #194 744
- Foot Control Bracket #300 676
- RPBS-14 On-Off Switch Remote #300 666
- Bernard™ PipeWorx™ Guns #195 399 15 ft. (4.6 m) 250-15 #195 400 15 ft. (4.6 m) 300-15

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

RMD® (Regulated Metal Deposition)

- Higher quality root pass
- Calm stable arc
- Less chance of cold lap or lack of fusion reducing rework
- Less spatter
- More tolerant of hi-lo conditions
- Reduced training requirements
- Can eliminate the need for a hot pass
- Can eliminate backing/purge gas in some stainless applications



RMD Carbon Steel

Pulsed MIG

- Less heat input than traditional spray pulse transfer
- Shorter arc length
- Narrower arc cone
- Less training time required because Pulsed MIG:
 - Virtually eliminates arc wander
 - Is easier to control the puddle
 - Compensates for tip to work variations automatically
- Improved fusion and fill at the toes of the weld resulting in:
 - Faster travel speeds
 - Higher deposition rates
- When used with RMD, it is possible to use one wire and one gas for all passes



Pulsed MIG Stainless

PipeWorx Memory Card, Accu-Power #300 667

Displays instantaneous power during welding to meet the new ASME Requirement for calculating heat input on complex waveform processes (RMD and Pulsed MIG). Requires version 1.07 software minimum.

*Dimensions and weight are for power source only.

Model/Stock Number	Welding Mode/ Process	Amperage/ Voltage Ranges	Rated Output at 100% Duty Cycle	Amps Input at Rated Output, 60 Hz, 3-Phase 230 V 460 V 575 V	KVA 230 V 460 V 575 V	KW 230 V 460 V 575 V	Max. Open-Circuit Voltage	Dimensions*	Net Weight*
PipeWorx Welding System (#951 381) 230/460 V (#951 382) 575 V	CC: Stick	40-350 A	350 A at 34 VDC	37.9 23.2 19.4	15.1 18.5 19.2	13.9 14 14	90 VDC	H: 28.5 in. (724 mm) W: 19.5 in. (495 mm) D: 31.75 in. (806 mm)	225 lb. (102 kg)
	CC/DC: TIG	10-350 A	350 A at 24 VDC	29.3 18.2 13.5	11.8 14.5 13.4	10.7 10.6 10			
	CV: MIG/ Flux-Cored	10-44 V	400 A at 34 VDC	42.9 24 20.5	17.3 19.2 20.5	16 15.8 16.2			

Model/Stock Number	Input Power	Input Welding Circuit Rating	Wire Feed Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
PipeWorx Feeder only (#300 365) Single-Wire model (#300 366) Dual-Wire model	24 VAC, 11 A	100 V, 750 A at 100% Duty Cycle	50-780 IPM (1.3-19.8 m/min.)	.035-.062 in. (0.9-1.6 mm)	60 lb. (27 kg)	H: 14 in. (356 mm) W: 19 in. (483 mm) D: 29 in. (737 mm)	Single 65 lb. (29.5 kg) Dual 90 lb. (41 kg)



PipeWorx FieldPro™ System

See literature no. PWS/6.0

NEW!



Simplicity-driven performance for your pipe construction site

PipeWorx 350 FieldPro shown with optional FieldPro Remote, FieldPro Smart Feeder, and FieldPro Feeder.



See page 78 for wireless remote controls.

FREE! PipeWorx 350 FieldPro System DVD showcases the features and benefits of PipeWorx 350 FieldPro System and new pipe welding techniques. Visit PipeWorx page at MillerWelds.com to order your DVD today.

Simplified cable management

- Save time by eliminating the need to trace cables back to change welding parameters and processes
- No control cables to string and manage on the jobsite

Complete control at the weld joint

- FieldPro Remote reduces weld defects by automatically setting correct polarity for each welding process – without the need to manually swap cables
- Eliminates the need to “get by” with less than optimal settings without control cables, and allows for easy setup of a new weld process with the touch of a button
- Total remote control of welding processes and parameters improves safety by limiting jobsite movement and reducing slip, trip and fall hazards

Arc performance optimized for critical pipe welding

- Industry-leading arc performance like the PipeWorx 400 Welding System, but in a field-ready package
- True multiprocess system provides conventional Stick, TIG, FCAW, and MIG welding as well as the advanced technologies of RMD® and Pulse
- Smart Feeder delivers excellent RMD® and Pulse welding 200 feet from the power source with no control cables. RMD and Pulse processes help reduce weld failures and eliminate backing gas on some stainless and chromoly applications

New durability standard for field construction

- Designed and built to withstand the harshest field environments

RMD® (Regulated Metal Deposition)

- Higher quality root pass
- Calm stable arc
- Less chance of cold lap or lack of fusion reducing rework
- Less spatter
- More tolerant of hi-lo conditions
- Reduced training requirements
- Can eliminate the need for a hot pass
- Can eliminate backing/purge gas in some stainless applications



RMD Carbon Steel

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- Shorter arc length
- Narrower arc cone
- Less training time required because Pulsed MIG:
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 - Faster travel speeds
 - Higher deposition rates
- When used with RMD, it is possible to use one wire and one gas for all passes



Pulsed MIG Stainless

PipeWorx Memory Card, Accu-Power #300 667

Displays instantaneous power during welding to meet the new ASME Requirement for calculating heat input on complex waveform processes (RMD and Pulsed MIG).

*Dimensions and weight are for power source only.

Heavy Industrial
CC CV DC 3 1
Phase Phase

Processes

- Stick (SMAW) • DC TIG (GTAW)
- MIG (GMAW) • Flux-Cored (FCAW)
- RMD® (GMAW MSC)
- Pulsed MIG (GMAW-P)
- Air Carbon Arc Cutting and Gouging (CAC-A) (1/4-in. carbons)

PipeWorx FieldPro

Stick/TIG System includes

- PipeWorx 350 FieldPro power source
- FieldPro Remote #300 934
- Work sense lead with clamp

PipeWorx FieldPro

MIG/Flux-Cored System includes

- PipeWorx 350 FieldPro power source
- FieldPro Feeder
- Work sense lead with clamp
- PipeWorx 300-amp MIG gun

PipeWorx FieldPro

RMD/Pulse System includes

- PipeWorx 350 FieldPro power source
- FieldPro Smart Feeder
- PipeWorx 300-amp MIG gun

Most popular accessories



PipeWorx FieldPro Rack

- #907 588 4-Pack Rack
- #907 589 6-Pack Rack
- Includes four or six PipeWorx 350 FieldPro power sources, mounting kits and one rack.
- Empty FieldPro Rack #195 466
- FieldPro Rack Mounting Kit #301 100
- Kit to mount single units in rack.
- Rack Running Gear #195 114
- For all XMT- and CST-style racks.
- Bernard™ PipeWorx™ Guns
- #195 399 15 ft. (4.6 m) 250-15
- #195 400 15 ft. (4.6 m) 300-15

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model/Stock Number	Input Power	Amperage/Voltage Ranges	Rated Output at 60% Duty Cycle	Amps Input at Rated Output, 60 Hz			KVA	KW	Max. Open-Circuit Voltage	Dimensions*	Net Weight*
PipeWorx FieldPro System (#951 547) Stick/TIG (#951 572) MIG/Flux-Cored (#951 573) RMD/Pulse PipeWorx FieldPro Power Source only (#907 533) 230-575 V	Three-Phase	CC Mode: 10-350 A CV Mode: 10-44 V	350 A at 34 VDC	36.1	17.8	14.1	15.0	14.4	75 VDC	H: 17 in. (432 mm) W: 12 in. (305 mm) D: 22 in. (559 mm)	95 lb. (43.1 kg)
	Single-Phase	CC Mode: 10-350 A CV Mode: 10-44 V	300 A at 32 VDC	54.6	25.4	19.9	11.7	11.2			
Feeder only Model/Stock Number	Input Power	Input Welding Circuit Rating	Wire Feed Speed	Wire Diameter Capacity			Maximum Spool Size Capacity	Dimensions	Net Weight		
FieldPro Feeder (#301 058 001)	Operates on open-circuit voltage and arc voltage: 14-48 VDC/110 Max. OCV	425 A at 60% Duty Cycle	50-780 IPM (1.3-19.8 m/min.) dependent on arc voltage	Solid Wire .023-5/64 in. (0.6-2.0 mm) Flux-Cored .030-5/64 in. (0.8-2.0 mm)			12 in. (305 mm), 45 lb. (20 kg)	H: 21 in. (533 mm) W: 9 in. (229 mm) D: 15.5 in. (394 mm)	35 lb. (15.9 kg)		
FieldPro Smart Feeder (#300 935)	Operates on open-circuit voltage and arc voltage: 30-100 VDC	275 A at 60% Duty Cycle	50-500 IPM (1.3-12.7 m/min.) dependent on arc voltage	.035-.045 in. (0.9-1.1 mm)			12 in. (305 mm), 33 lb. (15 kg)	H: 21.5 in. (546 mm) W: 18 in. (457 mm) D: 13 in. (330 mm)	50 lb. (23 kg)		



CST™ 280 Racks See literature no. DC/18.82

Rugged enclosure provides simple means for protecting and transporting multiple welding power sources for construction, maintenance/repair and shipbuilding applications.



See page 78 for wireless remote controls.

CST 280 8-Pack Rack shown.

Light weight and small footprint for easy transportation. The low weight enables the use of elevators to move the rack.

All controls including power switch are located on front of machine for easy access.

Top cover protects machines from falling debris.

Lift eye simplifies crane or overhead lifting device transport.

Lift truck fork pockets.

One main disconnect box with branched fusing for each machine.

Common output ground connection (for same polarity use only).

Optional rack running gear available for moving the rack.

Heavy industrial **CC CV DC 3 Phase**

Processes

- Stick (SMAW)
- TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (Carbons – Paralleled CST 280s: 5/16 in.)

Most popular accessories



- 4-Pack Rack Running Gear #195 114
- 8-Pack Rack Running Gear #195 436

Model/Stock Number	Rack Capacity	Input Power to Rack	Amps Input at Rated Output, 50/60 Hz 220 V 230 V 400 V 440 V 460 V 575 V	KVA	KW	Dimensions	Net Weight
4-Pack Rack (#907 247) Tweco®-style (#907 245) Dinse-style	4 units	220-230/460-575 V, 50/60 Hz, 3-Phase. Note: CST 280s are factory-linked for 460-575 V.	137 134 79 72 70 57	58.4	40.8	H: 50.75 in. (1289 mm) 4-Pack W: 25.5 in. (648 mm)	355 lb. (161 kg)
8-Pack Rack (#907 365) Tweco®-style	8 units	Dinse units include one set of male connectors; Tweco units do not. See page 27 for information on CST 280.	274 268 158 145 140 114	116.8	81.6	8-Pack W: 46 in. (1168 mm) D: 26.5 in. (673 mm)	640 lb. (290 kg)
Empty Rack (#195 051)	4 units	–	–	–	–	Same as 4-Pack Rack	166 lb. (75 kg)

XMT® Racks See literature no. DC/18.81, DC/18.8 and DC/18.83

XMT Rack conveniently houses multiple power sources for multiple welders. This is an ideal system for onsite applications including construction and shipbuilding.



XMT 350 6-Pack Rack shown.



Except 350 VS rack. See page 78 for wireless remote controls.

Custom build your own rack by mix and matching XMT 304 CC/CV, 350 CC/CV, 350 VS, 350 MPa, 450 CC/CV and 450 MPa (Rack holds a maximum of four of the XMT 450 models.)

All racks with factory-equipped power sources include fuses to provide primary power line protection for each inverter power supply on 460 or 575 VAC. (XMT 304 and 350: 20-amp fuses, XMT 450: 30-amp fuses.)

Four-rack and six-rack models are available and come with **two lift eyes** for transportation and **rugged skids** for dragging or pushing.

Lift truck side and end pockets in base for forklift loading and worksite repositioning.

Rack roof panel and power source shelves are **fabricated from galvanized steel and painted** for added protection in harsh environments.

Liquid-tight strain reliefs designed to resist salt water, alcohol, oil, grease and common solvents are provided on both the welding power source and electrical junction box.

Isolated work terminal provides a connection point for common workpiece construction.

Meets IP23 which is more stringent than IP23S or IP23M ratings.

One connection allows up to six inverters to be connected with one primary power drop.

Heavy industrial **CC CV DC 3 Phase**

Processes

- MIG (GMAW)
- Pulsed MIG* (GMAW-P)
- Stick (SMAW)
- TIG and Lift-Arc™ TIG (GTAW)
- Flux-Cored (FCAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (Carbons – 304: 1/4 in., 350: 5/16 in. 450: 3/8 in.)

*With optional controls only – not available with XMT 350 VS model.

Most popular accessories

- SuitCase® Wire Feeders (pg 21)
- Remote Controls (pg 79)
- Rack Running Gear #195 114
- Fuse Kits
XMT 304/350 (20 A, 460/575 V)
4-Pk #220 766/ 6-Pk #220 765
XMT 304/350 (45 A, 208/230 V)
4-Pk #220 764/ 6-Pk #220 763
XMT 450 (30 A, 460/575 V)
4-Pk #220 767

Model	Stock Number with 4 Units	Stock Number with 6 Units	Input Power to Rack	Dimensions	Net Weight
XMT 304 CC/CV Rack	(#907 292) Dinse-style	(#907 291) Dinse-style	230/460 VAC, 60 Hz, 3-Phase (20 A fuses included)	H: 59.375 in. (1508 mm) W: 43 in. (1092 mm) D: 34.375 in. (873 mm)	4 Units 560 lb. (254 kg)
XMT 350 VS Rack	–	(#907 228) Tweco®-style	208–575 VAC, 50/60 Hz, 3-Phase (20 A fuses included)		6 Units 712 lb. (323 kg)
XMT 350 CC/CV Rack	(#907 231) Dinse-style (#907 407) Tweco®-style	(#907 232) Dinse-style (#907 406) Tweco®-style			4 Units 599 lb. (272 kg)
XMT 450 CC/CV Rack	(#907 607) with 1/2 in. Studs (#907 608) with 1/2 in. Studs	–	230/460 VAC, 60 Hz, 3-Phase (30 A fuses included) 575 VAC, 60 Hz, 3-Phase (30 A fuses included)		6 Units 759 lb. (344 kg)
Empty Rack	(#195 466) Can contain XMT 304 or 350 (6 units); XMT 450 (4 units).		(Order required fuse kit separately)		780 lb. (354 kg)
					279 lb. (127 kg)



Engine-Driven

For more detailed information, visit

MillerWelds.com/enginedriven



Product Guide

	Page	Class	Stick	MIG	Flux-Cored*	AC TIG	DC TIG	PAC**	CAC-A	Portability	Weldable Metals	Std. Generator Pwr. (Watts)	Welding Amperage Range	Engine Brand	Special Features	Typical Applications	
Gasoline	Blue Star® 145	45	●	●			●	●		Optional lift eye, running gear	Steel	4500	40-145 DC	Yamaha	Compact, portable	Maintenance, service trucks	
	Blue Star® 185	45	●	●			●	●				6000	55-185 DC				
	Bobcat™ 225	46	●	●	●	●	●	●	●	Lift eye, pickup mount, optional running gear, trailer	Steel, aluminum, stainless	11,000	70-150 AC 50-225 DC	Kohler	Cost-effective AC/DC Stick	Maintenance, farm/ranch, construction	
	Bobcat™ 3 Phase	46	●	●	●	●	●	●	●			11,000	50-200 AC 50-210 DC	Kohler	Backup power for pivot irrigation	Farm/ranch	
	Bobcat™ 250	46	●	●	●	●	●	●	●	3/16"		11,000 12,000 w/EFI	40-250 DC 40-275 DC w/EFI	Kohler	Most popular engine drive, AC/DC, optional EFI	Fab, maintenance, farm/ranch, construction	
	Trailblazer® 275	48	●	●	●	●	●	●	●	3/16"		12,000 11,000 w/LP	10-275 DC	Kohler	Long run times, quiet, Excel power	Fab, structural, maintenance, repair, piping	
	Trailblazer® 325	48	●	●	●	●	●	●	●	3/16"		12,000	10-325 DC	Kohler	Long run times, quiet, optional EFI and Excel power	Fab, structural, maintenance, repair, piping	
	Trailblazer® 302 Air Pak™	50	●	●	●	●	●	●	●	3/16"		13,000	10-225 AC 10-350 DC	Kohler	AC/DC, CC/CV, 31 CFM air, battery charge/jump start	Service/maintenance, construction	
Diesel	Bobcat™ 250 Diesel	46	●	●	●	●	●	●	●	Lift eye, optional running gear, trailer	Steel, aluminum, stainless	11,000	40-250 DC	Kubota	Contractor's choice, AC/DC Stick, strong FCAW	Fab, maintenance, farm, construction	
	Trailblazer® 325 Diesel	48	●	●	●	●	●	●	●	3/16"		12,000	10-325 DC	Kubota	Smoothest, most stable arc in industry	Fab, structural, maintenance, repair, piping	
	Big Blue® 300 Pro	50	●	●	●	●	●	●	●	Lift eye, pickup mount, optional trailer	Steel, stainless	12,000	20-410 DC	CAT, Kubota, Mitsubishi	Low-speed engine, compact, quiet	Construction, rental, pipe	
	Big Blue® 350 PipePro®	51	●	●	●	●	●	●	●	1/4"		12,000	20-400 DC	CAT, Mitsubishi	Premium pipe arc	Pipe, structural	
	Big Blue® 400 Pro	51	●	●	●	●	●	●	●	3/16"		12,000	20-400 DC	CAT, Kubota Mitsubishi	Quiet, compact, powerful, fuel efficient	Construction, rental, pipe	
	Big Blue® 450 Duo CST™	52	●	●			●	●	●	1/4"		12,000	5-450 DC	Mitsubishi	Multiprocess engine drive	Construction, fab, pipe	
	Big Blue® 400	52	●	●	●	●	●	●	●	5/16"	Lift eye, generally mounted on optional trailer	Steel, stainless	5500	15-500 DC	Deutz, Perkins	Engine and process choice	Repair, construction, rental
	Big Blue® 500	52	●	●	●	●	●	●	●	3/8"		5500	20-600 DC	Deutz	Engine and process choice	Repair, construction, rental	
	Big Blue® 700 Duo Pro	52	●	●	●	●	●	●	●	3/8"		32,000	20-800 DC	Deutz	Multiprocess engine drive	Pipe, structural, rental	
	Big Blue® Turbo	53	●	●	●	●	●	●	●	1/2"		5500	20-750 DC	Deutz	Turbo for high altitude	Construction, mining	
Big Blue® Air Pak™	53	●	●	●	●	●	●	●	1/2"			5500	20-750 DC	Deutz	60 CFM air, AC on Deluxe model	Repair, mining, railroad	

EFI advantages (vs. carburetor models)

- Up to 27% better fuel efficiency
- Extended runtimes up to 27%
- Fast, easy starts in all climates
- Reliable operation, even with infrequent use
- Fewer emissions – 27% less CO and 33% lower HC+NOx levels

Gasoline advantages (vs. diesel)

- Lower product cost (by 50 to 70%)
- Smaller size and less weight
- Less expensive repairs
- Easier cold weather starting

Diesel advantages (vs. gas)

- 1-1/2 to 2-1/2 times the engine life
- Required on some jobsites for safety
- Typically have longer maintenance intervals
- Convenient if other equipment is diesel

PRODUCT KEY

CLASS: ● Light Industrial ● Industrial ● Heavy Industrial CAPABILITY: ● Designed for this process ● Capable of this process
 New! or Improved! products appear in blue type. *If using self-shielded wire, use CV weld output. **With appropriate Spectrum plasma cutter.



Blue Star® 145 and 185 See literature no. ED/2.5

Reliable outdoor portable power! Great for farm, ranch, maintenance, construction and hobbyist.



Blue Star 185 shown.

Compact and portable, its small footprint uses little truck space. Optional running gear also makes the Blue Star one-man portable.

Stick and TIG capable.

Accu-Rated™ peak generator power is usable for maximum generator loads such as plasma cutting, Millermatic® MIG welders and motor starting.

Includes electric start, 120 VAC GFCI and 240 VAC receptacles, five-gallon fuel capacity, auto-idle and engine hour meter.

Light industrial ● **CC DC**

Processes

- Stick (SMAW) • TIG (GTAW)
- Air Plasma Cutting and Gouging

Gasoline engines

145 – Yamaha MZ300:

9.1 HP at 3600 RPM

185 – Yamaha MZ360:

10.2 HP at 3600 RPM

One-cylinder, four-cycle, OHV, air-cooled

Note: Engines are warranted separately by engine manufacturer.

Most popular accessories

- No. 38 Running Gear (pg 74)
- Protective Cover (pg 74)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Gasoline	Model	Stock Number	Welding Process	Amperage Range	Rated Output at 104° F (40° C)	Single-Phase Generator Power at 104° F (40° C)	Dimensions	Net Weight
	Blue Star 145	(#907 590) Yamaha	DC Stick/TIG	40 - 145	145 A at 25 V, 20% Duty Cycle 100 A at 25 V, 60% Duty Cycle	Peak: 4500 watts, Continuous: 4000 watts	H: 22.75 in. (578 mm) W: 22.75 in. (578 mm) D: 31.625 in. (803 mm)	309 lb. (140 kg)
Blue Star 185	(#907 591) Yamaha	DC Stick/TIG	55 - 185	185 A at 25 V, 20% Duty Cycle 130 A at 25 V, 60% Duty Cycle	Peak: 6000 watts, Continuous: 5500 watts		315 lb. (143 kg)	

Bobcat™/Trailblazer®: Which is right for you?

Gas Model Comparison

Bobcat™ (page 46)



The most popular welder/generator:

- Cost-effective price point
- Good for Stick and Flux-Cored welding
- Standalone generator power
- Rugged and powerful performance

Trailblazer® (page 48)



The best performer in the industry:

- Professional welder's choice
- Independent weld and generator power
- Exceptional fuel efficiency and quiet operation
- Unbeatable arc performance

	Bobcat 225	UPGRADE	Bobcat 250	UPGRADE	Trailblazer 275	UPGRADE	Trailblazer 325
Sound Levels (at 23 feet)							
At Maximum Load/At 150 Amps	73.5 dB/72 dB	➔	72.5 dB/72 dB	➔	73.5 dB/65 dB	➔	73.5 dB/65 dB
Compared to Previous Model	up to 25 percent less noise	➔	up to 33 percent less noise	➔	up to 68 percent less noise	➔	up to 68 percent less noise
Sound Quality	Good	➔	Very Good	➔	Excellent	➔	Excellent
Fuel System							
Typical Runtime per 12 Gal. Tank	13 hours	➔	13/15.5 hours with EFI	➔	Up to 19.5 hours with options	➔	Up to 19.5 hours with options
Efficient	Good	➔	Good/Very Good with EFI	➔	Excellent	➔	Excellent
Type	Gasoline	➔	Gasoline or LP	➔	Gasoline or LP	➔	Gasoline
Delivery	Carburetor	➔	Carburetor or EFI available	➔	Carburetor	➔	Carburetor or EFI available
Generator							
Watts	11,000	➔	11,000/12,000 with EFI	➔	12,000/11,000 with LP	➔	12,000
Clean Power Quality	Very Good/Excellent	➔	Very Good/Excellent	➔	Excellent	➔	Excellent
Power While Welding	Fair/Good With voltage control set near maximum	➔	Good Easier to fine-tune with arc voltage control near maximum	➔	Smart-Cor™ delivers excellent independent weld and generator power with no interaction between tools and welding arc	➔	Smart-Cor™ delivers excellent independent weld and generator power with no interaction between tools and welding arc
Excel™ Power Generator (120 V, 60 Hz at all Engine Speeds)	N/A	➔	N/A	➔	Excel™ Power available	➔	Excel™ Power available
Weld Performance							
Stick	Good/Very Good	➔	Very Good	➔	Excellent	➔	Excellent
MIG – Wire (Solid/FCAW), Steel	Fair (.035 in.)	➔	Good (.035–1/16 in.)	➔	Excellent (.023–1/16 in.)	➔	Excellent (.023–5/64 in.)
MIG – Wire, Aluminum w/Spool Gun	Fair/Good (add WC-115A with Contactor)	➔	Very Good (add WC-115A with Contactor)	➔	Excellent (add WC-24)	➔	Excellent (add WC-24)
DC TIG (Steel)	Good	➔	Very Good	➔	Excellent	➔	Excellent
Pulsed DC TIG (Thin Metal, Out of Position)	N/A	➔	N/A	➔	Yes	➔	Yes
AC Weld	70–150 amps (TIG: add HF-251D-1 and Contactor Kit)	➔	40–250 amps (TIG: add HF-251D-1 and Contactor Kit)	➔	Add Dynasty®	➔	Add Dynasty®
Carbon Arc Gouging	N/A	➔	Good/Very Good Carbons: Rated 3/16 in.	➔	Very Good Carbons: Rated 3/16 in.	➔	Very Good, Carbons: Rated 3/16 in., Capable 1/4 in.
Key Features							
Digital Meters with SunVision™	N/A	➔	N/A	➔	Yes	➔	Yes
Maintenance Displays	Hours/Oil Change	➔	Hours/Oil Change/Fuel	➔	Hours/Oil Change/Fuel/RPMs	➔	Hours/Oil Change/Fuel/RPMs
Battery Charge/Jump Start	N/A	➔	N/A	➔	N/A	➔	12/24-Volt available
14-pin Receptacle	N/A	➔	N/A	➔	Yes	➔	Yes



Engine-Driven

Bobcat™ Series

Gas, LP and Diesel

The most popular welder/generators in the industry are better than ever. Building on their exceptional value, the redesigned Bobcats are:

- Quieter to operate
- Smaller and lighter
- More fuel efficient with EFI
- Easier to maintain

Our Bobcat engine-driven welder/generators have been the top-selling in their class because they are engineered to be reliable, powerful and durable from the start.



