Miller®

The Power of Blue®

International Catalog MillerWelds.com 2017

WE BUILD™ with you

New from Blue

19 **Auto-Continuum™ Systems**

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32 **Multimatic™ 215**

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Shop with expert advice and attention

Visit your local Miller distributor for in-depth knowledge and one-on-one assistance in product selection. **MillerWelds.com/wheretobuy**

Help me choose

Finding the welding equipment that's right for you doesn't have to be complicated. Follow the steps below.

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

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

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

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

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

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 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
Check to see if the machine you're considering requires single-phase power, and whether its voltage requirements are met by the electrical service at the intended location.

Three-phase power
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 hobbyist or occasional light industrial user. They are designed to be easy to operate, are affordably priced and typically have a low duty cycle and lower-rated output.

● **Industrial** products are suitable for applications that do not require high-volume production. They typically have a 60 percent duty cycle and/or rated output of 300 amps. 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 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 truck, enabling them to be driven to wherever the welding is needed. Heavy-duty trailers are also available for engine drives.

3 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 or visit us on the Web at MillerWelds.com.


MIG | ALL-IN-ONE GMAW

Millermatic® 212 Auto-Set™ See literature DC/12.46

Welding Capability

Max. 3/8 in. (9.5 mm)	Max. 3/8 in. (9.5 mm)
Mild Steel	Aluminum
Min. 22 ga. (0.8 mm)	Min. 14 ga. (1.9 mm)

Aluminum welding uses optional Spoolmate 200 spool gun.

Auto-Set™ makes setup quick and easy. On the Millermatic 212, it works with .030- and .035-inch wire (see page 8 for more information).

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

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.

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

Aluminum MIG welding with optional Spoolmate™ 200 spool gun. Wire feed speed control on the gun saves time by reducing trips back to the machine. Also compatible with the more industrial Spoolmatic® spool guns.

Recommended aluminum solution
Spoolmate 200 (300497).

Light 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 with plug
- Flow gauge regulator and gas hose for argon or Ar/CO_2 mix
- Factory-installed lowered running gear/cylinder rack
- .030/.035 in. reversible dual-groove drive rolls
- Extra contact tips and material thickness gauge (229895)

Most popular accessories
- Spoolmate® 200 300497 (pg 30)
- Dual EZ-Change™ Low Cylinder Rack 300337 (pg 114)
- Elevated Gun and Cable Rack 300335 (pg 114)
- Protective Cover 195142 (pg 117)
- Full KVA Adaptor Cord 300517 (pg 118)

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

Stock Number	Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz 208 V	230 V	460 V	KW	Wire Feed Speed	Wire Type and Diameter Capacity	Dimensions	Net Weight
(907405) 200/208/230 V (951177) 200/208/230 V with Spoolmate 200, regulator, gas hose and dual cylinder rack	30–210	160 A at 24.5 VDC, 60% duty cycle	31	28	6.2	5.2	50–700 ipm (1.3–17.8 m/min.)	Solid steel .023–.035 in. (0.6–0.9 mm) Stainless .023–.035 in. (0.6–0.9 mm) Flux-cored .035–.045 in. (0.9–1.2 mm)	H: 30 in. (762 mm) W: 19 in. (483 mm) D: 40 in. (1,016 mm)	183 lb. (83 kg)

Brief listing of most popular accessories.

Millermatic® 125 Hobby

See literature DC/12.3

Welding Capability

Max. 4.8 mm (3/16 in.)
Mild Steel
Min. 0.6 mm (24 ga.)

Auto-Set™ for 0.8 mm (.030 in.) solid wire selects the correct parameters for the material you are welding.
- Turn the wire speed knob to Auto-Set
- Dial in the thickness of material you are welding
- Start welding!

Manual mode allows you to set your own parameters.

Tapped voltage control allows you to easily adjust the voltage when changing material thicknesses.

Cast-aluminum drive system with calibrated tension knob creates consistent feeding and easy setup.

Factory-installed gas solenoid makes it easy to change from MIG welding to flux-cored wire welding.

Quick Select™ drive roll makes setup quicker by offering three grooves – two for different size solid wire and a third for flux-cored wire.

Thermal overload protection shuts down unit and activates the **over temperature light** if airflow is blocked or duty cycle is exceeded. Automatically resets when unit cools.

Uses 102 or 203 mm (4 or 8 in.) spools.

Light industrial ● CV DC 1 Phase

Processes
- MIG (GMAW) ▪ Flux-cored (FCAW)

Comes complete with
- 2.4 m (8 ft.) M-80 MIG gun and cable assembly
- 2.4 m (8 ft.) work cable with clamp
- Power cord with plug
- Quick Select™ drive roll for 0.6 mm (.024 in.) or 0.8/0.9 mm (.030/.035 in.) solid wire, and 0.8/0.9 mm (.030/.035 in.) flux-cored wire
- Fixed flow regulator and gas hose, two 0.8 mm (.030 in.) contact tips, Hobart® spool of 0.8 mm (.030 in.) solid wire and material thickness gauge (229895)

Most popular accessories
- Running Gear/Cylinder Rack 301239
- Protective Cover 301333

Stock Number	Input Power	Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz 115 V	KVA	KW	Wire Feed Speed	Wire Type and Diameter Capacity	Power Source Dimensions	Power Source Net Weight
(907692)	115 V	30–130	85 A at 18.25 VDC, 20% duty cycle	20	2.79	2.65	0–11 m/min. (0–415 ipm)	**Solid steel** 0.6–0.8 mm (023–.030 in.) **Stainless** 0.6 mm (.023 in.) **Flux-cored** 0.8–0.9 mm (.030–.035 in.)	H: 429 mm (16.875 in.) W: 251 mm (9.875 in.) D: 308 mm (12.125 in.)	22.5 kg (49.7 lb.)

Millermatic® 141 and 190

See literature DC/12.42 (141) and DC/12.44 (190)

Mild Steel Welding Capability

Max.	4.8 mm (3/16 in.)	7.9 mm (5/16 in.)
Model	141	190
Min.	0.6 mm (24 ga.)	0.6 mm (24 ga.)

Aluminum Welding Capability

Max.	1.9 mm (14 ga.)	6.4 mm (1/4 in.)
Model	141	190
Min.	1.2 mm (18 ga.)	1.2 mm (18 ga.)

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

Recommended aluminum solution

Spoolmate 100 (300371).

Auto-Set™ automatically provides the right settings to weld mild steel while **infinite voltage control** allows the flexibility to manually set your own parameters.

- Set the wire diameter (0.6 mm or 0.8 mm [.024 or .030 in.] diameter solid steel wire), a blue light shows Auto-Set is activated
- Dial in the thickness of material you are welding
- Start welding with the exact parameters you need!

Angled cast-aluminum drive system with calibrated tension knob creates consistent feeding and easy setup with included 3 m (10 ft.) MIG gun or optional 4.6 m (15 ft.) M-150 MIG gun.

Quick Select™ drive roll makes setup quicker by offering three grooves — two for different size solid wire and a third for flux-cored wire.

Auto Spool Gun Detect™ automatically detects when a MIG gun or spool gun is connected eliminating the need for a switch.

Smooth-Start™ provides a smooth, spatter-free start.

Thermal overload protection shuts down unit and activates the **over temperature light** if airflow is blocked or duty cycle is exceeded. Automatically resets when unit cools.

Uses 102 or 203 mm (4 or 8 in.) spools.

Millermatic 190 model additional features

Inverter technology combines best-in-class arc characteristics with the portability of a 16 kg (35 lb.) machine. The arc is extremely forgiving to variations in arc length and travel speeds.

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

Light industrial ● CV DC 1 Phase

Processes

- MIG (GMAW) ▪ Flux-cored (FCAW)

Comes complete with

- 3 m (10 ft.) M-100 MIG gun and cable assembly (248282)
- 3 m (10 ft.) work cable with clamp
- 2 m (6.5 ft.) power cord with plug
- Quick Select™ drive roll for 0.6 mm (.024 in.) or 0.8/0.9 mm (.030/.035 in.) solid wire, and 0.8/0.9 mm (.030/.035 in.) flux-cored wire

- Flow gauge regulator and gas hose for argon or AR/CO_2 mix, two 0.8 mm (.030 in.) contact tips, Hobart® spool of 0.8 mm (.030 in.) solid wire, hook-and-loop cord wraps and material thickness gauge (229895)

Most popular accessories

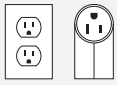
- Spoolmate™ 100 300371

- **Running Gear/Cylinder Rack** 301239
- Protective Cover 301262

Model/Stock Number	Input Power	Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz 120 V	240 V	KVA	KW	Wire Feed Speed	Wire Type and Diameter Capacity	Power Source Dimensions	Power Source Net Weight
Millermatic 141 (907612)	120 V	30–140	90 A at 18.5 VDC, 20% duty cycle	20	–	3.0	2.45	0.4–9.1 m/min. (15–360 ipm)	**Solid steel** 0.6–0.8 mm (.023–.030 in.) **Stainless** 0.6–0.8 mm (.023–.030 in.) **Flux-cored** 0.8–0.9 mm (.030–.035 in.)	H: 318 mm (12.5 in.) W: 286 mm (11.25 in.) D: 521 mm (20.5 in.)	23.1 kg (51 lb.)
Millermatic 190 (907613)	240 V	30–190	140 A at 21 VDC, 40% duty cycle	–	21	5.0	3.8	1.5–15.2 m/min. (60–600 ipm)	**Solid steel** 0.6–0.9 mm (.023–.035 in.) **Stainless** 0.6–0.9 mm (.023–.035 in.) **Flux-cored** 0.8–0.9 mm (.030–.035 in.)		15.9 kg (35 lb.)

Millermatic® 211

See literature DC/12.58



Multi-voltage plug (MVP™) allows connection to common 120- and 240-volt power receptacles without the use of any tools — simply choose the plug that fits the receptacle and connect to the power cord.

Recommended aluminum solutions

Spoolmate 100 (300371) or 150 (301272).

Welding Capability

Mild Steel	Aluminum
Max. 9.5 mm (3/8 in.)	Max. 9.5 mm (3/8 in.)
Min. 0.6 mm (24 ga.)	Min. 1.2 mm (18 ga.)

Aluminum welding uses optional Spoolmate 100 or Spoolmate 150 spool guns.

Advanced Auto-Set™ now includes five different wire/gas combinations and 0.6, 0.8 and 0.9 mm (.024, .030 and .035 in.) wire capabilities. The easiest welder to use just became more versatile. Manual mode allows you to set your own parameters while welding.

Inverter technology combines best-in-class arc characteristics with the portability of a 17 kg (38 lb.) machine. The arc is extremely forgiving to variations in arc length and travel speeds.

Angled cast-aluminum drive system with calibrated tension knob for consistent feeding and easy setup for up to 4.6 m (15 ft.) MIG guns.

Quick Select™ drive roll makes setup quicker by offering three grooves — two for different size solid wire and a third for flux-cored wire.

Auto Spool Gun Detect™ automatically detects when a MIG gun or spool gun is connected eliminating the need for a switch.

Fan-On-Demand™ and **thermal overload protection** protect your investment.

Smooth-Start™ provides a smooth, spatter-free start. It's the best-starting machine in the small MIG machine category.

Uses 102 or 203 mm (4 or 8 in.) spools.

Light industrial ● CV DC 1 Phase

Processes

- MIG (GMAW) ▪ Flux-cored (FCAW)

Comes complete with

- 3 m (10 ft.) M-100 MIG gun and cable assembly (248282)
- 3 m (10 ft.) work cable with clamp
- 2 m (6.5 ft.) power cord with MVP plugs for 120 V and 240 V
- Quick Select™ drive roll for 0.6 mm (.024 in.) or 0.8/0.9 mm (.030/.035 in.) solid wire, and 0.8/0.9 mm (.030/.035 in.) flux-cored wire
- Flow gauge regulator and gas hose for argon or AR/CO_2 mix, two 0.8 mm (.030 in.) contact tips, Hobart® spool of 0.8 mm (.030 in.) solid wire, hook-and-loop cord wraps and material thickness gauge (229895)

Most popular accessories

- Spoolmate™ 100 300371
- Spoolmate™ 150 301272
- Running Gear/Cylinder Rack 301239
- Protective Cover 301262
- V-Knurled Drive Roll 202926

Stock Number	Input Power	Amperage Range	Rated Output	Amps Input at Rated Output, 50/60 Hz 120 V	240 V	KVA	KW	Wire Feed Speed	Wire Type and Diameter Capacity	Power Source Dimensions	Power Source Net Weight
(907614)	120 V	30–130	115 A at 19.8 VDC, 20% duty cycle	24.3	–	2.9	2.9	1.5–15.2 m/min. (60–600 ipm)	**Solid steel** 0.6–0.9 mm (.023–.035 in.) **Stainless** 0.6–0.9 mm (.023–.035 in.) **Flux-cored** 0.8–1.2 mm (.030–.045 in.)	H: 318 mm (12.5 in.) W: 286 mm (11.25 in.) D: 521 mm (20.5 in.)	17.2 kg (38 lb.)
	240 V	30–230	150 A at 21.5 VDC, 40% duty cycle	–	16.6	4.0	4.0				

Engineered for Simplicity. Built for Durability.

Your welders select the Bernard gun handles, triggers and necks that are **the most comfortable and effective** for accessing their welds.

Management enjoys the resulting **increase in productivity, longer gun life, and a reduced parts inventory** with consumables designed to work across all of your welding guns.

BERNARD™

A Division of Miller Electric Mfg. Co.

Visit **BernardWelds.com** to configure a hand-held gun for your welding application today.

Millermatic® 212 Auto-Set™

See literature DC/12.46

Recommended aluminum solution
Spoolmate 200 (300497).

Welding Capability

Max. 9.5 mm (3/8 in.)	Max. 9.5 mm (3/8 in.)
Mild Steel	Aluminum
Min. 0.8 mm (22 ga.)	Min. 1.9 mm (14 ga.)

Aluminum welding uses optional Spoolmate 200 spool gun.

Auto-Set™ makes setup quick and easy. On the Millermatic 212, it works with 0.8 and 0.9 mm (.030 and .035 in.) wire.

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

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.

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

Aluminum MIG welding with optional Spoolmate™ 200 spool gun. Wire feed speed control on the gun saves time by reducing trips back to the machine. Also compatible with the more industrial Spoolmatic® spool guns.

Light industrial ● CV DC 1 Phase

Processes
- MIG (GMAW) ▪ Flux-cored (FCAW)

Comes complete with
- 4.5 m (15 ft.), 250-amp M-25 gun
- 3 m (10 ft.) work cable with clamp
- 2.1 m (7 ft.) power cord with plug
- Flow gauge regulator and gas hose for argon or AR/CO_2 mix
- Factory-installed lowered running gear/cylinder rack
- 0.8/0.9 mm (.030/.035 in.) reversible dual-groove drive rolls
- Extra contact tips and material thickness gauge (229895)

Most popular accessories
- Spoolmate™ 200 300497
- Dual EZ-Change™ Low Cylinder Rack 300337
- Elevated Gun and Cable Rack 300335
- Protective Cover 195142
- Full KVA Adapter Cord 300517

Stock Number	Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz 200 V	230 V	KVA	KW	Wire Feed Speed	Wire Type and Diameter Capacity	Dimensions	Net Weight
(907405) 200(208)/230 V	30–210	160 A at 24.5 VDC, 60% duty cycle	31	28	6.2	5.2	1.3–17.8 m/min. (50–700 ipm)	**Solid steel** 0.6–0.9 mm (.023–.035 in.) **Stainless** 0.6–0.9 mm (.023–.035 in.) **Flux-cored** 0.8–1.2 mm (.030–.045 in.)	H: 762 mm (30 in.) W: 483 mm (19 in.) D: 1,016 mm (40 in.)	83 kg (183 lb.)

Millermatic® 252

See literature DC/12.49

Recommended aluminum solution
Spoolmatic 15A (195156) or 30A (130831).

Welding Capability

Max. 13 mm (1/2 in.)	Max. 9.5 mm (3/8 in.)
Mild Steel	Aluminum
Min. 0.8 mm (22 ga.)	Min. 1.9 mm (14 ga.)

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.

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

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

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

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

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

Industrial ● CV DC 1 Phase

Processes
- MIG (GMAW) ▪ Flux-cored (FCAW)

Comes complete with
- 4.5 m (15 ft.), 250-amp M-25 gun
- 3 m (10 ft.) work cable with clamp
- 3 m (10 ft.) industrial power cord (and plug on 200/230 V model)
- Factory-installed gas solenoid
- Flow gauge regulator and gas hose for argon or AR/CO_2 mix
- Factory-installed lowered running gear/cylinder rack
- 0.8/0.9 mm (.030/.035 in.) reversible dual-groove drive rolls
- Extra contact tips

Most popular accessories
- Spoolmate™ 200 and Spoolmatic® Spool Guns
- XR™ Air-Cooled Push-Pull Guns
- Dual EZ-Change™ Low Cylinder Rack 300337
- Elevated Gun and Cable Rack 300335
- Protective Cover 195142

Model/Stock Number	Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz 200 V	230 V	460 V	575 V	KVA	KW	Wire Feed Speed	Wire Type and Diameter Capacity	Dimensions	Net Weight
(907321) 200(208)/230 V	30–300	200 A at 28 VDC, 60% duty cycle	48	42	–	–	9.5	7.5	1.3–17.8 m/min. (50–700 ipm)	**Solid steel** 0.6–1.2 mm (.023–.045 in.) **Stainless** 0.6–1.2 mm (.023–.045 in.) **Flux-cored** 0.8–1.2 mm (.030–.045 in.)	H: 762 mm (30 in.) W: 483 mm (19 in.) D: 1,016 mm (40 in.)	94 kg (205 lb.)
			(at 60% duty cycle)									
(907322) 230/460/575 V		250 A at 28 VDC, 40% duty cycle	–	46	23	18	9.5	7.5				
			(at 60% duty cycle)									

Millermatic® 350P

See literature DC/12.51

All-in-one package with steel and aluminum programs and MIG and pulsed MIG processes.

Recommended aluminum solution
XR-Aluma-Pro push-pull gun.

Welding Capability

Max. 13 mm (1/2 in.)	Max. 13 mm (1/2 in.)
Mild Steel	Aluminum
Min. 0.6 mm (24 ga.)	Min. 1.2 mm (18 ga.)

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.

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

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

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.

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

Millermatic® 350P Auto Body Aluminum Repair System

The ideal auto body welding package for aluminum and steel repair.

Welding Capability

Max. 13 mm (1/2 in.)	Max. 13 mm (1/2 in.)
Mild Steel	Aluminum
Min. 0.6 mm (24 ga.)	Min. 0.8 mm (22 ga.)

Aluminum welding uses Bernard BTB Gun 200 A aluminum MIG gun.

Complies with 2015 Ford F-150 body shop welding machine certification for aluminum body vehicles.

Optimized low-end aluminum pulse program. Reduces heat input to prevent warping and burn-through on thin 1.2 mm (18 ga.) aluminum auto body panels

Customized Bernard™ aluminum MIG gun. 3.7 m (12 ft.) Bernard BTB Gun 200 A with Teflon liner and 30-degree head tube for superior aluminum wire delivery.

Hobart® 5554 aluminum wire specified by Ford. Includes one 203 mm (8 in.), 2.3 kg (5 lb.) spool of 1.2 mm (.047 in.) aluminum wire.

Industrial ● CV DC 3 Phase 1 Phase

Processes
- MIG (GMAW) ▪ Flux-cored (FCAW)
- Pulsed MIG (GMAW-P)

Millermatic 350P comes complete with
- 4.5 m (15 ft.) Bernard™ BTB Gun 300 A with Centerfire™ consumables
- 3 m (10 ft.) work cable with clamp
- 3 m (10 ft.) industrial power cord (without plug) for single- or three-phase
- Factory-installed gas solenoid
- Flow gauge regulator and gas hose for argon or AR/CO_2 mix
- Factory-installed, low-mounted running gear/cylinder rack
- 0.9/1.2 mm (.035/.045 in.) reversible V-groove drive rolls (order U-groove drive rolls for aluminum welding)
- Extra contact tips

Millermatic 350P Auto Body Aluminum Repair System comes complete with
- 3.7 m (12 ft.) Bernard™ BTB Gun 200 A aluminum MIG gun
- 3 m (10 ft.) work cable with clamp
- 3 m (10 ft.) industrial power cord (without plug) for single- or three-phase
- Factory-installed gas solenoid
- Flow gauge regulator and gas hose for argon or AR/CO_2 mix
- Factory-installed, low-mounted running gear/cylinder rack
- 1.2 mm (.047 in.) U-groove drive rolls
- 1.2 mm (.047 in.) aluminum Centerfire™ contact tips (T-047AL)
- 203 mm (8 in.), 2.7 kg (6 lb.) spool of Hobart 1.2 mm (.047 in.) 5554 aluminum wire

Most popular accessories
- Spoolmatic® Spool Guns
- XR™ Air-Cooled Push-Pull Guns
- Dual Cylinder Rack 195299
- Protective Cover 195142

Model/ Stock Number	Input Power	Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz 200 V	230 V	460 V	KVA	KW	Wire Feed Speed	Wire Type and Diameter Capacity	Dimensions	Net Weight
Millermatic 350P (907300) 200/230/460 V	Three-phase	25–400	300 A at 32 VDC, 60% duty cycle	34	30	15	11.6	11.5	**MIG gun** 1.3–17.8 m/min. (50–700 ipm) **Optional spool gun/push-pull gun** 1.3–20 m/min. (50–800 ipm)	**Solid steel** 0.6–1.2 mm (.023–.045 in.) **Stainless** 0.8–1.2 mm (.030–.045 in.) **Aluminum** 0.9–1.2 mm (.035–.047 in.) **Metal-cored** 0.9–1.3 mm (.035–.052 in.) **Flux-cored** 0.8–1.3 mm (.030–.052 in.)	H: 863 mm (34 in.) W: 483 mm (19 in.) D: 1,041 mm (41 in.)	82 kg (181 lb.)
Millermatic 350P Auto Body Aluminum Repair System (907300002) 200/230/460 V	Single-phase			69	61	30	13.1	11.2				

Millermatic® 350P Aluminum

See literature DC/12.56

Millermatic 350P Aluminum with XR-Aluma-Pro Lite gun shown.

Welding Capability

Max. 13 mm (1/2 in.)

Aluminum

Min. 1.2 mm (18 ga.)