Bobcat 225

Bobcat 3 Phase

Bobcat 250 EFI



Improvements (compared to previous model)



Quieter and better sound. Gas models deliver significant improvements in sound level and quality for better jobsite communication and a safer, more efficient working environment. By rotating the engine toward the front we created a more efficient airflow, resulting in significantly quieter operation. Now you can start jobs earlier, end later, and work around noise-sensitive areas.



Smaller and lighter design. Bobcat welder/generators take up less space on trucks and trailers—leaving more room for other equipment and tools. Plus, they're easier to move around jobsites—even with weld cables and running gear attached. Five inches shorter and up to 55 pounds lighter with gas models. Seven inches shorter and over 60 pounds lighter with the new diesel model.

Easier maintenance. Easy-to-read front panel maintenance displays show when your equipment needs to be serviced. With the intuitive design, the daily maintenance is fast and easy:

- Oil checks from the top by the front panel
- Toolless panels that allow for quick access
- Single-side fuel fill and oil drain/filter

Additional features



Optional Electronic Fuel Injection (EFI). Available on the Bobcat 250 gas model only. Use up to 27 percent less fuel, saving money and improving your bottom line. See page 47 for details.



Smooth power. Better power means better performance. Our Bobcat welder/generators have smoother power—not the spiked power found with other brands—because of:

- Revolutionary ten-degree skewed-rotor design
- Optimized generator performance

Accu-Rated™—not inflated generator power. Our Accu-Rated peak power is usable for maximum generator loads, including plasma cutters, wire welders and motor starting. It also beats the competition's very short-duration peak or surge power. Accu-Rated power delivers:

- 11,000 watts (12,000 on Bobcat 250 with EFI) of *usable* peak power
- Peak power delivered for a minimum of 30 seconds

Large 12-gallon fuel capacity means many hours of run time before refueling.

Versatile AC and DC weld output provides quality welds on all types of metals. DC is smooth and easy to run while AC Stick is used when arc blow occurs.

Maintenance displays show engine hours and hours left before an oil change is due.

Heavy-duty construction. All internal components are designed to handle the harshest environments and will run better and last longer.



Scan this tag to hear more about the redesigned Bobcat gas models.



Industrial CC CV AC DC

Processes

- AC/DC Stick (SMAW)
- MIG (GMAW)¹
- Flux-Cored (FCAW)¹
- AC²/DC TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A)³ (rated 3/16-in. carbons)

¹With voltage-sensing feeder only.

²With Dynasty® 200 Series or HF-251 (non-critical).

³Bobcat 250/250 Diesel models only.

Engines

Gas – Kohler CH730:

23.5 HP at 3600 RPM

EFI Gas – Kohler ECH730:

23 HP at 3600 RPM

LP – Kohler CH730:

Liquid withdrawal LP system

21 HP at 3600 RPM

V-twin-cylinder, four-cycle, overhead valve, industrial, air-cooled

EPA Tier 4 compliant!

Diesel – Kubota D722:

19 HP at 3600 RPM

Three-cylinder, industrial, liquid-cooled

Note: Engines are warranted separately by engine manufacturer.

Most popular accessories

- SuitCase® X-TREME™ Wire Feeders (pg 21)
- Dynasty® 200 Series (pg 30)
- Spectrum® 625 X-TREME™ (pg 56)
- Multi-Terrain Running Gear (pg 74)
- Off-Road Running Gear (pg 74)
- Protective Cage with Cable Holders (pg 74)
- Hose and LP Tank Mounting Assembly (pg 74)
- Remote Oil Drain/Filter Kits (pg 74)
- All-Purpose Running Gear (pg 74)
- Adapter Cord, Full KVA #300 517 (pg 74)
- Protective Cover (pg 74)
- HWY-1000 Trailer #195 013 (pg 75)
- GFCI Panel Mount 120 VAC Duplex Kit #300 975
- Spark Arrestor Kit (gas models only) #300 924

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Bobcat™ 225 (Gas) See literature no. ED/4.4

Cost-effective, multiprocess machine primarily used for Stick welding. Great for farm, ranch, maintenance/repair operations and as a stand-alone generator.

Bobcat™ 3 Phase (Gas) See literature no. ED/4.33

Designed for farm and ranch owners in need of single- and three-phase power to run 480 V three-phase pivot irrigation systems or to provide backup power for home, farm and ranch.

Most Popular! Bobcat™ 250 (Gas, Diesel or LP) See literature no. ED/4.4 and ED/4.34

Rugged multipurpose engine drives are ideal for mobile maintenance trucks where reduced size and weight are essential. They are great for Stick and Flux-Cored welding, add Carbon Arc gouging, and are designed to handle maintenance/repair, construction, farm/ranch, and generator use.

Front panel fuel gauge provides convenient fuel level indication.

Smoother weld output and better generator power while welding.

More weld output than 225-amp welder generators for more versatility. 72 percent more power for MIG/FCAW, 67 percent more for AC welding, and 11 percent more for DC Stick.



Bobcat 250 recommended option (gas model)

Electronic fuel injection (EFI).

EFI gas engines optimize the air/fuel ratio for all engine speeds and engine loads, resulting in lower operational costs, fewer emissions, longer runtimes and better performance when compared to carbureted models. The payback from fuel savings alone is a matter of months.



EFI advantages (vs. carburetor models):

- 12,000 watts of generator power
- Up to 27% better fuel efficiency
- Extended runtimes up to 27%
- Fast, easy starts in all climates
- Reliable operation, even with infrequent use
- Fewer emissions – 27% less CO and 33% lower HC+NOx levels

See gas engine drive comparison chart on page 45. *Additional models are available – visit MillerWelds.com or your distributor.

	Model	Stock Number*	Welding Mode	Process	Amp/Volt Ranges	Rated Output at 104° F (40° C)	Generator Power at 104° F (40° C)	Dimensions	Net Weight
Gasoline/LP	Bobcat 225	(#907 498-001) Kohler (#907 498) Kohler with GFCI	CC/AC	Stick/TIG	70–150 A	150 A at 25 V, 100% Duty Cycle	Single-Phase Peak: 11,000 watts Continuous: 9500 watts	H: 28 in. (711 mm) H: 32.75 in. (832 mm) to top of exhaust W: 20 in. (508 mm) D: 40.5 in. (1029 mm)	485 lb. (220 kg)
			CC/DC	Stick/TIG	50–225 A	225 A at 25 V, 100% Duty Cycle			
			CV/DC	MIG/FCAW	19–28 V	200 A at 20 V, 100% Duty Cycle			
	Bobcat 3 Phase	(#907 505) Kohler with GFCI	CC/AC	Stick/TIG	50–200 A	200 A at 25 V, 100% Duty Cycle	Single-Phase/Three-Phase Peak: 11,000 watts Continuous: 9500 watts/10,000 watts		
			CC/DC	Stick/TIG	50–210 A	210 A at 25 V, 100% Duty Cycle			
			CV/DC	MIG/FCAW	19–28 V	200 A at 20 V, 100% Duty Cycle			
Bobcat 250	(#907 500-001) Kohler (#907 500) Kohler with GFCI (#907 502) EFI Kohler (#907 504) LP Kohler with GFCI (order Hose and LP Tank Mounting Assembly #300 917 separately)	CC/AC	Stick/TIG	40–250 A 40–275 A w/EFI	250 A at 25 V, 60% Duty Cycle 225 A at 25 V, 100% Duty Cycle	Single-Phase Peak: 11,000 watts Continuous: 9500 watts EFI Model Peak: 12,000 watts Continuous: 10,500 watts	H: 28 in. (711 mm) H: 32.75 in. (832 mm) to top of exhaust W: 20 in. (508 mm) D: 40.5 in. (1029 mm)	501 lb. (227 kg)	
		CC/DC	Stick/TIG	40–250 A 40–275 A w/EFI	250 A at 25 V, 100% Duty Cycle				
		CV/DC	MIG/FCAW	17–28 V	275 A at 25 V, 60% Duty Cycle 250 A at 25 V, 100% Duty Cycle				
Diesel	Bobcat 250 Diesel	(#907 565-001) Kubota (#907 565) Kubota with GFCI	CC/AC	Stick/TIG	40–275 A	250 A at 25 V, 100% Duty Cycle	Single-Phase Peak: 11,000 watts Continuous: 9500 watts	H: 28 in. (711 mm) H: 32.375 in. (873 mm) to top of exhaust W: 20 in. (508 mm) D: 45.375 in. (1153 mm)	638 lb. (289 kg)
			CC/DC	Stick/TIG	40–275 A	250 A at 25 V, 100% Duty Cycle			
			CV/DC	MIG/FCAW	17–28 V	275 A at 25 V, 60% Duty Cycle 250 A at 28 V, 100% Duty Cycle			



Engine-Driven

Trailblazer® Series

Gas, LP and Diesel

See lit. no. ED/4.75 and ED/4.8

Designed for the professional welder, our Trailblazer welder/generators are better than ever. Building on their outstanding performance, the redesigned Trailblazers are:

- More fuel efficient
- Quieter to operate
- Smaller and lighter
- Easier to maintain



See page 78 for wireless remote controls.



Trailblazer 275 EFI

Trailblazer 325 EFI

Trailblazer 325 Diesel



Our Trailblazer welder/generators deliver unbeatable arc performance, the smoothest, most stable arc in the industry and an independent welder and generator power system.

Improvements (compared to previous model)



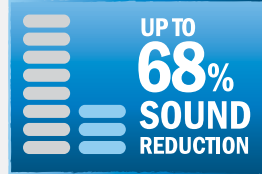
Longer runtimes. Stop less for refueling and get more work done. Gas models equipped with EFI and Excel power can run up to 50 percent longer. The new diesel model equipped with Excel power can run up to 55 percent longer.



More fuel efficient. Save money and improve your bottom line. Gas models equipped with EFI and Excel power can use up to 35 percent less fuel. The new diesel model equipped with Excel power uses up to 25 percent less fuel.

More user friendly. Easy-to-read front panel maintenance displays show when your equipment needs to be serviced. With the intuitive design, the daily maintenance is faster and easier:

- Oil checks from the top by the front panel
- Sunvision™ technology that provides easy-to-read digital meter
- Toolless panels that allow for quick access
- Single-side fuel fill and oil drain/filter



Quieter and better sound. Redesigned engine/generator packaging plus advanced generator technologies mean less sound output – so you can work earlier, later, and around noise-sensitive areas. Up to 68 percent quieter with gas models and up to 40 percent quieter with the new diesel model.



Smaller and lighter design. Size-reducing, weight-reducing Smart-Cor™ technology and a new internal design mean a lighter Trailblazer that takes up less space. Five inches shorter and up to 108 pounds lighter with gas models and seven inches shorter and up to 80 pounds lighter with the new diesel model.

Arc performance

- Three Stick modes – EXX18, EXX10, and Gouge
- Two Wire modes – Solid and Flux-Core
- Three Lift-Arc™ TIG modes – Auto-Stop™, Auto-Crater™, and Pulse

Additional features

Self-calibrating digital weld meters with maintenance displays

- Preset and actual weld amperage/voltage
- Process settings
- Fuel gauge
- Hour meter function and oil change interval
- Engine speed (RPM)

Accu-Rated™ – not inflated generator power.

Our Accu-Rated peak power is usable for maximum generator loads, including plasma cutters, wire welders and motor starting. It also beats the competition's very short-duration peak or surge power. Accu-Rated power delivers:

- 12,000 watts of *usable* peak power
- Peak power delivered for a minimum of 30 seconds

Large 12-gallon fuel capacity means many hours of run time before refueling.

Heavy-duty construction. All internal components are designed to handle the harshest environments and will run better and last longer.



Scan this tag to hear more about the redesigned Trailblazer gas models.



Exclusive, game-changing technology

Our Trailblazer welder/generators include innovative technologies designed with the professional welder in mind. These Miller® exclusives deliver superior runtimes, increased fuel efficiency, and improved welder and generator performance.

Base model exclusive technologies

Smart-Cor™ technology.

Independent weld and generator power in an improved, more compact design. Benefits it provides:

- No interaction between jobsite tools and the welding arc
- Stronger, cleaner, more efficient generator power
- Reduced size and weight
- Improved arc performance

Auto-Speed™ technology.

Automatically adjusts the engine speed to run at lower speeds depending on the total power needed. Benefits it provides:

- Exceptional fuel efficiency
- Extended runtimes
- Quieter operation
- Reduced emissions

Innovative design.

Engine is rotated to the front to create more efficient airflow. Benefits it provides:

- Quieter operation
- Reduced size and weight
- Easier maintenance

Add the following options to maximize your Trailblazer's performance.

Option	325 Option (gas model)	325 Option (gas model)
Excel™ power. Improves generator performance by providing 120-volt, 60 hertz of pure sine wave generator power at idle speed and while welding. When connected to the Excel power receptacle, you get up to 2400 watts of the cleanest generator power available. Plus you can run most jobsite tools – like lights, drills, grinders and chop saws—at idle speed, which provides: <ul style="list-style-type: none"> • Exceptional fuel efficiency • Extended runtimes • Quieter operation • Longer engine life 		Battery charge/jump start. Reduce downtime with battery charge/jump start capability. Designed and recommended for mechanics or anyone else responsible for a fleet of trucks or equipment. By using your Trailblazer to charge dead batteries or jump a stubborn engine, you'll keep your crew working and the fleet up and running.
	Electronic fuel injection (EFI). EFI maximizes performance by optimizing the air/fuel ratio for all engine speeds and loads. Choose EFI for: <ul style="list-style-type: none"> • Up to 27% better fuel economy • Extended runtimes up to 27% • Fast, easy starts in all climates • Reliable operation, even with infrequent use • Fewer emissions – 27% less CO and 33% lower HC+NOx levels 	

See gas engine drive comparison chart on page 45.

*Additional models are available – visit MillerWelds.com or your distributor. **Battery charge/jump cables (#300 422) must be ordered separately.

Heavy industrial

Processes

- Stick (SMAW)
- MIG (GMAW)¹
- Flux-Cored (FCAW)¹
- DC TIG/Pulsed TIG (GTAW/GTAW-P)²
- Air Carbon Arc Cutting and Gouging (CAC-A) (rated 3/16-in. carbons, capable 1/4-in. carbons)³

¹With wire feeder.

²Two-piece TIG torch recommended.

³Trailblazer 325 model only.

Engines

Gas – Kohler CH730:

23.5 HP at 3600 RPM

EFI Gas – Kohler ECH730:

23 HP at 3600 RPM

LP – Kohler CH730:

Liquid withdrawal LP system

21 HP at 3600 RPM

V-twin-cylinder, four-cycle, overhead valve, industrial, air-cooled

EPA Tier 4 compliant!

Diesel – Kubota D902:

24.8 HP at 3600 RPM

Three-cylinder, industrial, liquid-cooled

Note: Engines are warranted separately by engine manufacturer.

Most popular accessories

- SuitCase® X-TREME™ 12VS Wire Feeder (pg 21)
- Spoolmatic® 30A Aluminum Spool Gun / WC-24 Control #130 831 / #137 549 (pg 22)
- Dynasty® Series (pg 30)
- Spectrum® 625 X-TREME™ (pg 56)
- Multi-Terrain Running Gear (pg 74)
- Off-Road Running Gear (pg 74)
- Protective Cage with Cable Holders (pg 74)
- Hose and LP Tank Mounting Assembly (pg 74)
- All-Purpose Running Gear (pg 74)
- Adapter Cord, Full KVA #300 517 (pg 74)
- Protective Cover (pg 74)
- HWY-1000 Trailer #195 013 (pg 75)
- 25-ft. Battery Charge/Jump Cables with Plug #300 422

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

	Model	Stock Number*	Welding Mode	Process	Amp/Volt Ranges	Rated Output at 104° F (40° C)	Single-Phase Generator Power at 104° F (40° C)	Dimensions	Net Weight
Gasoline/LP	Trailblazer 275	(#907 506-001) Kohler (#907 506) Kohler with GFCI (#907 509) LP Kohler with GFCI (#907 509-001) LP Kohler with Excel Power <i>(order Hose and LP Tank Mounting Assembly #300 917 separately)</i>	CC/DC	Stick/TIG	10-275 A	275 A at 28 V, 100% Duty Cycle	Peak: 12,000 watts 11,000 watts (LP) Continuous: 10,500 watts 9500 watts (LP)	H: 28 in. (711 mm) H: 32.75 in. (832 mm) to top of exhaust W: 20 in. (508 mm) D: 40.5 in. (1029 mm)	459 lb. (208 kg)
			CV/DC	MIG/FCAW	10-35 V	275 A at 28 V, 100% Duty Cycle			
	Trailblazer 325	(#907 510-001) Kohler (#907 510) Kohler with GFCI (#907 510-002) Kohler w/Electric Fuel Pump (#907 510-003) Kohler with Excel Power (#907 512) EFI Kohler (#907 512-001) EFI Kohler with Excel Power (#907 512-002**) EFI Kohler with Excel Power and Battery Charge/Jump Start	CC/DC	Stick/TIG	10-325 A	325 A at 28 V, 100% Duty Cycle	Excel Power (optional) 2400 watts 20 A at 120 V, 60 Hz pure generator power at idle speed and while welding	H: 28 in. (711 mm) H: 32.75 in. (832 mm) to top of exhaust W: 20 in. (508 mm) D: 40.5 in. (1029 mm)	460 lb. (209 kg)
			CV/DC	MIG/FCAW	10-35 V	325 A at 28 V, 100% Duty Cycle			
Diesel	Trailblazer 325 Diesel	(#907 566-001) Kubota (#907 566) Kubota with GFCI (#907 566-002) Kubota with Excel Power	CC/DC	Stick/TIG	10-325 A	325 A at 33 V, 100% Duty Cycle		H: 28 in. (711 mm) H: 34.375 in. (873 mm) to top of exhaust W: 20 in. (508 mm) D: 45.375 in. (1153 mm)	620 lb. (281 kg)
			CV/DC	MIG/FCAW	10-35 V	325 A at 33 V, 100% Duty Cycle			



Engine-Driven

Trailblazer® 302 Air Pak™ See literature no. ED/4.78

Powerful all-in-one tool designed for repair and construction with multiprocess weld quality, generator power, air compressor and battery charge/jump start.



Superior arc performance. Preset dig settings optimized for the majority of Stick welding applications, best-in-class Wire arc performance, and two Lift-Arc™ TIG modes for most DC TIG applications.

Strongest combined generator/compressor power. Delivers an industry-leading 13,000 watts of peak generator power independent of weld settings – can power a Spectrum® 875 plasma cutter, and provide air for plasma cutting at the same time (rated 5/8-inch mild steel).

Rotary screw air compressor. Delivers up to 31 CFM and 160 PSI of air with no storage tank. Gives 100 percent deliverable air and runs many tools at idle speed. Air outputs are rated at an industry-high 104 degrees Fahrenheit (40° C). Front panel air pressure adjustment and automatic overpressure shutdown with indication. Designed for more than 30,000 hours of operation and warranted for three years by Miller.

Battery charge/jump start. Provides selectable 12- or 24-volt battery charging capability with up to 450 amps of battery jump-starting capability. Convenient front panel battery charger/jump starter access.



See page 78 for wireless remote controls.

*Battery charge/jump cables (#300 422) must be ordered separately.

Heavy industrial ● CC CV AC/DC

Processes

- AC/DC Stick (SMAW)
- MIG (GMAW)¹ ▪ Flux-Cored (FCAW)¹
- AC²/DC³ TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (rated 3/16-in. carbons, capable 1/4-in. carbons)
- Battery Charger/Jump Start

¹With wire feeder.

²With Dynasty® 200 Series or HF-251 (non-critical).

³Two-piece TIG torch recommended.

Gasoline engine

Kohler CH750: 27 HP at 3600 RPM V-twin-cylinder, four-cycle, overhead valve, industrial, air-cooled

Note: Engine is warranted separately by engine manufacturer.

Most popular accessories

- SuitCase® X-TREME™ 12VS (pg 21)
- Spoolmatic®/WC-24 Control (pg 22)
- 25-ft. Battery Charge/Jump Cables with Plug #300 422

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Gasoline	Stock Number		Welding Mode	Process	Amp/Volt Ranges	Rated Weld Output at 104° F (40° C)	Single-Phase Generator Power at 104° F (40° C)	Dimensions	Net Weight
	#907 549-001*		CC/DC	Stick/TIG	10–300 A	280 A at 32 V, 100% Duty Cycle	Peak: 13,000 watts Continuous: 11,000 watts	H: 28 in. (711 mm) H: 34.5 in. (876 mm) to top of exhaust W: 20 in. (508 mm) D: 59.625 in. (1514 mm)	771 lb. (350 kg)
	#907 549*		CV/DC	MIG/FCAW	13–35 V, 350 A	300 A at 32 V, 100% Duty Cycle 350 A at 32 V, 60% Duty Cycle			
	#907 549-003*		CC/AC	TIG/Stick	10–225 A	200 A at 25 V, 60% Duty Cycle			
Air Compressor	Features	Free Air Delivery at 3600 RPM	Free Air Delivery at 3000 RPM	Free Air Delivery at 2400 RPM (Idle)	Working Pressure Constant	Duty Cycle	Oil Capacity		
By Miller	Rotary screw with electric clutch for on/off. Oil change intervals 500 hours.	31 CFM (0.88 m ³ /min.)	28 CFM (0.79 m ³ /min.)	22 CFM (0.62 m ³ /min.)	80–160 PSIG	100%	1.75 qt. (1.7 L)		

Big Blue® 300 Pro See literature no. ED/5.21

Reliable low-speed diesel with outstanding arc performance. Ideal for construction, fabrication or process piping professionals.



Meter maintenance displays

- Fuel gauge, hour meter function and oil change interval
- High coolant temperature and low oil pressure shutdowns
- Low fuel shutdown – engine shuts down before system runs out of fuel making restarts easy

The Vault – ultimate control board reliability.

Housed in a sealed vault, sealed connections are made through watertight plugs that make these components impenetrable to dust and moisture.



Tailored arc control (DIG) allows arc characteristics to be changed for specific applications and electrodes. Smooth running 7018 or stiffer, more penetrating 6010.

Quiet. Only 72.2 decibels (97 Lwa) at maximum output. Improves jobsite communication and safety.

Compact design fits sideways in a standard pickup.

Optional stainless steel package available.

CSA, IEC and NEMA compliant.



See page 78. Wireless Antenna Kit (#300 749) recommended.

Heavy industrial ● CC CV DC

Processes

- Stick (SMAW) ▪ MIG (GMAW)
- Flux-Cored (FCAW) ▪ TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (rated 3/16-in. carbons, capable 1/4-in. carbons)

Diesel engines

EPA Tier 4 compliant choices

CAT C1.5: 21.7 HP at 1800 RPM

Three-cylinder, industrial, liquid-cooled

Kubota V1505: 20.2 HP at 1800 RPM

Four-cylinder, industrial, liquid-cooled

Mitsubishi S4L2: 24.7 HP at 1800 RPM

Four-cylinder, industrial, liquid-cooled

Note: Engines are warranted separately by engine manufacturer.

Most popular accessories

- SuitCase® Feeders (pg 21)
- Dynasty® 200 Series (pg 30)
- Spectrum® 875 (pg 56)
- Single-Phase Full KVA Plug Kit (pg 74)
- HWY-224 Trailer #043 805 (pg 75)
- PRHC-14 Remote #195 511 (pg 78)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Diesel	Stock Number		Welding Mode	Amp/Volt Ranges	Rated Output at 104° F (40° C)	Single-Phase Generator Power at 104° F (40° C)	Dimensions	Net Weight
	#907 144) CAT		CC/DC	20–410 A	300 A at 32 V, 60% Duty Cycle	Peak: 12,000 watts Continuous: 10,000 watts	H: 32 in. (813 mm) W: 26.25 in. (667 mm) D: 56 in. (1422 mm)	Caterpillar 1100 lb. (499 kg) Kubota 1040 lb. (472 kg) Mitsubishi 1083 lb. (491 kg)
	#907 144-01-1) CAT with 120 V Block Heater							
#907 144-02-1) CAT with Stainless Steel/120 V Block Heater		CV/DC	14–40 V					
#907 521) Kubota with 120 V Block Heater								
#907 472) Mitsubishi								
#907 472-001) Mitsubishi with 120 V Block Heater								



Big Blue® 350 PipePro® System

Designed for transmission pipeline work, this system offers a complete welding solution. With Stick as well as MIG/FCAW welding capabilities it is ideal for the most demanding pipeline jobs.



See page 78.
Wireless Antenna Kit
(#300 749)
recommended.

System components (order items separately)

- Miller Big Blue 350 PipePro engine drive
- Miller SuitCase® X-TREME™ wire feeder (now both 8VS and 12VS have capabilities to meet PipePro system needs, see page 21 for specs)
- Bernard™ PipePro Dura-Flux™ gun
- Hobart Brothers Fabshield® 71T8/X80 wire
- Miller Wireless Remote Hand Control

Visit MillerWelds.com/pipepro for complete information and product spec sheets.

Miller® Big Blue 350 PipePro (see literature no. ED/5.4)

- Easy arc starts and better arc control provide improved arc performance to produce more consistent welds.
- The Vault – ultimate control board reliability. A sealed aluminum case protects the circuit board from dust, dirt, moisture and heat.
- Compact size and weight optimizes truck space.
- LINE-X® cover provides superior impact, corrosion and abrasion protection.
- Standard features include digital preset weld meters, output contactor control, automatic idle and 120-volt block heater.
- Enhanced MIG/FCAW arc control for best in class performance.
- Quieter – 70.7 db @ full output improves jobsite communication and safety.
- Auto Remote Sense™ (ARS) – eliminates confusion of a remote/panel switch.
- Optional stainless steel package available.
- EPA, CSA, IEC and NEMA compliant.