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

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 burn-through 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 reduces operator fatigue on extended welds.

Standard jog and purge.

Industrial ● CV DC 3 Phase 1 Phase

Processes
- Aluminum MIG (GMAW)
- Aluminum pulsed MIG (GMAW-P)

Comes complete with
- 3 m (10 ft.) work cable with clamp
- 3 m (10 ft.) industrial power cord (without plug) for single- or three-phase
- Factory-installed gas solenoid
- Flow gauge regulator and gas hose for argon
- Factory-installed, low-mounted running gear/cylinder rack
- 0.9 and 1.2 mm (.035 and .047 in.) U-groove drive rolls for aluminum welding

Most popular accessories
- XR™ Air-Cooled Push-Pull Guns
- Dual Cylinder Rack 195299
- Protective Cover 195142

Model/Stock Number	Input Power	Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz 200 V	230 V	460 V	KVA	KW	Wire Feed Speed	Wire Type and Diameter Capacity	Dimensions	Net Weight
Millermatic 350P Aluminum (gun NOT included) (907474) 200/230/460 V standard unit	Three-phase	25–400	300 A at 32 VDC, 60% duty cycle	34	30	15	11.6	11.5	**Optional spool gun/ push-pull gun** 1.3–20 m/min. (50–800 ipm)	0.9–1.2 mm (.035–.047 in.)	H: 863 mm (34 in.) W: 483 mm (19 in.) D: 1,041 mm (41 in.)	82 kg (181 lb.)
	Single-phase			69	61	30	13.1	11.2				

Migmatic® 175

See literature DCM/13.0

Must be purchased from ITW Italy

Manual mode allows for simple manual setting of parameters for welding on a broad range of applications.

Thermal overload protection shuts down the power source output if the main transformer or rectifier overheats.

Industrial dual-gear-driven system features no-tool, quick-change reversible drive rolls (0.8/1.0 mm) and an easy-to-set tension adjustment knob.

Traditional tapped design and laminated inductor provide a stable, smooth arc for consistent weld quality.

Light industrial ● CV DC 1 Phase

Processes
- MIG (GMAW) ▪ Flux-cored (FCAW)

Comes complete with
- Power cord with plug
- Work cable with clamp
- Running gear/bottle rack
- 0.8/1.0 mm drive rolls

Most popular accessories
- Spoolmate™ 200 300497
- Dual EZ-Change™ Low Cylinder Rack 300337
- Elevated Gun and Cable Rack 300335
- Protective Cover 195142
- Full KVA Adapter Cord 300517

Stock Number	Amperage Range	Rated Output	Amps Input at Rated Output 230 V	Max. Open-Circuit Voltage	Wire Feed Speed	Wire Type and Diameter Capacity	Dimensions	Net Weight
(029015550) 230 V, 50/60 Hz, **CE**	30–150	150 A at 21 VDC, 30% duty cycle	21	34	1.8–18 mpm (70–708 ipm)	**Solid steel** 0.6–0.8 mm (.023–.030 in.) **Aluminum** 0.8–1.0 mm (.030–.040 in.) **Flux-cored** 0.6–0.8 mm (.023–.030 in.)	H: 561 mm (22.1 in.) W: 447 mm (17.6 in.) D: 769 mm (30.25 in.)	43.3 kg (95.5 lb.)

Migmatic® 220/220DX and 250/250DX

See literature DCM/9.0 (220/220 DX) and DCM/10.0 (250/250DX)

Must be purchased from ITW Italy

Migmatic 220 and 220DX shown.

Light industrial

CV DC 1 Phase — *220/220DX*

CV DC 3 Phase — *250/250DX*

Processes

- MIG (GMAW) ▪ Flux-cored (FCAW)

Comes complete with

- Power cord with plug
- Work cable with clamp
- Running gear/bottle rack
- 0.8/1.0 mm drive rolls

Most popular accessories

- Spoolmate™ 200 300497
- Dual EZ-Change™ Low Cylinder Rack 300337
- Elevated Gun and Cable Rack 300335
- Protective Cover 195142
- Full KVA Adapter Cord 300517

Manual mode allows for simple manual setting of parameters for welding on a broad range of applications.

Thermal overload protection shuts down the power source output if the main transformer or rectifier overheats.

Industrial dual-gear-driven system features no-tool, quick-change reversible drive rolls (0.8/1.0 mm) and an easy-to-set tension adjustment knob.

Professional wire drive motor withstands even the most demanding applications.

Superior arc control technology provides the operator with state-of-the-art welding performance on a wide variety of materials.

Traditional tapped design (10 steps) and laminated inductor provide a stable, smooth arc for consistent weld quality.

Adjustable run-in control allows the operator to optimize arc starting with avariety of different wires.

Adjustable burnback control reduces wire stubbing, arc flaring and prevents wire burnback to protect contact tips.

Spot weld timer provides consistent spot welds every time. (Base models only.)

Synergic user interface with digital display to simplify setup and offer precise settings for welding a variety of materials. (DX models only.)

Model/Stock Number	Rated Output	Max. Open-Circuit Voltage	Wire Feed Speed	Wire Type and Diameter Capacity	Dimensions	Net Weight
Migmatic 220 (CE) **(029015520)** 220/240 V, 50/60 Hz **Migmatic 220DX (CE)** **(029015521)** 220/240 V, 50/60 Hz	220 A at 28 VDC, 25% duty cycle	40	1.0–20 mpm (39–787 ipm)	**Solid steel** 0.6–1.2 mm (.023–.047 in.) **Stainless** 0.8–1.0 mm (.030–.040 in.) **Aluminum** 0.8–1.2 mm (.030–.047 in.) **Flux-cored** 0.9–1.2 mm (.035–.047 in.)	H: 712 mm (28 in.) W: 480 mm (18.88 in.) D: 920 mm (36.19 in.)	66 kg (152 lb.)
Migmatic 250 (CE) **(029015524)** 230/380–400 V, 50/60 Hz **Migmatic 250DX (CE)** **(029015525)** 230/380–400 V, 50/60 Hz	240 A at 26 VDC, 35% duty cycle	43	1.0–20 mpm (39–787 ipm)	**Solid steel** 0.6–1.2 mm (.023–.047 in.) **Stainless** 0.8–1.0 mm (.030–.040 in.) **Aluminum** 0.8–1.2 mm (.030–.047 in.) **Flux-cored** 0.9–1.2 mm (.035–.047 in.)		73 kg (161 lb.)

Migmatic® 300/300DX and 380/380DX

See literature DCM/11.0 (300/300 DX) and DCM/12.0 (380/380DX)

Must be purchased from ITW Italy

Migmatic 380 and 380DX shown.

Industrial ● CV DC 3 Phase

Processes
- MIG (GMAW) ▪ Flux-cored (FCAW)

Comes complete with
- Power cord with plug
- Work cable with clamp
- Running gear/bottle rack
- 1.0/1.2 mm drive rolls

Most popular accessories
- Spoolmate™ 200 300497
- Dual EZ-Change™ Low Cylinder Rack 300337
- Elevated Gun and Cable Rack 300335
- Protective Cover 195142
- Full KVA Adapter Cord 300517

Manual mode allows for simple manual setting of parameters for welding on a broad range of applications.

Thermal overload protection shuts down the power source output if the main transformer or rectifier overheats.

Industrial dual-gear-driven system features no-tool, quick-change reversible drive rolls (0.8/1.0 mm) and an easy-to-set tension adjustment knob.

Professional wire drive motor withstands even the most demanding applications.

Superior arc control technology provides the operator with state-of-the-art welding performance on a wide variety of materials.

Traditional tapped design (20 steps) and laminated inductor provide a stable, smooth arc for consistent weld quality.

Adjustable run-in control allows the operator to optimize arc starting with avariety of different wires.

Adjustable burnback control reduces wire stubbing, arc flaring and prevents wire burnback to protect contact tips.

Spot weld timer provides consistent spot welds every time. (Base models only.)

Synergic user interface with digital display to simplify setup and offer precise settings for welding a variety of materials. (DX models only.)

Model/Stock Number	Rated Output	Amps Input at Rated Output 230 V	400 V	Max. Open-Circuit Voltage	Wire Feed Speed	Wire Type and Diameter Capacity	Dimensions	Net Weight
Migmatic 300 **(029015545)** 230/400 V, 50 Hz, **CE** **(029015540)** 400 V, 50 Hz, **CE**	300 A at 28 VDC, 35% duty cycle	35	20	43	1.3–26 mpm (51–1,024 ipm)	**Solid steel** 0.6–1.2 mm (.023–.047 in.) **Stainless** 0.8–1.0 mm (.030–.040 in.) **Aluminum** 0.8–1.2 mm (.030–.047 in.) **Flux-cored** 0.9–1.4 mm (.035–.055 in.)	H: 825 mm (32.5 in.) W: 471 mm (18.5 in.) D: 1,066 mm (42 in.)	88 kg (194 lb.)
Migmatic 300DX **(029015541)** 400 V, 50 Hz, **CE**								
Migmatic 380 **(029015547)** 380-400 V, 50 Hz, **CE** **(029015542)** 400 V, 50 Hz, **CE**	350 A at 29 VDC, 35% duty cycle	27	16	43	1.3–26 mpm (51–1,024 ipm)	**Solid steel** 0.6–1.2 mm (.023–.047 in.) **Stainless** 0.8–1.0 mm (.030–.040 in.) **Aluminum** 0.8–1.2 mm (.030–.047 in.) **Flux-cored** 0.9–1.4 mm (.035–.055 in.)	H: 825 mm (32.5 in.) W: 471 mm (18.5 in.) D: 1,066 mm (42 in.)	102.6 kg (227 lb.)
Migmatic 380DX **(029015548)** 230/380-400 V, 50 Hz, **CE** **(029015543)** 400 V, 50 Hz, **CE**								

XPS Series

See literature DCM/42.0 UK

Must be purchased from ITW Italy

XPS 450 shown.

Traditional tapped transformer power source. Simple and precise with 30 (XPS 350) or 40 (XPS 450) voltage steps, provides the operator with a superior range and arc performance for even the most demanding applications.

Two inductance terminals and laminated inductor provides a stable, smooth arc operators appreciate.

Standard 14-pin connection to Miller wire feed units connects to a variety of Miller wire feeders.

Thermal overload protection shuts down the power source output if the main transformer or rectifier overheats.

Optional 115-volt auxiliary power receptacles. Auxiliary power for water-cooling unit.

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

Optional dual digital meters with hold function display clear, precise readings of arc voltage and amperage.

Industrial ● CV DC 3 Phase

Processes
- MIG (GMAW) ▪ Flux-cored (FCAW)

Comes complete with
- Industrial power cord
- Work cable with clamp
- Factory-installed running gear/ twin bottle rack

Most popular accessories
- ST®-44 Series Wire Feeders
  029007406 Base model
  029007404 Digital model
- Hydracool® 1 028042103

Model	Stock Number	Rated Output	IP Rating	Amps Input at Rated Output, 50 Hz 230 V	400 V	Max. Open-Circuit Voltage	Dimensions	Net Weight
XPS 350	**(029015531)** 400 V, 50 Hz, **CE** **(029015528)** 400 V, 50 Hz with aux power, digital meters and Fan-On-Demand, **CE**	350 A at 32 VDC, 45% duty cycle	IP22	–	23	38	H: 930 mm (37 in.) W: 570 mm (22.5 in.) D: 860 mm (34 in.)	125 kg (275 lb.)
XPS 450	**(029015535)** 230/400 V, 50 Hz with aux power, digital meters and Fan-On-Demand, **CE** **(029015532)** 400 V, 50 Hz with aux power, **CE** **(029015529)** 400 V, 50 Hz with aux power, digital meters and Fan-On-Demand, **CE**	450 A at 37 VDC, 45% duty cycle	IP22	56	32	47		153 kg (337 lb.)

AlumaFeed® Synergic Aluminum Welding System

See literature DC/34.0

Dedicated aluminum system for the most advanced MIG and synergic pulsed MIG performance.

AlumaPower 350 MPa and XR-AlumaFeed with XR-Aluma-Pro gun air-cooled system shown.

AUTO-LINE Power Management Technology

AlumaPower™ 350 model allows for any input voltage hookup (230–575 V, three-phase) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable power. *450 model is 400 V only, three-phase.*

Built-in MIG and pulsed MIG programs automatically set the optimal parameters for a wide variety of wires making it easy to set up and use.

Synergic pulsed MIG. As wire speed increases/decreases, pulse parameters also increase/decrease to match the right amount of power needed, eliminating the need to make additional adjustments.

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.

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 Phase

Processes
- Aluminum MIG (GMAW)
- Aluminum pulsed MIG (GMAW-P)

AlumaFeed System consists of the following (sold separately)
- AlumaPower 350 MPa power source (907420003) **OR** 450 MPa power source (907526)
- XR-AlumaFeed feeder (300509), **CE**
- XR-Aluma-Pro™ push-pull MIG gun **OR** XR™-Pistol Grip push-pull MIG gun
- Coolmate™ 3 cooling system with coolant (water-cooled systems only)

Most popular accessories
- XR™ Push-Pull Guns
- MIGRunner™ Cart 195445
- Coolmate™ 3 043007
- Coolant 043810
- Extension Cables
  247831025 7.6 m (25 ft.)
  247831050 15 m (50 ft.)
  247831080 24.4 m (80 ft.)
- 1.6 mm (1/16 in.) Liner and Wire Kit for Gun 230708
- 1.6 mm (1/16 in.) Drive Roll Kit for Control Box 195591

Note: All systems come set up out of the box to run 1.2 mm wire. 1.6 mm consumables not included — order separately above.

Model/Stock Number	Amp/Volt Ranges	Rated Output	Amps Input at Rated Load Output, 50/60 Hz 230 V	400 V	460 V	575 V	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
AlumaPower 350 MPa (907420) 208–575 V **(907420001)** 208–575 V with auxiliary power **(907420003)** 230–575 V with auxiliary power, **CE**	5–425 A 10–38 V	350 A at 34 VDC, 60% duty cycle	36.1	20.6	17.8	14.1	14.2	13.6	75 VDC	H: 432 mm (17 in.) W: 318 mm (12.5 in.) D: 610 mm (24 in.)	36.3 kg (80 lb.)
AlumaPower 450 MPa (907483) 230/460 V with auxiliary power **(907526)** 400 V with auxiliary power, **CE**	15–600 A 10–38 V	450 A at 36.5 VDC, 100% duty cycle	49.4	–	27.2	23.6	21.6	18.3	90 VDC	H: 438 mm (17.25 in.) W: 368 mm (14.5 in.) D: 689 mm (27.125 in.)	55.3 kg (122 lb.)

XR-AlumaFeed Wire Feeder (300509), CE	Input Power	Input Welding Circuit Rating	Wire Feed Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
14-pin compliant, but only operates synergically w/MPa power sources	24 VAC, 5 A, 50/60 Hz	400 A at 100% duty cycle System duty cycle is limited to gun rating	1.3–22.9 mpm (50–900 ipm)	0.9–1.6 mm (.035–1/16 in.) Requires wire kit (230708) for gun and drive roll kit (195591) for control box to run 1.6 mm (1/16 in.) wire.	305 mm (12 in.)	H: 406 mm (16 in.) W: 241 mm (9.5 in.) D: 540 mm (21.25 in.)	19.2 kg (42.5 lb.)

Deltaweld® Series

See literature DC/16.2

Industry standard for heavy-industrial MIG welding. Designed for manufacturing operations, with 100 percent duty cycle for extended arc-on time.

Deltaweld 602 shown with optional S-74D wire feeder and standard running gear with cylinder rack.

Line voltage compensation ensures consistent weld performance even when primary power varies.

Fan-On-Demand™ cooling system operates only when needed. Reduces contaminants drawn into the machine and excess noise in work areas.

Digital meters are easy to read and display preset and actual voltage and amperage.

Remote control capability allows operators fine tuning capability at an extended distance.

115-volt power for tools and coolant systems.

Thermal overload protection light indicates power shutdown. Helps prevent machine damage if the duty cycle is exceeded or airflow is blocked.

Material specific output studs provide the flexibility to produce the optimal arc characteristics for aluminum, stainless steel and all other materials.

Industrial ● *302 model*
Heavy industrial ● *452/652 models*

CV DC 3 Phase

Processes
- MIG (GMAW) ▪ Flux-cored (FCAW)
- Air carbon arc gouging (CAC-A) (Deltaweld 452: 6.4 mm [1/4 in.] carbons) (Deltaweld 652: 9.5 mm [3/8 in.] carbons)

Most popular accessories
- 70 Series Feeders
- Standard Running Gear 042886
- Standard Cylinder Rack 042887
- Extension Cables
  242208025 7.6 m (25 ft.)
  242208050 15 m (50 ft.)
  242208080 24.4 m (80 ft.)
- Remote On/Off Control 042869

**Includes lift eye and strain relief.*

Model	Stock Number	Voltage Range	Rated Output	Amps Input at Rated Output, 60 Hz 200 V	230 V	460 V	575 V	KVA	KW	Max. Open-Circuit Voltage	Dimensions*	Net Weight
Deltaweld 302/402	**(#903 376)** 200-208/230/460 V, Machine only **(#903 392)** 230/460/575 V, Machine only **(#907 357)** 380/400/440 V, 50/60 Hz, **CE**	10–32	300 A at 32 VDC, 100% duty cycle	48	42	21	17	16.9	12.9	42 VDC	H: 762 mm (30 in.) W: 585 mm (23 in.) 302 D: 775 mm (30.5 in.) 452/652 D: 966 mm (38 in.)	147 kg (323 lb.)
Deltaweld 452/602	**(#903 377)** 200-208/230/460 V, Machine only **(#903 394)** 230/460/575 V, Machine only **(#903 358)** 380/400/440 V, 50/60 Hz, **CE**	10–38	450 A at 38 VDC, 100% duty cycle	72	63	32	25	25.1	21.1	48 VDC		174 kg (384 lb.)
Deltaweld 652/852	**(#903 396)** 230/460/575 V, Machine only **(#907 359)** 380/400/440 V, 50/60 Hz, **CE**	10–44	650 A at 44 VDC, 100% duty cycle	–	96	48	38	38.2	34.2	54 VDC		214 kg (472 lb.)

XMS® 425 MPa Synergic Welding System

Must be purchased from ITW Italy

Industry standard for heavy-industrial MIG welding. Designed for manufacturing operations, with 100 percent duty cycle for extended arc-on time.

XMS 425 MPa shown with XMS MPa wire feeder and MIG Gun (sold separately).

Inverter arc control technology provides class-leading welding performance on a variety of material, while line voltage compensation (LVC™) maintains constant power even when primary power input varies from +/- 10 percent.

Multiprocess power source. MIG, synergic MIG, synergic pulsed and double-pulsed MIG, Lift-Arc™ TIG and stick processes.

Enhanced double-pulsed and pulsed MIG capabilities are easy to read and display preset and actual voltage and amperage.

Integrated water-cooling system provides efficient cooling with low-flow shutdown for both MIG and TIG applications, and reduces external connections and cables to save workspace.

Simple user interface reduces the number of control set up combinations for all processes and programs (including double-pulsed and pulsed MIG capabilities) without minimizing features or welding performance.

Large, dual digital meters are easily preset to the desired weld output, and provide easy-to-view current and voltage measurements during welding to ensure optimal control of the weld bead.

32-bit microprocessor controls the arc and allows easy setting, updating and memorization of more than 100 customized welding programs.

Industrial ● CC CV DC 3 Phase

Processes
- Double pulsed MIG (GMAW-DP)
- Pulsed MIG (GMAW-P)
- MIG (GMAW) ▪ Flux-cored (FCAW)
- Lift-Arc™ TIG (GTAW) ▪ Stick (SMAW)

Power source comes complete with
- Industrial power cord
- Work cable with clamp
- Factory-installed running gear/ bottle rack

Most popular accessories
- Interconnecting Cable Assembly (Water-Cooled)
- Rotating Support 156012136
- Wheel Kit V28066182

Model/Stock Number	Amp/Volt Ranges	Rated Output	Amps Input at Rated Load Output, 50 Hz, 400 V	Max. Open-Circuit Voltage	Dimensions	Net Weight
XMS 425 MPa (029015483) 400 V, 50/60 Hz, **CE**	5–400 A	300 A at 32 VDC, 60% duty cycle	17	90 VDC	H: 860 mm (34 in.) W: 490 mm (19.5 in.) D: 990 mm (39 in.)	90 kg (198 lb.)

XMS MPa Wire Feeder (029007424), CE	Input Power	Wire Feed Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
	24 VAC, 7 A, 50/60 Hz	1.0–20.0 mpm (40–780 ipm)	0.8–1.4 mm (.030–.055 in.)	305 mm (12 in.) 15 kg (33 lb.)	H: 440 mm (17.5 in.) W: 230 mm (9.25 in.) D: 640 mm (25.25 in.)	18 kg (40 lb.)

Invision™ MPa Plus System

See literature DC/23.6

MIG and synergic pulsed MIG system with optimized weld programs for both steel and aluminum.

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

Recommended Aluminum Solution

Dedicated XR Plus guns work with MPa Plus feeders to coordinate wire feed speed of the gun and the feeder. This provides optimized aluminum feeding and welding performance.

AUTO-LINE Power Management Technology

Invision 352 model allows for any input voltage hookup (208–575 V, three-phase) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable power. *450 model is 400 V, three-phase.*

Built-in MIG and pulsed MIG programs automatically set the optimal parameters for a wide variety of wires making it easy to set up and use.

Synergic pulsed MIG. As wire speed increases/decreases, pulse parameters also increase/decrease to match the right amount of power needed, eliminating the need to make additional adjustments.

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.

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

Wind Tunnel Technology™. Air flow that protects internal components, greatly improving reliability.