Heavy industrial

Processes

- Stick (SMAW) • MIG (GMAW)
- Flux-Cored (FCAW) • TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (rated 1/4-in. carbons)

Diesel engines

EPA Tier 4 compliant choices

- CAT C1.5T:** 24.7 HP at 1800 RPM
Turbo 3-cylinder, industrial, liquid-cooled
- Mitsubishi S4L2:** 24.7 HP at 1800 RPM
Four-cylinder, industrial, liquid-cooled

Note: Engines are warranted separately by engine manufacturer.

Big Blue 350 PipePro System (order items separately)

- Big Blue 350 PipePro engine drive
- SuitCase X-TREME feeder w/Bernard PipePro Dura-Flux gun
#951 593 8VS
#951 592 12VS
- Bernard PipePro Dura-Flux gun with 10-ft. (3 m) cable #301 011 (included with feeders above)
- Hobart Brothers Fabshield #S228519-P32 FS 71T8 1/16 in. #S228525-P32 FS 71T8 5/64 in. #S228825-P32 FS X80 5/64 in.
- Wireless Remote Hand Control/Wireless Antenna Kit #300 430 / #300 749 (pg 78)

Visit MillerWelds.com or your distributor for Miller® options and accessories.

Diesel	Model/Stock Number	Welding Mode	Process	Amp/Volt Ranges	Rated Output at 104° F (40° C)	Single-Phase Generator Power at 104° F (40° C)	Dimensions	Net Weight
		Big Blue 350 PipePro (Engine Drive only) (#907 478) CAT Turbo (#907 478-001) CAT Turbo w/Stainless Steel (#907 428) Mitsubishi (#907 428-001) Mitsubishi w/Stainless Steel	CC/DC	TIG	20–400 A	350 A at 24 V, 100% Duty Cycle 400 A at 26 V, 40% Duty Cycle	Peak: 12,000 watts Continuous: 10,000 watts	H: 32 in. (813 mm) W: 26.25 in. (667 mm) D: 56 in. (1422 mm)
		CV/DC	MIG/FCAW	14–40 V	325 A at 33 V, 100% Duty Cycle 350 A at 34 V, 60% Duty Cycle 350 A at 31.5 V, 100% Duty Cycle			

NEW! Big Blue® 400 Pro

See literature no. ED/5.7

Clean, quiet and reliable low-speed EPA-compliant diesel is more efficient than ever before. Ideal for construction, piping and fleet use.



See page 78. Wireless Antenna Kit
(#300 749) recommended.

400-amp output now available in a 300-amp package. Provides up to 400 amps at 100 percent duty cycle.

The Vault – ultimate control board reliability. Housed in a sealed vault, sealed connections are made through watertight plugs that make these components impenetrable to dust and moisture.

Tailored arc control (DIG) allows arc characteristics to be changed for specific applications and electrodes. Smooth running 7018 or stiffer, more penetrating 6010.

Quiet. Only 72.1 decibels (97 Lwa) at maximum output. Improves jobsite communication and safety.

CSA, IEC and NEMA compliant.

Standard features include digital weld meters, auto idle, 120-volt block heater and output contactor control.

Heavy industrial

Processes

- Stick (SMAW) • MIG (GMAW)
- Flux-Cored (FCAW) • TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (rated 3/16-in. carbons)

Diesel engines

EPA Tier 4 compliant choices

- CAT C1.5:** 21.7 HP at 1800 RPM
Three-cylinder, industrial, liquid-cooled
- Kubota V150S:** 20.2 HP at 1800 RPM
Four-cylinder, industrial, liquid-cooled
- Mitsubishi S4L2:** 24.7 HP at 1800 RPM
Four-cylinder, industrial, liquid-cooled

Note: Engines are warranted separately by engine manufacturer.

Most popular accessories

- SuitCase® Feeders (pg 21)
- Dynasty® 200 Series (pg 30)
- Spectrum® 875 (pg 56)
- HWY-224 Trailer #043 805 (pg 75)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Diesel	Stock Number	Welding Mode	Process	Amp/Volt Ranges	Rated Output at 104° F (40° C)	Single-Phase Generator Power at 104° F (40° C)	Dimensions	Net Weight
		(#907 604) CAT (#907 606) Kubota (#907 605) Mitsubishi	CC/DC	TIG	20–400 A	300 A at 32 V, 100% Duty Cycle 350 A at 27 V, 100% Duty Cycle 400 A at 24 V, 100% Duty Cycle	Peak: 12,000 watts Continuous: 10,000 watts	H: 32 in. (813 mm) W: 26.25 in. (667 mm) D: 56 in. (1422 mm)
		CV/DC	MIG/FCAW	14–40 V				



Engine-Driven

Big Blue® 400 and 500

See literature no. ED/10.8

Designed for fleet owners, construction contractors and rental companies who want a powerful diesel welder/generator and place a premium on rugged reliability with proven performance.



Big Blue 500 CC/CV Deluxe model shown.

Meter maintenance displays

- Fuel gauge, hour meter function and oil change interval
- High coolant temperature, low oil pressure and low fuel shutdowns

CC/CV models have the vault (see page 50 for details).

Designed and built with reliable, heavy-duty industrial components.

Hot Start™ and Arc-Drive™ enhance Stick welding.

Quick and easy maintenance with single-side engine access.

CSA, IEC and NEMA compliant.

*Additional models are available including CC only models without additional generator power—visit MillerWelds.com or your distributor.
**Includes auto idle, weld meters and optional generator power.

Heavy industrial ● CC CV DC

Processes

- Stick (SMAW) • MIG (GMAW)
- Flux-Cored (FCAW) • TIG (GTAW)
- Air Carbon Arc Gouging (CAC-A)

Diesel engines

EPA Tier 4 compliant choices

400 – Deutz D2011L03i:

32 HP at 1800 RPM
Three-cylinder, industrial, air/oil-cooled

400 – Perkins 404D-22:

32.6 HP at 1800 RPM
Four-cylinder, industrial, liquid-cooled

500 – Deutz D2011L04i:

48.6 HP at 1800 RPM
Four-cylinder, industrial, air/oil-cooled

Note: Engines are warranted separately by engine manufacturer.

Visit MillerWelds.com or your distributor for Miller® options and accessories.

Diesel	Model	Stock Number*	Process	Amp/Volt Ranges	Rated Output at 104° F (40° C)	Single-Phase Generator Power at 104° F (40° C)	Dimensions	Net Weight
	Big Blue 400 CC/CV Deluxe Model	(#907 327)** Deutz (#907 329)** Perkins	DC Stick/TIG/MIG/FCAW	15–500 A 14–40 V	400 A at 36 V (14.4 kW), 100% Duty Cycle	Peak: 5500 watts, Continuous: 4000 watts Additional Generator Power (While NOT Welding) 400: 3-Phase: 15,000 watts or 1-Phase: 12,000 watts 500: 3-Phase: 20,000 watts or 1-Phase: 12,000 watts	H: 43 in. (1092 mm) W: 28.5 in. (724 mm) D: 65.125 in. (1654 mm)	Deutz 1655 lb. (751 kg) Perkins 1545 lb. (701 kg)
Big Blue 500 CC/CV Deluxe Model	(#907 331)** Deutz	DC Stick/TIG/MIG/FCAW	20–600 A 14–40 V	500 A at 40 V (20 kW), 100% Duty Cycle			Deutz 1695 lb. (769 kg)	

Big Blue® 450 Duo CST™

See literature no. ED/5.5

Dual-operator welder/generator delivers proven CST 280 Stick/TIG performance maximizing productivity and efficiency. Fuel efficient and quiet operation makes it ideal for any jobsite.



See page 78. Wireless Antenna Kit recommended.

Two superior arcs in one compact package. See CST 280 (page 27) for additional details.

Save fuel, reduce maintenance costs and increase productivity.

Quiet operation. At 72.2 decibels at 23 feet (7 m) it's quieter than most single-operator models. Improves jobsite communication and safety.

Low-speed Mitsubishi diesel engine.

Heavy industrial ● CC CV DC

Processes

- Stick (SMAW) • TIG (GTAW)
- Air Carbon Arc Gouging (CAC-A)

Diesel engine

EPA Tier 4 compliant

Mitsubishi S4L2: 24.7 HP at 1800 RPM

Four-cylinder, industrial, liquid-cooled

Note: Engine is warranted separately by engine manufacturer.

Visit MillerWelds.com or your distributor for Miller® options and accessories.

Diesel	Stock Number (#907 477) Mitsubishi	Process	Output Mode	Amperage Range	Rated Output at 122° F (50° C)	Single-Phase Generator Power at 122° F (50° C)	Dimensions	Net Weight
	DC Stick/TIG	Separate (Dual Outputs)	5–280 A	200 A at 28 VDC, 100% Duty Cycle	Peak: 12,000 watts, Continuous: 10,000 watts 120/240 VAC, 60 Hz	H: 32 in. (813 mm) W: 26.25 in. (667 mm) D: 56 in. (1422 mm)	1064 lb. (483 kg)	
	Paralleled (Combined)	10–450 A	400 A at 28 VDC, 100% Duty Cycle					

Big Blue® 700 Duo Pro

See literature no. ED/5.6

Complete multiprocess and multioperator welder/generator in one rugged package. Up to 400 amps of output per operator can be paralleled with a single switch to provide up to 800 amps of power.



See page 78. Wireless Antenna Kit recommended.

Two independent pipe quality arcs in one compact package.

Multiprocess CC/CV provides independent operator controls with no interaction.

Easy arc starts and better arc control for best in class performance.

Independent remote control connections.

Quiet operation. At 76 decibels at 23 feet (7 m), it's quieter than many single-operator models. Improves jobsite communication and safety.

Compatible with Big Blue® 350 PipePro® System components (see page 51).

Standard features include oil pan heater, intake manifold heater, output paralleling switch and automatic idle.

Heavy industrial ● CC CV DC

Processes

- Stick (SMAW) • MIG (GMAW)
- Flux-Cored (FCAW) • TIG (GTAW)
- Air Carbon Arc Gouging (CAC-A)

Diesel engine

EPA Tier 4 compliant

Deutz D2011L04i: 48.6 HP at 1800 RPM

Four-cylinder, industrial, air/oil-cooled

Note: Engine is warranted separately by engine manufacturer.

Visit MillerWelds.com or your distributor for Miller® options and accessories.

Diesel	Stock Number (#907 461) Deutz	Process	Output Mode	Amp/Volt Ranges	Rated Output at 104° F (40° C)	Generator Power at 104° F (40° C)	Dimensions	Net Weight
	DC Stick/TIG/MIG/FCAW	Separate (Dual Outputs)	20–400 A 14–40 V	300 A at 32 VDC, 100% Duty Cycle 400 A at 36 VDC, 40% Duty Cycle	Single-Phase: 5500 watts peak/4000 watts continuous Additional Generator Power 3-Phase: 27,000 watts peak/20,000 watts continuous or 1-Phase: 19,000 watts peak/12,000 watts continuous	H: 43 in. (1092 mm) W: 28.5 in. (724 mm) D: 65.125 in. (1654 mm)	1729 lb. (784 kg)	
	Paralleled (Combined)	40–800 A 14–40 V	500 A at 40 VDC, 100% Duty Cycle 700 A at 28 VDC, 60% Duty Cycle					



Big Blue® Air Pak™ See literature no. ED/10.5

Designed for heavy construction or maintenance and repair contractors, this all-in-one multiprocess welder/generator/compressor and optional AC weld/battery charge/jump-start package sets the standard for power and performance.



Deluxe model shown without the vandalism lockout kit.

Meter maintenance displays

- Fuel gauge, hour meter function and oil change interval
- High coolant temperature, low oil pressure and low fuel shutdowns

Ingersoll Rand ultra-reliable industrial rotary screw air compressor.

Belt-driven with automatic belt tensioner.

Independent compressor controls include an on/off switch for applications not requiring compressed air.

Turbocharged engine provides superior performance in high altitudes.

Quiet. 70 decibels (95 Lwa) at idle and 79 decibels (104 Lwa) at maximum output.

Hot Start™ and **Arc-Drive™** enhance Stick welding.

Optional battery charge / jump start for 12- and 24-volt batteries.

Note: Option includes AC weld.

CSA, IEC and NEMA compliant.

Heavy industrial ● CC CV DC AC DC

Processes

- AC¹/DC Stick (SMAW)
- MIG (GMAW) ▪ Flux-Cored (FCAW)
- AC²/DC TIG (GTAW)
- Air Carbon Arc Gouging (CAC-A) (rated 1/2-in. carbons)
- Battery Charger/Jump Start¹

¹Deluxe model only.

²Deluxe model with HF-251, or all models with Dynasty® 200 Series.

Diesel engine

EPA Tier 4 compliant

Deutz TD2011L04:

63.4 HP at 1800 RPM

Turbo, 4-cylinder, industrial, liquid-cooled

Note: Engine is warranted separately by engine manufacturer.

Most popular accessories

- Desiccant Air Dry System #195 117



Eliminates moisture in the air stream and prevents air line freeze-ups in cold climates.

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

*Comes complete with engine gauges, auto idle and 12-volt intake manifold heater.
 **Cold Weather model – comes complete with engine gauges, auto idle, weld meters, battery lockout/tagout disconnect switch, 12-volt intake manifold heater and 120-volt oil pan heater.
 ***Deluxe model – comes complete with engine gauges, auto idle, weld meters, battery lockout/tagout disconnect switch, 12-volt intake manifold heater, 120-volt oil pan heater, vandalism lockout kit, AC/DC/battery charge/jump-start switch and optional generator power.

Diesel	Stock Number (#907 062)* Deutz (#907 062-04-1)** Deutz, Cold Weather Model (#907 062-07-1)*** Deutz, Deluxe Model	Welding Mode	Amp/Volt Ranges	Weld Output Rated at 104° F (40° C) NEMA Amperage and Voltage	Single-Phase Generator Power at 104° F (40° C)	Dimensions	Net Weight
		CC/DC	20-750 A	600 A at 44 V (26.4 kW), 40% Duty Cycle 550 A at 42 V (23.1 kW), 60% Duty Cycle 500 A at 40 V (20 kW), 100% Duty Cycle	Peak: 5500 watts Continuous: 4000 watts	H: 43 in. (1092 mm) W: 28.5 in. (724 mm) D: 69.5 in. (1765 mm)	Base and Cold Weather Models 1931 lb. (876 kg)
		CV/DC	14-40 V	500 A at 40 V (20 kW), 100% Duty Cycle	Additional Generator Power for Deluxe Model (While NOT Welding) Three-Phase: 20,000 watts or Single-Phase: 12,000 watts		Deluxe Model 1956 lb. (887 kg)
		CC/AC (Deluxe Model Only)	20-575 A	400 A at 36 V (14.4 kW), 100% Duty Cycle			
		Battery Charge / Jump Start (Deluxe Model Only)	12/24 V	750 A, 12 V, Jump-Start 750 A, 24 V, Jump-Start			
Air Compressor	Features	Free Air Delivery at 1850 RPM	Free Air Delivery at 1235 RPM (Idle)	Working Pressure Constant	Duty Cycle	Oil Capacity	Automatic Compressor Shutdowns
Ingersoll Rand CE55 G1	Rotary screw with electric clutch for on/off. Oil change intervals of 500 hours (same as engine). Life expectancy of 30,000 hours.	60 CFM (1.70 m ³ /min.)	40 CFM (1.13 m ³ /min.)	100 PSIG (7 bar)	100%	5 qt. (4.7 L)	Oil Temperature

Big Blue® Turbo See literature no. ED/10.3

Similar to the Big Blue Air Pak, but without the air compressor.



Meter maintenance displays

- Fuel gauge, hour meter function and oil change interval
- High coolant temperature, low oil pressure and low fuel shutdowns

Turbocharged engine provides superior performance in high altitudes.

High output rating. 20 to 750 amp range, 600 amps at 100 percent duty cycle!

Quiet. 70 decibels (95 Lwa) at idle and 79 decibels (104 Lwa) at maximum output.

Hot Start™ and **Arc-Drive™** enhance Stick welding.

CSA, IEC and NEMA compliant.

Heavy industrial ● CC CV DC

Processes

- Stick (SMAW) ▪ MIG (GMAW)
- Flux-Cored (FCAW) ▪ TIG (GTAW)
- Air Carbon Arc Gouging (CAC-A) (rated 1/2-in. carbons)

Diesel engine

Same as Big Blue Air Pak above

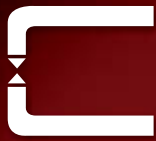
Visit MillerWelds.com or your distributor for Miller® options and accessories.

Diesel	Stock Number (#907 157) Deutz	Welding Mode	Process	Amp/Volt Ranges	Rated Output at 104° F (40° C)	Single-Phase Generator Power at 104° F (40° C)	Dimensions	Net Weight
			CC/DC	Stick/TIG	20-750 A	600 A at 44 V (26.4 kW), 100% Duty Cycle	Peak: 5500 watts Continuous: 4000 watts	H: 43 in. (1092 mm) W: 28.5 in. (724 mm) D: 69.5 in. (1765 mm)
		CV/DC	MIG/FCAW	14-40 V				



Tier 4 Final (T4F) Questions?

We're here to help! Contact our Industrial Engine Drive team at 920.831.4851 or IEDServiceGroup@MillerWelds.com for help in selecting the right size welder/generator to maximize efficiency and reduce your emissions footprint.



Spot Welders

For more detailed information, visit

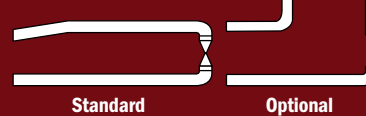
MillerWelds.com/spotwelders



Tongs and tips. Miller offers a wide variety of both symmetrical and asymmetrical tong and tip configurations. Maximum capabilities of spot welders are obtained with minimum tong lengths. Tips are made of durable Class 2, long-wearing copper alloy.

See literature no. SW/1.0 for full range of tongs and tips.

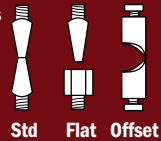
Tongs



Standard

Optional

Tips



Std

Flat

Offset

Air-Cooled Spot Welders

See literature no. SW/1.0

MSW and LMSW Series lightweight, air-cooled units are portable, easy to operate, and provide a quick and effective means for spot welding mild, galvanized or stainless materials.



"T" models include timer panel with a 0 to 5 second weld timer and power on/off switch. Timer panel can be mounted on the optional SWP-2 pedestal or any other convenient location. Includes 10-foot (3 m) input power and interconnecting cords.

Hand lever locks tongs firmly on material, ensuring positive, accurate fit-up.

Accommodates a wide variety of tongs and tips (ordered separately).

Quick and easy adjustment for material thickness.

Reversible for left- or right-hand operation.

*Tongs and tips must be ordered separately – see literature no. SW/1.0 for full range of tongs and tips.

1 Phase

Process

- Resistance Spot Welding

Note: Not recommended for welding aluminum, copper or copper alloys.

Most popular accessories

- Gyro Ball #041 979

Supports weight of welder. Operates with boom and counterweight or from spring-loaded cable (sold separately). Spot welds in any position.



- Spot Welder Pedestal #040 872

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model/Stock Number*	Input Power (50/60 Hz)	Work Capacity (Combined thickness uncoated mild steel using 6-in. [152 mm] tongs)	Rated Output	Rated Output (Calibrated with standard-type tongs)			Max Open-Circuit Voltage	Dimensions	Net Weight
				6 in. (152 mm)	12 in. (305 mm)	18 in. (457 mm)			
MSW-41 (#900 371) MSW-41T (#901 345) w/Timer	110 VAC, 30 A, Single-Phase	1/8 in. (3.2 mm) or two pieces of 20-ga. (1.8 mm) galvanized steel	1.5 kVA at 50% Duty Cycle	5550 A	4500 A	3600 A	1.6	H: 6 in. (152 mm) W: 3.75 in. (95 mm) D: 13 in. (330 mm)	22 lb. (10 kg) 34 lb. (15 kg) w/Timer
LMSW-52 (#900 377) LMSW-52T (#901 357) w/Timer	220 VAC, 30 A, Single-Phase	3/16 in. (4.7 mm) or two pieces of 16-ga. (3.0 mm) galvanized steel	2.5 kVA at 50% Duty Cycle	6750 A	5800 A	4850 A	2.5	H: 6 in. (152 mm) W: 3.75 in. (95 mm) D: 16 in. (406 mm)	30 lb. (14 kg) 42 lb. (19 kg) w/Timer



Submerged Arc

For more detailed information, visit

MillerWelds.com/subarc



Miller offers an array of versatile Submerged Arc components, including power sources, controllers, wire feed systems, tractors, torches and a variety of other accessories.

Subarc Series

Subarc DC Series power sources are known for stable, consistent arc output with a variety of electrode sizes, electrode types, and fluxes in single-arc system configurations.

Subarc AC/DC power sources work in single-arc and multi-arc configurations: AC + DC or AC + AC combined welding output. They feature:

- Enhanced arc stability** from built-in digital arc control for increased throughput.
- Precise parallel operations** for multi-arc and higher output Submerged Arc welding configurations.
- Interchangeable accessories** (controls, RAD wire drives, tractors, etc.) are fully compatible with DC or AC/DC systems.



Subarc DC 650

Subarc AC/DC 1000

Heavy industrial

CC CV AC DC DC 3 Phase Subarc DC Series is DC only.

Processes

- Submerged Arc (SAW)
- Flux-Cored (FCAW)*
- Stick (SMAW)*

*Subarc DC Series only.

See below for essential Submerged Arc components. Miller also offers various accessories including wire straighteners, spot lasers, strip cladding heads and more.

Automatic Weld Controls

Reliable and flexible weld controls feature run-in control to ensure smoother arc starting, and bumpback control to help prevent wire sticking on weld termination. Crater time, speed, and output rates can also be adjusted with the controls.



Digital

Analog

Wire Drive Assemblies

Miller RAD wire drive assemblies handle a wide range of wire diameters and are available in two models: Standard Speed (20-400 IPM) High Speed (20-780 IPM)



Subarc Torches

Miller offers a variety of torches to support various Submerged Arc welding applications. These include 600- and 1200-amp single-wire torches, 1200-amp twin-wire torches and narrow-groove single and tandem torches.

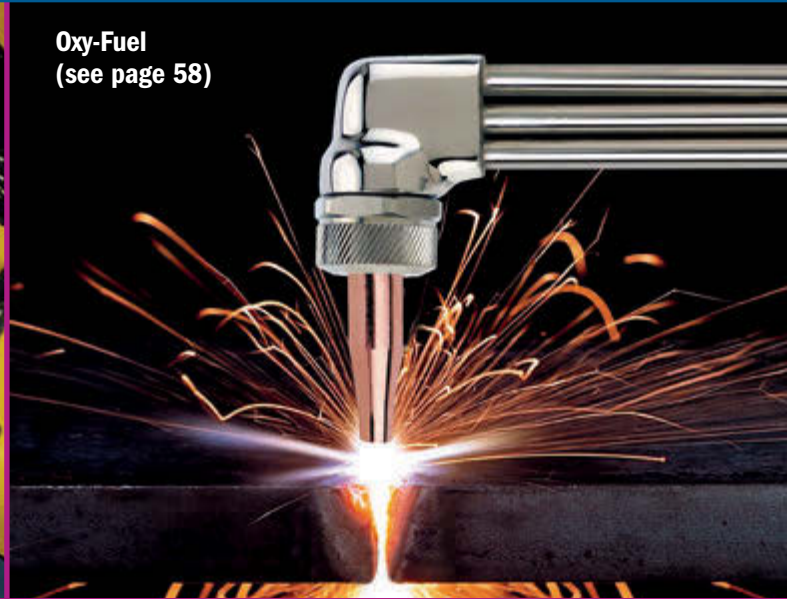




Plasma
(see page 56)



Oxy-Fuel
(see page 58)



Plasma Product Guide

	Page	Class	Gouging	Piercing	Rated Output/ Duty Cycle	Rated Cutting Thickness*			Max. Sever Thickness	Special Features	Typical Applications	
						Mild Steel	Stainless Steel	Aluminum	Mild Steel			
Spectrum® 375	56	●	●	●	27 A at 35%	3/8 in.	3/8 in.	1/4 in.	5/8 in.	115/230 V dual input voltage, XT30C torch	Hobbyist, auto restoration, fabrication	1-Phase
Spectrum® 375 X-TREME™	56	●	●	●	30 A at 35%	3/8 in.	3/8 in.	1/4 in.	5/8 in.	Auto-Line™: 115-230 V, MVP™ plugs, Auto-Retire™, only 19 lb., XT30 torch	HVAC, maintenance, construction	
Spectrum® 625 X-TREME™	56	●	●	●	40 A at 50%	5/8 in.	1/2 in.	3/8 in.	7/8 in.	Auto-Line™: 115-230 V, MVP™ adapters, Auto-Retire™, automatic air regulation, only 21 lb., XT40 or XT40M torch	Maintenance, light construction, body shops, prototyping	
Spectrum® 875	56	●	●	●	60 A at 50%	7/8 in.	7/8 in.	5/8 in.	1-1/4 in.	Auto-Retire™, automatic air regulation, only 49 lb., XT60 or XT60M torch	Construction, maintenance/repair, fabrication	
Spectrum® 875 Auto-Line™	56	●	●	●	208: 60 A at 40% 230-380 V: 60 A at 50% 380-575 V: 60 A at 60%	7/8 in.	7/8 in.	5/8 in.	1-1/4 in.	Auto-Line™: 208-575 V, Auto-Retire™, automatic air regulation, only 54 lb., XT60 or XT60M torch	Construction, maintenance/repair, fabrication	1&3-Ph

PRODUCT KEY CLASS: ● Light Industrial ● Industrial ● Heavy Industrial CAPABILITY: ● Designed for this process ● Capable of this process
Improved! products appear in blue type. *See page 56 for note on cut capacity ratings above.

NEW! Automation-Ready Machines

See literature no. PC/9.6 or PC/9.8

Spectrum 625 X-TREME



Spectrum 875



Spectrum 875 Auto-Line



Spectrum 625 X-TREME and 875 plasma units are available factory-ready with long or short body machine torches. Automation Kit for Spectrum 875 Auto-Line includes a remote pendant control for manual on/off.