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

Heavy industrial ● CC CV DC 3 Phase

Processes

- MIG (GMAW) ▪ Flux-cored (FCAW)
- Pulsed MIG (GMAW-P)
- Air carbon arc gouging (CAC-A) (Invision 352: 6.4 mm [1/4 in.] carbons) (Invision 450: 7.9 mm [5/16 in.] carbons)

Invision MPa System consists of the following (sold separately)

- Invision 352 MPa power source (907431002) **OR** 450 MPa power source (907524)
- 70 Series MPa Plus feeder
- XR-Aluma-Pro™ Plus or XR™-Pistol Plus push-pull gun
- Coolmate™ 3 cooling system with coolant (water-cooled systems only)

Most popular accessories

- XR™ Push-Pull Guns
- MIGRunner™ Cart 195445
- Coolmate™ 3 043007
- Extension Cables
  247831025 7.6 m (25 ft.)
  247831050 15 m (50 ft.)
  247831080 24.4 m (80 ft.)
- 1.6 mm (1/16 in.) Liner and Wire Kit for Gun 230708
- Running Gear Cylinder Rack 300408

Model/Stock Number	Amp/Volt Ranges	Rated Output	Amps Input at Rated Load Output 230 V	400 V	460 V	575 V	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
Invision 352 MPa **(907431),** 50/60 Hz **(907431001)** with auxiliary power, 50/60 Hz **(907431002)** 230–575 V with auxiliary power, 50/60 Hz, **CE**	5–425 A 10–38 V	350 A at 34 VDC, 60% duty cycle	36.1	20.6	17.8	14.1	14.2	13.6	75 VDC	H: 432 mm (17 in.) W: 318 mm (12.5 in.) D: 610 mm (24 in.)	36.3 kg (80 lb.)
Invision 450 MPa **(907485)** 230/460 V with auxiliary power, 60 Hz **(907524)** 400 V with auxiliary power, 50/60 Hz, **CE**	15–600 A 10–38 V	450 A at 36.5 VDC, 100% duty cycle	49.4	–	27.2	23.6	21.6	18.3	90 VDC	H: 438 mm (17.25 in.) W: 368 mm (14.5 in.) D: 689 mm (27.125 in.)	55.3 kg (122 lb.)

Continuum™ Systems

See literature DC/36.0

Next generation of advanced industrial welding solutions improves productivity through weld quality, ease of use and system flexibility.

Continuum 350 shown with Continuum single-wire feeder. Filler metal sold separately.

More power — better reliability

Up to 26 percent more welding output (than competitive models) for demanding industrial applications.

Power source design

Smart and powerful digital design has the fast response needed to deliver the most stable welding performance for better welding results.

Flexible to meet current and future needs with integrated expansion capabilities.

Welding Intelligence.™ Increase productivity, improve quality and manage costs with Insight Core™ (standard) and Insight Centerpoint™ (optional) welding information management systems.

Feeder design

Tru-Feed™ technology provides precise feeding operation for stable arc performance.

- **Low-inertia motor** provides faster response for the best arc starts with the least amount of spatter
- **Balanced-pressure drive-roll design and tensioners** feed wire in its truest and straightest form for consistent feedability, resulting in better welding performance

New user interface makes the system easy to set up and adjust with minimal training.

Continuum Processes

Best For	Standard Spray	High-Deposition MIG	Accu-Pulse	Versa-Pulse	Short Circuit	RMD
Deposition	A	A	A	B	D	D
Gap Filing	D	D	B	B	A	A
Low Heat Input	D	C	B	A	A	A
Out-of-Position Welds			A	B	B	B
Low Spatter	A	A	A	B	C	B
Thick Metals	A	A	A	C	D	D
Thin Metals			B	A	A	A
Increased Travel Speed	A	A	A	A	B	C
HOT →						COLD

***Ratings A, B, C, and D** are relative values. An "A" rating indicates a best fit between your performance needs and process. A "blank" rating indicates that the process is not recommended for that application.*

***Accu-Pulse** is the most popular process for majority of industrial welding applications.*

***Versa-Pulse** is a fast, low-heat, low-spatter process designed for thin-material applications.*

***RMD** is a low-heat modified short-circuit process designed to fill gaps with thin-material applications.*

***High-deposition MIG** provides increased deposition rates over standard spray on thicker materials.*

Note: As the technological advances offered by Continuum extend beyond the capability of Axcess® systems, the two systems are not compatible. Continuum systems are designed to allow future upgradability, to expand with your operation's needs.

Heavy industrial ● CC CV DC 3 Phase

Processes

- Accu-Pulse® MIG (GMAW-P)
- Versa-Pulse™ ▪ RMD® ▪ MIG (GMAW)
- High-deposition MIG (GMAW)
- Flux-cored (FCAW)
- Air carbon arc gouging (CAC-A)

Most popular accessories

- Bernard™ MIG Guns
- Insight Centerpoint™ Software
- Continuum Running Gear/Cylinder Rack 301264
- Continuum Integrated Cooler 301214, **CE**
  Mounts to bottom of Continuum power source. Does not require external power.
- Continuum Control/Motor Cables
  263368003 0.9 m (3 ft.)
  263368015 4.6 m (15 ft.)
  263368020 6.1 m (20 ft.)
  263368025 7.6 m (25 ft.)
  263368050 15 m (50 ft.)
  263368080 24.4 m (80 ft.)
  263368100 30.5 m (100 ft.)
- Industrial MIG 4/0 Kit 300390

**While idling.*

Model	Stock Number	Amperage/ Voltage Range	Rated Output	Amps Input at Rated Output, 50/60 Hz, 3-Phase 230V	380V	400V	460V	575V	KVA	KW	Max. Open-Circuit Voltage	Net Weight (power source only)
Continuum 350	**(907636)** 230-575 V Machine only **(907636001)** 230-575 V w/running gear **(907645)** 400 V, **CE**	20-400 A, 10-44 V	300 A at 34 VDC, 100% duty cycle	36.7 0-1*	21.8 0-1*	20.8 0-1*	18.8 0-1*	14.6 0-1*	14.4 0.8*	13.8 0.17*	75 VDC	57.6 kg (127 lb.)
Continuum 500	**(907640)** 230-575 V Machine only **(907640001)** 230-575 V w/running gear **(907648)** 400 V, **CE**	20-600 A, 10-44 V	500 A at 40 VDC, 100% duty cycle	34.9 0-1*	– –	33.2 0-1*	28.9 0-1*	23.3 0-1*	23.1 0.8*	21.9 0.17*		67.1 kg (148 lb.)

Model	Stock Number	Input Power	Input Welding Circuit Rating	Wire Feed Speed	Wire Diameter Capacity	Max Spool Size Capacity	Dimensions	Net Weight
Continuum Feeder only	**(301195)** Single-wire model **(301195010)** Single-wire model, **CE** **(301199)** Dual-wire model **(301199 010)** Dual-wire model, **CE**	50 VDC	500 A at 100% duty cycle	Standard: 1.3-25.4 m/min. (50-1000 IPM)	0.9-2.0 mm (.035-5/64 in.)	457 mm (18 in.), 27 kg (60 lb.)	H: 351 mm (13.812 in.) Single W: 414 mm (16.312 in.) Dual W: 432 mm (17 in.) D: 754 mm (29.687 in.)	**Single** 19.5 kg (43 lb.) **Dual** 27.9 kg (61.5 lb.)

Auto-Continuum™ Systems

See literature AU/10.0

Next generation automation welding solution delivers advanced arc performance to improve throughput and weld quality.

Auto-Continuum 500 shown with robot arm (not included) and Auto-Continuum wire drive motor assembly.

Closeup of Auto-Continuum wire drive motor assembly (left-hand drive).

Note: As the technological advances offered by Auto-Continuum extend beyond the capability of Axcess® systems, the two systems are not compatible. Continuum systems are designed to allow future upgradability, to expand with your operation's needs.

More power — better reliability. Up to 26 percent more welding output (than competitive models) for demanding industrial applications.

Improve work environment and reduce spatter. Versa-Pulse and Accu-Pulse processes reduce fume generation, and by precisely controlling the welding arc they also reduce spatter size and quantity. Fume generation can be reduced up to 50 percent over traditional CV MIG.

- **Versa-Pulse** is a fast, low-heat, low-spatter process for high-speed automation on thin materials and is great for gap filling
- **Accu-Pulse** is better for out-of-position welds, provides higher deposition rates and is designed for thicker materials than Versa-Pulse

Easy communication from robot to power source.

Designed for easy integration with fixed and flexible automation.

Fleet standardization. Auto-Continuum can be used for both automation and hand-held applications.

Welding Intelligence.™ Increase productivity, improve quality and manage costs.

- **Insight Core™** (standard) is a simplified, Internet-based welding information solution that reports cell productivity and weld parameter verification
- **Insight Centerpoint™** (optional) is an advanced, real-time feedback solution to ensure consistent weld quality and actively detects a bad weld when it happens, reducing rework costs and improving quality

Heavy industrial ● CV DC 3 Phase

Processes

- Accu-Pulse® MIG (GMAW-P)
- Versa-Pulse™ ▪ RMD® ▪ MIG (GMAW)
- High-deposition MIG (GMAW)
- Flux-cored (FCAW)

Most popular accessories

- Insight Centerpoint™ Software
- Wire Drive Motor Mounting Brackets
  301276 ABB® 1600
  301277 ABB® 2600
  300483 FANUC® 100 and 120 IC
  300013 FANUC®/KUKA®/Motoman®
  301282 KUKA® KR5 HW
  301275 KUKA® KR16 HW
  300375 Motoman® EA1400
  300376 Motoman® EA1900
- Motor Control Cables
  263368025 7.6 m (25 ft.)
  263368050 15 m (50 ft.)
  263368080 24.4 m (80 ft.)
  263368100 30.5 m (100 ft.)
- EtherNet/IP™ Communication Cables
  300734 3 m (9.8 ft.)
  300735 5 m (16.4 ft.)
  300736 10 m (32.8 ft.)
- DeviceNet Communication Cables
  300020 2.7 m (9 ft.)
  300021 6.1 m (20 ft.)
- DeviceNet to Analog Adapter 301427
  Adapts DeviceNet to analog communication.

**While idling.*

Model	Stock Number	Amp/Volt Ranges	Rated Output	IP Rating	Amps Input at Rated Output, 50/60 Hz, 3-Phase 230 V	380 V	400 V	460 V	575 V	KVA	KW	Max. Open-Circuit Voltage	Dimensions (Includes lift eye)	Net Weight
Auto-Continuum 350	**(907656)** EtherNet/IP™ **(907658)** EtherNet/IP™ with auxiliary power **(907656001)** DeviceNet **(907658001)** DeviceNet with auxiliary power **(907660)** EtherNet/IP™, **CE** **(907660001)** DeviceNet, **CE**	20–400 A, 10–44 V	350 A at 31.5 VDC, 100% duty cycle	IP23	36.7 0–1*	21.8 0–1*	20.8 0–1*	18.8 0–1*	14.6 0–1*	14.4 0.8*	13.8 0.17*	75 VDC	H: 27.187 in. (691 mm) W: 17.5 in. (444 mm) D: 28.22 in. (717 mm)	59.4 kg (130 lb.)
Auto-Continuum 500	**(907657)** EtherNet/IP™ **(907659)** EtherNet/IP™ with auxiliary power **(907657001)** DeviceNet **(907659001)** DeviceNet with auxiliary power **(907661)** EtherNet/IP™, **CE** **(907660001)** DeviceNet, **CE**	20–600 A, 10–44 V	500 A at 39 VDC, 100% duty cycle	IP23	58.7 0–1*	34.9 0–1*	33.2 0–1*	28.9 0–1*	23.3 0–1*	23.1 0.8*	21.9 0.17*	75 VDC		69 kg (150 lb.)

Auto-Continuum Wire Drive Motor Assembly	Input Power	Input Welding Circuit Rating	IP Rating	Wire Feed Speed	Wire Diameter Capacity	Dimensions	Net Weight
(301207) Left-hand drive, **CE** **(301208)** Right-hand drive, **CE**	50 VDC	500 A at 100% duty cycle	IP23	Standard: 1.3–25.4 m/min. (50–1,000 ipm)	0.9–2.0 mm (.035–5/64 in.)	H: 222 mm (8.75 in.) W: 254 mm (10 in.) D: 254 mm (10 in.)	7.5 kg (16.5 lb.)

SuitCase® Series
Portable Feeders

Portable SuitCase feeders that set the standard for performance and provide extreme reliability to stand up to the demands of construction and fabrication.

SuitCase X-TREME 8VS *SuitCase X-TREME 12VS* *SuitCase X-TREME 12VS ArcReach* *SuitCase 12RC/12RC Euro*

SuitCase Series Features

Feature	X-TREME 8VS	X-TREME 12VS	X-TREME ArcReach 8VS	X-TREME ArcReach 12VS	12RC
Remote voltage control (control cable required)					●
Remote voltage control without a cord			●	●	
Digital meters	◉	●	●	●	●
Impact-resistant case	●	●	●	●	●
Gas purge	●	●	●	●	●
Wire jog	●	●	●	●	●

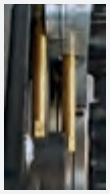
●Standard ◉Optional

Setting the standard for performance

Heavy-duty drive motor with tachometer control provides 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.

Front panel has trigger hold, wire jog, and gas purge for easy operator access. (X-TREME™ feeders only.)

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

Ultra-low drag inlet guide pins make loading the wire easy and does not deform the wire on the way into the drive rolls improving wire feeding performance.

Scaled wire pressure knob provides easy adjustment and consistent pressure on the drive rolls and wire.

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. (Meters are optional on 8VS.)

Unique and durable case

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

Built-in slide rails allow you to drag the feeder into position for welding.

Innovative feeder door design allows you can change wire while feeder is standing upright or laying down.

Case is available in two sizes. (X-TREME™ feeders only.)

Extreme reliability

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.

Gun locking tab works with guns and Euro-adapter having corresponding locking grooves to prevent gun from being pulled out if the feeder is dragged by the gun.

Gas inlet recessed into back of case is protected from incidental contact by the weld cable, ensuring consistent and contaminant-free shielding gas delivery to the gun. **Double-filtered gas valve** helps keep dirt from clogging and affecting gas flow.

SuitCase® X-TREME™ 8VS and 12VS See literature M/6.42

Voltage-sensing feeders designed to run off of arc voltage from almost any welding power source. 8VS model is sized for a 203 mm spool of wire, can be carried to remote welding sites and fits through a 356 mm manhole/manway. 12VS model is sized for an 203 or 305 mm spool of wire. 305 mm spools are the most common in structural steel and fabrication.

SuitCase® X-TREME™ 8VS and 12VS ArcReach® See literature M/6.42

ArcReach **Remote control of the power source without a cord.** With a SuitCase ArcReach feeder and ArcReach power source you can change 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.

SuitCase® 12RC See literature M/6.5

Standard remote voltage control with a control cord. For applications where the feeder is within 30.5 meters of the power source and control cords are acceptable.

Heavy industrial CC CV DC

Use with CC (except 12RC model) and CV, DC power sources.

Processes
- MIG (GMAW) ▪ Flux-cored (FCAW)

Suggested power sources
- Dimension™ Series
- XMT® Series
- Big Blue® Series

Note: Full functionality of ArcReach is only available with ArcReach power sources.

RC feeder requires power source with 14-pin connector.

Suggested guns
- Bernard™ Guns

Most popular accessories
- Extension Cables (12RC only, 1 required)
- Flowmeter Kit 300343
- Shielding Gas Filter 195189

	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 (300877), CE	Operates on open-circuit voltage and arc voltage: 14–48 VDC/ 110 max. OCV	330 A at 60% duty cycle	1.3–19.8 mpm (50–780 ipm) Actual range in CC mode is dependent on arc voltage applied	**Solid wire** 0.6–1.4 mm (.023–.052 in.) **Flux-cored** 0.8–2.0 mm (.030–5/64 in.)	203 mm (8 in.), 6.4 kg (14 lb.)	H: 324 mm (12.75 in.) W: 184 mm (7.25 in.) D: 457 mm (18 in.)	13 kg (28 lb.)
	SuitCase X-TREME 12VS (300876), CE		425 A at 60% duty cycle		**Solid wire** 0.6–1.4 mm (.023–.052 in.) **Flux-cored** 0.8–2.0 mm (.030–5/64 in.)	305 mm (12 in.), 20 kg (45 lb.)	H: 394 mm (15.5 in.) W: 229 mm (9 in.) D: 533 mm (21 in.)	15.9 kg (35 lb.)
ArcReach	SuitCase X-TREME 8VS ArcReach (301033), CE	Operates on open-circuit voltage and arc voltage: 14–48 VDC/ 110 max. OCV	330 A at 60% duty cycle	1.3–19.8 mpm (50–780 ipm) Actual range in CC mode is dependent on arc voltage applied	**Solid wire** 0.6–1.4 mm (.023–.052 in.) **Flux-cored** 0.8–2.0 mm (.030–5/64 in.)	203 mm (8 in.), 6.4 kg (14 lb.)	H: 324 mm (12.75 in.) W: 184 mm (7.25 in.) D: 457 mm (18 in.)	13 kg (28 lb.)
ArcReach	SuitCase X-TREME 12VS ArcReach (301032), CE		425 A at 60% duty cycle		**Solid wire** 0.6–1.4 mm (.023–.052 in.) **Flux-cored** 0.8–2.0 mm (.030–5/64 in.)	305 mm (12 in.), 20 kg (45 lb.)	H: 394 mm (15.5 in.) W: 229 mm (9 in.) D: 533 mm (21 in.)	15.9 kg (35 lb.)
	SuitCase 12RC (301121), CE	24 VAC, 10 A, 50/60 Hz	425 A at 60% duty cycle	1.3–17.8 mpm (50–700 ipm)	**Solid wire** 0.6–1.4 mm (.023–.052 in.) **Flux-cored** 0.8–2.0 mm (.030–5/64 in.)	305 mm (12 in.), 20 kg (45 lb.)	H: 394 mm (15.5 in.) W: 229 mm (9 in.) D: 533 mm (21 in.)	14.1 kg (31 lb.)

Increase, improve and maximize

Exclusive Miller® technology uses the weld cables to communicate changes in voltage settings. With an ArcReach System, voltage and wire-feed-speed controls are conveniently located at the operator's fingertips — right at the point of use — not back at the power source. By eliminating control cables to the feeder, cabling is streamlined and operators work at maximum efficiency.

ArcReach®

- **Increase Productivity**
  No time-consuming trips to the power source.
- **Improve Weld Quality**
  Reduces costly "work arounds".
- **Improve Worker Safety**
  Reduces operator hazards and injuries.
- **Maximize Efficiency**
  Reduces costly cord set up, maintenance and repair.

Learn more at **MillerWelds.com/arcreach**

20 Series
Industrial Bench Feeders

70 Series
Heavy-Industrial Bench Feeders

Designed for manufacturing, our popular bench feeders are available in two series with multiple models to fit your needs.

22A *S-74D* *D-74 MPa Plus*

20 and 70 Series Features

Feature	20 Series 22A	20 Series 24A	70 Series 74S	70 Series 74D	70 Series 74MPA
Includes BTB Gun 300 A	●	●			
Includes BTB Gun 400 A			●	●	●
Trigger hold	●	●	●	●	●
Adjustable run-in control	◉	●			●
Automatic run-in control			●	●	●
Digital meters	◉	◉		●	●
Remote voltage control		●		●	●
Preflow/postflow	◉[1]	◉	●	●	●
Spot control	◉[1]	◉	●	●	●
Dual-wire models			●	●	●
Rotatable drive assembly			●	●	●
Accu-Mate™					●
Dual schedule control					●
Trigger program select					●
Trigger dual schedule					●
Sequence control					●
Locks and limits					●
Weld programs					4
Trigger schedule select					●
Push-pull capability					●
Synergic pulsed MIG					●
Profile Pulse™					●

●**Standard** ◉**Optional** [1]Field option.

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

Miller® standard, quick-change drive rolls save time.

Easy loading and threading of welding wire without having to release the drive roll pressure arm.

Additional features for 70 Series feeders

Available in dual-wire models which allows two different wire types to be available on one feeder, avoiding downtime from changing spools and drive rolls.

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

Quick-release drive-roll pressure arm allows drive roll change without losing spring preload setting.

High-torque permanent-magnet motor, sealed ball bearing gear drive and solid-state speed and brake control are maintenance free for long life.

22A and 24A See literature M/11.0

Simple and cost-effective feeders for industrial manufacturing and fabricating.

Ideal for most high-duty-cycle applications requiring day-in/day-out trouble-free operation.

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

Two gear-driven drive rolls on 22A and **four gear-driven drive rolls** on 24A provide smooth, positive wire feed.

Additional features for 24A feeder

Remote voltage control at feeder for easier adjustments in the weld cell.

Adjustable run-in control for better arc-starting performance on a variety of wires.

Four gear-driven drive rolls provide more consistent feeding on larger wire diameters.

74S and 74D See literature M/3.0

Standard, simple feeders for most heavy-industrial applications, with the 74D providing increased accuracy and control of the most common weld parameters.

Digital meters (74D models only) ensure accuracy when presetting and reading actual voltage, amperage and wire feed speed.

Remote voltage control (74D models only) allows you to set both voltage and wire feed speed at the feeder, saving time and increasing weld quality because optimal weld parameters are easy to set.

74 MPa Plus See literature M/3.0

Adds features for weld control and programs, plus push-pull aluminum capabilities. Optimized with Invision™ MPa or XMT® MPa power sources.

Adjustable run-in control for improved arc starts.

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

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

Trigger program select provides the ability to access any of the four active programs.

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

Locks and limits for restricting or limiting operator adjustments, such as voltage and wire feed speed parameters.

Four weld program memories allow operators to recall up to four previously used processes and their weld settings.

Accu-Mate™ properly seats the MIG gun power pin for best feeding performance.

Push-pull capability provides consistent, versatile and dependable aluminum wire feeding over greater distances.

Recommended aluminum solution.

Dedicated XR Plus guns (gooseneck and pistol grip) work with MPa Plus feeders to coordinate wire feed speed of the gun and the feeder. This provides optimized aluminum feeding and welding performance. See chart below for gun models and stock numbers.

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

Synergic pulsed MIG. As wire speed increases/decreases, pulse parameters also increase/decrease to match the right amount of power needed, eliminating the need to make additional adjustments.

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.

**Requires wire kit (230708) to run 1.6 mm (1/16 in.) wire.*

Industrial 20 Series
Heavy industrial 70 Series

CV DC *Use with CV, DC power sources.*

Processes
- MIG (GMAW) ▪ Flux-cored (FCAW)
- Pulsed MIG (GMAW-P) with MPa Plus feeder and optional MPa power source feeder and optional MPa power source

Suggested power sources
- Deltaweld® Series
- Invision™ MPa Series
- Dimension™ Series
- XMT® Series

Suggested guns
- Bernard™ Guns
- XR-Aluma-Pro™ Plus and XR™-Pistol Plus (see chart below)

Most popular accessories
- Wire Straightener
- Hanging Bail 058435
- Wire Reel Assembly 108008
- Spool Covers
  - 057607 For 20 and 70 Series single-wire models and left side of dual-wire models
  - 090389 For right side of dual-wire models

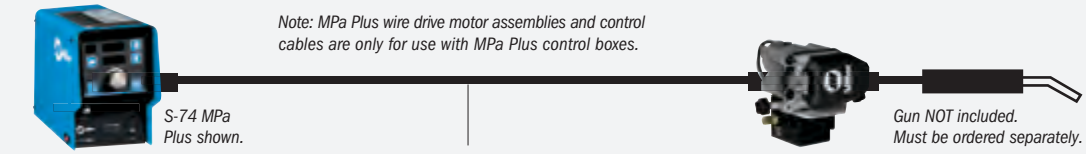
Model	Stock Number*	Input Power	Wire Feed Speed	Wire Type and Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
20 Series	**22A (300615)** **22A (300615001)** w/run-in control **22A (300615002)** w/digital display and voltage control **24A (300622)** **24A (300622001)** w/digital display **I-24A (186493), CE**	24 VAC, 7 A, 50/60 Hz	1.9–19 m/min. (75–750 ipm)	**22A** 0.6–2.0 mm (.023–5/64 in.) **24A** 0.6–2.4 mm (.023–3/32 in.)	27 kg (60 lb.) coil with optional wire reel assembly (108008)	H: 279 mm (11 in.) W: 273 mm (10.75 in.) D: 597 mm (23.5 in.)	**22A** 15.4 kg (36 lb.) **24A** 18 kg (40 lb.)
70 Series (Single-wire models)	**S-74S (300616), CE** **S-74D (300617), CE** **S-74 MPa Plus (300577), CE**	24 VAC, 10 A, 50/60 Hz	1.3–19.8 m/min. (50–780 ipm)	0.6–3.2 mm (.023–1/8 in.) Low-speed motor recommended for 2.4 and 3.2 mm (3/32 and 1/8 in.) wires (factory option) **MPa Plus model** **Hard wire** 0.6–2.0 mm (.023–5/64 in.) **Aluminum*** 0.9–1.6 mm (.035–1/16 in.)	27 kg (60 lb.) coil with optional wire reel assembly (108008)	H: 356 mm (14 in.) W: 318 mm (12.5 in.) D: 711 mm (28 in.)	26 kg (58 lb.)
70 Series (Dual-wire models)	**D-74S (300619), CE** **D-74D (300620), CE** **D-74 MPa Plus (300578), CE**					H: 356 mm (14 in.) W: 533 mm (21 in.) D: 889 mm (35 in.)	39.5 kg (87 lb.)

Optional Push-Pull Gun *(For MPa Plus feeders only)*	Cable Length 4.6 m (15 ft.)	7.6 m (25 ft.)	10.6 m (35 ft.)	Welding Current Rating	Wire Feed Speed	Wire Type and Diameter Capacity	Dimensions	Net Weight
XR-Aluma-Pro Plus (Air-cooled)	**(300000001)**	**(300001001)**	**(3000264001)**	300 A at 100% duty cycle	1.8–23 m/min. (70–900 ipm)	**Aluminum**** 0.8–1.6 mm (.030–1/16 in.)	H: 127 mm (5 in.) W: 64 mm (2.5 in.) L: 432 mm (17 in.)	1.1 kg (2.5 lb.)
XR-Aluma-Pro Plus (Water-cooled)	**(300003001), CE**	**(300004001), CE**	**(300265001)**	400 A at 100% duty cycle				1.3 kg (2.9 lb.)
XR-Pistol Plus (Air-cooled)	**(300753)**	**(300754)**	**(300755)**	200 A at 100% duty cycle	1.8–23 m/min. (70–900 ipm)	**Aluminum**** 0.8–1.6 mm (.030–1/16 in.)	H: 187 mm (7.375 in.) W: 48 mm (1.875 in.) L: 270 mm (10.625 in.)	1 kg (2.2 lb.)
XR-Pistol Plus (Water-cooled)	**(300756)**	**(300757)**	**(300758)**	400 A at 100% duty cycle				1.1 kg (2.4 lb.)

70 Series Remote Configurations

See literature M/3.0

Remote wire feeder control box and wire drive assembly for non-Miller boom applications.



Note: MPa Plus wire drive motor assemblies and control cables are only for use with MPa Plus control boxes.

S-74 MPa Plus shown.

Gun NOT included. Must be ordered separately.

Single-wire control box
300881 S-74S, **CE**
300882 S-74D, **CE**
300738001 S-74 MPa Plus, **CE**

Motor control cable
Standard: 11 conductor
MPa Plus: 14 conductor

Wire drive motor assembly
300904 Standard left-hand drive, **CE**
300740001 MPa Plus left-hand drive, **CE**
MPa Plus drive can be used with push-only guns, or XR-Aluma-Pro™ Plus and Pistol Plus push-pull guns.

Motor control cable
11 conductor

Motor control cable
Standard: 11 conductor
MPa Plus: 14 conductor

Gun NOT included. Must be ordered separately.

D-74D shown.

Gun NOT included. Must be ordered separately.

Push-only wire drive motor assembly
300741001 Standard right-hand drive, **CE**
300741 MPa Plus right-hand drive, **CE**

Dual-wire control box
300886 D-74S, **CE**
300887 D-74D, **CE**
300739 D-74 MPa Plus, **CE**

Wire drive motor assembly
300904 Standard left-hand drive, **CE**
300740001 MPa Plus left-hand drive, **CE**
MPa Plus drive can be used with push-only guns, or XR-Aluma-Pro™ Plus and Pistol Plus push-pull guns.

Heavy industrial ● **CV DC**

Use with CV, DC power sources.

Processes
- MIG (GMAW) ▪ Flux-cored (FCAW)
- Pulsed MIG (GMAW-P) with MPa Plus control box and optional MPa power source

Suggested power sources/guns
- Same as 70 Series

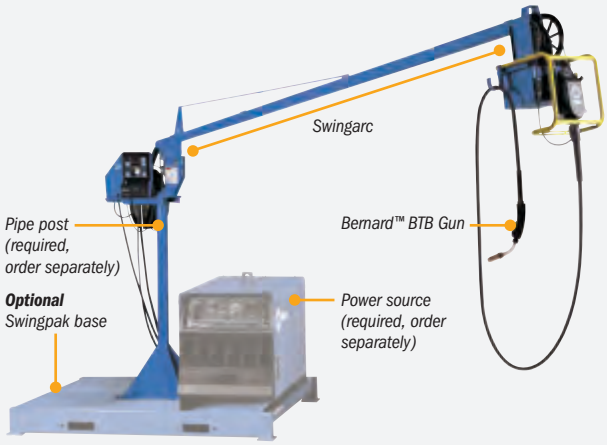
Most popular accessories
- Motor Control Cable (11 conductor)
  254935010 3 m (10 ft.)
  254935025 7.6 m (25 ft.)
  For push-only gun configurations.
- MPa Plus Motor Control Cable (14 conductor)*
  254864010 3 m (10 ft.)
  254864025 7.6 m (25 ft.)
  For MPa Plus configurations only – single-wire or left side of dual-wire.

- **Feeder Base** 195369
  For use with spooled wire.

70 Series Swingarc™

See literature M/13.11

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.



Models in 2.4 m (8 ft), 3.6 m (12 ft) or 4.8 m (16 ft) lengths maximize output.

Counterbalance design makes it easy to position the boom exactly where it is needed.

360-degree rotation and 60-degree lift angle maximizes work area (4.8 m [16 ft], 7.3 m [24 ft] or 9.75 m [32 ft] diameter work area).

Standard 3 m (10 ft) 14-pin interconnecting cord included.

In-boom cable routing organizes hoses and cables, protects them from damage.

Quick-change drive rolls mean no tools are required by the operator to change drive rolls.

Heavy industrial ● **CV DC**

Use with CV, DC power sources.

Processes
- MIG (GMAW) ▪ Flux-cored (FCAW)
- Pulsed MIG (GMAW-P) with MPa Plus feeder and optional MPa power source

Suggested power sources/guns
- Same as 70 Series

Most popular accessories
- Swingpak™ Base 183997
- Pipe Post with 45 mm (18 in.) Base
  149838 1.2 m (4 ft.)
  149839 1.8 m (6 ft.)
- **Single/Dual Spool Carrier** (pipe post not included)
  300353 For 1.2 m (4 ft.) post
  300352 For 1.8 m (6 ft.) post
  Designed to put spool hub assembly at 914 mm (36 in.) from base for easier wire spool installation.

		Model/Stock Number			
Single-Wire Feeder Models	**Boom Size**	**Feeder Control Box**	**Dual-Wire Feeder Models**	**Boom Size**	**Feeder Control Box**
SS-74S8 SS-74D8 SS-74DX8 SS-74MPa Plus-8	2.4 m (8 ft.) (300518) 2.4 m (8 ft.) (300518) 2.4 m (8 ft.) (300518) 2.4 m (8 ft.) (300818)	S-74S (300881), CE S-74D (300882), CE S-74MPa Plus (300738), CE	DS-74S8 DS-74D8 DS-74DX8 DS-74MPa Plus-8	2.4 m (8 ft.) (300521) 2.4 m (8 ft.) (300521) 2.4 m (8 ft.) (300521) 2.4 m (8 ft.) (300821)	D-74S (300886), CE D-74D (300887), CE D-74MPa Plus (300739), CE
SS-74S12 SS-74D12 SS-74DX12 SS-74MPa Plus-12	3.7 m (12 ft.) (300519) 3.7 m (12 ft.) (300519) 3.7 m (12 ft.) (300519) 3.7 m (12 ft.) (300819)	S-74S (300881), CE S-74D (300882), CE S-74MPa Plus (300738), CE	DS-74S12 DS-74D12 DS-74DX12 DS-74MPa Plus-12	3.7 m (12 ft.) (300522) 3.7 m (12 ft.) (300522) 3.7 m (12 ft.) (300522) 3.7 m (12 ft.) (300822)	D-74S (300886), CE D-74D (300887), CE D-74MPa Plus (300739), CE
SS-74S16 SS-74D16 SS-74DX16 SS-74MPa Plus-16	4.9 m (16 ft.) (30020) 4.9 m (16 ft.) (300520) 4.9 m (16 ft.) (300520) 4.9 m (16 ft.) (300820)	S-74S (300881), CE S-74D (300882), CE S-74MPa Plus (300738), CE	DS-74S16 DS-74D16 DS-74DX16 DS-74MPa Plus-16	4.9 m (16 ft.) (300523) 4.9 m (16 ft.) (300523) 4.9 m (16 ft.) (300523) 4.9 m (16 ft.) (300823)	D-74S (300886), CE D-74D (300887), CE D-74MPa Plus (300739), CE

Input Power	Wire Speed	Wire Diameter Capacity	Maximum Spool Size Capacity
24 VAC, 10 A, 50/60 Hz	1.3 - 19.8 m/min. (50-780 IPM) Optional High Speed: 2.3 - 36.6 m/min. (92-1435 IPM)	Standard Speed Motor: 0.6 - 3.2 mm (.023 - 1/8 in.) When using 2.4 - 3.2 mm (3/32 - 1/8 in.) wires, consult factory for low speed options.	27 kg (60 lb.) coil

Product Guide

Product	Class	MIG	Pulsed MIG*	Flux-cored**	Wire Types: Hard	Wire Types: Flux-cored Dual-shld	Wire Types: Flux-cored Self-shld	Wire Types: Alum.	Wire Diameter Capacity	Available Cable Lengths	Typical Applications	
Bernard™ BTB MIG Guns	Heavy	Designed	Capable	Capable	Designed	Capable	Capable CV**	Capable	0.6–3.2 mm (.023–1/8 in.)	2.4, 3, 3.7, 4.5, 6, or 7.6 m	Heavy industrial steel fabrication	Steel
Bernard™ Clean Air™ Fume Extraction Guns	Heavy	Designed	Capable	Capable	Designed	Capable	Capable CV**	Capable	0.6–3.2 mm (.023–1/8 in.)	2.4, 3, 3.7, 4.5, 6, or 7.6 m	Heavy industrial steel fabrication	Steel
Bernard™ FILTAIR™ Fume Extraction Guns	Heavy	Designed	Capable	Capable	Designed	Capable	Capable CV**	Capable	0.6–2.0 mm (.023–5/64 in.)	2.4, 3, 3.7, 4.5, 6, or 7.6 m	Heavy industrial steel fabrication	Steel
Bernard™ Dura-Flux™ Gun with Fixed Liner	Heavy			Designed			Designed CV**		1.6–2.4 mm (1/16–3/32 in.)	2.4, 3, 3.7, 4.5, 6, or 7.6 m	Heavy industrial steel fabrication	Steel
Bernard™ Dura-Flux™ Gun with Replaceable Liner	Heavy			Designed			Designed CV**		1.2–2.0 mm (.045–5/64 in.)	2.4, 3, 3.7, 4.5, 6, or 7.6 m	Heavy industrial steel fabrication	Steel
XR-Aluma-Pro™ Lite Push-Pull Gun	Industrial	Designed	Capable		Capable			Designed	0.8–1.2 mm (.030–.047 in.)	7.6 m	Industrial aluminum fabrication	Aluminum
XR-Aluma-Pro™ Push-Pull Guns	Heavy	Designed	Designed		Capable			Designed	0.8–1.6 mm (.030–1/16 in.)	4.5, 7.6 or 10.6 m	Heavy industrial aluminum fabrication	Aluminum
XR™-Pistol Push-Pull Guns	Heavy	Designed	Designed		Capable			Designed	0.8–1.6 mm (.030–1/16 in.)	Pistol: 4.5 or 9 m Pistol-Pro: 4.5, 7.6 or 10.6 m	Heavy industrial aluminum fabrication	Aluminum
XR™ Controls	Heavy	Designed	Designed		Capable			Designed	0.8–1.6 mm (.030–1/16 in.)	–	Heavy industrial aluminum fabrication	Aluminum

Product Key

Class: Light industrial · Industrial · Heavy industrial **Capability:** Designed for this process · Capable of this process

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

Bernard™ Semi-Automatic Guns

ITW Welding offers rugged and reliable Bernard welding guns that have been customized to match the performance of many of its industrial wire feeders and power sources.

BTB Air-Cooled MIG Guns

See Bernard literature SP-BTB

Our rugged Bernard BTB (Best of the Best) MIG guns bring together all the best features and options from our former Q-Gun™, S-Gun™ and T-Gun™ MIG guns into a single, flexible gun series.

B Series handle (small or large)

O Series handle (small or large)

T Series handle (small or large)

To configure your BTB MIG gun from the following array of options visit BernardWelds.com/ConfigureMyGun

- Compatible with three high-performance consumable lines – TOUGH LOCK™ Centerfire™ and Quik Tip™
- Compatible with Universal Conventional or front-loading QUICK LOAD™ liners
- Fixed or rotatable aluminum armored necks in various lengths and angles to optimize weld access
- Choice of seven different handles with various trigger options for a comfortable, ergonomic fit
- Internal cable connections are compression fit (instead of crimped) to optimize conductivity, reduce heat and increase gun life
- Optional ultra-heavy-duty steel monocoil cable provides extra reinforcement and high pinch/kink resistance
- One year manufacturer's warranty with lifetime warranty on rear strain relief

For more detailed information, visit **BernardWelds.com**

BERNARD™

Heavy industrial

Processes

- MIG (GMAW)
- Flux-cored (FCAW)

Suggested feeders

- Continuum™ Feeder
- SuitCase® Series
- 20 and 70 Series Feeders

Most popular consumables

Centerfire Consumable Series

Diffusers (amps)

DS-1	200, 300, small
D-1	400, 500, 600, large

Brass Nozzles (inches)

NS-1218B	1/2 ID, 1/8 rec., small

Copper Nozzles (inches)

NS-5818C	5/8 ID, 1/8 rec., small
N-5818C	5/8 ID, 1/8 rec., large
N-5814C	5/8 ID, 1/4 rec., large
N-3414C	3/4 ID, 1/4 rec., large

Contact Tips (mm)

T-035	0.9
T-045	1.2
T-052	1.4
T-062	1.6

TOUGH LOCK Consumable Series

Diffusers (amps)

404-18-25	200, 300, 400 SD
404-26-25	300, 400, 500, 600 HD

Copper Nozzles (inches)

401-4-62	5/8 ID, 1/8 rec., SD
401-6-62	5/8 ID, 1/8 rec., HD
401-5-62	5/8 ID, 1/4 rec., HD
401-5-75	3/4 ID, 1/8 rec., HD

Contact Tips (mm)

403-14-35-25	0.9 SD
403-20-35-25	0.9 HD
403-14-45-25	1.2 SD
403-20-45-25	1.2 HD
403-20-52-25	1.4 HD
403-20-116-25	1.6 HD

Bernard™ Semi-Automatic Guns

Industrial-duty fume extraction and flux-cored welding solutions built for the way you weld.

Fume Extraction MIG Guns

See Bernard literature SP-CLA (Clean Air™ gun) and SP-FFE (FILTAIR™ gun)

Maintaining a clean working environment is important and Bernard understands the need for a reliable fume extraction solution. Extract fumes at the weld bead using either of our two models.

Clean Air

Clean Air™ gun
- Available in 400-, 500- and 600-amp models
- Compatible with TOUGH LOCK, Centerfire and Quik Tip consumables
- Ergonomic, lightweight handle with rear swivel improves operator comfort

FILTAIR

FILTAIR™ gun
- Available in 300- and 400-amp models
- Compatible with Centerfire and Quik Tip consumables
- Small lightweight handle maximizes maneuverability and comfort

Dura-Flux™ Self-Shielded Flux-Cored Guns

See Bernard literature SP-DF

For structural steel applications, bridge construction and heavy equipment repair, Bernard offers two types of 350-amp self-shielded flux-cored guns.

Replaceable power cable liner

Dura-Flux gun with replaceable power cable liner
- Replaceable power cable liner allows quick and easy power cable maintenance
- Quik Tip consumables provide excellent heat transfer and electrical conductivity

Fixed power cable liner

Dura-Flux gun with fixed power cable liner
- Ultra-heavy-duty steel monocoil power cable is highly resistant to kinking
- Centerfire consumables are easy to use and high performing, providing better arc starts, less spatter and more consistent welds

For more detailed information, visit **BernardWelds.com**

BERNARD™

Heavy industrial

Processes
- MIG (GMAW)
- Flux-cored (FCAW)

Suggested feeders
- Continuum™ Feeder
- SuitCase® Series
- 20 and 70 Series Feeders

Most popular consumables

Centerfire Consumable Series

Diffusers (amps)

DS-1	200, 300, small
D-1	400, 500, 600, large

Brass Nozzles (inches)

NS-1218B	1/2 ID, 1/8 rec., small

Copper Nozzles (inches)

NS-5818C	5/8 ID, 1/8 rec., small
N-5818C	5/8 ID, 1/8 rec., large
N-5814C	5/8 ID, 1/4 rec., large
N-3414C	3/4 ID, 1/4 rec., large

Contact Tips (mm)

T-035	0.9
T-045	1.2
T-052	1.4
T-062	1.6

TOUGH LOCK Consumable Series

Diffusers (amps)

404-18-25	200, 300, 400 SD
404-26-25	300, 400, 500, 600 HD

Copper Nozzles (inches)

401-4-62	5/8 ID, 1/8 rec., SD
401-6-62	5/8 ID, 1/8 rec., HD
401-5-62	5/8 ID, 1/4 rec., HD
401-5-75	3/4 ID, 1/8 rec., HD

Contact Tips (mm)

403-14-35-25	0.9 SD
403-20-35-25	0.9 HD
403-14-45-25	1.2 SD
403-20-45-25	1.2 HD
403-20-52-25	1.4 HD
403-20-116-25	1.6 HD

Tregaskiss™ Robotic Guns

Air-Cooled MIG Guns

Compatible with most robotic welding systems, fully configurable TOUGH GUN™ robotic MIG guns are engineered for accurate, reliable and repeatable performance that maximizes production uptime and throughput.

TOUGH GUN TA3 MIG Guns

See Tregaskiss literature SP-TA3

Designed for welding applications where the gun runs internally through the robot arm.

Available in 350-amp models at 100 percent duty cycle with mixed gases.

Available as a complete package from the power pin to the contact tip.

Re-engineered neck clamp improves durability and consistency of clamping force.

Easy maintenance with minimal downtime.

TOUGH GUN CA3 MIG Guns

See Tregaskiss literature SP-CA3

Designed for welding applications where the gun runs external to the robot arm.

Available in 385-amp models at 100 percent duty cycle with mixed gases.

Replaceable unicable reduces downtime through faster repair and extended service life.

Cable guide minimizes stress on cable connection as the robot articulates.

Re-engineered neck clamp improves durability and consistency of clamping force.

Easy maintenance with minimal downtime.

Industrial

Process ▪ MIG (GMAW)

Compatible robots
- Panasonic®
- ABB®
- COMAU®
- FANUC®
- Kawasaki®
- KUKA™
- Motoman®
- OTC Daihen®
- Reis™ (CA3 only)

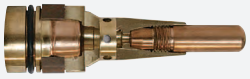
Most popular accessories
- TOUGH GUN I.C.E.™ (Integrated Cooling Enhancer) Technology — adds water-cooling to air-cooled guns for a boost in duty cycle.
- Neck Checking Fixture
- TOUGH GUN TT3E Ethernet Reamer Robotic Nozzle Cleaning Station
- Reamer Lubricator
- TOUGH GUN TT3 Reamer Robotic Nozzle Cleaning Station
- ***NEW!*** TOUGH GUN Reamer Stand — custom height, quick installation, easy on the budget.
- TOUGH GARD Multi-Feed System

Most popular consumables
- TOUGH LOCK™ Consumables
- QUICK LOAD™ Liners (see Tregaskiss literature SP-QLL)
- QUICK LOAD Liner AutoLength™ System (see Tregaskiss literature SP-QLL)

For more information or to configure your Tregaskiss robotic gun online, visit **Tregaskiss.com/ConfigureMyGun**

Bernard™ Welding Consumables

(cutaways shown)



TOUGH LOCK™

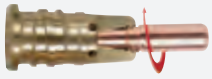
See Bernard literature SP-TLC

- Dual taper technology keeps consumables locked from tip to neck for improved weld consistency, positive electrical conductivity and maximized heat dissipation
- Consumables run cooler, improving performance and extending life

Centerfire™

See Bernard literature SP-CFC

- Drop-in contact tip (no tools required to replace tip or nozzle) means quick changeover and reduced downtime
- Spatter shield within nozzle holds tip in place, protects diffuser and directs gas evenly with reduced turbulence
- Diffuser mates securely with contact tip for better conductivity



Quik Tip™

See Bernard literature SP-QTC

- A 1/4 turn is all it takes to install contact tips
- Threaded taper lock increases tip life and allows excellent heat transfer and electrical conductivity
- Fixed contact tip position for repeatability and consistent quality welds

Spoolmate™ Spool Guns

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

Spoolmate 100

Spoolmate 100 includes carrying case that holds gun and cable, extra contact tips, nozzle and wire (wire sold separately).