*Requires new Spectrum 625 X-TREME with quick connect hand torch to be converted to use long or short body machine torches.
Note: Kits above are shown with long body torches.

NEW! Automation Kits
Converts units for machine cutting.



#301 158* Kit for Spectrum 625 X-TREME



#301 156 Kit for Spectrum 875



#301 157 Kit for Spectrum 875 Auto-Line



Metal Cutting

Improved!

Spectrum® Series Plasma Cutters

Our Spectrum line of plasma cutters has gotten even better with features like more flexible cables and new torches for both the 625 X-TREME (machine torches) and 875/875 Auto-Line (hand-held and machine torches).



Spectrum 375

IMPROVED!
Spectrum 375 X-TREME

IMPROVED!
Spectrum 625 X-TREME

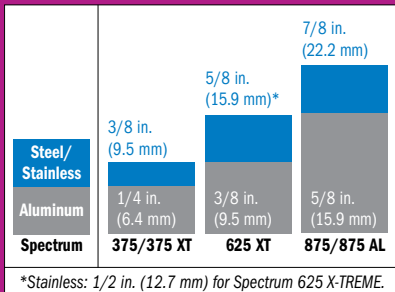
IMPROVED!
Spectrum 875

IMPROVED!
Spectrum 875 Auto-Line

Spectrum Features

Feature	375	375 XT	625 XT	875	875 AL
Auto-Line (120-240 V)		●	●		●
Auto-Line (208-575 V)					●
Dual Input Voltage	●				
MVP Plugs/Adapters		●	●		
Ultra-Quick Connect			●	●	●
Torch w/Flexible Cable		●	●	●	●
Quick Connect Flexible Work Cable w/Clamp		●	●	●	●
Built-in Gas/Air Filter and Regulator	●	●	●	●	●
Auto-Refire	●	●	●	●	●
Auto Postflow	●	●	●	●	●
Auto Air Regulation				●	●
X-CASE		●	●		
Machine Torch Capable		●	●	●	●

Steel/Stainless/Aluminum Rated Cutting Capacity



Cut capacity ratings are based on traveling speed of approximately 15 inches per minute to achieve a precise cut. This is the key rating that should meet or exceed your typical cutting thickness requirements. Factors that can affect actual cut speeds, thickness capacity and duty cycles are: types of thermally conductive material being cut, available input power, output power settings and operator technique. For highly thermal conductive metals such as aluminum, cutting capacities may be reduced up to 30 percent compared to mild steel.

Power Factor Correction (PFC). Uses less energy by utilizing input power more efficiently and increases productivity by reducing nuisance circuit breaker trips.

Miller engine drive generator compatibility. See MillerWelds.com/spectrumpower.

LED indicators for easy troubleshooting.

Non-high-frequency arc starting does not interfere with or damage controls or computers.

Postflow cooling circuitry extends life of the consumable and torch by cooling them with postflow air after trigger is released.

Auto-Refire™ provides ultimate convenience by automatically controlling the pilot arc when cutting expanded metal or multiple pieces of metal.

Built-in gas/air filter and regulator. Provides air filtration of airborne particles five microns and larger. Additional filtration and water separation recommended.

LVC™ line voltage compensation provides peak performance power under variable input voltage conditions for clean, steady cuts.

Wind Tunnel Technology™ prevents abrasive dust and particles from damaging internal components.

Fan-On-Demand™ cooling system only operates when needed, reducing the amount of airborne dust/dirt pulled through the unit.

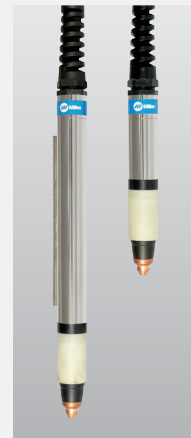
NEW! Spectrum features

Quick connect flexible work cable with heavy-duty clamp (not available on 375).



Ultra-Quick Connect™ hand-held torches with flexible cables.

XT40 (625 X-TREME™) and new XT60 (875 models) hand-held torches feature quick torch connection, ergonomic handles to help prevent operator fatigue and flexible cables that make maneuvering easier.



Long and short body machine torches. New XT40M (625 X-TREME™) and XT60M (875 models) machine torches are available in long or short body configurations. XT60M is also available in 25- or 50-ft. cable lengths.

Machine torch capable. 625 X-TREME™ and both 875 models can be ordered with a machine torch or can be converted to use a machine torch with optional Automation Kits (page 77).

Models/Packages



Spectrum 375 X-TREME hand-held torch package (#907 529) shown.



Spectrum 875 Auto-Line machine torch package (#907 584 002) shown.

Model	Hand-Held Torch Packages			Machine Torch Packages			
	12 ft. (3.7 m)	20 ft. (6.1 m)	50 ft. (15.2 m)	25 ft. (7.6 m)		50 ft. (15.2 m)	
				Long Body	Short Body	Long Body	Short Body
Spectrum 375	–	(#907 532)	–	–	–	–	–
Spectrum 375 XT	(#907 529)	–	–	–	–	–	–
Spectrum 625 XT	(#907 579)	(#907 579 001)	–	(#907 579 002)	(#907 579 003)	–	–
Spectrum 875	–	(#907 583)	(#907 583 001)	(#907 583 002)	(#907 583 003)	–	–
Spectrum 875 AL	–	(#907 584)	(#907 584 001)	(#907 584 002)	(#907 584 003)	(#907 584 004)	(#907 584 005)



Spectrum® 375 features See literature no. PC/9.1

Dual input voltage allows either 115 or 230 VAC input power and provides protection in case of incorrect switch position. The unit comes with a 115 V, 20 A plug.

Industrial, heavy-duty work clamp.

Pressure gauge and pressure knob for manual adjustment of pressure to the torch.

Includes XT30C torch with ergonomic design and flexible cable.



Spectrum® 375 X-TREME™/625 X-TREME™ features See literature no. PC/9.2 and PC/9.6



Allows for any input voltage hook-up (120-240 VAC, single-phase, 50/60 Hz) with no manual linking, providing convenience in any job setting.

X-CASE™ provides the ultimate protection during transport and storage. Additional space is ideal for MVP plugs, consumables box, gloves, etc.

Multi-voltage plug (MVP™) on 375 XT or MVP™ adapter on 625 XT allows connection to 120 or 240 V receptacles without tools.

Automatic gouging consumable detection (on 625 XT only).

Detects gouging consumable and adjusts gas pressure to optimize performance, eliminating the need for a manual regulator.

375 XT model includes XT30 torch with ergonomic design and flexible cable.

625 XT model includes Ultra-Quick Connect XT40 torch with ergonomic design and flexible cable; or **NEW XT40M long body or short body machine torch.**



Spectrum 625 shown.

Spectrum® 875/875 Auto-Line™ features See literature no. PC/9.8



Spectrum 875 Auto-Line model allows for any input voltage hook-up (208-575 V, single- or three-phase) with no manual linking, providing convenience in any job setting. Standard Spectrum 875 model operates on 208/230 V, single-phase input voltage only.

Consumables storage compartment provides convenient access to consumables and parts.

Automatic air regulation compensates for input pressure variation to provide constant recommended torch pressure for optimum cutting performance.

Includes NEW Ultra-Quick Connect™ XT60 torch with ergonomic design and flexible cable; or **NEW XT60M long body or short body machine torch.**



Spectrum 875 shown.

Light industrial ● 375/375 XT/625 XT
Industrial ● 875/875 Auto-Line

DC 3 1 Only 875 Auto-Line has 3-Phase capabilities.

Processes

- Air Plasma Cutting
- Air Plasma Gouging (625/875 models)

375 comes complete with

- XT30C hand-held torch with 20-ft. (6.1 m) cable
- Heavy-duty work clamp with 20-ft. (6.1 m) cable
- 10-ft. (3 m) power cord with 115 VAC, 20 A plug
- Extra consumables (two electrodes, two tips and one air fitting)

375 X-TREME comes complete with

- XT30 hand-held torch with 12-ft. (3.7 m) cable
- Heavy-duty work clamp with 12-ft. (3.7 m) flexible cable
- 10-ft. (3 m) MVP™ power cord with MVP™ 5-15P (120 VAC, 15 A) and 6-50P (240 V, 50 A) plugs
- X-CASE™ for protection and storage
- Shoulder strap
- Consumables box with two electrodes, two tips, deflector and air fitting

625 X-TREME comes complete with

- XT40 hand-held torch with 12-ft. (3.7 m) or 20-ft. (6.1 m) cable; **OR** XT40M long body or short body machine torch with 25-ft. (7.6 m) cable
- Heavy-duty work clamp and flexible cable with quick connect
- 12-ft. (3.7 m) power cord with 240 V, L6-30P twist lock plug
- MVP™ adapters with 5-15P (120 VAC, 15 A) and 6-50P (240 V, 50 A) plugs
- X-CASE™ for protection and storage
- Shoulder strap
- Consumables box with two electrodes, two 40 A tips and one 30 A tip, 30 A drag shield, deflector and air fitting
- Machine torch packages include corresponding Automation Kit

875 and 875 Auto-Line comes complete with

- XT60 hand-held torch with 20-ft. (6 m) or 50-ft. (15.2 m) cable; **OR** XT60M long body or short body machine torch with 25-ft. (7.6 m) or 50-ft. (15.2 m) cable
- Heavy-duty work clamp and flexible cable with quick connect
- 10-ft. (3 m) power cord
- Extra consumables
- Machine torch packages include corresponding Automation Kit

Most popular accessories

- Automation Kits (pg 77)
- Cart (pg 77)
- Cutting Guides (pg 77)
- Filters (pg 77)
- Protective Covers/Cases (pg 77)
- Torches/Consumables (pg 77)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

*Recommended 30 A branch circuit for maximum performance.

Model	Input Power	Rated Output at 104° F (40° C)	Amps Input at Rated Output	KVA	KW	Compressor Requirement	Dimensions	Net Weight with Torch
Spectrum 375 115/230 VAC, 60 Hz	Single-Phase	15-27 A at 90 VDC, 35% Duty Cycle	115 V: 28* 230 V: 14	3.3	3.2	5.0 CFM (142 L/min.) at 90 PSI (621 kPa)	H: 13.5 in. (343 mm) W: 8.5 in. (216 mm) D: 16 in. (406 mm)	55 lb. (25 kg)
Spectrum 375 X-TREME 120-240 VAC, 50/60 Hz	Single-Phase	120 V (15 A): 20 A at 88 VDC, 35% Duty Cycle	18.1	2.2	2.1	5.0 CFM (142 L/min.) at 90 PSI (621 kPa)	H: 9 in. (229 mm) W: 5.5 in. (140 mm) D: 13.25 in. (337 mm)	19 lb. (8.6 kg)
		120 V (20 A): 27 A at 91 VDC, 20% Duty Cycle	25.6	3.1	3.0			
		240 V: 40 A at 140 VDC, 50% Duty Cycle	13.6	3.3	3.1			
Spectrum 625 X-TREME 120-240 VAC, 60 Hz	Single-Phase	120 V (15 A): 20 A at 88 VDC, 35% Duty Cycle	18.1	2.2	2.1	6.0 CFM (170 L/min.) at 90 PSI (621 kPa)	H: 9 in. (229 mm) W: 5.5 in. (140 mm) D: 13.25 in. (337 mm)	12 ft. 21 lb. (9.5 kg)
		120 V (20 A): 27 A at 91 VDC, 20% Duty Cycle	25.6	3.0	2.9			20 ft. 23 lb. (10.5 kg)
		240 V: 40 A at 140 VDC, 50% Duty Cycle	13.6	6.4	6.3			25 ft. 24 lb. (10.7 kg)
Spectrum 875 208/230 VAC, 50/60 Hz	Single-Phase	208 V: 60 A at 140 VDC, 40% Duty Cycle	208 V: 47	9.9	9.8	6.75 CFM (191 L/min.) at 90 PSI (621 kPa)	H: 13.5 in. (343 mm) W: 8.75 in. (222 mm) D: 18.5 in. (470 mm)	20 ft. 49 lb. (22.2 kg)
		230 V: 60 A at 140 VDC, 50% Duty Cycle	230 V: 42					50 ft. 58 lb. (26.3 kg)
Spectrum 875 Auto-Line 208-575 VAC, 50/60 Hz	Three-Phase	208 V: 60 A at 140 VDC, 40% Duty Cycle	208 V: 27.5	9.9	9.4			20 ft. 54 lb. (24.5 kg)
		230 V: 60 A at 140 VDC, 50% Duty Cycle	230 V: 25					25 ft. 56 lb. (25.4 kg)
		380-575 V: 60 A at 140 VDC, 60% Duty Cycle	380 V: 15					50 ft. 63 lb. (28.6 kg)
Single-Phase	208 V: 60 A at 140 VDC, 40% Duty Cycle	208 V: 47.4	9.9	9.7				
		230 V: 60 A at 140 VDC, 50% Duty Cycle	230 V: 42.2					
Single-Phase	230 V: 60 A at 140 VDC, 50% Duty Cycle	230 V: 42.2						
		230 V: 50 A at 140 VDC, 100% Duty Cycle						



Metal Cutting

Heavy-Duty Outfits



HBA-40510

Combination torch outfits (acetylene or LP)

Premium oxy-fuel combination torch outfits feature proven in-tip gas mixing technology and **include torch-mount flashback arrestors** (acetylene outfits) or **check valves** (LP/MP outfits) for increased operator safety and torch life. Outfits are available with industrial-grade, heavy-duty Series 40 or medium-duty Series 30 regulators. Heavy-duty torches are covered by our True Blue® wear and tear lifetime warranty. Exclusive Graf-Tite® cutting tip seats hold up far longer and require less replacement than traditional metal-to-metal seat tip designs. HBA-40510 and HBA-40300 outfits cut up to 1-1/4 inch (32 mm) with tip included. Other outfits cut up to 5/8 inch (16 mm). All outfits cut up to 8 inches (203 mm) with optional tips.



16206

16280

Combination torch and tip kits (acetylene or LP)

Combination torch and tip kits include tips to handle most jobs. Kits **include torch-mount flashback arrestors** for added safety. Heavy-duty torches are covered by our exclusive True Blue® wear and tear lifetime warranty. Exclusive Graf-Tite® cutting tip seats hold up far longer and require less replacement than traditional metal-to-metal seat tip designs. Thick-wall welding and heating tips hold up well to excess heat and provide years of service. Cuts up to 5/8 inch (16 mm) with tip included, up to 8 inches (203 mm) with optional tips.



HBS-H510S

HBAS-30510

Straight torch outfits (acetylene)

Hand cutting torch outfits are built for the toughest jobs. HBS outfits include heavy-duty Series 40 regulators constructed with stainless steel diaphragms, 2.5-inch brass gauges and assembled with Hard Hat™ gauge/regulator guards. HBAS outfits include medium-duty Series 30 regulators plus **torch-mount flashback arrestors** for increased operator safety. Regulators are corrosion resistant and feature shatter-resistant polycarbonate gauge lenses. Outfits feature a 21-inch nickel-plated, straight cutting torch that is covered by our exclusive True Blue® wear and tear lifetime warranty. It has a reversible top or bottom mount cutting lever and an ease-on oxygen feature that reduces slag blowback when piercing. HBS outfits cut up to 1-1/4 inch (32 mm) with tip included. HBAS cut up to 5/8 inch (16 mm). All outfits cut up to 12 inches (305 mm) with optional tips.

*Acetylene regulator has CGA 300 inlet fitting.

Heavy-duty torch tips

Stock Number	Max. Metal Thickness Inches (mm)	Cutting Jet Drill Size
Acetylene Cutting		
SC12-00	3/16 (5)	68
SC12-0	3/8 (10)	62
SC12-1	5/8 (16)	56
SC12-2	1-1/4 (32)	54
SC12-3	2 (51)	51
SC12-4	4 (102)	45
SC12-5	8 (203)	41
SC12-6	12 (305)	32
Propane/Natural Gas Cutting		
SC50-00	3/16 (5)	68
SC50-0	3/8 (10)	62
SC50-1	5/8 (16)	56
SC50-2	1-1/4 (32)	54
SC50-3	2 (51)	51
SC50-4	4 (102)	45
SC50-5	8 (203)	41
SC50-6	12 (305)	32
SC50-7	14 (354)	28
SC50-8	18 (457)	17
SC50-9	20 (508)	3
Propylene Cutting		
SC60-0	1/4 (6)	62
SC60-1	5/8 (16)	56
SC60-2	1-1/4 (32)	54
SC60-3	2 (51)	51
SC60-4	4 (102)	45
SC60-5	8 (203)	41
SC60-6	12 (305)	32
Acetylene Gouging		
SC13-3	3/8 (10) wide, 1/4 (6) deep	
Propane/Natural Gas Gouging		
SC23-3	3/8 (10) wide, 1/4 (6) deep	
Propylene Gouging		
SC23-3M	1/4 (6) wide, 3/8 (10) deep	
Acetylene Heating		
ST602	40,000 BTU	
ST603	72,000 BTU	
ST605	125,000 BTU	
ST610	195,000 BTU	

See Gas Equipment catalog (#264 059), or visit MillerWelds.com or your distributor for additional tips, options and accessories.

Outfit	Stock Number	Fuel	Cut Tip	Weld Tip	Heat Tip	Description	Typical Applications	
Combination Torch Complete Outfits	HBA-40510	Acetylene	SC12-1	SW205	ST602	Heavy-duty combination torch, heavy-duty regulators, 25-ft. (7.6 m) hose, lighter, safety glasses, tip cleaner and flashback arrestors	Heavy fabrication, construction, pipeline, maintenance/repair, rail and truck repair	
	HBA-40300*		SC12-2					
	HBA-30510	Acetylene	SC12-1	SW205	ST602			Heavy-duty combination torch, medium-duty regulators, 25-ft. (7.6 m) hose, lighter, safety glasses, tip cleaner and flashback arrestors
	HBA-30300*	Acetylene	SC12-1	SW205	ST602			Heavy-duty combination torch, medium-duty regulators, 25-ft. (7.6 m) hose, lighter, safety glasses, tip cleaner and flashback arrestors
Combination Torch and Tip Kits	16206	Acetylene	SC12-1	SW203	ST602	Heavy-duty combination torch and flashback arrestors	Heavy fabrication, construction, pipeline, maintenance/repair, rail and truck repair	
	16280	Acetylene	SC12-0, SC12-1	-	-			
	16280LP	Propane	SC40-0, SC40-1	-	-			
Straight Torch Outfits	HBS-H510S	Acetylene	SC12-2	-	-	Heavy-duty SC229 hand cutting torch and heavy-duty regulators with Hard Hat™ gauge guards	Heavy fabrication, construction, shipyard, rail car, rail and truck repair	
	HBS-H300S*		SC12-1	-	-			
	HBAS-30510	Acetylene	SC12-1	-	-	Heavy-duty SC229 hand cutting torch, medium-duty regulators, 20-ft. (7.6 m) hose, lighter, safety glasses, tip cleaner and flashback arrestors		
	HBAS-30300*	Acetylene	SC12-1	-	-	Heavy-duty SC229 hand cutting torch, medium-duty regulators, 20-ft. (7.6 m) hose, lighter, safety glasses, tip cleaner and flashback arrestors		



Medium-Duty Outfits



MBA-30510

Combination torch outfits (acetylene or LP)

Premium oxy-fuel combination torch outfits feature proven in-tip gas mixing technology and **include torch-mount flashback arrestors** (acetylene outfits) or **check valves** (LP/MP outfits) for increased operator safety and torch life. Outfits include industrial-grade, medium-duty Series 30 regulators. Medium-duty torches are covered by our True Blue® wear and tear lifetime warranty. Exclusive Graf-Tite® cutting tip seats hold up far longer and require less replacement than traditional metal-to-metal seat tip designs. Cuts up to 5/8 inch (16 mm) with tip included, up to 6 inches (153 mm) with optional tips.



16205

16281

Combination torch and tip kits (acetylene or LP)

Combination torch and tip kits include tips to handle most jobs. Kits **include torch-mount flashback arrestors** for added safety. Medium-duty torches are covered by our exclusive True Blue® wear and tear lifetime warranty. Exclusive Graf-Tite® cutting tip seats hold up far longer and require less replacement than traditional metal-to-metal seat tip designs. Thick-wall welding and heating tips hold up well to excess heat and provide years of service. Cuts up to 5/8 inch (16 mm) with tip included, up to 6 inches (153 mm) with optional tips.



MB55A-510

Toughcut™ combination torch outfits (acetylene or LP)

Economy combination outfits include many features found on more expensive outfits and **include check valves** for increased operator safety and torch life. Outfits include industrial-grade, medium-duty torches and Series 30 regulators which are covered by our True Blue® three-year limited warranty. Exclusive Graf-Tite® cutting tip seats hold up far longer and require less replacement than traditional metal-to-metal seat tip designs. Cuts up to 5/8 inch (16 mm) with tip included, up to 6 inches (153 mm) with optional tips.



TL-550

VT-4T

Tag-A-Long™ and Versa-Torch™ portable outfits (acetylene)

Complete and portable outfits are housed in carriers designed for mobility and ease of storage. They **include check valves** for increased operator safety and torch life. Tag-A-Long includes medium-duty torch and Series 30 regulators which are covered by our True Blue® three-year limited warranty. Versa-Torch outfit is one of the most versatile systems on the market. It includes a standard-duty torch covered by our exclusive True Blue® wear and tear lifetime warranty and Series 30 regulators covered by our True Blue® three-year limited warranty.

*Acetylene regulator has CGA 300 inlet fitting.

Medium-duty torch tips

Stock Number	Max. Metal Thickness Inches (mm)	Cutting Jet Drill Size
Acetylene Cutting		
MC12-00	3/16 (5)	68
MC12-0	3/8 (10)	62
MC12-1	5/8 (16)	55
MC12-2	1 (25)	54
MC12-3	2 (51)	51
MC12-4	4 (102)	45
MC12-5	6 (152)	41
Propane/Natural Gas Cutting		
MC40-00	3/16 (5)	68
MC40-0	3/8 (10)	62
MC40-1	5/8 (16)	55
MC40-2	1-1/4 (32)	54
MC40-3	2 (51)	51
MC40-4	4 (102)	51
Propylene Cutting		
MC60-1	5/8 (16)	55
MC60-2	1-1/4 (32)	54
MC60-3	2 (51)	51
MC60-4	4 (102)	45

Acetylene Gouging

MC13-3	3/8 (10) wide, 1/2 (6) deep
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Note: Tips above fit medium- and standard-duty torches.

Acetylene Heating

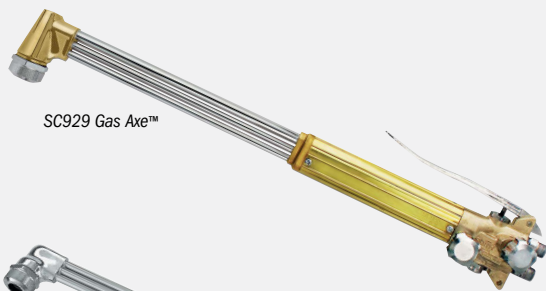
MT603	40,000 BTU
MT605	73,000 BTU
MT610	129,000 BTU

See Gas Equipment catalog (#264 059), or visit MillerWelds.com or your distributor for additional tips, options and accessories.

Outfit	Stock Number	Fuel	Cut Tip	Weld Tip	Heat Tip	Description	Typical Applications
Combination Torch Complete Outfits	MBA-30510	Acetylene	MC12-0	MW205	MT603	Medium-duty combination torch, medium-duty regulators, 25-ft. (7.6 m) hose, lighter, safety glasses, tip cleaner and flashback arrestors	Fabrication, farm and ranch, pipe, truck and auto, refrigeration, maintenance/repair
	MBA-30300*	Acetylene	MC12-1				
	MBA-30510LP	Propane	MC40-1	-	MT805	Medium-duty combination torch, medium-duty regulators, 20-ft. (7.6 m) "T"-grade hose, lighter, safety glasses, tip cleaner and check valves	
Combination Torch and Tip Kits	16205	Acetylene	MC12-1	MW203	MT603	Medium-duty combination torch and flashback arrestors	Fabrication, farm and ranch, pipe, truck and auto, refrigeration, maintenance/repair
	16281	Acetylene	MC12-0, MC12-1	-	-		
	16281LP	Propane	MC40-0, MC40-1	-	-		
Toughcut Economy Combination Torch Outfits	MB55A-510	Acetylene	MC12-1	MW205	MT603	Medium-duty combination torch, medium-duty regulators, 20-ft. (7.6 m) hose, lighter, safety glasses and check valves	Fabrication, farm and ranch, pipe, hobby, auto, refrigeration, maintenance/repair
	MB55A-300*	Acetylene	MC12-1	MW205	-		
	MB54A-510	Acetylene	MC12-1	MW205	-	Medium-duty combination torch, medium-duty regulators, safety glasses and check valves	
	MB54A-300*	Acetylene	MC12-1	MW205	-		
	MB54-510L	Acetylene	MC12-1	MW205	-		
MB54-510LP	Propane	MC40-1	-	-	Medium-duty combination torch, medium-duty regulators, 20-ft. (7.6 m) "T"-grade hose, lighter, safety glasses and check valves		
MB54A-510MP	Propylene	MC60-1	-	-			
Combination Torch Portable Outfits	TL-500 (no tanks)	Acetylene	MC12-0	MW203	-	Medium-duty (TL500/TL550) or standard-duty (VT-4T) combination torch, medium-duty regulators, 12.5-ft. (3.8 m) hose, carrier, lighter, safety glasses, check valves and cylinders (cylinders NOT included with TL-500)	Farm and ranch, hobby, DIY, auto, refrigeration, maintenance/repair
	TL-550	Acetylene	MC12-0	MW203	-		
	VT-4T	Acetylene	MC12-00	LT103, 104, 106	13716		



Torches



SC929 Gas Axe™



SC229



SC229S

Straight torches

Gas Axe® extra-heavy-duty straight cutting torches

Ideal for scrap and salvage, our super-tough Gas Axe torches cut up to 24-inch (610 mm) thick steel and are covered by a one-year warranty. Features include our proven in-tip gas mixing technology for added safety and a reversible top- or bottom-mount cutting lever. Torches are available in four torch lengths with three different head angles and use our exclusive long-lasting, Graf-Tite® soft-seat cutting tips. For use with acetylene, natural gas, and propane- or propylene-based fuel gases.