Spoolmate 100 See literature M/1.45

Light industrial gun for 4043 series aluminum wire rated at 135 amps at 30 percent duty cycle.

3.7 m (12 ft.) 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.

Clear spool canister protects the wire and allows easy view of spool.

Includes carrying case, extra contact tips and nozzle.

Spoolmate 150

PORTABLE!

Spoolmate 150 See literature M/1.46

Light industrial gun for 4000 or 5000 series aluminum wire rated at 150 amps at 60 percent duty cycle.

6 m (20 ft.) direct-connect cable with heavy-duty strain relief provides extended reach and accessibility to your work.

Heavy-duty head tube.

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

Clear spool canister protects the wire and allows easy view of spool.

Spoolmate 200

Spoolmate 200 See literature M/1.47

Light industrial gun for 4000 or 5000 series aluminum wire rated at 160 amps at 60 percent duty cycle.

6 m (20 ft.) weld/control cables with strain relief and sheath provide extended reach and accessibility to your work.

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

Easy access to drive assembly and drive rolls.

Two-stage trigger with built-in gas valve allows for gas preflow/postflow.

Toolless head tube removal allows easy replacement. Comes standard with heavy-duty head tube. Three optional head tubes available.

Spoolmate 3035

Spoolmate 3035 See literature M/1.5

Light industrial gun for 4000 or 5000 series aluminum wire rated at 150 amps at 60 percent duty cycle.

6 m (20 ft.) weld/control cables with strain relief and sheath provide extended reach and accessibility to your work.

Light weight and well balanced for operator comfort.

Clear spool canister protects the wire and allows easy view of spool.

Easy-to-remove head tube assembly.

Light industrial ● CV DC

Use with CV, DC power sources.

Processes

- MIG (GMAW) with aluminum and other soft alloy wires
- MIG (GMAW) with hard wires

Suggested power sources

For Spoolmate 100
- Millermatic® 141
- Millermatic® 190
- Millermatic® 211
- Multimatic™ 20
- Multimatic™ 215
- Syncrowave® 210 – requires MIG accessory kit (301254)

For Spoolmate 150
- Millermatic® 211
- Multimatic™ 200 effective with serial number MF364047N
- Multimatic™ 215
- Syncrowave® 210 – requires MIG accessory kit (301254)

For Spoolmate 200
- Millermatic® 212 Auto-Set™
- Millermatic® 252

For Spoolmate 3035
- Direct connect to vintage Millermatic 210/212 tapped-voltage models
- Millermatic® 141/190/211 – requires SGA 100 control (043856)
- Bobcat™ 225 – requires SGA 100C control (043857)

Most popular accessories

For Spoolmate 200
- 45-Degree Head Tube 300591
- 229 mm (9 in.) Extension Head Tube 300592
- 127 mm (5 in.) Head Tube 243385
- Spoolmatic Adapter Cable 195287 Allows connection to older Millermatic 210 and 212 (non-Auto-Set).

For Spoolmatic 3035
- SGA 100 043856
- SGA 100C 043857
- Heavy-Duty Head Tube 195375

Model/ Stock Number	Welding Current Rating	Wire Feed Speed	Wire Type and Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight with Cable Assembly
Spoolmate 100 (300371)	135 A at 30% duty cycle	1.7–15.9 m/min. (5–625 ipm) Wire speed dependent on power source used	**Aluminum** 0.8–0.9 mm (.030–.035 in.) **Solid steel** 0.6–0.9 mm (.023–.035 in.) **Stainless** 0.6–0.9 mm (.023–.035 in.)	102 mm (4 in.)	H: 291 mm (11.5 in.) W: 76 mm (3 in.) L: 330 mm (13 in.)	2.7 kg (6 lb.) 4.1 kg (9 lb.) with case
Spoolmate 150 (301272)	150 A at 60% duty cycle	2.9–18.1 m/min. (115–715 ipm) Wire speed dependent on power source used	**Aluminum** 0.8–0.9 mm (.030–.035 in.) **Solid steel** 0.8–0.9 mm (.030–.035 in.) **Stainless** 0.8–0.9 mm (.030–.035 in.)	102 mm (4 in.)	H: 291 mm (11.5 in.) W: 76 mm (3 in.) L: 318 mm (12.5 in.)	3.2 kg (7.3 lb.)
Spoolmate 200 (300497)	160 A at 60% duty cycle	1.8–22.2 m/min. (70–875 ipm)	**Aluminum** 0.8–0.9 mm (.030–.035 in.) **Solid steel** 0.6–0.9 mm (.023–.035 in.) **Stainless** 0.6–0.9 mm (.023–.035 in.)	102 mm (4 in.)	H: 229 mm (9 in.) W: 64 mm (2.5 in.) L: 368 mm (14.5 in.)	5 kg (11 lb.)
Spoolmate 3035 (195016)	150 A at 60% duty cycle, 200 A at 60% duty cycle with optional heavy-duty head tube	2.9–18.1 m/min. (115–715 ipm)	**Aluminum** 0.8–0.9 mm (.030–.035 in.) **Solid steel** 0.6–0.9 mm (.023–.035 in.) **Stainless** 0.6–0.9 mm (.023–.035 in.)	102 mm (4 in.)	H: 291 mm (11.5 in.) W: 57 mm (2.25 in.) L: 203 mm (8 in.)	4.1 kg (9.1 lb.)

Spoolmatic® Spool Guns

Portable, aluminum wire feeder for industrial applications.

Spoolmatic

PORTABLE!

Spoolmatic Pro

Spoolmatic See literature M/1.73

Cost-effective, industrial aluminum spool gun.

Integrated spool canister rotates 180 degrees for operator flexibility and comfort.

Available in 4.6 or 9 m (15 or 30 ft.) cable lengths, providing flexibility to be used in the shop and in the field.

Two-stage trigger with built-in gas valve allows for gas preflow, and eliminates the need to purge long gas lines.

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

Quick-change, single-turn contact tip provides excellent performance and is easy to replace.

Spoolmatic Pro (additional features)

See literature M/1.76

The most reliable, easy-to-use spool gun in the industry for the professional welder.

Wire tension settings. 4000- or 5000-specific tension settings ensure the very best wire feeding performance and arc consistency.

More durable motor and drive design improves feedability and arc consistency while helping reduce downtime and maintenance costs.

Easy access to drive assembly and removable toolless head tube reduce service time, by allowing a simple means of changing drive rolls and head tube – or performing routine maintenance without disassembly of gun.

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.

Industrial CC CV DC

Use with CC/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

Suggested power sources

- Millermatic® 212 Auto-Set™
- Millermatic® 252
- Millermatic® 350P/350P Aluminum – except Spoolmatic Pro
- Shopmate™ 300 DX
- Bobcat™ Series – requires WC-115A with contactor (137546011)

These power sources require WC-24 control (137549)

- AlumaPower™ MPa
- CP-302
- Deltaweld® Series
- Invision™ MPa
- Dimension™ Series
- XMT® Series
- Trailblazer® Series

Most popular accessories

- WC-115A 137546
- WC-115A with contactor 137546011
- WC-24 137549

**Spoolmatic Pro requires wire kit (230708) to run 1.6 mm (1/16 in.) wire.*

Model/Stock Number	Welding Current Rating	Wire Feed Speed	Wire Type and Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Gun Only Net Weight
Spoolmatic **(195156)** 4.5 m (15 ft.) cable **(130831)** 9 m (30 ft.) cable	200 A at 100% duty cycle	1.8–22.2 m/min. (70–875 ipm) Wire speed dependent on control or Millermatic used	**Aluminum*** 0.8–1.6 mm (.030–1/16 in.) **Hard wire** 0.8–1.1 mm (.030–.045 in.)	102 mm (4 in.)	H: 260 mm (10.25 in.) W: 64 mm (2.5 in.) L: 384 mm (15.125 in.)	1.3 kg (2.9 lb.)
Spoolmatic Pro **(301147)** 4.5 m (15 ft.) cable **(301148)** 9 m (30 ft.) cable	200 A at 100% duty cycle	1.8–23 m/min. (70–900 ipm) Wire speed dependent on control or Millermatic used			H: 273 mm (10.75 in.) W: 64 mm (2.5 in.) L: 390 mm (15.375 in.)	1.4 kg (3.0 lb.)

XR™ Push-Pull Guns

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

XR-Aluma-Pro Lite

XR-Aluma-Pro

PORTABLE!

Threaded quick-change 360-degree rotatable head tubes are available in different bends and lengths for even those hard-to-reach welds. Over 30 different styles to fit your application and welder's preference.

Wire tension settings (except XR-Pistol). 4000- or 5000-specific tension settings ensure the very best wire feeding performance and arc consistency.

Heavy-duty construction. All internal components are designed to provide long lasting performance and feeding precision.

XR-Aluma-Pro™ Lite

See literature M/1.75

Lightest weight gooseneck-style gun features rear trigger that allows access to hard-to-reach welds.

XR-Aluma-Pro™

See literature M/1.71

Robust professional-grade gun has the highest duty cycle rating in its class.

Easy access to drive assembly and removable toolless head tube reduce service time, by allowing a simple means of changing drive rolls and head tube – or performing routine maintenance without disassembly of gun.

XR-Pistol

XR-Pistol-Pro

XR™-Pistol

See literature M/1.73

Reliable, cost-effective gun for light- to medium-industrial applications.

XR™-Pistol-Pro

See literature M/1.74

Exceptional aluminum welding results for heavy-industrial applications.

Most durable motor and drive design improves feedability and arc consistency while helping reduce downtime and maintenance costs.

Easy access to drive assembly and removable toolless head tube reduce service time, by allowing a simple means of changing drive rolls and head tube – or performing routine maintenance without disassembly of gun.

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 feeders/controls
- XR-AlumaFeed® 300509, **CE**
- XR™-S Control 300601, **CE**
- XR™-D Control 300687, **CE**

Suggested power sources
- Millermatic® 252
- Millermatic® 350P/350P Aluminum

These power sources require XR-AlumaFeed or XR Control
- AlumaPower™ MPa
- Deltaweld® Series
- Invision™ MPa
- XMT® Series
- Trailblazer® Series

Most popular accessories
- Hardwire Liner Kit 198377

**Dependent on control box or Millermatic used. **Requires wire kit (230708) to run 1.6 mm (1/16 in.) wire.*

Model	Cable Length 4.6 m (15 ft.)	7.6 m (25 ft.)	9 m (30 ft.)	10.6 m (35 ft.)	Welding Current Rating	Wire Feed Speed*	Wire Type and Diameter Capacity	Dimensions	Gun Only Net Weight
XR-Aluma-Pro Lite (Air-cooled)	–	**(300948)**	–	–	175 A at 60% duty cycle	1.8–23 m/min. (70–900 ipm)	**Aluminum** 0.8–1.2 mm (.030–.047 in.)	H: 102 mm (4 in.) W: 48 mm (1.9 in.) L: 381 mm (15 in.)	0.9 kg (2.0 lb.)
XR-Aluma-Pro (Air-cooled)	**(300000)**	**(300001)**	–	**(300264)**	300 A at 100% duty cycle	1.8–23 m/min. (70–900 ipm)	**Aluminum**** 0.8–1.6 mm (.030–1/16 in.)	H: 127 mm (5 in.) W: 64 mm (2.5 in.) L: 432 mm (17 in.)	1.1 kg (2.5 lb.)
XR-Aluma-Pro (Water-cooled)	**(300003), CE**	**(300004), CE**	–	**(300265), CE**	400 A at 100% duty cycle				1.3 kg (2.9 lb.)
XR-Pistol (Air-cooled)	**(198127), CE**	–	**(198128), CE**	–	200 A at 100% duty cycle	1.8–22.2 m/min. (70–875 ipm)	**Aluminum** 0.8–1.6 mm (.030–1/16 in.)	H: 187 mm (7.375 in.) W: 48 mm (1.875 in.) L: 270 mm (10.625 in.)	1 kg (2.2 lb.)
XR-Pistol (Water-cooled)	**(198129), CE**	–	**(198130), CE**	–	400 A at 100% duty cycle				1.1 kg (2.4 lb.)
XR-Pistol-Pro (Air-cooled)	**(300782)**	**(300783)**	–	**(300784)**	200 A at 100% duty cycle	1.8–23 m/min. (70–900 ipm)	**Aluminum**** 0.8–1.6 mm (.030–1/16 in.)		1 kg (2.2 lb.)
XR-Pistol-Pro (Water-cooled)	**(300786)**	**(300787)**	–	**(300788)**	400 A at 100% duty cycle				1.1 kg (2.4 lb.)

XR™ Control

See literature M/1.7

Standard aluminum wire feeding system for fabrication and manufacturing, consisting of a control box and push-pull gun. Beneficial for difficult-to-feed wire types.

XR-S

XR-D

PORTABLE!

***Includes** both 0.9 mm (.035 in.) and factory-installed 1.2 mm (3/64 in.) drive rolls. Order 1.6 mm (1/16 in.) control box drive roll kit (195591) separately.*

XR-S

Simple, cost-effective push-pull feeder for industrial applications.

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.

Digital meters ensure accuracy when presetting and reading actual wire feed speed or voltage.

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 (additional features)

Adds basic programmable weld sequencing that allows adjustments for preflow, postflow, start, and crater providing 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 guns
- Push-pull guns

Suggested power sources
- AlumaPower™ MPa
- Deltaweld® Series
- Invision™ MPa
- XMT® Series
- Trailblazer® Series

Most popular accessories
- Extension Cables
- PSA-2 Control
- Gas Flowmeter Kit 246127

Model/Stock Number	Input Power	Wire Feed Speed	Wire Type and Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
XR-S (300601), CE **XR-D (300687), CE** **XR-AlumaFeed (300509), CE**	24 VAC, 50/60 or 100 Hz	1.3–23 m/min. (50–900 ipm)	**Aluminum** 0.8–1.6 mm (.030–1/16 in.) Requires drive roll kit (195591) to run 1.6 mm (1/16 in.) wire	305 mm (12 in.)	H: 406 mm (16 in.) W: 235 mm (9.25 in.) D: 540 mm (21.25 in.)	19.2 kg (42.5 lb.)

Feeding aluminum – choose the right gun solution

Push-only Guns

Known as standard MIG guns, these guns are only used for occasional aluminum work.
- Typically used with hard wire or flux-cored wires in general manufacturing
- For aluminum, guns should be limited to 3.7 m (12 ft.) lengths and configured with correct aluminum liner and consumables

UPGRADE

Spool Guns

Integrated wire spools and better aluminum wire feedability make spool guns great for repair and small jobs.
- Low initial cost versus push-pull guns
- Work with many power sources
- Light and simple to use
- Limited deposition because of wire spool size

UPGRADE

Push-pull Guns

Preferred guns for industrial production work with the best overall aluminum wire feedability.
- Built for longevity
- Great arc starts and performance
- Higher amp ratings
- Air- and water-cooled models
- Work in conjunction with designated wire feeders

Learn more at **MillerWelds.com/aluminum**

Multimatic™ 200

See literature DC/12.57

Multi-voltage plug (MVP™) allows connection to common 120- and 240-volt power receptacles without the use of any tools — simply choose the plug that fits the receptacle and connect to the power cord.

Welding Capability

Max. 9.5 mm (3/8 in.)	Max. 9.5 mm (3/8 in.)	Max. 4.8 mm (3/16 in.)	Max. 9.5 mm (3/8 in.)
MIG Mild Steel	MIG Aluminum	TIG Mild Steel	Stick Mild Steel
Min. 0.6 mm (24 ga.)	Min. 1.2 mm (18 ga.)	Min. 0.6 mm (24 ga.)	Min. 1.5 mm (16 ga.)

Aluminum welding uses optional Spoolmate 100 and 4000 series aluminum wire or Spoolmate 150 (effective with Multimatic 200 serial number MF364047N) and either 4000 or 5000 series aluminum wire. TIG welding uses optional TIG contractor kit.

Weighing only 13 kg (29 lb.), this lightweight MIG, stick and TIG welder provides portability on the job.

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

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

Excellent arc characteristics! Positive arc starts and an extremely stable arc with minimal spatter.

Auto Spool Gun Detect™ automatically detects when a MIG gun or spool gun is connected eliminating the need for a switch.

NEW! Multimatic™ 215

See literature DC/12.59

Multi-voltage plug (MVP™) allows connection to common 120- and 240-volt power receptacles without the use of any tools — simply choose the plug that fits the receptacle and connect to the power cord.

Welding Capability

Max. 9.5 mm (3/8 in.)	Max. 9.5 mm (3/8 in.)	Max. 4.8 mm (3/16 in.)	Max. 9.5 mm (3/8 in.)
MIG Mild Steel	MIG Aluminum	TIG Mild Steel	Stick Mild Steel
Min. 0.6 mm (24 ga.)	Min. 1.2 mm (18 ga.)	Min. 0.6 mm (24 ga.)	Min. 1.5 mm (16 ga.)

Aluminum welding uses optional Spoolmate 100 and 4000 series aluminum wire or Spoolmate 150 and either 4000 or 5000 series aluminum wire. TIG welding uses optional TIG contractor kit.

Intuitive color LCD user interface makes it quick and easy to adjust parameters.

Angled cast-aluminum drive system provides smooth feeding and the ability to use 3, 3.7 or 4.6 m (10, 12 or 15 ft.) guns.

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! Positive arc starts and an extremely stable arc with minimal spatter.

Auto Spool Gun Detect™ automatically detects when a MIG gun or spool gun is connected eliminating the need for a switch.

Light industrial ● CC CV DC 1 Phase

Processes

- MIG (GMAW) ▪ Flux-cored (FCAW)
- DC stick (SMAW) ▪ DC TIG (DC GTAW)

Comes complete with

- 3 m (10 ft.) Bernard™ Q150 MIG gun and cable assembly (Multimatic 200) **OR** 3 m (10 ft.) M-100 MIG gun and cable assembly (Multimatic 215)
- 4 m (13 ft.) cable with electrode holder and 25 mm Dinse-style connector
- 3 m (10 ft.) work cable with clamp and 25 mm Dinse-style connector
- Power cord with MVP plugs for 120 V and 240 V
- Quick Select™ drive roll for 0.6 mm (.024 in.) or 0.8/0.9 mm (.030/.035 in.) solid wire, and 0.8/0.9 mm (.030/.035 in.) flux-cored wire

- Flow gauge regulator and gas hose for argon or AR/CO_2 mix, extra contact tips, information/settings chart and material thickness gauge (229895) — Hobart® spool of 0.8 mm (.030 in.) solid wire and hook-and-loop cord wraps as seen in photo above are included with Multimatic 215 model only

Most popular accessories

- Spoolmate™ Spool Guns
  300371 Spoolmate 100
  301272 Spoolmate 150
- Running Gear/Cylinder Rack
  301239
- Protective Cover 301262 (Multimatic 215 only)
- TIG Contractor Kits
  301287 For Multimatic 200
  301337 For Multimatic 215

Model/ Stock Number	Welding Mode/Process	Input Power	Amperage Range	Rated Output	Amps Input at Rated Output, 50/60 Hz 120 V	230 V/240 V	KVA	KW	Wire Feed Speed	Max. Open-Circuit Voltage	Dimensions	Net Weight
Multimatic 200 (907518)	CV: MIG/ flux-cored	120 V	30–140	90 A at 18.5 V, 60% duty cycle	18.0	–	2.2	2.0	1.8–10.8 m/min. (70–425 ipm)	90 VDC	H: 368 mm (14.5 in.) W: 248 mm (9.75 in.) D: 432 mm (17 in.)	13.2 kg (29 lb.)
				110 A at 19.5 V, 20% duty cycle	20.0	–	2.7	2.6				
		230 V	30–200	150 A at 21.5 V, 20% duty cycle	–	17.5	4.0	3.8				
	CC: TIG	120 V	5–150	150 A at 16 V, 30% duty cycle	27.0	–	3.3	3.2	–	90 VDC (22–25 VDC, sense voltage for stick and Lift-Arc™ TIG)		
		230 V	5–150	150 A at 16 V, 30% duty cycle	–	13.8	3.2	3.0				
	CC: Stick	120 V	20–150	100 A at 24 V, 35% duty cycle	24.0	–	2.9	2.8				
		230 V	20–150	150 A at 26 V, 30% duty cycle	–	20.8	4.8	4.5				
Multimatic 215 (907693)	CV: MIG/ flux-cored	120 V	30–125	110 A at 19.5 V, 60% duty cycle	23.0	–	2.8	2.8	1.5–15.2 m/min. (60–600 ipm)	58 VDC	H: 318 mm (12.5 in.) W: 286 mm (11.25 in.) D: 521 mm (20.5 in.)	17.2 kg (38 lb.)
		240 V	30–230	200 A at 24 V, 20% duty cycle	–	25.8	6.2	6.2				
				150 A at 21.5 V, 40% duty cycle	–	16.7	4.0	4.0				
	CC: TIG	120 V	20–150	140 A at 15.6 V, 40% duty cycle	24.6	–	3.0	3.0	–	58 VDC		
		240 V	20–210	190 A at 17.6 V, 20% duty cycle	–	18.0	6.7	6.7				
	CC: Stick	120 V	30–100	90 A at 23.6 V, 40% duty cycle	22.7	–	2.7	2.7				
		240 V	30–200	190 A at 27.6 V, 20% duty cycle	–	27.0	6.5	6.5				

MPi 220P

See literature DCM/9.5 UK

Must be purchased from ITW Italy

Includes work clamp.

Synergic welding mode offers the simplicity of single knob control. The machine will select the correct voltage and amperage based on the wire feed speed (WFS) set by the operator.

Note: Complete material library to select from for the targeted market segment.

Large graphical display guides user through process and parameter setup with ease and high visibility.

Durable cast aluminum feedhead incorporates dual-groove quick-change drive roll and spring-loaded tension arm with calibrated tension knob, all designed to make setup easier and faster.

Thermal overload protection shuts down unit and activates **over temperature light** if airflow is blocked or duty cycle is exceeded. Automatically resets when fault is corrected and unit cools.

Adjustable Hot Start™ for stick arc starts. Adjust the optimal start current for the application. The current automatically increases the output amperage at the start of a weld.

Built-in upslope/downslope function for TIG helps provide better arc starts and reduces craters.

Built-in run-in/crater/burnback function for MIG helps provide better arc starts and reduces craters.

Adjustable preflow and postflow gives operator better control of the gas parameters affecting weld zone.

Selectable trigger configuration allows the operator to choose standard or 2T trigger method.

Industrial ● CC CV DC 1 Phase

Processes

- MIG (GMAW) ▪ Pulsed MIG (GMAW-P)
- Flux-cored (FCAW) ▪ Stick (SMAW)
- TIG (GTAW)

Most popular accessories

- TIG Torch WTC9AA4AG
  125 amps DC/100 amps AC, 60% duty cycle
- TIG Torch CS130AGA4CG-I
  130 amps DC/100 amps AC, 60% duty cycle
- MIG/MAG Torch Q2010AO8DE
  200-amp Q-Gun with 3 m (10 ft.) cable

Stock Number	Welding Mode	Amperage/Voltage Range DC	Rated Output	IP Rating	Max. Open-Circuit Voltage	Dimensions	Net Weight
(059016014) 230 V, 50/60 Hz, **CE**	MIG	2–200 A, 15–24 V	180 A at 23.0 VDC, 35% duty cycle 140 A at 21.0 VDC, 60% duty cycle 110 A at 17.5 VDC, 100% duty cycle	IP22S	35	H: 365 mm (14.4 in.) W: 237 mm (9.3 in.) D: 548 mm (21.6 in.)	16 kg (35 lb.)
	Stick	5–200 A, 20.2–28 V	170 A at 26.8 VDC, 35% duty cycle 130 A at 25.2 VDC, 60% duty cycle 100 A at 24.0 VDC, 100% duty cycle		65		
	TIG	5–200 A, 10–18 V	180 A at 17.2 VDC, 35% duty cycle 130 A at 15.2 VDC, 60% duty cycle 100 A at 14.0 VDC, 100% duty cycle		65		

Dimension™ Series and NT 500

See literature DC/19.2 and DC/19.5

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

Dimension Stationary

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** for auxiliary tools.

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 500 adds the following features:

- **Electronic arc and inductance controls with digital display** for added flexibility and control on a large variety of stick electrodes and welding wires.
- **Lift-Arc**™ start for TIG arc starting without high frequency.

Heavy industrial ● CC CV DC 3 Phase

Processes

- MIG (GMAW) ▪ Flux-cored (FCAW)
- Stick (SMAW) ▪ TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A)
  (Dimension 302: 6.4 mm [1/4 in.] carbons)
  (Dimension 452: 7.5 mm [5/16 in.] carbons)
  (Dimension NT 500: 7.5 mm [5/16 in.] carbons)
  (Dimension 652: 9.5 mm [3/8 in.] carbons)

Most popular accessories

- SuitCase X-TREME™ Feeders
- 70 Series Feeders
- Standard Running Gear 042886
- Standard Cylinder Rack 042887
- Industrial MIG 4/0 Kit 300390
  Includes Smith® regulator/flowmeter with 3 m (10 ft.) gas hose, 3 m (10 ft.) 4/0 feeder weld cable with lugs, and 4.6 m (15 ft.) work cable with 600-amp C-clamp.
- Extension Cables
- Bernard™ and Tregaskiss™ MIG Guns

Model	Stock Number	Welding Mode	Amperage/ Voltage Range	Rated Output	Max. Open-Circuit Voltage	Net Weight *(power source only)*
Dimension 302	**(903216)** 230/460/575 V, Machine only	CC	15-375 A	300 A at 32 VDC, 100% duty cycle	60 VDC	164 kg (361 lb.)
		CV	10-32 V		36 VDC	
Dimension 452/562	**452 (903255)** 230/460/575 V, Machine only **562 (907360)** 380/400/440 V, 50/60 Hz, **CE**	CC	20-565 A	450 A at 38 VDC, 100% duty cycle	65 VDC	192 kg (424 lb.)
		CV	10-38 V		43 VDC	
Dimension 652/812	**652 (903379)** 230/460/575 V, Machine only **812 (907361)** 380/400/440 V, 50/60 Hz, **CE**	CC	50-815 A	650 A at 44 VDC, 100% duty cycle	72 VDC	247 kg (545 lb.)
		CV	10-65 V		67 VDC	
Dimension NT 500	**(907391)** 380/400/440 V, 50 Hz	CC	5-500 A	450 A at 38 VDC, 100% duty cycle	80 VDC	171 kg (376 lb.)
		CV	10-38 V			

Dimension™ 650 and 650 ArcReach®

See literature DC/19.3

Developed for harsh environmental conditions and output requirements that range from power-intensive to precise.

*Dimension 650 ArcReach power source shown with SuitCase X-TREME 12VS ArcReach feeder and ArcReach Stick/TIG Remote (sold separately). Feeder **includes** Bernard S-Gun **OR** BTB Gun 300 A with reversible dual size (1.2 mm and 1.6 mm [.045 and 1/16 in.]) VK drive rolls.*

ArcReach®

Remote control of the power source without a cord. An ArcReach system allows you to change weld settings from your SuitCase® wire feeder or ArcReach Stick/TIG Remote, saving a trip to the power supply. No extra control cable to purchase, maintain, string or unstring — saving time and money. Learn more at **MillerWelds.com/arcreach**

All aluminum construction helps the machine resist corrosion for long life.

Exclusive protection input inductor protects machine's performance and reliability from "dirty" input power.

Wind Tunnel Technology™ protects internal components, greatly improving reliability.

Fan-On-Demand™ reduces power consumption and improves reliability.

High-quality performance in all welding processes, from thick to thin metals.

Arc control available in the stick and wire modes for easier fine tuning of tough-to-weld materials and out-of-position applications.

Reduced size and weight results in an easier-to-handle package that exceeds the welding performance of larger, heavier machines. Dimension 650 is 3.5 times lighter than the Dimension 652 and also uses 40 percent less floor space.

High electrical efficiency and excellent power factor mean that you can get more welding done using less power. Dimension 650 uses 32 percent fewer amps than the Dimension 652.

Heavy industrial ● CC CV DC 3 Phase

Processes

- MIG (GMAW) ▪ Flux-cored (FCAW)
- Stick (SMAW) ▪ TIG (GTAW)
- Submerged arc (SAW)
- Air carbon arc cutting and gouging (CAC-A) (9.5 mm [3/8 in.] carbons)

Most popular accessories

4-pack rack shown.

- **Dimension 650 Rack**
  907687 2-pack rack
  907688 4-pack rack
  Rack comes assembled with two or four Dimension 650 power sources fused for 460 V.
- **Dimension 650 ArcReach Rack**
  907702 2-pack rack
  907701 4-pack rack
  Rack comes assembled with two or four Dimension 650 ArcReach power sources fused for 460 V.
- SuitCase X-TREME™ Feeders
- 70 Series Feeders
- ArcReach Stick/TIG Remote 301325
- Bernard™ MIG Guns
- Running Gear Cylinder Rack 300408
- Dimension 650 Running Gear 301307
- Industrial MIG 4/0 Kit (with lug connectors) 300390
- Extension Cables
  242208025 7.6 m (25 ft.)
  242208050 15 m (50 ft.)
  242208080 24.4 m (80 ft.)

Model/Stock Number	Amperage/ Voltage Ranges	Rated Output	Amps Input at Rated Output, 50/60 Hz 380 V	460 V	KVA	KW	Max. Open-Circuit Voltage	Power Source Dimensions (Includes lift eye)	Power Source Net Weight
Dimension 650 **(907617)** 380/460 V power source only **(907318)** 380/460 V, **CE** **Dimension 650 ArcReach** **(907617001)** 380/460 V power source only	CC mode: 10–815 A CV mode: 10–44 V SAW mode: 10–65 V	650 A at 44 VDC, 100% duty cycle	53.2	42.8	34	30.7	87 VDC	H: 716 mm (28.187 in.) W: 424 mm (16.687 in.) D: 803 mm (31.625 in.)	158 lb. (71.7 kg)

XMT® Series

Portability and excellent multiprocess arc performance make the XMT family the most popular in the industry. With many models to choose from the XMT family has the right solution for your business.

XMT 350 *XMT 425* *XMT 450*

Input power choices

AUTO-LINE Power Management Technology (350/425 models) allows for any input voltage hookup (230–575 V, three-phase) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable input power.

Standard hookup (450 models). Available as 400 V, three-phase.

Advanced features for the professional welder

Adaptive Hot Start™ makes starting stick electrodes easy without creating an inclusion.

Infinite arc control available in the stick and wire modes for easier fine tuning of tough-to-weld materials and out-of-position applications.

Lift-Arc™ provides arc starting that minimizes contamination of the electrode and without the use of high frequency.

Insight Core™ **Welding Intelligence™ system.** XMT 14-pin models are Insight Core capable to monitor weld voltage, amperage, and arc-time and percentage.

Reliability

Wind Tunnel Technology.™ Air flow that protects internal components, greatly improving reliability.

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

Welder friendly control panel

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

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

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

Output connector choices

Dinse-style weld disconnects (350/425 models) provide high-quality weld cable connections. Machines come with two Dinse connectors.

Weld studs (450 models).

14-pin receptacle provides a quick, direct connection to Miller® wire feeders. Capable of remote voltage control.

Choose the Right XMT

	350 Amp			450 Amp	
	XMT 350 CC/CV	XMT 350 MPa	XMT 425 CC/CV	XMT 450 CC/CV	XMT 450 MPa
Input Power	3-phase		3-phase	3-phase	
Primary Operating Range	Auto-Line (230–575 V)		Auto-Line (230–575 V)	400 V	
Weld Output	350 A at 34 VDC (3-phase input power at 60% duty cycle)		425 A at 27 VDC (3-phase input power at 30% duty cycle)	UPGRADE 450 A at 38 VDC (3-phase input power at 100% duty cycle)	
Carbon Arc Gouging	Rated: 6 mm		Rated: 6 mm	UPGRADE Rated: 7.9 mm	
Net Weight	36.3 kg (80 lb.)		36.3 kg (80 lb.)	55.3 kg (122 lb.)	
Output Connector	Dinse		Dinse	1/2 in. stud	
Pulsed MIG	–	UPGRADE Yes	– UPGRADE Yes	–	UPGRADE Yes
14-pin Compliant	Yes		Yes	Yes	
Insight Core Capable (requires Insight Core 14-pin module)	Yes		Yes	Yes	

XMT® 350 CC/CV, 425 CC/CV and 450 CC/CV

See literature DC/18.93 (350), EX/18 (425) and DC/18.94 (450)

Flexibility and simplicity make this the most popular model. It has the core multiprocess capabilities along with the flexibility of a 14-pin for spool guns, feeders, and remote controls.

Stronger weld output for increased capabilities. XMT 350 provides 24 percent more output than the 304 model for larger wires and stick electrodes. XMT 450 provides 43 percent more output for carbon arc gouging.

XMT® 350 MPa and 450 MPa

See literature DC/18.93 (350) and DC/18.94 (450)

Built-in pulse programs for manufacturing and fabrication applications that have benefits for standard steels, high-strength steels and aluminum.

Pulse programs provide reduced heat affected zone, weld in all positions, great for thick-to-thin metal, good gap filling ability and faster travel speeds and deposition.

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

Additional features when using a 70 Series MPa Plus feeder or XR-AlumaFeed® feeder

Synergic pulsed MIG. 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, eliminating the need to make additional adjustments.

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.

Added capabilities with Insight Core.™ When using an MPa Plus feeder, wire deposition is added to the Insight Core capabilities.

Heavy industrial CC CV DC 3 Phase

Processes

- MIG (GMAW) ▪ Pulsed MIG (GMAW-P)*
- Stick (SMAW) ▪ TIG (GTAW)
- Flux-cored (FCAW)
- Air carbon arc cutting and gouging (CAC-A) (carbons – 350/425: 6 mm, 450: 8 mm)

**Only XMT MPa models.*

Most popular accessories

- XR-AlumaFeed®
- SuitCase® X-TREME™ Feeders
- 70 Series Feeders
- XR™ Control
- Universal Running Gear
- Coolmate™ Coolant System
- Protective Cover (XMT 350/425 only) 195478
- Gas Valve Kit
  195286 XMT 350/425
  300928 XMT 450

**Optional 115-volt auxiliary power provides 10 amps of circuit-breaker protected power for coolant systems, etc.*
***Duty cycle rating below achieved with 6-gauge input power cord (8-gauge cord supplied with unit).*

Model/Stock Number	Input Power	Amperage/ Voltage Ranges	Rated Output	Amps Input at Rated Load Output 208 V	230 V	400 V	460 V	575 V	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
XMT 350 CC/CV (Dinse) **(907161)** 208-575 V, 50/60 Hz **(907161011)** 208-575 V, w/auxiliary power*, 50/60 Hz **(907161012)** Auto-Line w/auxiliary power, 50/60 Hz, **CE** **XMT 350 MPa** (Dinse except where noted) **(907366)** 208-575 V, 50/60 Hz **(907366011)** 208-575 V, w/auxiliary power*, 50/60 Hz **(907366014)** 208-575 V, with Tweco®, 50/60 Hz **(907366002)** w/auxiliary power, 50/60 Hz, **CE**	3-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: 432 mm (17 in.) W: 318 mm (12.5 in.) D: 610 mm (24 in.)	36.3 kg (80 lb.) 43 kg (94.8 lb.) w/aux power
	1-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 425 CC/CV **(907386)** 230–575 V w/auxiliary power*, 50/60 Hz	3-phase		425 A at 27 VDC, 30% duty cycle	–	36.1	20.6	17.8	14.1	14.2	13.6			
XMT 450 CC/CV **(907481)** 230/460 V, 60 Hz **(907525)** 400 V w/auxiliary power*, 50/60 Hz, **CE**	3-phase	15–600 A 10–38 V	450 A at 38 VDC, 100% duty cycle	–	51	–	27.6	24.4	22	18.9	90 VDC	H: 438 mm (17.25 in.) W: 368 mm (14.5 in.) D: 689 mm (27.125 in.)	55.3 kg (122 lb.)
XMT 450 MPa **(907479)** 230/460 V, 60 Hz **(907468)** 400 V, w/auxiliary power, 50/60 Hz, **CE**				–	51	–	27.6	23.6	21.6	18.3			
				(KVA is 23.5 on 575 V)									

XMT® 350 and 450 ArcReach® Systems

See literature DC/18.93 (350) and DC/18.94 (450)

XMT 350 and 450 CC/CV ArcReach power sources shown with SuitCase X-TREME 8VS and 12VS ArcReach feeders and ArcReach Stick/TIG Remote (sold separately).

ArcReach®

Remote control of the power source without a cord.
An ArcReach system allows you to change weld settings from your SuitCase® wire feeder or ArcReach Stick/TIG Remote, saving a trip to the power supply. No extra control cable to purchase, maintain, string or unstring – saving time and money. Learn more at **MillerWelds.com/arcreach**

More arc-on time and reduced exposure to workplace hazards for operators can be realized using ArcReach because less time is spent going back to the XMT to set process and arc voltage.

Auto-Process Select.™ System automatically changes to MIG/FCAW (with gas) if electrode positive polarity is detected or FCAW (no gas) if electrode negative polarity is detected, when ArcReach communication is established between the feeder and the XMT – reducing the need to access the power supply.

Automatic return to panel settings. System automatically returns to XMT setting when ArcReach communication is terminated. For example, if the XMT is set to gouging at 350 amps and an ArcReach feeder is connected, the XMT will go to a MIG/FCAW process. If the feeder is disconnected, the XMT will go back to its previous setting (gouging at 350 amps).

Auto-Bind™ automatically establishes exclusive communication between the power source and the wire feeder, using the existing weld cables upon system power up.

Operator can precisely set arc voltage at the feeder and monitor the actual arc voltage and current delivered to the weld using the digital meters on the feeder. This removes guesswork when it comes to adhering to weld procedures.

Less operator fatigue by not needing to move or reposition both heavy secondary weld leads bundled with control cords on the jobsite. Control cables are not used.

Save time by no longer needing to troubleshoot welding system problems that result from damaged control cords.

Eliminate costly control cord repairs because control cords are not used.

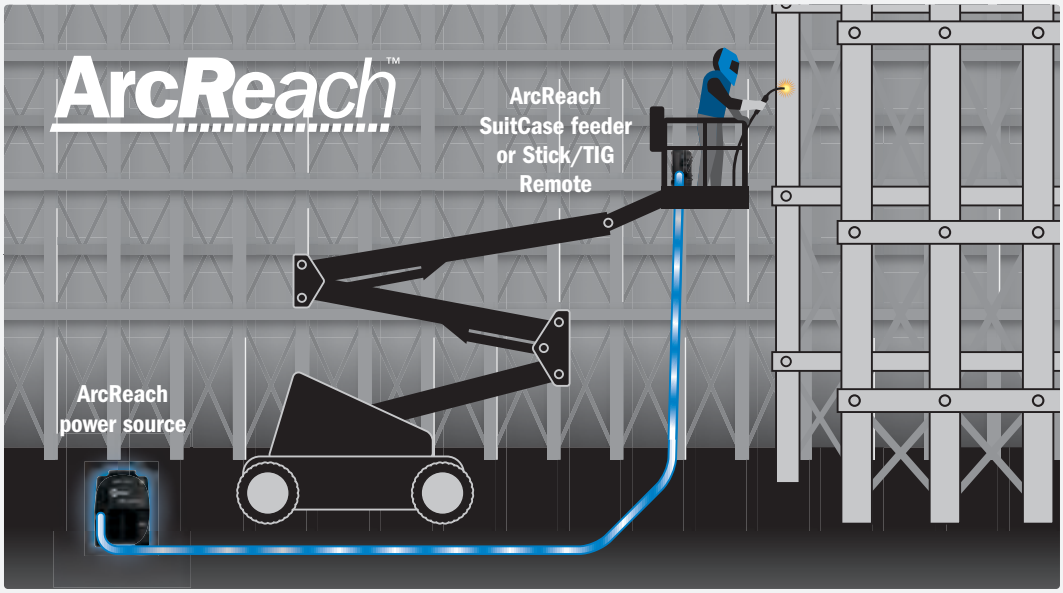
Remote override of XMT. When an ArcReach feeder is connected to an XMT the feeder has full control and the XMT controls are disabled. While under ArcReach control, process and voltage/amperage adjustments are locked out, preventing accidental changes by personnel other than the welding operator.

Remote in use indicator provides convenient feedback indicating an ArcReach wire feeder is controlling the power source.

LED process indicator.
Front panel process selections are illuminated with an LED that identifies the active process. This enables the selected weld process to be seen at a distance from the power source. Includes new carbon arc gouging mode for enhanced arc stability and control, and two new stick modes (EXX10 and EXX18) designed to reduce spatter and enhance arc starts.

Fleet compatibility. ArcReach-equipped power sources and wire feeders work with non-ArcReach equipment; however the complete ArcReach benefit is only realized with the ArcReach system. This allows you to start investing in ArcReach one power source, one wire feeder at a time.

How ArcReach® Works



ArcReach technology uses the existing weld cable to communicate welding control information between the feeder or remote and the power source. This technology eliminates the need for control cords, and their associated problems and costs. Learn more at **MillerWelds.com/arcreach**

ArcReach® Accessories

SuitCase® X-TREME™ 8VS and 12VS ArcReach feeders for MIG or flux-cored welding

Features remote voltage control, polarity indication and Auto-Process Select.™

ArcReach Stick/TIG Remote for stick or TIG welding

301325

Features remote amperage control, arc control for stick, polarity indication and Auto-Process Select.™

**Optional 115-volt auxiliary power provides 10 amps of circuit-breaker protected power for coolant systems, etc.*
***Duty cycle rating below achieved with 6-gauge input power cord (8-gauge cord supplied with unit).*

Heavy industrial ●

CC CV DC 3 Phase 1 Phase *XMT 450 is 3-phase only.*

Processes

- MIG (GMAW) ▪ Stick (SMAW)
- TIG (GTAW) ▪ Flux-cored (FCAW)
- Air carbon arc cutting and gouging (CAC-A) (carbons – 304: 6.4 mm [1/4 in.], 350: 6.4 mm [1/4 in.], 450: 7.5 mm [5/16 in.])

Most popular accessories

- **XMT® 350 CC/CV ArcReach Rack**
  907699 4-pack rack
  907698 6-pack rack
  Rack comes assembled with four or six XMT 350 CC/CV ArcReach power sources fused for 460/575 V. See literature DC/18.81 for more information.
- **XMT® 450 CC/CV ArcReach Rack**
  907700 4-pack rack
  Rack comes assembled with four XMT 450 CC/CV ArcReach power sources fused for 460 V. See literature DC/18.81 for more information.
- XR-AlumaFeed® 300509
- 20 and 70 Series Feeders
- Spoolmatic®/WC-24
- XR™ Control

	Model/Stock Number	Input Power	Amperage/ Voltage Ranges	Rated Output	Amps Input at Rated Load Output 208 V	230 V	400 V	460 V	575 V	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
350 A	**XMT 350 CC/CV ArcReach** (Tweco®) **(907161032)** 208–575 V, 50/60 Hz **(907161033)** 208–575 V, 50/60 Hz w/auxiliary power*	3-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: 432 mm (17 in.) W: 318 mm (12.5 in.) D: 610 mm (24 in.)	36.3 kg (80 lb.)
		1-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			
450 A	**XMT 450 CC/CV ArcReach** (1/2 in. stud) **(907481003)** 230/460 V, 60 Hz **(907481004)** 230/460 V, 60 Hz w/auxiliary power*	3-phase	15–600 A 10–38 V	450 A at 38 VDC, 100% duty cycle	–	51	–	27.6	24.4	22	18.9	90 VDC	H: 438 mm (17.25 in.) W: 368 mm (14.5 in.) D: 689 mm (27.125 in.)	55.3 kg (122 lb.)

PipeWorx 350 FieldPro™ System

See literature PWS/6.0

Simplicity-driven performance for your pipe construction site.

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

ArcReach®

Remote control of the power source without a cord.