Heavy-duty straight cutting torches

Torches cut up to 12-inch (305 mm) thick steel and are covered by our True Blue® wear and tear lifetime warranty. Features our proven in-tip gas mixing technology for added safety and a reversible top- or bottom-mount cutting lever. Sintered metal inlet-filters protect internal mechanisms and thick-wall forged brass heads resist distortion. Torches are available in three torch lengths with three different head angles and use our exclusive long-lasting, Graf-Tite® soft-seat cutting tips. For use with acetylene, natural gas, and propane- or propylene-based fuel gases.

Combination torches

Our heavy-duty combination torches cut up to 8 inches, medium-duty up to 6 inches and standard-duty up to 3 inches. They are covered by our True Blue® wear and tear lifetime warranty and are constructed to last a lifetime with silver-brazed joints, stainless steel tubes, forged brass butt and head. Features our proven in-tip gas mixing technology for added safety and an ease-on cutting oxygen valve to reduce slag blowback when piercing. The thick-wall brass forged heads resist warping and distortion. Heavy- and medium-duty models are available with 75- or 90-degree head angles. All torches use our exclusive Graf-Tite® soft-seat cutting tips which hold up far longer and require less replacement than traditional metal-to-metal seats. For use with acetylene, natural gas, and propane- or propylene-based fuel gases.

Machine torches

Our heavy-duty three- and two-hose machine torches provide superior performance and are covered by our True Blue® wear and tear lifetime warranty. SC781A high-capacity three-hose torch is capable of cutting up to 24 inches (610 mm) with acetylene and 20 inches (508 mm) with LP or natural gas. SC770 and SC772A two-hose machine torches are capable of cutting up to 12 inches (305 mm) with acetylene, LP or natural gas. Torch barrels are adjustable to four positions at 90-degree increments and barrel diameters are 1-3/8 inches (9.5 mm) to fit most machines. Rack pitch is 32-8 teeth per inch.



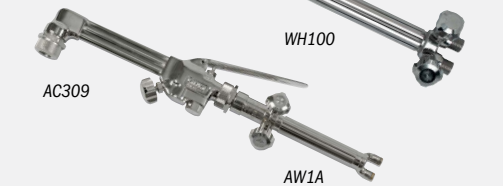
SC209

WH200A



MC509

WH100



AC309

AW1A



SC781A

SC772A

SC770

Torches

Stock Number	Head Angle in Degrees	Length Inches (mm)
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Gas Axe Extra Heavy-Duty Straight Torches

SC929	90	21 (533)
SC935	75	36 (914)
SC939	90	36 (914)
SC930	180	36 (914)
SC945	75	48 (1219)
SC949	90	48 (1219)
SC940	180	48 (1219)
SC965	75	72 (1829)
SC969	90	72 (1829)
SC960	180	72 (1829)

Heavy-Duty Straight Torches

SC175	75	17 (432)
SC179	90	17 (432)
SC225	75	21 (533)
SC225S	75	21 (533)
SC229	90	21 (533)
SC229S	90	21 (533)
SC220	180	21 (533)
SC365	75	36 (914)
SC369	90	36 (914)
SC360	180	36 (914)

Heavy-Duty Combination Torches

SC205	75	12.5 (318)
SC209	90	12.5 (318)
WH200A	Handle	7.5 (191)

Medium-Duty Combination Torches

MC505	75	11.25 (286)
MC509	90	11.25 (286)
WH100	Handle	7 (178)

Standard-Duty Combination Torches

AC309	90	8.5 (216)
AW1A	Handle	5.75 (146)

Machine Torches

SC781A	–	15.5 (394)
SC772A	–	13.75 (349)
SC770	–	8 (203)

Most popular accessories

- Safety Gloves (pg 69)



- Safety Glasses (pg 70)

Blue frame/shade 3 #235 661
Blue frame/shade 5 #235 657



- Circle Cutter Guide #16229

Visit MillerWelds.com or your distributor for other Miller® options and accessories.



Gas Handling

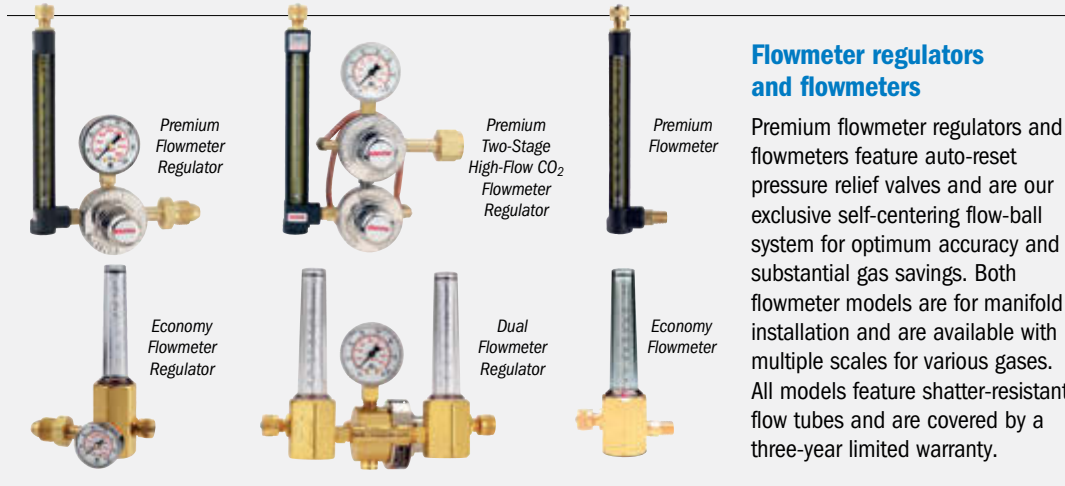


Series 40

Series 30

Regulators

Premium, industrial-grade pressure regulators provide accurate pressure readings and are designed with our Sure Seat™ high-pressure seat technology that protects the most vulnerable part of the regulator from debris for substantially longer regulator service. Corrosion-resistant Series 40 high-flow regulators are constructed with a stainless steel diaphragm. All include shatter-resistant gauge lenses. Covered by a three-year limited warranty.



Flowmeter regulators and flowmeters

Premium flowmeter regulators and flowmeters feature auto-reset pressure relief valves and are our exclusive self-centering flow-ball system for optimum accuracy and substantial gas savings. Both flowmeter models are for manifold installation and are available with multiple scales for various gases. All models feature shatter-resistant flow tubes and are covered by a three-year limited warranty.

Flow gauge regulators

Single-stage flow gauge regulators are compact and feature a forged brass body and a self-resetting pressure relief valve. They include a Sure Seat™ protective inlet filter and a durable neoprene-composite diaphragm. Covered by a three-year limited warranty.

Most popular accessories



Proportional MIG and TIG Two-Gas Mixer #299-006-1C

- Gases: argon/CO₂
argon/helium
argon/oxygen
CO₂/oxygen
- Flow range of 10–180 SCFH
- Requires no electricity
- Easy to operate
- Eliminates gas stratification
- Excellent training tool
- Eliminates stocking premixed gas
- Reduces gas costs
- Reduces cylinder handling
- Custom mix gases for optimum weld quality



#HB190

#H195

Hard Hat™ Regulator Guards

- For Series 40 #HB190
- For Series 30 #H195



#H697

#H698

Reverse-Flow Check Valve Set (oxy and fuel)

- Torch mount #H697
- Regulator mount #H698



#H753

Flashback Arrestor Set (oxy and fuel)

- Torch mount #H743
- Regulator mount #H753



GASAVER™

- Propylene/oxygen #WDW100
- Acetylene/oxygen #WDW101
- Propane or natural gas/oxygen (4 psi and above) #WDW104
- For repetitious brazing and soldering
- Hang torch to shut off
- Pilot light for relighting
- Eliminates flame readjustment

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model	Stock Number	Gas	Max. Delivery Pressure or Flow	Inlet Pressure PSIG (Bar)	Inlet Connection	Outlet Connection
Heavy-Duty Series 40 Pressure Regulators	40-175-540 Single-stage	Oxygen	175 PSIG (12 Bar)	3000 (207) Max.	CGA 540	9/16"-18 RH
	40-275-540 Single-stage	Oxygen	275 PSIG (19 Bar)	3000 (207) Max.	CGA 540	9/16"-18 RH
	40-15-510 Single-stage	Acetylene	15 PSIG (1 Bar)	400 (28) Max.	CGA 510	9/16"-18 LH
	40-15-300 Single-stage	Acetylene	15 PSIG (1 Bar)	400 (28) Max.	CGA 300	9/16"-18 LH
	40-50-510 Single-stage	LP Gas	50 PSIG (3 Bar)	400 (28) Max.	CGA 510	9/16"-18 LH
	40-275-580 Single-stage	Inert Gas	275 PSIG (19 Bar)	3000 (207) Max.	CGA 580	5/8"-18 RH Internal
Medium-Duty Series 30 Pressure Regulators	30-100-540 Single-stage	Oxygen	100 PSIG (7 Bar)	3000 (207) Max.	CGA 540	9/16"-18 RH
	30-20-540 Single-stage	Oxygen	20 PSIG (1.4 Bar)	3000 (207) Max.	CGA 540	9/16"-18 RH
	30-15-510 Single-stage	Acetylene	15 PSIG (1 Bar)	400 (28) Max.	CGA 510	9/16"-18 LH
	30-15-300 Single-stage	Acetylene	15 PSIG (1 Bar)	400 (28) Max.	CGA 300	9/16"-18 LH
	30-15-520 Single-stage	Acetylene	15 PSIG (1 Bar)	400 (28) Max.	CGA 520	9/16"-18 LH
	30-15-200 Single-stage	Acetylene	15 PSIG (1 Bar)	400 (28) Max.	CGA 200	9/16"-18 LH
	30-50-510 Single-stage	LP Gas	50 PSIG (3 Bar)	400 (28) Max.	CGA 510	9/16"-18 LH
Premium Flowmeter Regulators	32-80-580 Single-stage	Argon/CO ₂	80 SCFH (38 LPM)	3000 (207) Max.	CGA 580	5/8"-18 RH Internal
	32-80-320 Single-stage	CO ₂	80 SCFH (38 LPM)	3000 (207) Max.	CGA 320	5/8"-18 RH Internal
	32-30-580 Single-stage	Argon/CO ₂	60 SCFH (28 LPM)	3000 (207) Max.	CGA 580	5/8"-18 RH Internal
	32-30-580-6 Single-stage w/gas hose	Helium	190 SCFH (90 LPM)			
	35-30-320 Two-stage high-flow CO ₂	CO ₂	80 SCFH (38 LPM)	3000 (207) Max.	CGA 320	5/8"-18 RH Internal
Premium Flowmeters	H1105 Argon/CO ₂	Argon/CO ₂	80 SCFH (38 LPM)	80 (6) Recommended	1/4" NPT Male	5/8"-18 RH Internal
	H1240 Multi-scale (Select-O-Gas™)	Argon/Hel/CO ₂	80 SCFH (38 LPM)	30 (2) Recommended	1/4" NPT Male	5/8"-18 RH Internal
Economy Flowmeter Regulators	H2051A-580 Single-stage	Argon	60 SCFH (28 LPM)	3000 (207) Max.	CGA 580	5/8"-18 RH Internal
	H2051A-580H Single-stage w/gas hose	CO ₂	50 SCFH (24 LPM)			
	33-50-580 Single-stage dual flow/reg	Helium	160 SCFH (78 LPM)			
Economy Flowmeters	H2230 Multi-scale	Argon/Hel/CO ₂	Depends on gas	50 (3) Recommended	1/4" NPT Male	5/8"-18 RH Internal
	H2231 Multi-scale				5/8"-18 RH External	
Flow Gauge Regulators	31-50-580 Single-stage	Argon	50 PSIG (3 Bar)	3000 (207) Max.	CGA 580	5/8"-18 RH Internal
	31-50-580-6 Single-stage w/gas hose					
	31-50-320 Single-stage	CO ₂	50 PSIG (3 Bar)	3000 (207) Max.	CGA 320	5/8"-18 RH Internal



Fume Extraction

Choose the right fume extractor.

Miller offers a complete line of solutions for extracting weld fumes for all types of jobs and workspaces. Our family of air filtration systems is developed exclusively for welding applications to help you stay in compliance with environmental regulations.

For more detailed information, visit

MillerWelds.com/filtair



FILTAIR	130	Capture 5	MWX	SWX	400	2000 – 12000
Weld Fume Extractor Type	Portable, high-vacuum	Extended capture	Mobile	Wall or column mounted	High-vacuum system ideally suited for use with Bernard™ FILTAIR fume extraction MIG guns to extract at the source	These models are part of an engineered system and offer the best filter and cleaning technologies to effectively manage weld fume particulate
Ideal For	Contractors, maintenance and repair operations, light fabrication work and light manufacturing	Manufacturing and fabrication – the best solution for weldments over 18 inches long	Fabrication shops, manufacturing, and training centers	Fabrication shops, manufacturing, and training centers where weld areas are near filtration system	Fabrication, manufacturing, and maintenance and repair operations	Manufacturing, hand-held and automation, fabrication shops, and training facilities
Welding Arcs	1	1	1	Up to 2 per unit	Up to 6 per unit	Up to 16 per unit
Filter Type	Manual cleaning	Self-cleaning (automatic)	MWX-D: Disposable MWX-S: Self-cleaning	SWX-D: Disposable SWX-S: Self-cleaning	Self-cleaning (automatic)	Self-cleaning (automatic/programmable)

FILTAIR® 130 and 400 See literature no. AY/3.1 and AY/3.3

Portable (130 model) and stationary (400 model) high-vacuum weld fume extractors designed for use with accessories like nozzles and fume guns to collect weld fume particles at the source.



FILTAIR 400
(collection hoses not included, order separately)

Miller recommends Hobart® low-manganese and low-fume filler metals.

FILTAIR 130 features



Unrivaled filtering performance. Designed to capture weld fume particles with a cleanable filter and safely deposit them in an integrated particle bin.



Less noise. Up to 70 percent quieter than some other extractors. Only 68.5 decibels at five feet.



Portable and compact. At only 46 pounds (21 kg) the vertical-shaped machine is easy to move around.

FILTAIR 400 features



Extraction flexibility. Capable of utilizing more than 60 feet of collection hose to extend accessories for fume extraction. Rigid ducting can be used to extend overall reach.

User flexibility. With four-port access, the unit can remain centrally located while providing mobility of accessories.



Extract at the source. Designed for almost any solid wire welding application. Available in 300- and 400-amp models.

Processes

- Stick (SMAW) • Flux-Cored (FCAW)
- MIG (GMAW) • TIG (GTAW)

Comes with

- FiiTek™ XL Filter
- 8-ft. collection hose (130 model only)
- 20-ft. power cord (130 model only)

Most popular accessories

- Replacement Filters
 - #300 671 Cleanable (130 model)
 - #300 925 Cleanable (400 model)
- Collection Hose
 - #300 672 17 ft. (5.2 m)
 - #300 673 34 ft. (10.4 m)

Magnetic Nozzles

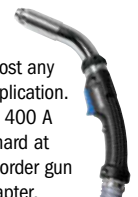
- #300 669 11.8 in. (300 mm) width
- #300 670 23.6 in. (600 mm) width (400 model only)



- Flexible Funnel Magnetic Nozzle** #300 668

Bernard™ FILTAIR Extraction Gun

Ideally suited for almost any solid-wire welding application. Available in 300 and 400 A models. Contact Bernard at 1-800-946-2281 to order gun and required gun adapter.



Four-Inch Duct Adapter

(400 model only) #300 974 Easy-to-install panel adapts four hose inlets to single four-inch duct inlet.



Dual Hose Inlet to Duct Adapter

(400 model only) #301 070

Y-shaped adapter connects duct to one or two hose attachments.



Model/Stock Number	Accu-Rated™ Airflow	Sound Level	Motor	Input Power	Dimensions	Net Weight
FILTAIR 130 (#300 595)	132 CFM (62 L/sec.)	68.5 dBA at 5 ft. (1.5 m)	1 HP	115 VAC, 1-Phase, 60 Hz at 11 A	H: 23 in. (584 mm) W: 12 in. (305 mm) D: 12 in. (305 mm)	46 lb. (21 kg)
FILTAIR 400 (#300 894)	400 CFM (189 L/sec.)	74 dBA at 5 ft. (1.5 m)	8.85 HP	460 VAC, 3-Phase, 60 Hz	H: 54 in. (1372 mm) W: 26 in. (660 mm) D: 48 in. (1219 mm)	551 lb. (250 kg)



FILTAIR® MWX and SWX Series See literature no. AY/3.0 and AY/3.2

Powerful systems that easily move to the weld or are mounted next to the weld area.
Disposable or cleanable filters for multiple applications.

MWX mobile fume extraction systems designed specifically for welding.



MWX-S (self-cleaning) model with 10-ft. extraction arm shown.

Miller recommends Hobart® low-manganese and low-fume filler metals.



SWX-D (disposable filter) model with 7-ft. extraction arm shown.

SWX wall- or column-mounted fume extraction systems designed specifically for welding.

Features common to all models



MERV 15 rating of FilTek XL filters provides superior filtering of up to 95 percent of weld fume particulate.



Class-leading suction power is Accu-Rated at the hood to better capture weld fumes and provide a cleaner environment.

Superior filters. Our FilTek XL filters are specifically designed for welding with a MERV 15 rating to outlast, out-filter, and outperform all the rest.

Durable aluminum pre-assembled extraction arm with external adjustments for better airflow and longer life.

Self-cleaning models additional features



Unrivalled filtering performance. Designed to capture weld fume particles with a cleanable filter and safely deposit them in an integrated particle bin.

One-minute cleaning cycle operates with a push of a button on the control panel.

Note: Compressed air required to operate cleaning mechanism.

Disposal drawer provides easy and convenient access to empty out collected particles. Handle releases drawer allowing it to slide out.

Upgrade to self-cleaning models for high arc-on time, extracting from heavy fume processes, or when welding aluminum or galvanized materials.

Processes

- Stick (SMAW) • Flux-Cored (FCAW)
- MIG (GMAW) • TIG (GTAW)

Comes with

- FilTek™ XL Filter
- Pre-assembled arm

Most popular accessories

Replacement Filters

- #300 540 Self-Cleaning Filter
- #300 539 Disposable Filter



FilTek XL filters are designed to efficiently capture the smallest weld fume particles and offer superior filter life.

Hood Light with Arc Sensor

- #300 689 For MWX Series
- #300 763 For SWX Series



Illuminates the welding zone and enables the fume extractor to start automatically when welding begins.



SWX Dual Arm Add-On Packages

- #951 519 SA-W807 (7-ft. arm)
- #951 520 SA-W810 (10-ft. arm)
- #951 521 SA-W812 (12-ft. arm)

Includes arm, blower and back draft dampers to turn single-arm weld fume extractor into dual-arm extractor.

- SA-W Arm Ducting Kit #300 771 Adapts new Miller arm to an existing extraction system.

Model/Stock Number	Filter Media	Accu-Rated™ Airflow	Extraction Arm Diameter	Sound Level	Motor	Input Power	Dimensions	Net Weight
MWX-S (Self-Cleaning) Models (#951 510) 7-ft. extraction arm (#951 511) 10-ft. extraction arm (#951 512) 12-ft. extraction arm	MWX-D (Disposable Filter) Models (#951 507) 7-ft. extraction arm (#951 508) 10-ft. extraction arm (#951 509) 12-ft. extraction arm	490 ft ² (45.52 m ²)	875 CFM (413 L/sec.)	8 in. (203 mm)	Approximately 70 dBA at 5 ft. (1.5 m)	1 HP, 3450 RPM	H: 34.75 in. (883 mm) W: 31.75 in. (806 mm) D: 48 in. (1219 mm)	MWX-S 300 lb. (136 kg) MWX-D 238 lb. (108 kg)
SWX-S (Self-Cleaning) Models (#951 516) 7-ft. extraction arm (#951 517) 10-ft. extraction arm (#951 518) 12-ft. extraction arm	SWX-D (Disposable Filter) Models (#951 513) 7-ft. extraction arm (#951 514) 10-ft. extraction arm (#951 515) 12-ft. extraction arm	490 ft ² (45.52 m ²)	875 CFM (413 L/sec.)	8 in. (203 mm)	Approximately 74 dBA at 5 ft. (1.5 m)	1 HP, 3450 RPM	SWX-S H: 33 in. (838 mm) SWX-D H: 29 in. (737 mm) W: 27.25 in. (692 mm) D: 33 in. (838 mm)	SWX-S 195 lb. (88 kg) SWX-D 130 lb. (59 kg)



Total Fume Solutions

Miller, Hobart and Bernard are committed to providing exclusive technologies designed specifically around your weld fume challenges. Find out how our portfolio of solutions is uniquely positioned with process modifications, engineered controls and personal protective equipment at Millerwelds.com/fumesolutions



Fume Extraction

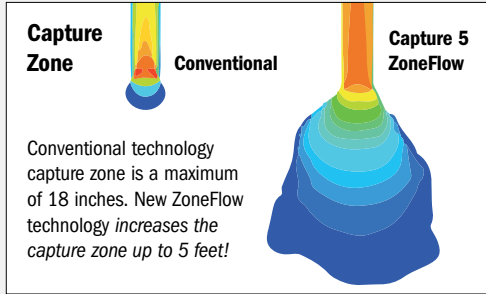
FILTAIR® Capture 5 See literature no. AY/3.5

The capture zone redefined. Innovative, extended-capture fume extraction system designed specifically for welding.



NEW!

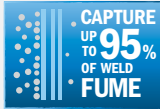
Miller recommends Hobart® low-manganese and low-fume filler metals.



ZoneFlow™ technology. Extends the capture area up to five feet versus 12–18 inches with conventional source capture arms. See illustration above.



Minimizes downtime with fewer fume extractor adjustments. With increased capture area, arm interactions are dramatically minimized.



MERV 15 rating of FilTek XL filters provides superior filtering of up to 95 percent of weld fume particulate.



Source capture is designed to draw weld fume away from the welder's breathing zone and keep the facility clean.

Processes

- Stick (SMAW) ▪ Flux-Cored (FCAW)
- MIG (GMAW) ▪ TIG (GTAW)

Comes with

- Self-cleaning FilTek™ XL Filter
- Durable aluminum pre-assembled extraction arm with toolless external adjustments for better airflow and longer life

Most popular accessories



- **Replacement FilTek XL Filter #301 106**

Filter is designed for the Capture 5 automatic self-cleaning system.



Scan this tag or visit MillerWelds.com/capture5 to see a video showing the capture zone redefined.

Stock Number	Filter Media	Accu-Rated™ Airflow	Extraction Arm Diameter	Sound Level	Motor	Input Power	Dimensions	Net Weight
(#951 574) 10-ft. extraction arm (#951 575) 12-ft. extraction arm	452 ft ² (42 m ²)	900 CFM (425 L/sec.)	10 in. (254 mm)	Approximately 77 dBA at 5 ft. (1.5 m)	5 HP, 3450 RPM	460 VAC, 3-Phase, 60 Hz at 5.8 A	H: 43 in. (1092 mm) W: 32 in. (813 mm) D: 48 in. (1219 mm)	670 lb. (304 kg) with 12-ft. arm

Cleaner air with FilTek™ XL filters

The FilTek XL filter's higher MERV rating means unrivaled filtering performance.

MERV Comparison

Applicable Weld Fume MERV Rating Categories ¹	Particle Size Range Efficiency % ²		
	0.3 to 1 µm	1 to 3 µm	3 to 10 µm
10	Not Rated	50–65%	85%
11	Not Rated	65–80%	85%
12	Not Rated	80–90%	85%
13	<75%	90%	90%
14	75–85%	90%	90%
15 Miller® FilTek XL	85–95%	90%	90%
16 Miller® FilTek XL	≥95%	≥95%	≥95%
HEPA³	≥99.97%	≥99.97%	≥99.97%
Weld Fume Composition⁴	75–95%	≤15%	≤10%

Filters are rated on a MERV scale, which measures filter efficiency based on particle count. MERV ratings range from 1–16, with 16 being the best at filtering small particles – such as those found in weld fumes. The vast majority of weld fumes are less than one micron in diameter, or roughly 1/100th the width of a human hair.

Filters in common air filtration systems often have MERV ratings between 7–11. FilTek XL filters are rated at class-leading MERV 15–16 to capture up to 95 percent of weld fume particulates including those found in hexavalent chromium.

¹American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) 52.2

²National Air Filtration Association (NAFA) Guide

³HEPA filters are depth loading and have high restrictions to air flow, reducing system performance versus FilTek XL filters.

⁴Jenkins, Pierce, Edgar, Particle Size Distribution of GMAW and FCAW



FILTAIR® 2000-12000 Industrial Centralized Systems

See literature no. AY/3.4

The Industrial Centralized weld fume extractors are custom engineered solutions designed for multiple capture sources which require ducting and accessories to complete the system.



FILTAIR 4000 model shown. Other models are available (2000, 6000, 8000, and 12000).

Call us toll-free at 855-FILTAIR (855-345-8247) for information on custom engineered solutions to fit your needs.

Custom-engineered solutions. System design, collectors and accessories, installation, training and support.

Improves operating efficiency. Creates a cleaner shop with less downtime spent cleaning equipment. Raises productivity with more motivated employees and fewer absences. Lowers insurance premiums and meets OSHA and EPA compliance.