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, flux-cored and MIG welding, as well as the advanced technologies of RMD® and pulsed MIG
- Smart Feeder delivers excellent RMD and pulsed MIG 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 chrome-moly applications

New durability standard for field construction

- Designed and built to withstand the harshest field environments

Stick/TIG system includes (sold separately)

- PipeWorx 350 FieldPro power source (907633)
- FieldPro Remote with work sense lead and clamp (301176)

MIG/flux-cored system includes (sold separately)

- PipeWorx 350 FieldPro power source (907633)
- SuitCase® X-TREME™ 8VS (301032) or 12VS (301033) ArcReach Feeder with drive rolls, work sense lead and clamp

RMD/pulse system includes (sold separately)

- PipeWorx 350 FieldPro power source (907633)
- FieldPro Smart Feeder with drive rolls (300177)

PipeWorx 350 FieldPro Racks

All the benefits of the individual PipeWorx 350 FieldPro in an easy to transport package for multiple arcs in the field.

Flexible solution. The flexibility of the PipeWorx 350 FieldPro makes it ideal for multiple system racks. Every system in a rack can be used for different tasks on-site, increasing fleet utilization and making the best use of equipment budgets.

Easy installation. The power distribution system on the rack allows the entire rack to be wired into a single power drop, isolating high-voltage power in the field.

Model/Stock Number	Rack Capacity	Input Power to Rack	Dimensions	Net Weight
4-Pack Rack (907588)	4 units	230–575 V, three-phase, 50/60 Hz. *(Fuses included for 460 or 575 V operation. Only empty racks require ordering appropriate fuse kit.)*	H: 1,500 mm (59 in.) W: 1,092 mm (43 in.) D: 873 mm (34.375 in.)	308 kg (679 lb.)
6-Pack Rack (907589)	6 units			399 kg (879 lb.)
Empty Rack (195466)	6 units			127 kg (279 lb.)

Heavy industrial CC CV DC 3 Phase

Processes
- Stick (SMAW) ▪ DC TIG (GTAW)
- MIG (GMAW) ▪ Flux-cored (FCAW)
- RMD ▪ Pulsed MIG (GMAW-P)
- Air carbon arc cutting and gouging (CAC-A)

Stick/TIG system includes (sold separately)
- PipeWorx 350 FieldPro power source (907633)
- FieldPro Remote with work sense lead and clamp (301176)

MIG/flux-cored system includes (sold separately)
- PipeWorx 350 FieldPro power source (907633)
- SuitCase® X-TREME™ 8VS (301032) or 12VS (301033) ArcReach Feeder with drive rolls, work sense lead and clamp

RMD/pulse system includes (sold separately)
- PipeWorx 350 FieldPro power source (907633)
- FieldPro Smart Feeder with drive rolls (300177)

Most popular accessories
- Bernard™ PipeWorx™ Guns
  195399 15 ft. (4.6 m) 250-15
  195400 15 ft. (4.6 m) 300-15

Advanced Technologies of PipeWorx FieldPro System

RMD® (regulated metal deposition)

RMD carbon steel

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

PipeWorx Memory Card, Accu-Power 300667
Displays instantaneous power during welding to meet the new ASME requirement for calculating heat input on complex waveform processes (RMD and pulsed MIG).

Pulsed MIG

Pulsed MIG stainless

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

**Welding with the Smart Feeder requires the PipeWorx 350 FieldPro to be hooked up to three-phase power.*

Power Source/Stock Number	Input Power	Amperage/ Voltage Ranges	Rated Output at 60% Duty Cycle	Amps Input at Rated Output, 50/60 Hz 230 V	380 V	400 V	460 V	575 V	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
PipeWorx 350 FieldPro (907633) 230–575 V, 50/60 Hz, **CE**	Three-phase	CC mode: 10–350 A CV mode: 10–44 V	350 A at 34 VDC	36.1	27.1	25.9	17.8	14.1	15.0	14.4	75 VDC	H: 432 mm (17 in.) W: 305 mm (12 in.) D: 559 mm (22 in.)	43.1 kg (95 lb.)

Wire Feeder Model/Stock Number	Input Power	Input Welding Circuit Rating	Wire Feed Speed	Wire Diameter Type and Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
SuitCase X-TREME 8VS ArcReach (301033), CE	Operates on open-circuit voltage and arc voltage: 14–48 VDC/110 max. OCV	330 A at 60% duty cycle	1.3–19.8 mpm (50–780 ipm) dependent on arc voltage	**Solid wire** 0.6–1.4 mm (.023–.052 in.) **Flux-cored** 0.8–2.0 mm (.030–5/64 in.)	203 mm (8 in.), 6.4 kg (14 lb.)	H: 324 mm (12.75 in.) W: 184 mm (7.25 in.) D: 457 mm (18 in.)	13 kg (28 lb.)
SuitCase X-TREME 12VS ArcReach (301032), CE	Operates on open-circuit voltage and arc voltage: 14–48 VDC/110 max. OCV	425 A at 60% duty cycle	1.3–19.8 mpm (50–780 ipm) dependent on arc voltage	**Solid wire** 0.6–1.4 mm (.023–.052 in.) **Flux-cored** 0.8–2.0 mm (.030–5/64 in.)	305 mm (12 in.), 20 kg (45 lb.)	H: 394 mm (15.5 in.) W: 229 mm (9 in.) D: 533 mm (21 in.)	15.9 kg (35 lb.)
FieldPro Smart Feeder (301177), CE	Operates on open-circuit voltage and arc voltage: 14–48 VDC/110 max. OCV*	275 A at 60% duty cycle	50–500 ipm (1.3–12.7 mpm) dependent on arc voltage	.035–.045 in. (0.9–1.1 mm)	305 mm (12 in.), 15 kg (33 lb.)	H: 457 mm (18 in.) W: 330 mm (13 in.) D: 546 mm (21.5 in.)	23 kg (50 lb.)

PipePro® XC Welding System

See literature PWSM/5.0

Designed specifically to meet the rugged demands of pipeline applications. System is optimized to provide excellent arc performance using the Hobart® Fabshield® family of self-shielded FCAW filler metals.

PipeWorx 400XC shown with optional PipePro XC Feeder with Bernard PipePro Dura-Flux gun and PipePro XC RMD Feeder with Bernard PipeWorx 250-15 gun.

Power source features

PipeWorx 400XC power source is able to perform simple stick (SMAW) welding to advanced RMD® welding. The arc performance and ease-of-use is optimized to provide quality and productivity, while simplifying welding training.

- Temperature – power source rating is based on 50°C ambient
- Moisture – meets IP23 standards. Horizontal control boards are potted
- Shock and vibration – the power source base is designed with shock mounts to reduce vibration when mounted on tractors
- Dust – Wind Tunnel Technology™ circulates air over components that require cooling (not electronic circuitry). Fan-On-Demand™ cooling system operates only when needed. This reduces the amount of airborne contaminants in the machine

Equipped with a memory card reader to provide new capabilities into the future.

- Stores weld parameters for all welding processes
- Enables the use of custom programs for future applications
- Provides range locks
- Provides Accu-Power (instantaneous power display)
- Provides diagnostic information and operational information in a text file format.

Feeder features

PipePro XC feeder is uniquely designed to operate with the PipePro 400XC power source to perform the flux-cored self-shielded weld process for fill and cap pass welding on pipelines. This economical solution optimizes the weld process using the Hobart Fabshield family of self-shielded wires.

PipePro XC RMD feeder provides the most versatile welding solution when used with the PipePro 400XC power source. It can provide MIG and RMD (solid wire and metal-cored wire), and flux-cored (self-shielded or gas-shielded wires). All welding processes are optimized for pipe welding.

Gun features

Bernard PipePro Dura-Flux gun is uniquely designed to perform self-shielded flux-cored with the PipePro 400XC system for onshore pipeline applications. The gun features a dual schedule switch to enable two sets of welding parameters – wire feed speed and voltage.

Bernard PipeWorx 250-15 gun is designed by welders to reduce fatigue and improve visibility of the puddle on the root pass.

Bernard PipeWorx 300-15 gun provides a heavy-duty solution to producing root, fill and cap welds on pipe.

Heavy Industrial ● CC CV DC 3 Phase

Processes

- Stick (SMAW) ▪ MIG (GMAW)
- Flux-cored (FCAW) ▪ RMD

Most popular accessories

- Bernard™ PipePro Dura-Flux™ Gun
  301011 3 m (10 ft.)
- Bernard™ PipeWorx™ Guns
  195399 4.6 m (15 ft.) 250-15
  195400 4.6 m (15 ft.) 300-15
- Feeder Control Cable
  (one required per system)
  300845 10 m (32 ft.)
  300846 20 m (64 ft.)
- RHC-14 Remote Control
  242211020 6 m (20 ft.)
  242211100 30.5 m (100 ft.)
- Work Sense Lead
  300947 5 m (16 ft.)
  300461 7.6 m (25 ft.)
  300462 15.2 m (50 ft.)

WIRELESS REMOTE COMPATIBLE

Wireless Hand Control
300430

Power Source/ Stock Number	Welding Mode/Process	Amperage/ Voltage Ranges	Rated Output at 100% Duty Cycle	IP Rating	Amps Input at Rated Output, 50/60 Hz 380 V	400 V	KVA 380 V	400 V	KW 380 V	400 V	Max. Open-Circuit Voltage	Dimensions	Net Weight
PipePro 400XC (907675) 380/400 V, **CE**	CC: Stick	40–350 A	350 A at 34 VDC	IP23	23.5	22.7	15.7	15.9	13.2	13.2	80 VDC	H: 375 mm (14.75 in.) W: 464 mm (18.25 in.) D: 686 mm (27 in.)	56.7 kg (125 lb.)
	CV: MIG/ flux-cored	10–39 V	400 A at 34 VDC		27.1	25.7							

Wire Feeder/ Stock Number	Input Power	Input Welding Circuit Rating	IP Rating	Wire Feed Speed	Wire Diameter Type and Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
PipePro XC (300794), CE SuitCase XC RMD (300844), CE	24 VAC, 9 A	100 V, 500 A at 100% duty cycle	IP23	1.3–12.7 mpm (50–500 ipm)	0.9–2.0 mm (.035–5/64 in.)	15 kg (33 lb.)	H: 438 mm (17.25 in.) W: 203 mm (8 in.) D: 508 mm (20 in.)	15.2 kg (33.5 lb.)

PipeWorx 400 Welding System

See literature PWS/2.0

Optimized for pipe fabrication shops.

PipeWorx 400 welding system shown. Filler metal and shielding gas sold separately.

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

Heavy industrial ● CC CV DC 3 Phase

Processes
- Stick (SMAW) ▪ DC TIG (GTAW)
- MIG (GMAW) ▪ Flux-cored (FCAW)
- RMD ▪ Pulsed MIG (GMAW-P)
- Air carbon arc cutting and gouging (CAC-A)

PipeWorx system includes (sold separately)
- PipeWorx 400 power source with cable hangers (907534)
- Dual feeder with drive rolls (300949)
- Two 4.6 m (15 ft.) PipeWorx 300 guns (195400)
- Running gear with gas cylinder rack and handles (300368)
- Cable kit with 7.6 m (25 ft.) work sense lead (300367)

Most popular accessories
- Bernard™ PipeWorx™ Guns
  195399 4.6 m (15 ft.) 250-15
  195400 4.6 m (15 ft.) 300-15

- **PipeWorx 400 Insight Module** 301304
- Composite Cable Kit
  300454 7.6 m (25 ft.)
  300456 15.2 m (50 ft.)
- PipeWorx Cooler 300370
- Foot Control Bracket 300676
- DSS-9 Dual Schedule Switch 071833
- RFCS-14 HD 194744

Advanced Technologies of PipeWorx FieldPro System

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

RMD carbon steel

PipeWorx Memory Card, Accu-Power 300667
Displays instantaneous power during welding to meet the new ASME requirement for calculating heat input on complex waveform processes (RMD and pulsed MIG).

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

Pulsed MIG stainless

Power Source/ Stock Number	Welding Mode/Process	Amperage/ Voltage Ranges	Rated Output at 100% Duty Cycle	Amps Input at Rated Output, 50/60 Hz 380 V	400 V	KVA 380 V	400 V	KW 380 V	400 V	Max. Open-Circuit Voltage	Dimensions	Net Weight
PipeWorx 400 (907534) 380/400 V, **CE**	CC: Stick	40–400 A	400 A at 36 VDC	26.3	25.5	17.6	17.8	16.5	16.5	90 VDC	H: 724 mm (28.5 in.) W: 495 mm (19.5 in.) D: 806 mm (31.75 in.)	102 kg (225 lb.)
	CC/DC: TIG	10–350 A	350 A at 24 VDC	19	18.1	12.4	12.5	9.7	9.8			
	CV: MIG/flux-cored	10–44 V	400 A at 34 VDC	27.1	25.7	18.0	18.0	15.5	15.6			

Wire Feeder/ Stock Number	Input Power	Input Welding Circuit Rating	Wire Feed Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
PipeWorx Feeder (300949), CE	24 VAC, 11 A	100 V, 750 A at 100% duty cycle	1.3–19.8 m/min. (50–780 ipm)	0.9–1.6 mm (.035–.062 in.)	27 kg (60 lb.)	H: 356 mm (14 in.) W: 483 mm (19 in.) D: 737 mm (29 in.)	41 kg (90 lb.)

Miller recommends

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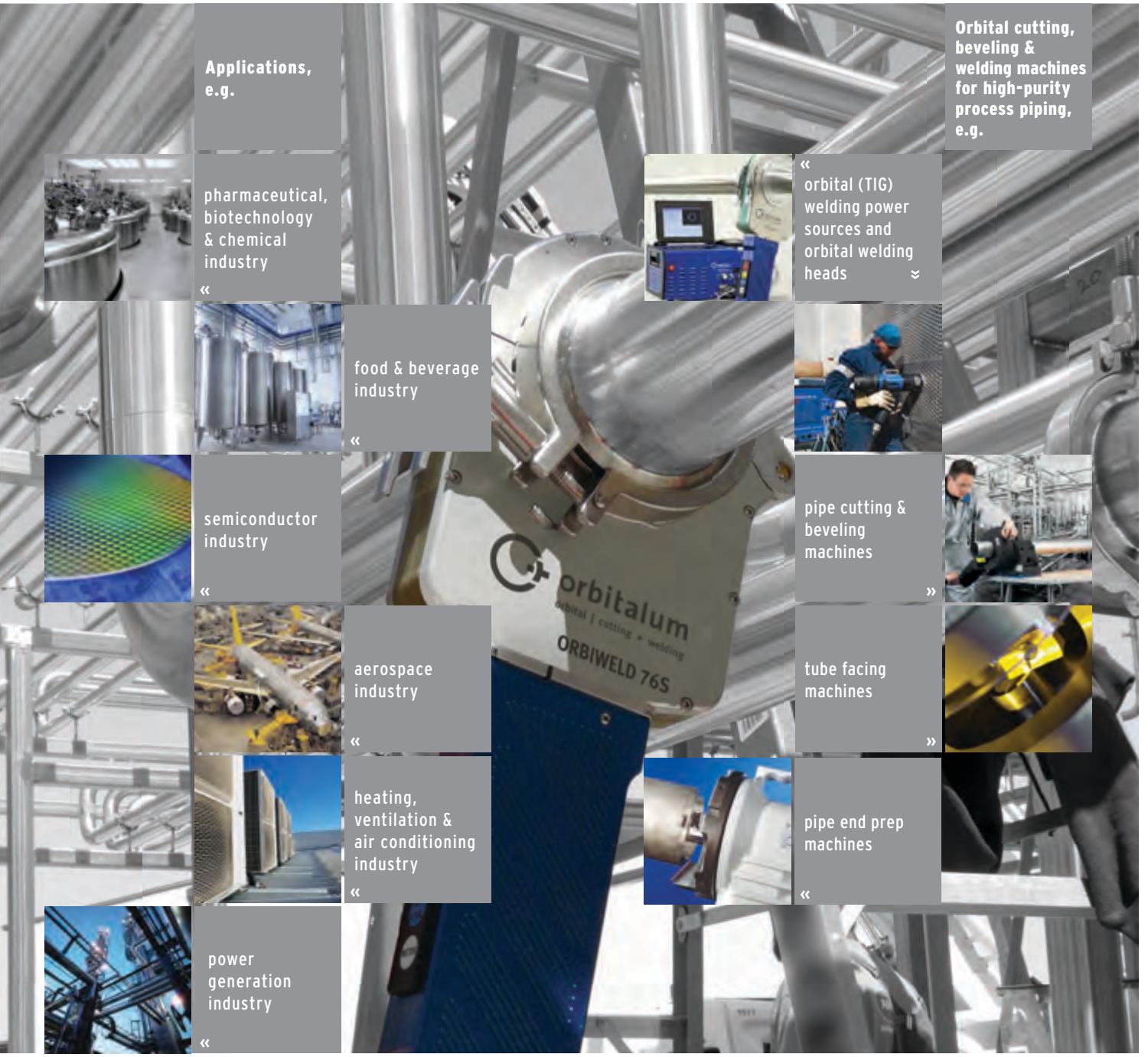

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Thunderbolt® XL 225 AC and 225 AC/150 DC

See literature AC/2.0 (AC model) and AD/8.0 (AC/DC model)

Thunderbolt XL 225 AC shown.

Economical stick machines with precise, dependable control.

Accu-Set™ amperage indicator provides precise heat control.

Unit allows higher duty cycle when amperage decreases.

Infinite current control allows the operator to adjust output by as little as one-amp increments.

Output selector switch on AC/DC units allows you to quickly select AC, DCEP or DCEN without adjusting the output leads.

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

Most popular accessories
- Thunderbolt XL Running Gear 043927

Model	Stock Number	Welding Mode	Welding Amperage Range	Rated Output at 20% Duty Cycle, 60 Hz (15% Duty Cycle, 50 Hz)	Rated Output at 100% Duty Cycle	Amps Input at Rated Output	Max. Open-Circuit Voltage	Dimensions	Net Weight
Thunderbolt XL 225 AC (CSA)	**(903641)** 230 V, 50/60 Hz	AC	30–235	225 A at 25 V	100 A	47.5	80 VAC	H: 476 mm (18.75 in.) W: 323 mm (12.75 in.) D: 445 mm (17.5 in.)	39 kg (85 lb.)
Thunderbolt XL 225 AC/150 DC (CSA)	**(903642)** 230 V, 50/60 Hz	AC	30–235	225 A at 25 V	100 A	47.5	80 VAC		47 kg (104 lb.)
		DC	30–160	150 A at 25 V	65 A	47.5	80 VDC		

Dialarc® 250 AC/DC

See literature AD/2.1

Superb performance and versatility in a flexible stick machine.

Single-dial infinite current control simplifies and allows precise weld output adjustment.

High and low ranges for both AC and DC allow greater control of weld performance.

Forced-draft cooling fan ensures cooler running product, extending life of power source.

Superior 6010 and 7018 stick welding performance offers wide range of electrode versatility.

High output and duty cycle allow unit to handle nearly all stick welding needs.

Optional remote weld output control provides current control without going back to power source saving time and effort.

Light industrial ● CC AC/DC 1 Phase

Processes
- Stick (SMAW)
- Air carbon arc cutting and gouging (CAC-A) (4.8 mm [3/16 in.] carbons)

Most popular accessories
- No. 19 Running Gear 041580

Model	Stock Number	Welding Mode	Welding Amperage Range	Rated Output at 30% Duty Cycle	Amps Input at Rated Output, 60 Hz 200 V	208 V	230 V	460 V	575 V	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
Dialarc without Power Factor Correction	**(907017)** 200(208)/230/460 V	AC	35–300	225 A at 29 V	84	–	73	36	29	16.8	9.8	70 VAC	H: 616 mm (24.25 in.) W: 483 mm (19 in.) D: 711 mm (28 in.)	163 kg (360 lb.)
		DC	35–265	225 A at 29 V	92	–	80	40	32	18.6	11.8	79 VDC		
Dialarc with Power Factor Correction	**(907015)** 208/230/460/575 V	AC	35–300	225 A at 29 V	–	60	55	27	22	12.5	9.9	70 VAC		166 kg (365 lb.)
		DC	35–265	225 A at 29 V	–	66	60	30	24	13.7	10.8	79 VDC		

Maxstar® 161 S

See literature DC/27.3

Maxstar 161 S with X-CASE (907709001) shown.

Best in class — provides maximum portability and performance in the most compact stick package in the industry.

AUTO-LINE Power Management Technology

Allows for any input voltage hook-up (120–240 V) with no manual linking.

Portable with adjustable handle/shoulder strap. Easy to transport at only 5.9 kg (13 lb.).

Adaptive Hot Start™ for stick arc starts.

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

Stick-Stuck detects if the electrode is stuck to the part and turns the welding output off to safely and easily remove the electrode. Menu selectable.

Superior stick arc performance even on the difficult-to-run electrodes like E6010.

Note: See the TIG section for Maxstar 161 STL and STH.
**Sense voltage for stick.*

Light industrial ● CC DC 1 Phase

Process ▪ Stick (SMAW)

Comes complete with
- 2 m (6.5 ft.) 120 V and 240 V power cords
- 4 m (13 ft.) electrode cable with holder and 25 mm Dinse-style connector
- 3 m (10 ft.) work cable with clamp and 25 mm Dinse-style connector

907709001 includes above plus
- Protective X-CASE™

Most popular accessories
- Protective X-CASE™ 301429

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
(907709) **(907709001)** with X-CASE	120 V	20–90	90 A at 23.6 V, 30% duty cycle	23.2	2.8	2.8	48 VDC (12–16 VDC*)	H: 262 mm (10.3 in.) W: 142 mm (5.6 in.) D: 343 mm (13.5 in.)	5.9 kg (13 lb.)
	240 V	20–160	160 A at 26.4 V, 20% duty cycle	22.6	5.4	5.3			

Maxstar® 210 STR

See literature DC/32.1

Note: See he TIG section for Maxstar 210 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 Power Management Technology

Allows for any input voltage hook-up (120–480 V) with no manual linking, providing convenience in any job setting.

Lift-Arc™ provides TIG arc initiation without the use of high frequency.

Dual schedule allows operators to switch between welding parameters for specific electrodes without readjusting the machine.

Adaptive Hot Start™ for stick arc starts.

Remote amperage control and digital meter.

Portable with adjustable shoulder strap.