Stand-alone space saver. Our fully assembled fume extractor provides up to a 65 percent smaller footprint versus traditional cartridge-style extractors. It provides all the necessary extraction tools, while offering customizable options.



Less noise. Up to 75 percent quieter than cartridge-style extractors. High-efficiency motors and integrated silencer housing create a safer, more productive work area.

Integrated electrical controls. Control panel manages all of the collector functions, including the fan, the filter differential, and the pulse cleaning system.



24 VDC motor start/stop feedback relay allows an external signal to automate the remote start of collector fan from other equipment.

Easy-clean filter with surface-loaded filter technology allows for more effective weld fume pulse cleaning without penetration into the filter. This provides an easier filter cleaning process, while outlasting conventional cartridge filters.

Smaller size and fewer filters.

One FilTek XL filter replaces up to three cartridge-style filters increasing efficiency, reducing extractor size, and lowering operational costs.



Processes

- Stick (SMAW) • Flux-Cored (FCAW)
- MIG (GMAW) • TIG (GTAW)

Custom solutions

- Configured to source fume extraction
- Configured for ambient push-pull collection

Comes with

- FilTek™ XL Filter
- Top or front air inlet
- Configured for indoor or outdoor mounting (outdoor models are wind load and seismic rated and include remote-mounted control box and optional weather hood)

Most popular accessories



- Replacement High-Efficiency Filter** #300 927
- Extraction Arms**
 - #300 953 6 in./7 ft.
 - #300 954 6 in./10 ft.
 - #300 955 6 in./12 ft.
 - #300 980 8 in./7 ft.
 - #300 981 8 in./10 ft.
 - #300 982 8 in./12 ft.
- Mounting Brackets**
 - #300 952 For 6-in. arms
 - #300 771 For 8-in. arms
- Call us toll-free at 855-FILTAIR (855-345-8247) for information on factory options such as HEPA filter kit, weather hood, automation hood, Spark Cooler® and installation services.

*Based on clean filters. **Dimensions for base models without factory options.

Model	Nominal Airflow Range*	Number of Filter Packs	Sound Level	Input Power	Dimensions** (H x W x D)			Ship Weight
FILTAIR 2000	960-3200 CFM (453-1510 L/sec.)	2	72-75 dBA at 5 ft. (1.5 m)	460 VAC, 3-Phase, 60 Hz	66.6 in. (1692 mm)	31.2 in. (792 mm)	83.2 in. (2113 mm)	1300 lb. (590 kg)
FILTAIR 4000	1920-5500 CFM (906-2596 L/sec.)	4	Peak pulse cleaning is 92.7 dBA at 5 ft. (1.5 m)	575 VAC, 3-Phase, 60 Hz	86.1 in. (2187 mm)	31.2 in. (792 mm)	83.2 in. (2113 mm)	1600 lb. (726 kg)
FILTAIR 6000	2880-8640 CFM (1359-4078 L/sec.)	6			117.2 in. (2977 mm)	31.2 in. (792 mm)	83.2 in. (2113 mm)	2250 lb. (1021 kg)
FILTAIR 8000	3840-11,520 CFM (1812-5437 L/sec.)	8			135 in. (3429 mm)	37.2 in. (945 mm)	83.2 in. (2113 mm)	2900 lb. (1315 kg)
FILTAIR 12000	5760-13,440 CFM (2718-6343 L/sec.)	12			120.3 in. (3056 mm)	59.7 in. (1516 mm)	83.2 in. (2113 mm)	3900 lb. (1769 kg)

FILTAIR® accessories

Miller offers a full line of accessories for complete system solutions and turnkey installation.

FILTAIR Low Profile Hood

- Available in one foot increments from 4 x 4 feet up to 16 x 16 feet
- Exclusive design—secondary air path ensures fume capture is maximized
- Hood airflow design reduces sound for better communication
- Unique airflow offers spark abatement in the standard deflector plate, and also in the recommended Spark Cooler
- Clear, UV-protected polycarbonate ceiling panels allow maximum light into the cell
- Corner lift hooks are convenient for hanging or installing the hood on a cell or legs



Spark Cooler®

- Cools sparks using the fume extractor's airflow
- Very efficient—maintains the extractor's suction power
- Simple design is easy to install

More FILTAIR accessories are available to build your system. Call us toll-free at 855-FILTAIR (855-345-8247) for information.





Welding Protection



For more detailed information, visit

MillerWelds.com/weldingprotection



Choose the right welding helmet



Serious dependability backed with a 3-year warranty on select models.

Feature	Classic Series FS#10	Classic Series FS#10 Flip-Up	Classic Series Variable Shade	Classic Series VSI™	Digital Pro-Hobby™	Digital Performance™	Digital Elite™	Titanium 1600™	Titanium 1600i™	Digital Titanium 7300™	Digital Titanium 9400™	Digital Titanium 9400i™
	UPGRADE	UPGRADE	UPGRADE	UPGRADE	UPGRADE	UPGRADE	UPGRADE	UPGRADE	UPGRADE	UPGRADE	UPGRADE	UPGRADE
Viewing Area	5.15 sq. in.	5.07 sq. in.	5.15 sq. in.	5.15 sq. in.	6.06 sq. in.	7.22 sq. in.	9.22 sq. in.	16 sq. in.	16 sq. in.	7.22 sq. in.	9.22 sq. in.	9.22 sq. in.
Shades	10	10	8-12	8-13	8-13	Cut: 5-8 Weld: 8-13	Cut: 5-8 Weld: 8-13	10	10	Cut: 5-8 Weld: 8-13	Cut: 5-8 Weld: 8-13	Cut: 5-8 Weld: 8-13
Modes	Weld	Weld/X-mode	Weld	Weld/X-mode	Weld/Grind	Weld/Cut/ Grind	Weld/Cut/ Grind/X-mode	N/A	N/A	Weld/Cut/ X-mode/ External Grind	Weld/Cut/ X-mode/ External Grind	Weld/Cut/ X-mode
Integrated Grind Shield	No	Yes	No	Yes	No	No	No	No	Yes	No	No	Yes
Auto-on	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	N/A	Yes	Yes	Yes
Sensors	2	2	2	3	2	3	4	N/A	N/A	3	4	4
TIG Rating	20 amps	20 amps	20 amps	5 amps/below	20 amps	5 amps	5 amps/below	N/A	N/A	5 amps/below	5 amps/below	5 amps/below
Switching Speed	1/3,600	1/3,600	1/10,000	1/20,000	1/20,000	1/20,000	1/20,000	N/A	N/A	1/20,000	1/20,000	1/20,000
Digital Controls	No	No	No	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Prem. Headgear	No	No	No	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes
InfoTrack™	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes
Weight	16 oz. (454 g)	14 oz. (396 g)	16 oz. (454 g)	23 oz. (652 g)	16 oz. (454 g)	17 oz. (482 g)	18 oz. (510 g)	17 oz. (482 g)	22.5 oz. (638 g)	19 oz. (539 g)	20 oz. (567 g)	24 oz. (680 g)

Features

See page 70 for helmet accessories and packages.



Digital controls easily allow welder to adjust shade, delay, and sensitivity.



External grind on Titanium 7300 and 9400 helmets allows welder to switch to grind mode with the push of a button.



Premium headgear features unsurpassed fit and durability. Provides extensive adjustability settings and a pivoting top for better fit and comfort.



EXCLUSIVE! InfoTrack™ technology on Titanium helmets allows the lens to track arc time while under the hood. Includes a digital clock display with the ability to set an alarm or timer.

Titanium Series™ Industrial helmets for the most extreme welding and grinding applications.



Four operating modes: weld, cut, grind and X-mode (not available on 1600/1600i models).

X-mode eliminates sunlight interference and low-amperage lens opening from obstructed sensors (not available on 1600/1600i models).

Silver shell reflects heat to keep helmet and user cool.

Aluminum heat shield protects analog lens in high-amperage applications.

Note: Titanium 1600i and 1600 models have a 30-day limited warranty.

Titanium 9400i™
#256 177

(features integrated grinding shield)

Titanium 9400™
#256 176

Titanium 7300™
#256 175

Titanium 1600i™
#255 519

(features integrated grinding shield)

Titanium 1600™
#245 799



Digital Elite™ Series Ultimate helmets PLUS four modes of digital versatility for most welding and cutting applications.



NEW!

Stars and Stripes™ III
#264 852

* Includes \$10 Donation to The National League of POW/MIA Families

Not Forgotten™
#260 127

Vintage Roadster™
#259 485

Lucky's Speed Shop™
#257 214

Inferno™
#257 217

The Joker™
#257 218

Fury™
#256 158

Camouflage
#256 173

Black
#257 213

Four arc sensors and four modes: weld, cut, grind and X-mode.

X-mode eliminates sunlight interference and low-amperage lens opening from obstructed sensors.

*Miller will be donating \$10 to the National League of POW/MIA Families (pow-miafamilies.org) for each helmet sold.

Digital Performance™ Series Mid-range helmets for most welding applications.



NEW!

America's Eagle™ II
#264 851

Blue Rage™
#256 164

'64 Custom™
#256 160

Illusion™
#256 165

Camouflage
#256 163

Black
#256 159

Digital Pro-Hobby™ Series Ideal helmets for light-duty welding applications.



NEW!

Stars and Stripes™
#264 850

Metalworks™
#259 486

Red Flame
#256 168

Camouflage
#256 169

Black
#256 166

Classic Series Miller® quality for the value-minded welder who wants an auto-darkening lens.



NEW!

FS#10 Flip-Up

FS#10

VSi

NEW! FS#10 Flip-Up #263 038
FS#10 #231 703 (4 Pk)
Variable Shade #251 292
VSi™ #260 938

- 2-year warranty
- FS#10 Flip-Up and VSi models feature integrated grinding shield and X-mode. Designed with construction market in mind.

MP-10™ Series Miller® quality for the value-minded welder.



Inferno™ #238 496 (Each)
Black #235 626 (6 Pk)
#238 497 (Each)

- Passive shade #10 lens
- 30-day limited warranty
- Upgradable to auto-darkening lens



Welding Protection

Welding Apparel



Leather Jacket
(See Size Chart)

- Premium top grain leather
- Expandable leather strategically placed for optimal mobility
- Flame-resistant inside cuff
- Satin lined
- Tapered, athletic cut



WeldX™ Jacket
(See Size Chart)

- Lightweight exclusive material with extreme flame-resistant properties
- 7-ounce WeldX front and flame-resistant navy cotton back
- Vented back/extended rear tail
- Zipper closure with Velcro® flap
- Chromium free



Combo Jacket
(See Size Chart)

- Indura® flame-resistant cotton (flame resistant guaranteed for life of jacket)
- Premium top grain leather
- Allows for patented bib/apron attachment



Indura® Cloth Jacket
Men's and Women's
(See Size Chart)

- Indura® flame-resistant cotton (flame resistance guaranteed for life of jacket)
- Nomex® flame-resistant thread
- Allows for patented bib/apron attachment



Classic Cloth Jacket
(See Size Chart)

- 9-ounce flame-resistant navy cotton
- Pre-shrunk fabric
- Fold-in sleeve snaps
- Finished hems and reinforced stitching



WeldX™ Cape Sleeves
(See Size Chart)

- 7-ounce WeldX front and flame-resistant navy cotton back
- Fold-in sleeve snaps
- Allows for bib attachment (sold separately)



Classic Cloth Cape Sleeves
(See Size Chart)

- 9-ounce flame-resistant navy cotton
- Fold-in sleeve snaps
- Allows for bib attachment (sold separately)



WeldX™ Apron
#247 134

- 35-inch length with accessible front pocket
- Adjustable drawstring ensures a good fit



Classic Cloth Apron
#247 149

- 35-inch length with accessible front pocket
- Adjustable drawstring ensures a good fit



Classic Cloth Lab Coat
(See Size Chart)

- 40-inch length
- 9-ounce flame-resistant navy cotton
- Fold-in sleeve snaps
- Finished hems and reinforced stitching



Bib/Apron
#231 125

- Attaches to Indura® Cloth and Combo Jackets with snaps across the chest as a bib or along the bottom as an apron



WeldX™ Bib
#247 133

- 19-inch length
- Attaches to cape sleeves



Classic Cloth Bib
#247 147

- 19-inch length
- Attaches to cape sleeves



WeldX™ Sleeves
#247 137

- 18-inch length
- Fold-in sleeve snaps
- One-handed cinch closure



Classic Cloth Sleeves
#247 148

- 18-inch length
- Fold-in sleeve snaps
- One-handed cinch closure



Combo Sleeves
#231 096

- Indura® flame-resistant cotton/top grain leather
- 21-inch (533 mm) length

Welding Apparel Size Chart

Apparel	Small	Medium	Large	X-Large	2X-Large	3X-Large	4X-Large	5X-Large
Leather Jacket	#231 088	#231 089	#231 090	#231 091	#231 092	#231 093	#231 094	#231 095
WeldX Jacket	#247 114	#247 115	#247 116	#247 117	#247 118	#247 119	#247 120	#247 121
Combo Jacket	#231 080	#231 081	#231 082	#231 083	#231 084	#231 085	#231 086	#231 087
NEW! Indura Cloth Jacket (Men's)	#258 095	#258 097	#258 098	#258 099	#258 100	#258 101	#258 102	#258 104
NEW! Indura Cloth Jacket (Women's)	#264 379	#264 380	#264 381	#264 382	#264 383	-	-	-
Classic Cloth Jacket	#244 749	#244 750	#244 751	#244 752	#244 754	#244 755	#244 756	#244 758
WeldX Cape Sleeves	#247 122	#247 123	#247 124	#247 126	#247 127	#247 128	#247 130	#247 131
Classic Cloth Cape Sleeves	#247 138	#247 139	#247 140	#247 142	#247 143	#247 144	#247 145	#247 146
NEW! Classic Cloth Lab Coat	-	-	#252 000	#252 001	#252 002	-	-	-



Welding Gloves

Premium – unprecedented comfort and performance, redefining the welding glove industry. Three-dimensional pattern, select-grade leather and precision craftsmanship with unique design features for specific welding applications. Exceptional dexterity and flexibility.

INDUSTRY FIRST

NEW!



Extra Heavy-Duty MIG/Stick
#263 350 Large
#263 351 X-Large

- **An industry first!** Silicone patches on back for heat and spatter protection
- Multi-layered insulated palm and back
- Dual-padded, pig grain palm for added comfort

NEW!



Heavy-Duty MIG/Stick (Long Cuff)
#263 342 X-Large

- Padded forearm for additional protection and comfort
- Triple-layered insulated back
- Strategically placed patches on pig grain palm and cow split back for extended glove life

NEW!



Heavy-Duty MIG/Stick
#263 339 Large
#263 340 X-Large

- Strategically placed patches on palm and back for extended glove life
- Double-layered insulated palm and back
- Premium pig grain leather palm provides extreme durability and protection

NEW!



MIG/Stick
#263 343 Large
#263 344 X-Large

- Strategically placed patches on palm and back for extended glove life
- Double-layered insulated palm and back
- Premium cow split leather provides extreme durability and protection

NEW!



MIG (Lined)
#263 330 X-Small (Women's)
#263 331 Small (Women's)
#263 332 Medium
#263 333 Large
#263 334 X-Large

- Dual-padded palm
- Fleece insulated palm, foam insulated back
- Cow grain palm, pig split back and goat grain inner fingers provide exceptional dexterity and comfort

NEW!



MIG (Unlined)
#263 335 Medium
#263 336 Large
#263 337 X-Large

- Unlined palm for heightened feel and dexterity
- Double-layer insulated back and dual-padded palm for added comfort
- Cow grain palm, cow split back and goat grain inner fingers provide exceptional dexterity and comfort

NEW!



TIG
#263 345 X-Small (Women's)
#263 346 Small (Women's)
#263 347 Medium
#263 348 Large
#263 349 X-Large

- Completely unlined for heightened feel and dexterity
- Triple-padded palm for added comfort
- Premium goat grain leather offers superior flexibility and dexterity

NEW!



TIG/Multitask
#263 352 Small
#263 353 Medium
#263 354 Large
#263 355 X-Large

- Wool back provides ultimate insulation
- Dual-padded palm for added comfort
- Premium goat grain leather offers superior flexibility and dexterity

NEW!



Metalworker
#251 066 Medium
#251 067 Large
#251 068 X-Large

- Durable top grain leather and spandex back for enhanced durability and dexterity
- Neoprene wrist with Velcro® closure increases fit and support
- Padded, reinforced palm and thumb saddle for extended wear

Classic – standard fit and materials for the value-minded welder.



Heavy-Duty MIG/Stick
#249 193 Large
#249 194 X-Large

- Durable side-split cowhide
- Aluminized insulation reflects radiant heat
- Reinforced palm heightens support and durability



MIG
#249 195 Large
#249 196 X-Large

- Durable side-split cowhide
- Moisture-wicking cotton fleece lining
- Thumb reinforcement straps increase support and durability



MIG (Long Cuff)
#249 197 Large
#249 198 X-Large

- Extra long 9-inch cuff for increased forearm protection
- Durable side-split cowhide
- Moisture-wicking cotton fleece lining



TIG
#249 199 Large
#249 200 X-Large

- Unlined pigskin palm offers superior dexterity and wear
- Durable side-split cowhide
- Reinforced palm heightens support and durability

Head Threads



Head Thread Size Chart

- Bandannas have a sewn-in sweatband
- Caps are reversible with a low, soft bill

Caps	Size 7	Size 7-1/8	Size 7-1/4	Size 7-3/8	Size 7-1/2	Size 7-3/4
American Pride	#230 553	#230 554	#230 555	#230 556	#230 557	#230 558
Blue Flame	#230 535	#230 536	#230 537	#230 538	#230 539	#230 540
Dragon	#230 547	#230 548	#230 549	#230 550	#230 551	#230 552
Ghost Skulls	#230 541	#230 542	#230 543	#230 544	#230 545	#230 546
Miller® Logos	#258 322	#258 323	#258 325	#258 326	#258 327	#258 328
Bandannas (One size only)	Black #250 904 Dragon #230 560 NEW! Maple Leaf #250 905		Miller® Logos #258 440 Skull & Barbed Wire #230 559			



Respiratory



LPR-100 Half Mask Respirator #ML00894

- Fit testing required – Quantitative Face-Fit Test Kit #261 086
- Patented low-profile design maximizes field of vision
- Fits easily under most welding helmets
- Pleated filter cartridge eases breathing and extends filter life
- Replaceable P100 filters (#SA00818) protect users against hexavalent chromium, stainless steel, galvanized steel, steel/manganese alloys, aluminum, cadmium and lead fumes
- Assigned protection factor of 10
- NIOSH 42 CFR 84 certified



PAPR Powered Air-Purifying Respirator

Available Packages:

With Hard Hat

- #259 385 With Titanium 9400™ Helmet
- #261 659 With Titanium 9400i™ Helmet
- #259 386 With Hard Hat only

With Titanium 9400i™ Helmet

- #247 531 With Auto-Darkening Lens Assembly
- #247 532 Without Auto-Darkening Lens Assembly

With Titanium 9400™ Helmet (External grind button)

- #262 615 With Auto-Darkening Lens Assembly
- #262 616 Without Auto-Darkening Lens Assembly



- Lightweight, low-profile blower design (3.25 pounds) provides enhanced comfort and unrestricted movement
- Comfortable load-bearing shoulder straps
- Dual air speeds for maximized comfort
- Audible and vibrating alarms notify users in noisy environments
- HEPA Filter for hexavalent chromium, stainless steel, galvanized steel, steel/manganese alloys, aluminum, cadmium and lead fumes
- Assigned protection factor of 25
- NIOSH 42 CFR 84 certified

Heat Stress

**NEW!**

CoolBand™ II Integrated Headgear Cooling System #261 970

- Up to **8 degrees Fahrenheit cooler** under the hood
- Strategically placed air vents reduce fogging
- Constant air movement removes stagnant air
- Now with premium headgear (#256 174)

Note: Not compatible with XL Series™, Classic VSi™ and Titanium 9400i™ helmets.



Note: Not compatible with XL Series™ helmets.

CoolBelt™ Belt-Mounted Cooling System #245 230

- Up to **17 degrees Fahrenheit cooler** under the hood
- Provides all-day comfort through maximized airflow power
- Multiple airflow speeds eliminate stagnant air and reduce fogging
- Lightweight design extends wearability

Accessories and Packages



Helmet Bib #253 882

- Attaches to bottom of the helmet with Velcro® for added neck coverage



Headgear #256 174

- Extensive adjustability settings and a pivoting top for better fit and comfort
- Fits any helmet in the Arc Armor line



Slotted Hard Hat Adapter #260 940

- Compatible with most slotted hard hats. Helmet and hat not included.



Hard Hat Adapter

- #213 110 (XL and XLi)
- #222 003 (All other Miller Series)
- Compatible with Fibre Metal and MSA hats. Other brands may fit depending on size and shape. Helmet and hat not included.



Helmet Hook #251 018

- Holds welding helmets, grinding shields or other helmets with a headgear. Silicone strap secures the helmet in place.



2x4 Auto-Darkening Lens

- #770 660 (Shade 8)
- #770 659 (Shade 9)
- #770 226 (Shade 10)
- Fits all 2x4-inch windows
- Solar powered, two arc sensors
- Light state shade 3
- Two-year warranty



Safety Glasses

- Black** #238 979 (Clear)
- Frame** #235 656 (Smoked)
- #235 662 (Shade 3)
- #235 658 (Shade 5)
- Blue** #235 655 (Smoked)
- Frame** #235 661 (Shade 3)
- #235 657 (Shade 5)
- Orange** #235 663 (Shade 3)
- Frame** #235 659 (Shade 5)
- ANSI Z87.1 compliant



Jobsite Tool Bag #228 028

- Over twenty separate pockets
- Opening of 12 x 18.5 inches (305 x 470 mm)



Performance Pak shown.

Protection Paks

- Starter Pak**
(Includes #251 292 Classic VS helmet and Classic Cloth jacket)
- #255 848 Large
- #255 850 X-Large
- #255 851 2X-Large
- Performance Pak**
(Includes #256 159 Performance helmet and Indura® Cloth jacket)
- #240 886 Large
- #240 887 X-Large
- #240 888 2X-Large



For more detailed information visit

MillerWelds.com/arcstation

Workstations



Count on Miller to design the perfect workbench to make welding projects faster and easier. The Miller® ArcStation is the first-ever, all-in-one workstation designed for welding and metalworking. It's versatile, affordable and just the right height to work comfortably. You can organize equipment, tools, and raw materials into one convenient workspace. And you can also customize your workbench with a wide range of handy accessories.



Scan this tag to see videos on ArcStation workbenches.

S-Series ArcStation™



Fully loaded 60SX model (#951 413) shown. See below for other models.

The S-Series is perfect for the welder who needs a tough workbench for the fab shop or the home garage.

Four S-Series models available, depending on your needs

- 30S (30 x 30 inch with solid tabletop)
- 30SX (30 x 30 inch with X-pattern tabletop)
- 60S (30 x 60 inch with solid tabletop)
- 60SX (30 x 60 inch with X-pattern and solid tabletop combo)

SX model includes X-pattern tabletop for trouble-free clamping!

Durable 1/8-inch steel frame with cross bar and heavy-duty tabletops provide a sturdy area for welding or metalworking.

Lower shelf provides a convenient place to store equipment, tools and raw materials.

Adjustable leveling feet keep bench rock-steady.

Customize with a wide range of handy accessories to make this the *ultimate* workbench (see at right).

S-Series accessories

Miller® ArcStation accessories allow you to get the most out of your ArcStation.

- 1** X-clamps
#300 613 6-inch
#300 850 5-inch
- 2** Side Shelf #300 680
- 3** Tool Chest with Ball-Bearing Slides #300 610
- 4** Interior Shelf #300 679
- 5** Quick-Remove Vise
#300 611 5-inch Vise and Mount
#300 612 Mount only
- 6** Weld Curtain
#300 685 30S Series
#300 686 60S Series
- 7** Casters
#300 849



Convenience Kit #300 614 includes the following:

- 8** Gun Holder
- 9** Tool Holder
- 10** Clamp Bar



Visit MillerWelds.com or your distributor for other Miller® options and accessories.

F-Series accessories

5-inch X-clamps #300 850

F-Series ArcStation™



Shown with optional 5-inch X-clamps.



When portability or space-savings is a concern, the F-Series ArcStation is your solution.

Wheels, handle, and fold-up design make unit easy to take to the jobsite or move around the shop.

Compact size makes storing unit a breeze. Unit folds down to 6 x 29 x 48 inches (152 x 737 x 1219 mm).

30 x 30 inch size tabletop provides plenty of work surface.

3/16-inch X-pattern steel tabletop allows trouble-free clamping.

1.5-inch diameter steel tube frame provides strength and durability.

Includes removable gun holder.

Add the optional 5-inch X-clamps (#300 850) to make this the *ultimate* portable workbench.

ArcStation Models

	 30FX (#300 837)	 30S (#951 167)	 30SX (#951 168)	 60S (#951 169)	 60SX (#951 170) 60SX Fully Loaded (#951 413)
Steel Top	(1) 29 x 29 x 3/16-in. X-Pattern	(1) 29 x 29 x 3/16-in. Solid	(1) 29 x 29 x 3/8-in. X-Pattern	(2) 29 x 29 x 3/16-in. Solid	(1) 29 x 29 x 3/8-in. Solid (1) 29 x 29 x 3/8-in. X-Pattern
Load Capacity	500 lb. (227 kg)	1000 lb. (454 kg)	1000 lb. (454 kg)	1000 lb. (454 kg)	1000 lb. (454 kg)
Dimensions	35 x 29 x 35 in. (889 x 737 x 889 mm)	35 x 29 x 29 in. (889 x 737 x 737 mm)	35 x 29 x 29 in. (889 x 737 x 737 mm)	35 x 58 x 29 in. (889 x 1473 x 737 mm)	35 x 58 x 29 in. (889 x 1473 x 737 mm)
Weight	74 lb. (34 kg)	123 lb. (56 kg)	177 lb. (80 kg)	230 lb. (104 kg)	318 lb. (144 kg)



Accessories

For more detailed information, visit

MillerWelds.com/accessories



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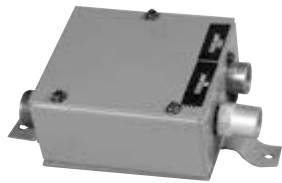
- High-Frequency Arc Starters and Stabilizers
- Kits • Protective Covers • Remote Controls
- Torch Connectors and Adapters

Wire Feeder Accessories 80

- Extension Cables (14-pin)
- External Secondary Contactor • Power Supply Adapter
- Spool Adapter • Spool Gun Controls and Kits
- Turntable Assembly • Wire Straightener

Automated MIG

For adapters and drive motors, visit MillerWelds.com.



Coolant Flow Switch #195 461

For Auto-Access. To ensure coolant is flowing in the system. Lack of coolant flow may cause damage to water-cooled guns. Module allows wiring into the peripheral connector port. 50-foot (15.2 m) cable with connector and separate shell connector for simple modification to desired length in the field. It can be mounted on Auto-Access or as desired elsewhere. Quarter-turn quick connection.

MCS-2 Motorized Cross Slide

#098 380 Control

#045 623 Adapter Plate*

Provides accurate weld head adjustment with convenient motorized control. Used to align the welding head (gun) to the weld joint, by providing vertical or horizontal adjustments, based on mounting preferences.

*Required when using two slides.

Cable Connectors and Adapters

Also see TIG Accessories Torch Adapters on page 80.

For Alumafeed System, Invision 352 MPa, CST 280, Maxstars, Dynastys, Syncrowaves, and XMT 304/350. These power sources are equipped with Dinse- or Tweco-style connectors for secondary connections. Power sources are shipped with two male plugs for use with #4 to #1/0 AWG cable.

Dinse-Style Connectors

#042 418 Accepts #4 to #1/0 AWG cable

#042 533 Accepts #1/0 to #2/0 AWG cable

Kits include one Dinse-style male plug which attaches to the work and/or weld cables and plugs into the Dinse-style receptacles on the power source.

Extension Kits for Dinse-Style Cable Connectors

#042 419 Accepts #4 to #1/0 AWG cable

#042 534 Accepts #1/0 to #2/0 AWG cable

Used to adapt or extend weld and/or work cables. Kit includes one male Dinse-style plug and one in-line female Dinse-style receptacle.



Tweco®-Style Connector #195 981

Accepts #1/0 to #2/0

AWG cable. Kit includes one Tweco-style male plug which attaches to the work and/or weld cables and plugs into the Tweco-style receptacles on the power source.



Dinse/Tweco® Adapter #042 465

Dinse/Cam-Lok Adapter #042 466

One-piece adapter with Dinse-style male plug (to power source) on one end and

Tweco or Cam-Lok female receptacle (for weld cable connection) on other end.



Tweco®/Dinse Adapter #210 061

One-piece adapter with Tweco-style male plug (to power source) on one

end and Dinse-style female receptacle (for weld cable connection) on other end.

Carts, Cylinder Racks and Running Gear

Also see Engine Drive Accessories and Plasma Accessories on pages 74 and 77.



Carrying Cart #056 301

For smaller Maxstars, CST 280, XMTs, and wire feeders. Cart is 34 inches high x 30 inches wide x 17 inches deep (864 x 762 x 432 mm).



Cylinder Cart #042 537

For Invisions, CST 280, and XMTs. Has adjustable handles and is slanted for convenient access to power source front panel controls. Carries two 160-pound (72.6 kg) gas bottles with feeder mounted to tray above power source. Accommodates Coolmate 3 or 4 coolant systems.



Universal Cart and

Cylinder Rack #042 934

For Invision 352 MPa, CST 280, Maxstar 200/280, Dynasty 200/280, Diversions, and XMT 304/350. Also accommodates single gas cylinder up

to 56 inches (142.2 cm) high measuring 6 to 9 inches (15.2 to 22.8 cm) in diameter. Provides storage for auxiliary items such as electrodes, helmets and gloves.



Feeder Cart #142 382

A low-profile, creeper cart which allows the operator to easily move the feeder around the work area.



Premium Running Gear/Cylinder Rack #770 187

For Millermatic 140 Auto-Set, 180 Auto-Set, 211 Auto-Set, and Diversions. Heavy-duty construction. For gas cylinders no larger than 7 inches (178 mm) in diameter. Maximum weight is 100 pounds (45 kg).



Standard Running Gear/Cylinder Rack #300 425

For Millermatic 140 Auto-Set, 180 Auto-Set, 211 Auto-Set, Diversions, and Multimatic 200. Durable construction. For gas cylinders no larger than 7 inches (178 mm) in diameter. Maximum weight is 75 pounds (34 kg).



Dual EZ-Change™ Low Cylinder Rack with Elevated Gun and Cable Rack #300 337

For Millermatic 212 Auto-Set and 252 and Syncrowave 210. Allows operators to easily roll cylinders on and off the rack with no lifting. Gun and cable rack keeps cables off the floor and tangle free.

Elevated Gun and Cable Rack #300 335

For Millermatic 212 Auto-Set and 252, and Syncrowave 210. For use with single cylinder rack. (Included with Dual EZ-Change Low Cylinder Rack.)



Dual Cylinder Rack #195 299

For Millermatic 350P and 350P Aluminum. Replaces single cylinder rack.



MIGRunner™ Cart #195 445
For AlumaFeed System, Invisions, and XMTs with single feeders. Small footprint and easily maneuverable, with cylinder rack low enough that you do not have to lift bottles. Durable, heavy-duty ergonomic handles are designed for comfort.



Shown with optional cylinder rack (#042 887).

Standard Running Gear #042 886

Standard Cylinder Rack #042 887
For CP-302, Deltawelds, Gold Stars, and Dimensions. Running gear has 10-inch (254 mm) rear wheels and 5-inch (127 mm) front casters for excellent mobility on the shop floor. Very easy to install. Handles double as a cable holder. Cylinder rack only installs on Standard Running Gear.



Thunderbolt XL Running Gear #043 927

Mounts easily to unit and provides convenient portability. Includes two wheels, two feet and a handle.



Running Gear Cylinder Rack #300 408

For Invisions, Access 300 and 450, and XMTs with single or dual feeders. Holds two large gas cylinders and has gun cable hangers and a consumable drawer in front. A convenient handle allows the cart to be pulled easily through doorways. Power source and single or dual feeders can be mounted to cart and secured.



2-Wheel Trolley Cart #300 480

For Maxstar/Dynasty 200 with or without Coolmate 1. Easy-to-manuever two-wheel cart features single-cylinder rack, chain for cylinder, straps (quick and easy to detach and carry machine), cable holders, torch holder, storage area, and filler rod storage area.



Small Runner™ Cart #300 988

For Maxstar/Dynasty 280 with or without Coolmate 1.3. Cart features single cylinder rack, foot pedal holder, two cable/torch holders and two TIG filler holders.



Runner™ Cart #300 244

For Maxstar/Dynasty 350 and 700 with or without Coolmate 3.5. Cart features single cylinder rack, foot pedal holder, three cable/torch holders and two TIG filler holders.



No. 37 Running Gear #195 282

For Syncrowave 250 DX and 350 LX. Includes two 10-inch (254 mm) wheels, two 5-inch (127 mm) casters, two-compartment rack for gas cylinders, and handles. Provides excellent mobility and easy to install.



Shopmate 300 Running Gear/Dual Cylinder Rack #300 145

For Shopmate 300 DX. The large 10-inch (254 mm) rear wheels and 5-inch (127 mm) front casters on this running gear provide excellent mobility on the shop floor, making it easier to move the power source. Very easy to install. Handles double as a cable holder. Holds two cylinders.

Coolant Systems

See literature no. AY/7.2

1
Phase



*May vary with torch design and cable length. Miller coolant systems are backed by the best warranty in the industry – one full year.

Coolmate™ 1 #300 360 115 VAC
For Maxstar/Dynasty 200 Series. Light industrial, 1-gallon cooler designed for water-cooled torches on power sources rated up to 200 A*.

Coolmate™ 1.3 #300 972 115 VAC
For Maxstar/Dynasty 280 Series. Light industrial, 1.3-gallon cooler designed for water-cooled torches on power sources rated up to 280 A*.

Coolmate™ 3 #043 007 115 VAC #043 008 230 VAC
Economical, 3-gallon cooler designed for water-cooled torches rated up to 500 A*.

Coolmate™ 3.5 #300 245 115 VAC
For Maxstar/Dynasty 350 and 700. Industrial, 3.5-gallon cooler designed for water-cooled torches rated up to 600 A*.

Coolmate™ 4 #042 288 115 VAC
Best performer in its class – industrial, 4-gallon cooler designed for water-cooled torches rated up to 600 A*.

Coolant

Sold in multiples of four in 1-gallon recyclable plastic bottles. Miller® coolants contain a base of ethylene glycol and deionized water to protect against freezing to -37° Fahrenheit (-38° C) or boiling to 227° Fahrenheit (108° C).



Low-Conductivity Coolant (clear, pre-mixed) #043 810
For TIG and MIG applications. NOT for use in push-pull systems or systems where aluminum is in coolant path/circuit.

Aluminum-Protecting Coolant (green, pre-mixed) #043 809
Primarily used in push-pull systems where aluminum is in coolant path/circuit and high frequency is NOT used.

Model	Motor Input Voltage	Maximum Current Draw	Maximum Cooling Capacity	IEC Cooling Capacity	Tank Capacity	Dimensions	Net Weight
Coolmate 1	115 VAC, 60 Hz	2.1 A (60 Hz)	2850 W (9700 BTU/hr.) 1.8 qt./min. (1.7 L/min.)	1210 W (4120 BTU/hr.) 1.1 qt./min. (1 L/min.)	1 gal. (3.8 L)	H: 8 in. (203 mm) W: 7.5 in. (191 mm) D: 23.75 in. (603 mm)	25 lb. (11 kg)
Coolmate 1.3	115 VAC, 60 Hz	4.7 A (60 Hz)	3400 W (11,600 BTU/hr.) 3.8 qt./min. (3.6 L/min.)	1330 W (4540 BTU/hr.) 1.1 qt./min. (1 L/min.)	1.3 gal. (4.9 L)	H: 11.25 in. (286 mm) W: 10.38 in. (264 mm) D: 24 in. (610 mm)	43 lb. (20 kg)
Coolmate 3	115 VAC, 50/60 Hz	5.9 A (50 Hz), 4.7 A (60 Hz)	3820 W (13,000 BTU/hr.) 4.2 qt./min. (4.0 L/min.)	1420 W (4840 BTU/hr.) 1.1 qt./min. (1 L/min.)	3 gal. (11.4 L)	H: 13.25 in. (337 mm) W: 12.25 in. (311 mm) D: 23.25 in. (584 mm)	40 lb. (18 kg)
	230 VAC, 50/60 Hz	2.5 A (50 Hz), 3.0 A (60 Hz)					
Coolmate 3.5	115 VAC, 50/60 Hz	5.9 A (50 Hz), 4.7 A (60 Hz)	4140 W (14,000 BTU/hr.) 5.0 qt./min. (4.7 L/min.)	1660 W (5660 BTU/hr.) 1.1 qt./min. (1 L/min.)	3.5 gal. (13.2 L)	H: 11.75 in. (298 mm) W: 15.75 in. (400 mm) D: 26 in. (660 mm)	64 lb. (29 kg)
Coolmate 4	115 VAC, 50/60 Hz	5.9 A (50 Hz), 4.7 A (60 Hz)	5500 W (18,000 BTU/hr.) 5.9 qt./min. (5.6 L/min.)	1780 W (6070 BTU/hr.) 1.1 qt./min. (1 L/min.)	4 gal. (15 L)	H: 16.25 in. (413 mm) W: 15.25 in. (387 mm) D: 18.75 in. (476 mm)	38 lb. (17 kg)

Engine Drive Accessories

Also see Trailers, Remote Controls and HF Arc Starters on pages 75, 78 and 79.

Big Blue and Blue Star Accessories



Cable Holder #043 946
For Big Blue 400, 500, 700 Duo Pro, Air Pak, and Turbo.



Lifting Eye #195 353
For Blue Stars.



No. 38 Hand Running Gear #195 352
For Blue Stars. Compact and balanced, lightweight wheelbarrow-style running gear provides easy onsite mobility.



Vandalism Lockout Kit #195 118 Field
For Big Blue 400, 500, Air Pak, and Turbo. Lockable hinged steel panels cover and protect name plate gauges and ignition switch (padlock included). Also includes engine compartment door lock and key.

Bobcat/Trailblazer Accessories (Gas/LP)



Multi-Terrain Running Gear #300 913
With inner tubes
#300 914
With Never Flat™ tires
For Gas/LP Bobcats and Trailblazers. Includes two heavy-duty 15-inch tires,

two 8-inch rubber swivel casters and a heavy-duty handle. Recommended for all surfaces and applications and is easy to move around the jobsite.



Off-Road Running Gear #300 909
With inner tubes
#300 910
With Never Flat™ tires

For Gas/LP Bobcats and Trailblazers. Includes four heavy-duty 15-inch tires and a rugged handle to provide maximum maneuverability.



Off-Road Running Gear with Protective Cage and Never Flat™ Tires #300 912
For Gas/LP Bobcats and Trailblazers. Running gear and rugged cage with cable holders protects your investment and is easy to move around the jobsite.



Protective Cage with Cable Holders #300 921 For Gas/LP Bobcats and Trailblazers
#300 473 For Trailblazer 302 Air Pak

Rugged cage with cable holders protects your investment. Works with Running Gear, Gas Cylinder Mounting Assembly or LP Tank Mounting Assembly.



Gas Cylinder Mounting Assembly #300 918
For Gas Bobcats and Trailblazers. Designed for use with Running Gear, Protective Cage, or by itself. Includes base tray with bottle bracket, vertical support rack and safety chain.

Note: Not for use with LP Tank Mounting Assembly. Not recommended for use with Protective Cover.



Hose and LP Tank Mounting Assembly #300 917
For LP Bobcats and Trailblazers. Designed for use with Running Gear, Protective Cage, or by itself. Includes bracket and clamp to mount 33- and 43-pound tanks

horizontally, and hose with fittings to converter.
Note: Cannot be used with Gas Cylinder Mounting Assembly. Not recommended for use with Protective Cover.



Remote Oil Drain and Filter Kits #300 923 Field
For Gas Bobcats and Trailblazers. Front mount for Kohler engines makes servicing easy when engine drive is mounted in tight spots.

Bobcat/Trailblazer Accessories (Diesel)



All-Purpose Running Gear with Never Flat™ Tires #300 477
For Diesel Bobcats and Trailblazers. Includes two heavy-duty 15-inch tires, two 8-inch rubber swivel casters and a heavy-duty handle. Recommended for all surfaces and applications and is easy to move around the jobsite.



Protective Cage with Cable Holders #195 331
For Diesel Bobcats and Trailblazers. Rugged cage with cable holders protects your investment. Works with Running Gear, Gas Cylinder Mounting Assembly or with trailer.

Note: Not for use with Protective Cover.



Gas Cylinder Mounting Assembly #195 330
For Diesel Bobcats and Trailblazers. Designed for use with Protective Cage, or by itself. Includes base tray with bottle bracket, vertical support rack and safety chain.
Note: Not recommended for use with Protective Cover.

Generator Accessories



Female Receptacle

Adapter Cord, Full KVA #300 517 Field
For Bobcats, Trailblazers, and Big Blue 300 Pro, 350 PipePro, 400 Pro, 450 Duo CST, and 700 Duo Pro. NEMA 14-50P to NEMA 6-50R. Adapts engine drive 120/240-volt plug to common Millermatic and Spectrum 240-volt plug.



Single-Phase Full KVA Plug Kit #119 172
For Bobcats, Trailblazers, and Big Blue 300 Pro, 350 PipePro, 400 Pro, 450 Duo CST and 700 Duo Pro. Can be wired for 120 or 240 VAC loads.

Three-Phase Full KVA Plug Kit #165 963 For Bobcat 3 Phase.
#254 140 For Big Blue 700 Duo Pro.

Protective Covers



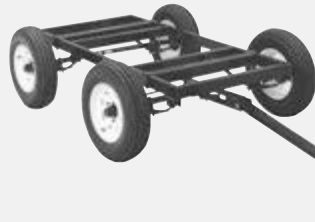
#300 919 and #195 301 covers shown.

Protective Covers
Heavy-duty, water- and mildew-resistant covers protect and maintain the finish of the welder.

- #195 193** For Blue Stars.
- #300 919** For **current model** Gas Bobcats and Trailblazers (except Air Pak) **without** Protective Cage or Running Gear.
- #300 920** For **current model** Gas Bobcats and Trailblazers (except Air Pak) **with** Protective Cage or Running Gear.
- #301 099** For **current model** Diesel Bobcats and Trailblazers **without** Protective Cage or Running Gear.
- #300 379** For Trailblazer 302 Air Pak.
- #195 301** For Big Blue 300 Pro, 350 PipePro, 400 Pro, and 450 Duo CST.
- #194 683** For Big Blue 400, 500, and 700 Duo Pro.
- #195 159** For Big Blue Air Pak and Turbo.

Trailers

See literature no. AY/20.0



HWY-1000 Trailer #195 013
For Bobcats, and Trailblazers (except Air Pak model). A 1000-pound (454 kg) capacity highway trailer with welded steel tubing frame, heavy-duty axle with roller bearing hubs and leaf-spring suspension. Includes jack stand, 2-inch (50 mm) ball hitch, fenders and lights.

4 West Four-Wheel Steerable Off-Road Trailer #042 801
For Big Blues. Heavy-duty 2570-pound (1166 kg) capacity trailer designed for use in mines, quarries, and other rough terrain. Has narrow 22-foot (6.7 m) turning radius. Includes 3-inch lunette eye, universal hitch and safety chains.

HWY-224 Trailer #043 805
OFR-224 Trailer #043 802
For Bobcats, Trailblazers, and Big Blues. A 2650-pound (1202 kg) capacity trailer with welded steel tubing frame, heavy-duty axle with roller bearing hubs and leaf-spring suspension. Includes jack stand and 2-inch (50 mm) ball hitch. HWY-224 also includes fenders and lights.

Trailer accessories



Dual Hitch #300 831
For HWY-1000, HWY-224, and OFR-224. Combination 2-inch (50 mm) ball and 3-inch (76 mm) lunette eye in one reversible assembly.

Cable Tree #195 023 For HWY-1000.
#043 826 For HWY-224 and OFR-224. Provides an area to conveniently wrap weld cables and extension cords.

Fender Kit #300 160
For HWY-224 and OFR-224. Add fenders to OFR-224 or replacement fenders for HWY-224.

Note: Trailers are shipped unassembled. *Width at outside of fenders. **Does not include tongue.

Model	Gross Axle Weight Rating	Gross Vehicle Weight Rating	Net Payload	Height of Bed	Road Clearance	Track (Center to Center of tires)	Standard Tires (Standard Rating or P-size Rating)	Dimensions	Net Weight
HWY-1000	1500 lb. (680 kg)	1265 lb. (574 kg)	1000 lb. (454 kg)	18.5 in. (470 mm)	6.5 in. (165 mm)	50 in. (1270 mm)	4.8-12	L: 98 in. (2489 mm) W: 57.5 in. (1460 mm)*	265 lb. (120 kg)
4 West	2000 lb./axle (907 kg/axle)	3000 lb. (1361 kg)	2570 lb. (1166 kg)	21.25 in. (540 mm)	8 in. (203 mm)	55.25 in. (1403 mm)	B78-13	L: 91 in. (2311 mm)** W: 61.25 in. (1556 mm)	430 lb. (195 kg)
HWY-224 OFR-224	3500 lb. (1588 kg)	2960 lb. (1343 kg)	2650 lb. (1202 kg)	18.5 in. (470 mm)	7.5 in. (191 mm)	52 in. (1321 mm)	B-78-13	L: 105 in. (2667 mm) W: HWY-59.5 in. (1511 mm)* OFR-58.437 in. (1484 mm)	320 lb. (145 kg)

Load Banks



LBP-350 #043 329
Designed to provide an adjustable load for troubleshooting or calibrating welding power sources or generators. Standard equipment

includes analog meters for both AC and DC output with jacks for external metering connections. It comes with a 13-foot (4 m) 115-volt power cord and has seven 50-amp load switches, providing a maximum capacity of 350 amps.



Welding Power Load Bank #902 804
Designed to load test the output of transformer-type, engine- or motor-driven generator welding power sources. This unit can be used to test AC or DC welder outputs, and to demonstrate welding equipment to customers.

Meters

Digital Meters #300 359 Field
For Gold Star models AFTER serial number KG283595. Easy-to-install, front-panel-mount, digital amp and volt meters.

SuitCase Wire Feeder Meter Kits
#300 331 Field For X-TREME 8VS.
#195 169 Field For 12RC BEFORE serial number LF232632.
#300 178 Field For 12RC AFTER serial number LF232631.

Weld Ammeter and Voltmeter Kit #195 131 Field
For Big Blue 400, 500, and Air Pak. Panel-mounted analog meters monitor welding output.

MIG Accessories

Accessory Kits



Industrial MIG 4/0 Kit #300 390 For single feeders.
#300 957 For dual feeders.
Consists of Miller | Smith® regulator/flowmeter with 10-foot (3 m) gas hose, 10-foot (3 m) 4/0 feeder weld cable with lugs, and 15-foot (4.6 m) work cable with 600-amp C-clamp. Dual kit comes with two regulator/flowmeters and gas hoses.

Industrial MIG 4/0 Kit with Dinse Connector #300 405 For single feeders.
#300 956 For dual feeders.
Same as above except weld and work cables have Dinse connector on one end instead of lug.



Shopmate 300 MIG Kit #300 150
Includes Miller | Smith® flow gauge regulator, 10-foot (3 m) gas hose, 10-foot (3 m) 1/0 interconnecting cable, 15-foot (4.6 m) 1/0 work cable with clamp, and consumable storage box.

Protective Covers



#195 149
For Millermatic 140 Auto-Set, 180 Auto-Set, and 211 Auto-Set with MVP.



#195 142
For Millermatic 212 Auto-Set, 252 and 350P, and Syncrowave 210. Features side pocket.

Pulsing Control

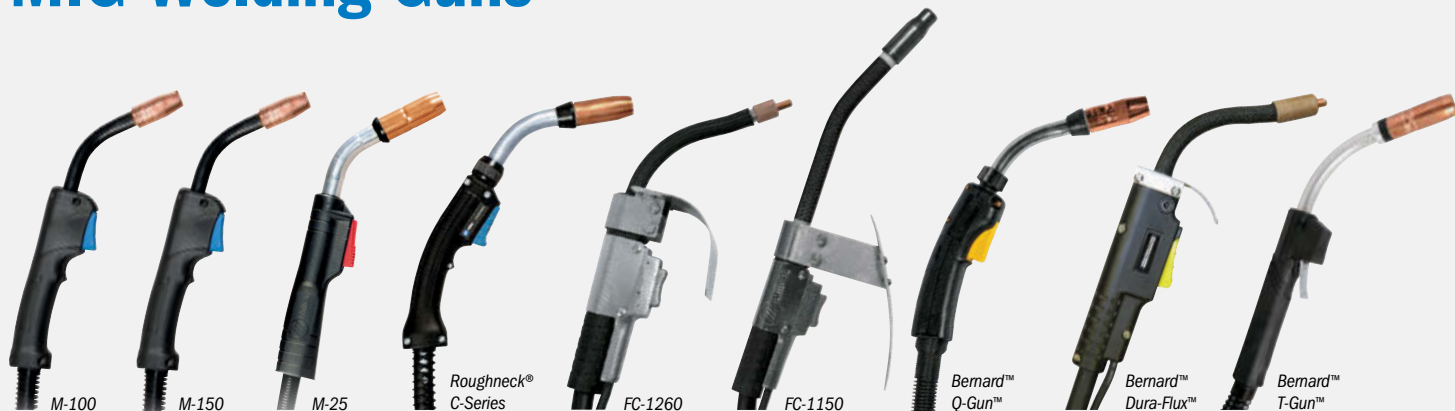


Optima™ MIG Pulse Control #043 389
For XMT CC/CV models. A multipurpose, microprocessor-based pulse control for synergic MIG (wire welding or GMAW), manual MIG pulsing or standard MIG welding. Use this control with above power sources and any Miller® wire feeder, including automatic feeders and spool guns. Includes 25-foot (7.6 m) cord with 14-pin plug.



Accessories

MIG Welding Guns



*Rated duty cycle for MIGmatic and Roughneck guns using CO₂ gas. Please see individual literature sheets for detailed specifications.

Model	Stock Number	Cable Length	Process	Rated Output	Rated Duty Cycle*	Standard Wire Size	Max. Recommended Wire Size
MIGmatic™ M-Series guns are an ideal match for Miller® integrated MIG packages and other Miller wire feeders. See literature no. AY/15.0							
M-100	#248 282	10 ft. (3 m)	MIG, Flux-Cored	100 Amps	100%	.030-.035 in. (0.8-0.9 mm)	.045 in. (1.2 mm)
M-150	#249 039	10 ft. (3 m)	MIG, Flux-Cored	150 Amps	100%	.030-.035 in. (0.8-0.9 mm)	.045 in. (1.2 mm)
	#249 040	12 ft. (3.7 m)					
	#249 041	15 ft. (4.6 m)					
M-25	#169 594	10 ft. (3 m)	MIG, Flux-Cored	250 Amps	100%	.030-.035 in. (0.8-0.9 mm)	3/64 in. (1.2 mm)
	#169 596	12 ft. (3.7 m)					
	#169 598	15 ft. (4.6 m)					
	#169 599	15 ft. (4.6 m)				.035-.045 in. (0.9-1.2 mm)	3/64 in. (1.2 mm)
Roughneck® C-Series guns are fully compatible with all current Miller wire feeders and are also adaptable to other major brands of welding equipment. See literature no. AY/17.0							
C-3010	#194 751	10 ft. (3 m)	MIG, Flux-Cored	300 Amps	100%	.035-.045 in. (0.9-1.2 mm)	5/64 in. (2.0 mm)
C-3012	#194 752	12 ft. (3.7 m)					
C-3015	#194 753	15 ft. (4.6 m)					
C-4010	#194 754	10 ft. (3 m)	MIG, Flux-Cored	400 Amps	100%	.035-.045 in. (0.9-1.2 mm)	5/64 in. (2.0 mm)
C-4012	#194 755	12 ft. (3.7 m)					
C-4015	#194 756	15 ft. (4.6 m)					
C-5010	#194 757	10 ft. (3 m)	MIG, Flux-Cored	500 Amps	100%	.052-1/16 in. (1.3-1.6 mm)	1/8 in. (3.2 mm)
C-5012	#194 758	12 ft. (3.7 m)					
C-5015	#194 759	15 ft. (4.6 m)					
Ironmate™ Series guns are ideal for feeding self-shielded (gasless) flux-cored wires with portable as well as standard-type wire feeders. See literature no. AY/16.0							
FC-1260	#195 732	10 ft. (3 m)	Self-Shielded Flux-Cored	350 Amps	60%	1/16-3/32 in. (1.6-2.4 mm)	3/32 in. (2.4 mm)
	#195 729	15 ft. (4.6 m)					
FC-1260LM (For Lincoln and Miller Wire Feeders)	#194 912	10 ft. (3 m)	Self-Shielded Flux-Cored	450 Amps	60%	3/32-1/8 in (2.4-3.2 mm)	1/8 in. (3.2 mm)
	#194 911	15 ft. (4.6 m)					
FC-1150	#194 864	10 ft. (3 m)	Self-Shielded Flux-Cored	450 Amps	60%	3/32-1/8 in (2.4-3.2 mm)	1/8 in. (3.2 mm)
	#194 863	15 ft. (4.6 m)					
Bernard™ Q-Gun™, T-Gun™ and Dura-Flux™ guns – see Website at BernardWelds.com							

MIG Gun Accessories

MIGmatic™ M-Series Consumable Kits

#234 607 .023-in. wire For M-100/M-150.

#234 608 .030-in. wire For M-100/M-150.

#234 609 .035-in. wire For M-100/M-150.

#234 610 .030-in. wire For M-25.

#234 611 .035-in. wire For M-25.

#234 612 .045-in. wire For M-25.

Contains contact tips, tip adapters, nozzle adapters and a standard nozzle.

Roughneck® Aluminum Conversion Kit #202 895

Allows 10-foot Roughneck guns to feed 3/64-1/16 inch aluminum wires.

Roughneck® Consumable Kit #206 073

Contains contact tips, diffuser, nozzle, nozzle insulator and gun hook.

Roughneck® Gun Hook #199 662

Enables Roughneck gun to be stored between welds.

Roughneck® Locking Trigger Switch #199 661

Allows Roughneck trigger to be locked during long welds.

Roughneck® Machine Adapter Kits

#199 663 For older Hobart and Thermal products.

#199 664 For Lincoln products.

Adapts Roughneck guns to be used with listed products.

Ironmate™ .045 Conversion Kit #199 178

Allows FC-1260 and FC-1260LM guns to feed .045-inch self-shielded wire.

Plasma Cutter Accessories

Automation Kits



Automation Kit for Spectrum 625 X-TREME #301 158

Upgrades new quick-connect hand-held torch packages to add machine torch capabilities. Includes new front panel with built-in remote control cable receptacle. Machine torches are NOT included in kits and must be ordered separately.



#301 157 kit shown.

Automation Kits for Spectrum 875 and 875 Auto-Line #301 156 For 875.

#301 157 For 875 Auto-Line.

Automation kits upgrade hand-held torch packages to add machine torch capabilities. Automation kit for Spectrum 875 Auto-Line (#301 157) includes a remote pendant control for manual on/off. Machine torches are NOT included in kits and must be ordered separately.

Cables and Cable Covers



Flexible Work Cable

#234 838 20 ft. (6.1 m)

#234 930 50 ft. (15.2 m)

20- or 50-ft. cable with quick connect and heavy-duty clamp.



#239 642 20 ft. (6.1 m)

#231 867 25 ft. (7.6 m)

#231 868 50 ft. (15.2 m)

Cart



No. 30B Economy Cart with Cord Wrap #300 511

For Spectrum 375, 875, and 875 Auto-Line. This economical running gear provides mobility, includes a cord wrap and extra storage space, and is angled for easy front panel access.

Cutting Guides



Plasma Circle-Cutting Guides #253 055

For XT30C, XT30, XT40 and XT60. Cut straight lines or circles up to 12 inches in diameter.



Suction/Magnetic Pivot Base #195 979

Add this to your cutting guide for convenient attachment to all flat surfaces. The extended arm accommodates holes up to 30 inches in diameter.



Plasma Standoff Roller Guide #253 054

Helps maintain recommended standoff distance to maximize cutting performance and improve tip life.

Filters



In-Line Air Filter Kit #228 926

For Spectrum 375, 375 X-TREME, 625 X-TREME, 875, and 875 Auto-Line. Mounts to back of the plasma cutter. Includes male and female 1/4-inch NPT quick-disconnect fittings and hose for easy on/off connection. The replaceable filter element (#228 928) filters to .85 microns for removal of 99.9 percent of water, dirt and oil.



RTI Filter and Bracket #300 491

For Spectrum 375, 875, and 875 Auto-Line.

Dryer will remove water, dirt and oil as small as one micron with 99.9 percent efficiency. Can be mounted on plasma cutter or on wall. Install as close as possible to point of air consumption. Replaceable filter element (#212 771).

Plugs and Cords

MVP™ Plugs



#219 258

For power cable 6-50P (230/240 V, 50 A).



#219 261

For power cable 5-15P (115/120 V, 15 A).



#219 259

For power cable 5-20P (115/120 V, 20 A).

For Spectrum 375 X-TREME, Millermatic 211 Auto-Set with MVP, Maxstar 150 models, Diversion 180, and Multimatic 200. Allows connection of machine to 115/120-volt or 230/240-volt receptacles without tools – just choose the plug that fits the receptacle.

MVP™ Adapters



#254 328

For connection to 6-50P receptacle (240 V, 50 A).



#254 330

For connection to 5-15P receptacle (120 V, 15 A).



#254 331

For connection to 5-20P receptacle (120 V, 20 A).

For Spectrum 625 X-TREME. Allows connection of machine to 120- or 240-volt receptacles without tools – just choose the adapter cord that fits the receptacle.



Female Receptacle

Adapter Cord, Full KVA #300 517 Field

NEMA 14-50P to NEMA 6-50R. Adapts engine drive 120/240-volt plug to common Millermatic and Spectrum 240-volt plug.

Protective Covers



#195 144

For Spectrum 375.

#300 388

For Spectrum 875.

#195 144 cover shown.



#300 184

X-CASE for Spectrum 375 X-TREME and 625 X-TREME, and Maxstar 150 models.

Torches

See your Miller® distributor for complete information on the following XT plasma torches and their consumables:



Spectrum plasma cutter hand-held torches:

#255 685 20-ft. (6.1 m) XT30C for 375.

#249 949 12-ft. (3.7 m) XT30 for 375 X-TREME.

#260 633 12-ft. (3.7 m) XT40 for 625 X-TREME.

#260 635 20-ft. (6.1 m) XT40 for 625 X-TREME.

#249 953 20-ft. (6.1 m) XT60 for 875/875 Auto-Line.

#249 954 50-ft. (15.2 m) XT60 for 875/875 Auto-Line.



Spectrum plasma cutter machine torches:

For Spectrum 625 X-TREME

#259 305 25-ft. (7.6 m) long body XT40M.

#257 462 25-ft. (7.6 m) short body XT40M.

For Spectrum 875 and 875 Auto-Line

#249 955 25-ft. (7.6 m) long body XT60M.

#249 956 50-ft. (15.2 m) long body XT60M.

#257 464 25-ft. (7.6 m) short body XT60M.

#263 952 50-ft. (15.2 m) short body XT60M.



Plasma Torch Consumable Kits

#253 520 For XT30C and XT30.

#253 521 For XT40.

#256 033 For XT60.

#127 493 Empty consumable box.

Polarity Switches/Controls

DC Polarity Reversing Switch Kit #043 942 Field

For Big Blue 400 and 500. Changes DC polarity without using tools.

Polarity Control #042 871

This dual-function control is designed for use with dual wire feeders or any application where electrical isolation and/or polarity reversing of weld current is required. Both functions can be used at the same time.



Process Selector Control #042 872

For CC, CV or CC/CV welding power source. Provides easy way to change welding process. Also includes features of Polarity Control.

Remote Controls

Also see TIG Accessories Remote Controls on page 79.



PRHC-14 Hand Control #195 511

For all solid-state power sources after serial number JK674521. Complete current or voltage control brings 120 volts of GFCI power to work area in a single cord. Housed in a durable and light aluminum case and includes 125-foot (38 m) cord with plugs.

Remote On/Off Control #242 197 025

For Deltawelds, Gold Stars, and Dimensions. Allows you to turn power source on or off from a distance of 25 feet (7.6 m). This is useful if power source is up in a mezzanine.



RHC-3GD34A Remote Hand Control #041 122

For Big Blue 400 CC and 500 CC. Remote hand amperage control. Includes 20-foot (6 m) cord and plug.

Stick Accessory Kits



No. 2 Stick Cable Sets

#195 196 15 ft. (4.6 m)

#300 836 50 ft. (15 m)

Consists of either 15- or 50-foot electrode cable with holder and work cable with clamp. 200 A, 100% duty cycle.

2/0 Stick Cable Set

#173 851 50 ft. (15 m), 350 A

#043 952 100/50 ft. (30/15 m), 300 A

Consists of either 50- or 100-foot 2/0 electrode cable with holder and 50-foot work cable with clamp. 100% duty cycle.



Weld Cables

#195 457 Cable with electrode holder

#195 458 Cable with work clamp

Consists of a stud/Tweco® adapter and 10-foot (3 m) 2/0 weld cable with a Tweco male connector and either an electrode holder or work clamp. Rated up to 400 A.



2/0 Weld Cable Extensions

#195 456 50 ft. (15 m)

#195 455 100 ft. (30 m)

For use with weld cables (#195 457) and (#195 458).

Wireless Remote Hand and Foot Controls

See literature no. AY/6.5 and AY/6.6

Increases productivity, saves money, improves safety and easy to use.



Wireless Foot Control

Wireless 14-pin Receiver (included with both systems)

Wireless Hand Control

Improves productivity and maneuverability by eliminating cord tangles. Reduces clean up time and work area cord clutter.

Improves safety by eliminating control cord and reducing potential trip hazard.

Improves reliability by eliminating control cord failure.

Multiple frequency sharing allows up to 20 systems to operate in a 90-foot (27.4 m) radius with accuracy and precision—and without delay, system interference, or crosstalk.

Easy-to-install receiver plugs directly into the 14-pin receptacle of Miller® machines.

Easily programmable. Control can be quickly and easily paired with any other Miller 14-pin wireless receiver. (Control is preprogrammed when purchased with the receiver.)

Foot control is designed specifically for TIG welding in manufacturing, fabrication and plant applications, allowing operator to adjust amperage at point of use without the limitations of remote cord.

Auto on feature extends the battery life up to 250 hours of welding without turning the pedal on and off.

Easy-Glide Wear Pads™ glide across concrete, making it easy to reposition the pedal for comfort and speed.

Hand control is designed for Stick, TIG, MIG and Flux-Cored welding, allowing operator to adjust parameters for different joint configurations, electrodes and wire types/sizes at the point of use instead of walking back to the machine.

Allows parameter adjustments up to 300 feet away from welder without returning to machine.

Improves weld quality. Operators can adjust their machines to optimize the parameters for different joint configurations, electrodes, and wire types and sizes.

Smart Touch™ buttons allow quick and accurate machine parameter adjustments.

Digital meter display allows presetting percentage of machine output before welding, and viewing amperage and voltage while welding.

Industrial

Processes

- TIG (GTAW) • Pulsed TIG (GTAW-P)

The following processes are with hand control only

- Stick (SMAW) • MIG (GMAW)*
- Flux-Cored (FCAW)

*Only with voltage-sensing feeder.

Comes complete with

- Wireless foot control (#300 429) or hand control (#300 430) transmitter
- Wireless 14-pin receiver (#300 722)
- Battery box (#249 297)
- Three AA batteries
- Four Easy-Glide Wear Pads™ (foot control only) (sold individually, #248 274)
- Belt clip (hand control only) (#249 233)

Suggested power sources

Look throughout this catalog for the icon at right signifying compatibility with a wireless remote. For a complete power source compatibility list visit MillerWelds.com/wireless.



*Some applications are not suitable for wireless communication. Keep in mind that the rated range is subjective, and depends on factors such as obstructions, frequency interference, transmission technology, and weather. The figures listed assume ideal conditions are present.

Model/Stock Number	Component	Power Supply	Battery Life	Rated Range*	Temperature	Radio Frequency	RF Power	Antenna	Dimensions	Weight
Wireless Foot Control System (#300 429)	Foot Control (Transmitter)	Three AA Batteries	250 hours	90 ft. (27.4 m)	-13° F to +158° F (-25° C to +70° C)	2.4 GHz (ISM Band)	<3 mW	Internal	H: 6 in. (152 mm)	3 lb. (1.4 kg) w/Batteries
									W: 5.75 in. (146 mm)	
Wireless Hand Control System (#300 430)	Hand Control (Transmitter)	Three AA Batteries	250 hours	300 ft. (91 m)					H: 5 in. (127 mm)	0.6 lb. (0.27 kg) w/Batteries
									W: 2.75 in. (70 mm)	
									D: 1.375 in. (35 mm)	

TIG Accessories

High-Frequency Arc Starters and Stabilizers



High Frequency Arc Starter/Stabilizer

HF-251D-1 #042 388 115 VAC

HF-251-2 #042 387 230 VAC

These portable 250-amp, 60 percent duty cycle units add high-frequency to the welding circuit to help start arc when using the TIG process.

Secondary Contactor Kit

#041 969 Field For HF-251D-1.

#041 906 Field For HF-251-2.

For power sources without a contactor. Mounts inside HF-251 cabinet.

Kits



#195 055 kit shown.

Contractor Kit

#195 055 TIG/Stick Pkg with RCCS-14 Fingertip

#195 054 TIG/Stick Pkg with RFCS-14 HD Foot Pedal For Maxstar/Dynasty 200 and 280. All-in-one TIG/Stick welding kit comes with either a RCCS-14 fingertip control or RFCS-14 HD foot control, Weldcraft® A-150 TIG torch with Dinse adapter, 200-amp Stick electrode holder with 15-foot (4.6 m) cable, 300-amp work clamp with 15-foot (4.6 m) cable, Miller | Smith® flow gauge regulator with 12-foot (3.7 m) gas hose, gas hose coupler, AK2C torch accessory kit, and protective carrying case.



TIG Contractor Kit #301 130

For Multimatic 200. Kit comes with Weldcraft® A-150 TIG torch with Dinse adapter, RFCS-6M foot control, regulator, gas hose, AK2C torch accessory kit, and protective carrying case.



#300 183 kit shown.

Weldcraft® Water-Cooled Torch Kits

#300 185 250 A, W-250 (WP20)

#300 990 280 A, W-280 (WP280)

#300 183 310 A, W-310 (CS310)

#300 186 400 A, W-400 (WP18SC)

For Maxstar/Dynasty 200, 280, 350, and 700, and Syncrowave 250 DX and 350 LX. Kit comes with 25-foot (7.6 m) TIG torch with Dinse adapter (thread-lock on 400-amp kit), torch cable cover, work clamp with 15-foot (4.6 m) cable [12-foot (3.7 m) cable on 400-amp kit], Miller | Smith® regulator/flowmeter with gas hose, and torch accessory kit.

Protective Covers



#300 579 and #195 478 covers shown.

#195 321 For Maxstar 200 Series.

#195 322 For Dynasty 200 Series.

#195 142 For Syncrowave 210.

#300 579 For Diversion 180.

#195 320 For Syncrowave 250/350.

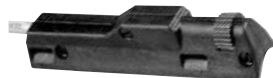
#195 478 For XMT 304 and 350.

Remote Controls



14-Pin to 6-Pin Adapter Cord #300 507

For Maxstar 150 STL and STH, and Multimatic 200. Adapts Miller® 14-pin foot control or fingertip control to a 6-pin plug.



RCC-14 (14-pin plug) #151 086

Side-to-side (east/west) rotary-motion fingertip current/contacter control fastens to TIG torch using two Velcro® straps. Great for production or contractors that need quick ramp-up. Includes 26.5-foot (8 m) cord and plug.



RCCS-6M (6-pin plug)

#195 184 13.25-ft. (4 m) cord

#195 503 26.5-ft. (8 m) cord

For Maxstar 150 STL and STH.

RCCS-RJ (Diversion)

#301 146 13.25-ft. (4 m) cord

For Diversion 165 and 180.

RCCS-14 (14-pin plug)

#043 688 26.5-ft. (8 m) cord

North/south rotary-motion fingertip current/contacter control fastens to TIG torch using two Velcro® straps. Great for applications that require a finer amperage control. Includes cord and plug.



RFCS-6M (6-pin plug)

#195 183 13.25-ft (4 m) cord

#195 504 20-ft (6 m) cord

For Maxstar 150 STL and STH, and Multimatic 200.

RFCS-5 (5-pin plug)

#043 716 20-ft (6 m) cord

RFCS-14 (14-pin plug)

#043 554 20-ft (6 m) cord

Foot pedal current/contacter control. Includes cord and plug.



RFCS-14 HD (14-pin plug) #194 744

Heavy-duty foot pedal current/contacter control with increased stability and durability from larger base and heavier cord. Reconfigurable cord can exit front, back or either side of the pedal for flexibility. Includes 20-foot (6 m) cord and plug.



RFCS-RJ45 #300 432

For Diversion 165 and 180. Foot pedal current/contacter control. Includes 14-foot (4.3 m) cord and plug.



RHC-14* (14-pin plug)

#242 211 020 20-ft. (6 m) cord

#242 211 100 100-ft. (30.5 m) cord

Miniature hand current/contacter control. Dimensions: 4 x 4 x 3.25 inches (102 x 102 x 82 mm). Includes cord and plug.

*For additional lengths visit MillerWelds.com/equiptoweld.



RMLS-14 (14-pin plug) #129 337

Momentary- and maintained-contact rocker switch for contactor control. Push forward for maintained contact and backward for momentary contact. Includes 26.5-foot (8 m) cord and plug.



RMS-6M (6-pin plug) #195 269

For Maxstar 150 STL and STH.

RMS-14 (14-pin plug) #187 208

Momentary-contact switch for contactor control. Rubber-covered pushbutton dome switch ideal for repetitive on-off applications. Includes 26.5-foot (8 m) cord and plug.



RPBS-14 (14-pin plug) #300 666

Attaches to the TIG torch to remotely start and stop the TIG welding process. Includes 25-foot (7.6 m) cord and plug.



TIG Accessories (continued)

Torch Connectors and Adapters



Thread Lock Connectors #225 029

For Maxstar/Dynasty 700. Contains two male connectors that accept #1/0 to #4/0 AWG size cable.

Air-Cooled TIG (GTAW) Torch Adapters



#195 234^{1,2}
For Maxstar 150 and Multimatic 200. 25-mm (small) Dinse-style gas thru for one-piece air-cooled torches.



#194 723 A-200 (WP26)
#194 722² All others
For Syncrowave 210. 50-mm Dinse-style gas thru for one-piece air-cooled torch.



#195 379 A-200 (WP26)
#195 378² All others
For CST 280, Maxstar/Dynasty 200, 280 and 350, and Syncrowave 250 and 350. 50-mm Dinse-style for one-piece air-cooled torch.

¹Except A-200 (WP26) torch.

²A-80 (WP24) torches require **24-5** adapter.

Water-Cooled TIG (GTAW) Torch Adapters



50-mm Dinse Flow Thru
#195 380
For Syncrowave 210. Used with all Miller | Weldcraft® water-cooled torches.



50-mm Dinse with Water Return Line **#195 377**
For Maxstar/Dynasty 200, 280 and 350, and Syncrowave 250 and 350. Used with all Miller | Weldcraft® water-cooled torches.



50-mm Thread Lock Style
#225 028
For Maxstar/Dynasty 700. Used with all Miller | Weldcraft® water-cooled torches.

Wire Feeder Accessories

Extension Cables (14-Pin)

8-Conductor Cables*

#242 208 025 25 ft. (7.6 m)

#242 208 050 50 ft. (15 m)

#242 208 080 80 ft. (24.4 m)

For XR-S and XR-D Controls, SuitCase 12RC feeder, 20 Series feeders, and 70 Series (S/D/DX model) feeders. For 14-pin remote controls/24 VAC wire feeders. 14-pin plug to a 14-pin socket. (Not for 115-volt XR or 50 Series feeders.)

11-Conductor Cables*

#247 831 025 25 ft. (7.6 m)

#247 831 050 50 ft. (15 m)

#247 831 080 80 ft. (24.4 m)

For XR-AlumaFeed, MPa Plus feeders, and 60M feeders. 11-conductors to support contactor control and remote voltage control on all Miller® electronic CV 14-pin power sources. Additional functions supported when using the Invision MPa or XMT MPa power sources include synergic Pulsed MIG, remote process select and side select capabilities.

14-Conductor Cables*

#242 205 025 25 ft. (7.6 m)

#242 205 050 50 ft. (15 m)

#242 205 080 80 ft. (24.4 m)

For HDC and WC-115 weld controls, XR-Controls prior to serial number KK309906, and 50 Series feeders. Fully-loaded 14-pin extension cables for remote controls, and 24-volt and 115-volt feeders.

*For additional lengths visit MillerWelds.com/equiptoweld.

External Secondary Contactor

#108 921

115 VAC/12 VDC secondary contactor is designed for use with voltage-sensing wire feeders to allow welding wire to be electrically cold until the gun trigger is pulled. Contactor will operate off 115 VAC or can be connected to 12 VDC battery of an engine-driven welder without 115 VAC auxiliary power available. Rated at 250 amps, 60 percent duty cycle.

Note: 25-foot Remote Contactor Cord (**#108 925**) required.

Power Supply Adapter



PSA-2 Control #141 604

Required when using SuitCase 12RC, 20 Series, and 70 Series feeders with power sources having only 115 VAC available. Control is equipped with a 14-pin receptacle and a 10-foot interconnecting cable with Hubbell

connections for older style power sources. Can also be used with competitive power sources requiring a contact closure for contactor control.

PSA-2 Extension Cord #047 813

25-foot (7.6 m) cord extends 10-foot (3 m) cord supplied with PSA-2 control (4-pin to 4-pin connection).

Spool Adapter

#047 141

For use with 14-pound (6.4 kg) spool of Hobart or Lincoln self-shielding wire.

Spool Gun Controls and Kits

For more information see literature no. M/1.5, M/1.73 and M/1.76.



SGA 100 #043 856

Required to connect Spoolmate 3035 spool gun to any Millermatic 140, 180, or 211. Also allows connection to virtually any

similar MIG welder – Miller or other brands. Includes 10-foot (3 m) 115 VAC power cable and plug, 6-foot (1.8 m) interconnecting cable, and 5-foot (1.5 m) gas hose.



SGA 100C #043 857

SGA with contactor required to connect Spoolmate 3035 spool gun to CV engine drives like the Miller Bobcat. Includes 10-foot (3 m) 115 VAC power cable and plug, 6-foot (1.8 m) interconnecting cable, and 5-foot (1.5 m) gas hose.



WC-115A Weld Control

#137 546 Without contactor
#137 546-01-1 With contactor
Operates on 115 VAC, and designed primarily for constant-current DC power sources. Can also be used with constant-voltage power sources or DC

engine drives supplying 115 VAC. Used with a CC source, the control circuit functions in a voltage-sensing mode and with a CV source, it functions as a constant-speed circuit. Includes wire run-in and drive motor acceleration controls which ensure optimum arc starting performance.

WC-24 Weld Control

#137 549

For Spoolmate 200, and Spoolmatic 15A, 30A, and Pro. Easily mounts on power source. Designed for use with Miller CV power sources with 14-pin receptacles and supplying 24 VAC.



Spool Gun Extension Hose and Cable Kits

#132 228 25 ft. (7.6 m)

#132 229 50 ft. (15 m)

For Spoolmatic 15A, 30A, and Pro. Extends leads, etc. between spool gun and power source.

Turntable Assembly

#146 236

Allows feeder to rotate as operator changes work position. Reduces strain and bending of gun cable.

Wire Straightener



For 20 Series and 70 Series.

#141 580 For .035-.045 inch (0.9-1.1 mm) wire.

#141 581 For 1/16-1/8 inch (1.6-3.2 mm) wire.

Get connected

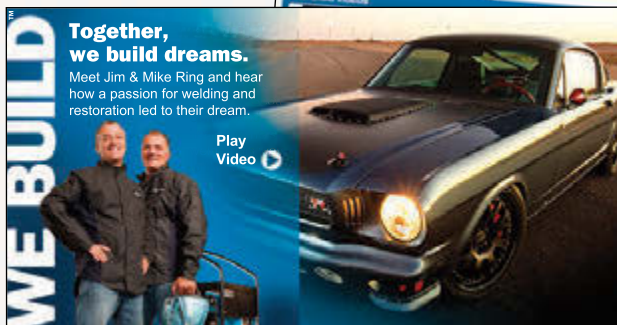
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