**Sense voltage for stick and Lift-Arc TIG.*

Industrial ● CC DC 3 Phase 1 Phase

Processes
- Stick (SMAW) ▪ TIG (GTAW)

Comes complete with
- 2.4 m (8 ft.) power cord (no plug)
- Two 50 mm Dinse-style connectors

Most popular accessories
- 3.8 m (12.5 ft.) Weldcraft™ A-150 Valve TIG torch WP-17V-25-2
- Remote Controls
- Air-Cooled TIG Torch Connector

Stock Number	Welding Process	Input Power	Welding Amperage Range	Rated Output	Phase	Amps Input at Rated Load Output, 50/60 Hz 120 V	208 V	240 V	400 V	480 V	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
(907682)	Stick	208–480 V	5–210	160 A at 26.4 V, 60% duty cycle	Three-phase	–	15	13	8	6	5.5	5.2	80 VDC (11 VDC*)	H: 346 mm (13.6 in.) W: 219 mm (8.6 in.) D: 495 mm (19.5 in.)	16.3 kg (36 lb.)
					Single-phase	–	26	22	13	11	5.3	5.3			
		120 V	5–100	90 A at 23.6 V, 60% duty cycle	Single-phase	23	–	–	–	–	2.8	2.8			
	TIG	208–480 V	1–210	210 A at 18.4 V, 60% duty cycle	Three-phase	–	14	12	7	6	5.2	4.9			
					Single-phase	–	24	20	12	10	4.9	4.9			
		120 V	1–210	125 A at 15 V, 60% duty cycle	Single-phase	22	–	–	–	–	2.6	2.6			

Gold Star® Series

See literature DC/8.1

Gold Star 452 shown.

WIRELESS REMOTE COMPATIBLE

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 V duplex receptacle**
- **Power efficient**
- **Remote control capability**
- **Optional digital volt and amp meters.** Easy to install, front-panel mount.
  300359 For models after KG283595
  300321 For models after MF100119C

Heavy industrial ● CC DC 3 Phase

Processes
- Stick (SMAW) ▪ TIG (GTAW)
- Air carbon arc cutting and gouging (CAC-A) (carbons — 452: 7.9 mm [5/16 in.], 652: 9.5 mm [3/8 in.])
- Flux-cored (FCAW)
- MIG spray transfer (GMAW) with voltage-sensing feeder

Model	Stock Number	Amperage Range in CC Mode	Rated Output	Amps Input at Rated Output, 60 Hz 200 V	230 V	460 V	575 V	KVA	KW	Max. Open-Circuit Voltage	Dimensions *(Includes lift eye and strain relief)*	Net Weight
Gold Star 452/602	**(903374)** 200(208)/230/460 V **(907363)** 380/400/440 V, 50/60 Hz, **CE**	20–590	450 A at 38 VDC, 60% duty cycle	102	89	45	36	35.5	23.3	72 VDC	H: 762 mm (30 in.) W: 585 mm (23 in.) D: 966 mm (38 in.)	183 kg (404 lb.)
Gold Star 652/852	**(903402)** 230/460/575 V **(907364)** 380/400/440 V, 50/60 Hz, **CE**	50–850	650 A at 44 VDC, 60% duty cycle	–	124	62	50	49.4	36	72 VDC		229 kg (505 lb.)

CST™ 280

See literature DC/29.55

Durable power source designed for the construction industry. Ideal for stick electrodes up to 4.8 mm (3/16 in.) and TIG welding of pipe and plate.

CST 280 *CST 280 with meter*

Superior stick arc performance even on the difficult-to-run electrodes like E6010.

Simple voltage-changeover switch saves time when changing primary voltage. Input voltage can be changed without removal from inverter rack or removal of machine case.

Optional digital meter for more precise control when presetting or monitoring welding amperage.

Portable in the shop or at the jobsite – at 18.6 kg (41 lb.) the CST 280 is easily moved from location to location.

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

Rack mountable for protection, storage and transportation of multiple power sources while using a single primary power cable.

**Output on single-phase reduced to comply with current limitation on input cable.*

Industrial ● CC DC 3 Phase 1 Phase

Processes
- Stick (SMAW)
- TIG (GTAW)

Comes with
- 1.8 m (6 ft.) power cord
- One set of male connectors (Dinse-style model only)

Most popular accessories
- CST 280 Rack (see below)
- Remote Controls
- For TIG torches see literature DC/29.55

Stock Number	Welding Process	Input Power	Welding Amperage Range	Rated Output	Amps Input at Rated Load Output, 50/60 Hz 208 V	220 V	230 V	400 V	440 V	460 V	575 V	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
(907244) Dinse **(907244011)** Tweco® **(907696)** Tweco® with meter 220-230/460-575 V	Stick/TIG	Three-phase	5-280	280 A at 31.2 V, 35% duty cycle	–	35.0	34.2	–	–	17.8	14.7	14.6	10.2	77 VDC	H: 343 mm (13.5 in.) W: 191 mm (7.5 in.) D: 457 mm (18 in.)	18.6 kg (41 lb.)
				200 A at 28 V, 100% duty cycle	–	23.3	22.5	–	–	11.7	9.7	9.6	6.4			
		Single-phase	5-200	200 A at 28 V, 50% duty cycle*	–	43.9	43.0	–	–	–	–	10.1	6.6			
				150 A at 26 V, 100% duty cycle*	–	32.7	32.0	–	–	–	–	7.3	4.6			
(907251) Dinse **(907251011)** Tweco® **(907563)** Dinse with meter **(907251012)** Dinse with VRD 208-230/400-460 V	Stick/TIG	Three-phase	5-280	280 A at 31.2 V, 35% duty cycle	36.0	–	34.0	19.8	18.0	17.5	–	14.0	10.2	67 VDC		
				200 A at 28 V, 100% duty cycle	23.5	–	22.8	13.5	12.0	12.7	–	10.2	6.9			
		Single-phase	5-200	200 A at 28 V, 50% duty cycle*	43.9	–	43.0	–	–	–	–	9.9	6.5			
				150 A at 26 V, 100% duty cycle*	35.0	–	32.9	–	–	–	–	7.6	4.8			

CST™ 280 Racks

See literature DC/18.82

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

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.

Note: For additional rack systems see Dimension™ 650, XMT® and PipeWorx FieldPro™.

Heavy industrial ● CC DC 3 Phase

Processes
- Stick (SMAW)
- TIG (GTAW)
- Air carbon arc cutting and gouging (CAC-A) (7.9 mm [5/16 in.] carbons with paralleled CST 280 units)

Most popular accessories

- **4-Pack Rack Running Gear** 195114
- 8-Pack Rack Running Gear 195436

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	**(907245)** Dinse **(907247)** Tweco®	4 units	220-230/460-575 V, three-phase, 50/60 Hz. *Note: CST 280 machines are factory-linked for 460-575 V. Dinse units include one set of male connectors; Tweco units do not. See above for information on CST 280.*	137	134	79	72	70	57	58.4	40.8	H: 1,289 mm (50.75 in.) 4-pack W: 648 mm (25.5 in.) 8-pack W: 1,168 mm (46 in.) D: 673 mm (26.5 in.)	161 kg (355 lb.)
8-Pack Rack	**(907365)** Tweco®	8 units		274	268	158	145	140	114	116.8	81.6		290 kg (640 lb.)
Empty Rack	**(195051)**	4 units	–	–						–	–	Same as 4-pack rack	75 kg (166 lb.)
	(300580)	8 units										Same as 8-pack rack	127 kg (280 lb.)

Miller recommends

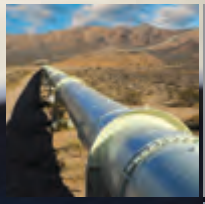
E.H.WACHS®
Superior Equipment. Complete Support.™

ITW Orbital Cutting & Welding

Applications, e.g.

oil, gas & petrochemical industry «

power generation industry «



pipeline distribution «

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Portable weld prep machine tools for industrial applications, e.g.

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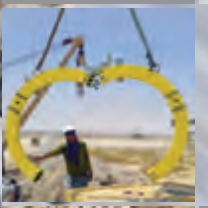
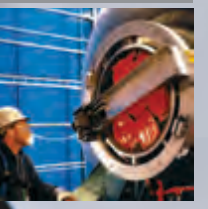
NEW DynaPrep MDSF split frames for heavy duty form tooling & pipe weld preparation

HDSF heavy duty split frames - built for big jobs in the field »

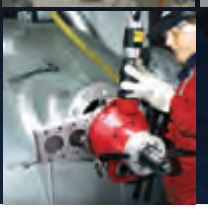


TRAV-L-CUTTER portable milling machines «



LCSF low clearance split frames »

EP 424 ID mount end prep machines «



SDB / FF small diameter bevelers & flange facers »

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Diversion™ 165 and 180 AC/DC TIG

See literature 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.

TIG Welding Capability

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

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

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

HF arc starting for non-contact arc initiation that reduces tungsten and material contamination.

Portable. Easy to transport at 23 kg (50 lb.).

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

Auto-postflow adjusts the length of postflow time based on the amperage setting, shielding your tungsten and eliminating the need to set the postflow time.

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

Weldcraft™ **A-150 torch with Diamond Grip**™ provides more comfortable grip and reduces operator fatigue.

Diversion 180 includes **multi-voltage plug (MVP™)** which allows for connection to 120- or 240-volt receptacles without tools. Choose the plug that fits the receptacle and connect it to the power cord.

While idling.

Light industrial ● CC AC/DC 1 Phase

Process ▪ TIG (GTAW)

Comes with
- Power cord with 50 A, 240 V plug (165 model) **OR** MVP plugs for 120 V and 240 V (180 model)
- 3.8 m (12.5 ft.) Weldcraft™ A-150 TIG torch
- 3.7 m (12 ft.) work cable with clamp
- RFCS-RJ45 remote foot control
- Flow gauge regulator with hose

Most popular accessories
- Running Gear/Cylinder Rack 301239
- Protective Cover 300579
- RCCS-RJ45 Remote Fingertip Control 301146
- RJ45 to 14-Pin Adapter Cord 300688
- Weldcraft™ Flexible Torch Body Kits (requires handle 105Z55R)
  A-125F (WP-9F)
  A-150F (WP-17F)
- TIG Torch Accessory Kit AK2C)

AC/DC

Model/ Stock Number	Input Power	Welding Amp Range	Rated Output	Amps Input at Rated Output, 50/60 Hz	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
Diversion 165 (907626)	230 V	10–165	150 A at 16 V, 20% duty cycle	23 (.20*)	5.3 (.04*)	3.7 (.02*)	80 VDC	H: 433 mm (17 in.) W: 251 mm (9.875 in.) D: 608 mm (23.875 in.)	23 kg (50 lb.)
			165 A at 16.6 V, 15% duty cycle	25.5 (.20*)	5.9 (.04*)	4.2 (.02*)			
Diversion 180 (907627)	115 V	10–125	125 A at 15 V, 35% duty cycle	26.5 (.88*)	3.1 (.1*)	3.0 (.03*)			
	230 V	10–180	150 A at 16 V, 20% duty cycle	16 (.44*)	3.7 (.1*)	3.6 (.03*)			
			180 A at 17.2 V, 10% duty cycle	20.5 (.44*)	4.7 (.1*)	4.6 (.03*)			

Maxstar® 161 STL and STH DC TIG and Stick

See literature DC/27.4 (STL) and DC/27.5 (STH)

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

Maxstar 161 STH TIG/stick package with remote fingertip control (907711001) shown — includes X-CASE.

TIG Welding Capability

Max. 4.8 mm (3/16 in.)
Steel
Min. 0.5 mm (0.020 in.)

Two models available.
STL: DC TIG/stick with Lift-Arc™ starting without high frequency.
STH: DC TIG/stick with high frequency and Lift-Arc™ starting, plus built-in pulsing from 0–150 pulses per second.

AUTOLINE Power Management Technology — Allows for any input voltage hook-up (120–240 V) with no manual linking.

Portable with adjustable handle/shoulder strap. Easy to transport at only 5.9 kg (13 lb.).

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

Fan-On-Demand™ power source cooling system.

Superior stick arc performance even on the difficult-to-run electrodes like E6010.

Sense voltage for stick and Lift-Arc™ TIG.

Light industrial ● CC DC 1 Phase

Processes
- TIG (GTAW) ▪ Stick (SMAW)
- Pulsed TIG (GTAW-P) with STH model

Comes with
- 2 m (6.5 ft.) 120 V and 240 V power cords
- 4 m (13 ft.) electrode cable with holder and 25 mm Dinse-style connector
- 3 m (10 ft.) work cable with clamp and 25 mm Dinse-style connector

TIG/stick packages include above plus
- 3.8 m (12.5 ft.) Weldcraft™ A-150 TIG torch (WP1712RDI25)
- Protective X-CASE™ (301429)
- Flow gauge regulator with hose
- RCCS-6M remote fingertip control (packages 907710002 and 907711001 only)
- AK2C TIG torch accessory kit

DC

Model/Stock Number	Model/Stock Number	Welding Process	Input Power	Welding Amp Range	Rated Output	Amps Input at Rated Output, 50/60 Hz	KVA at Duty Cycle	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
Maxstar 161 STL **(907710)** Power source only **(907710001)** TIG/stick package **(907710002)** TIG/stick package with remote fingertip control	**Maxstar 161 STH** **(907711)** Power source only **(907711001)** TIG/stick package with remote fingertip control	TIG	120 V	5–130	130 A at 15.2 V, 30% duty cycle	22.6	2.73	2.70	48 VDC (12–16 VDC*)	H: 262 mm (10.3 in.) W: 142 mm (5.6 in.) D: 343 mm (13.5 in.)	5.9 kg (13 lb.)
			240 V	5–160	160 A at 16.4 V, 20% duty cycle	15.05	3.62	3.49			
		Stick	120 V	20–90	90 A at 23.6 V, 30% duty cycle	23.16	2.78	2.76			
			240 V	20–160	160 A at 26.4 V, 20% duty cycle	22.55	5.41	5.25			

Syncrowave® 210 Series

AC/DC TIG and Stick

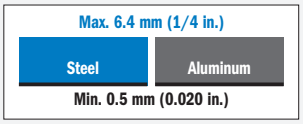
See literature AD/4.6

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

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

WIRELESS REMOTE COMPATIBLE

TIG Welding Capability



Light industrial ● CC AC/DC 1 Phase

Processes
- AC/DC TIG (GTAW) ▪ DC stick (SMAW)
- Pulsed TIG (GTAW-P) ▪ MIG (GMAW)*
- Flux-cored (FCAW)*

**TIG/MIG Complete package only.*

Comes with
- 3 m (10 ft.) power cord with MVP plugs for 120 V and 240 V
- 3.8 m (12.5 ft.) Weldcraft™ A-150 TIG torch (WP1712MFDI50)
- 3.7 m (12 ft.) work cable with clamp and Dinse-style connector
- Electrode holder with Dinse-style connector
- RFCS-14 remote foot control
- Flow gauge regulator with hose
- Factory-installed running gear with EZ-Change™ low cylinder rack

Most popular accessories
- 7.6 m (25 ft.) Weldcraft™ A-150 TIG Torch WP-17-25-R
- Protective Cover 195142
- RCC-14 Remote Control 151086
- Wireless Remote Foot Control 300429
- TIG Torch Accessory Kit AK2C Includes one short back cap, one of each size (#4, #5, #6) alumina nozzle, and one of each size (1, 1.6, 2.4 mm [.040, 1/16, 3/32 in.]) of the following: collet, collet body, and 178 mm (7 in.) 2% ceriated tungsten electrode.
- TIG Torch Accessory Kit AK-150MFC Allows A-150 torch customization. Converts into 28 different torch styles while using existing cable. Includes collets, collet bodies, nozzles, torch heads, handle and more.

AUTO-LINE Power Management Technology Allows for any input voltage hook-up (120–240 V) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable power.

Multi-voltage plug (MVP™) allows for connection to 120- or 240-volt receptacles without tools. Choose the plug that fits the receptacle and connect it to the power cord.

Low power draw. Inverter-based power source provides full welding output from 240 volts while drawing less than 30 amps.

Pro-Set™ (TIG/stick) eliminates the guesswork when setting weld parameters. Use Pro-Set when you want the speed, convenience and confidence of preset controls.

HF arc starting for non-contact arc initiation that reduces tungsten and material contamination.

AC frequency (TIG) controls the width of the arc cone and can improve directional control of the arc.

AC balance (TIG) control provides adjustable oxide removal which is essential for creating the highest quality aluminum welds.

Pulse (TIG). Pulsing can increase puddle agitation, arc stability and travel speeds while reducing heat input and distortion.

DIG (stick) control allows the arc characteristics to be changed for specific applications and electrodes. Lower the DIG setting for smooth running electrodes like E7018 and increase the DIG setting for stiffer, more penetrating electrodes like E6010.

Auto-Set™ (MIG) automatically sets your welder to the proper parameters. Simply set the wire size, material thickness, and shielding gas and you're ready to weld. (TIG/MIG complete package only.)

AC/DC

Stock Number	Input Power	Welding Process	Welding Amperage Range	Rated Output (R.M.S.)	Amps Input at Rated Output, 50/60 Hz	Max. Open-Circuit Voltage	Dimensions	Net Weight
(907596) Runner	115 V	DC TIG	5–125 A	95 A at 13.8 V, 60% duty cycle	17.4 (.58 while idling)	47 VDC	H: 800 mm (31.5 in.) W: 470 mm (18.5 in.) D: 1092 mm (43 in.)	Runner package: 61 kg (133.5 lb.) Runner TIG/MIG Complete package: 63 kg (139.5 lb.)
		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)			

Syncrowave® 250 DX and 350 LX

AC/DC TIG and Stick

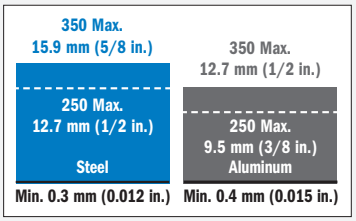
See literature AD/4.2

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

Syncrowave 250

Syncrowave 350

TIG Welding Capability



WIRELESS REMOTE COMPATIBLE

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)

Comes with

- Two 50 mm Dinse-style connectors

Note: Power cord is NOT included.

Most popular accessories

- Wireless Remote Foot Control 300429
- Pulser Module 300548 (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 300547 (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.

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-volt auxiliary power receptacle for cooling system or small tools.

Syncro Start™ allows the choice of soft, medium, or hot TIG starts based on the tungsten size and application.

HF arc starting for non-contact arc initiation that reduces tungsten and material contamination.

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

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

Coolmate™ 3CS 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 setup when switching polarity.

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

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

AC/DC

Model/Stock Number	Welding Amperage Range	Rated Output	Amps Input at Rated Output, 50/60 Hz 200 V	230 V	460 V	575 V	KVA	KW	Max. Open-Circuit Voltage	Power Source Dimensions	Power Source Net Weight
Syncrowave 250 DX **(907195)** 230/460/575 V, 50/60 Hz, power source only **(907194)** 200/230/460 V, 50/60 Hz, power source only **(907516)** 220/400/440/520 V, 50/60 Hz, **IEC**	3–310	200 A at 28 V, 60% duty cycle	–	77	38	31	17.6	8.6	80 VDC	H: 921 mm (36.25 in.) W: 572 mm (22.5 in.) D: 635 mm (25 in.)	172 kg (378 lb.)
		250 A at 30 V, 40% duty cycle	110	96	48	38	22	11.8			
Syncrowave 350 LX **(907199)** 230/460/575 V, 50/60 Hz, power source only **(907198)** 200/230/460 V, 50/60 Hz, power source only **(907517)** 220/400/440/520 V, 50/60 Hz, **IEC**	3–400	300 A at 32 V, 60% duty cycle	–	110	55	42	25	10.6	80 VDC	H: 921 mm (36.25 in.) W: 572 mm (22.5 in.) D: 635 mm (25 in.)	225 kg (496 lb.)
		350 A at 34 V, 40% duty cycle	146	128	65	50	29.5	13.7			

Maxstar® and Dynasty® 210 DX/280 DX

See literature DCM/37.0 UK (Maxstar 210 DX) and DCM/35.0 UK (Maxstar 280 DX), and literature ADM/11.0 UK (Dynasty 210 DX) and ADM/9.0 UK (Dynasty 280 DX)

WIRELESS REMOTE COMPATIBLE

Dynasty 280 DX

Maxstar 210 DX

210 DX TIG Welding Capability

Max. 6.4 mm (1/4 in.)	Max. 6.4 mm (1/4 in.)
Steel	Aluminum (Dynasty only)
Min. 0.05 mm (0.002 in.)	Min. 0.3 mm (0.012 in.)

280 DX TIG Welding Capability

Max. 9.5 mm (3/8 in.)	Max. 9.5 mm (3/8 in.)
Steel	Aluminum (Dynasty only)
Min. 0.1 mm (0.004 in.)	Min. 0.3 mm (0.012 in.)

Industrial ● CC AC/DC 3 Phase 1 Phase
Maxstar is DC only

Processes
- TIG (GTAW) ▪ Stick (SMAW)
- Pulsed TIG (GTAW-P)
- Air carbon arc (CAC-A) w/280 models

Comes with
- 2.4 m (8 ft.) power cord (no plug)
- Two 50 mm Dinse-style connectors

Most popular accessories
- 2-Wheel Trolley Cart 300971
- Small Runner™ Cart 301318
- Coolmate™ 1.3 300972
- Coolant 043810
- Remote Controls
  043688 RCCS-14 fingertip control
  194744 RFCS-14 HD foot control
  300429 Wireless Foot Control
- Contractor Kits
  301311 w/ RCCS-14 finger control
  301309 w/ RFCS-14 HD foot pedal

AUTO-LINE Power Management Technology Allows for any input voltage hook-up (210 models: 120–480 V, 280 models: 208–575 V) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable power.

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

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

Hot Start™ adaptive control provides positive arc starts without sticking.

Auto-postflow adjusts the length of postflow time based on the amperage setting, shielding your tungsten and eliminating the need to set the postflow time.

Pro-Set™ eliminates the guesswork when setting weld parameters. Use Pro-Set when you want the speed, convenience and confidence of preset controls.

Sleep timer conserves electricity. This programmable feature will power down the machine if it sits idle for a specified time.

Update and expand. Front panel memory card data port provides the ability to easily update software and expand product features.

Cooler power supply (CPS) is an integrated 120-volt dedicated-use receptacle for the Coolmate™ 1.3.

Cooler-On-Demand™ feature operates the auxiliary cooling system only when needed, reducing noise, energy use, and airborne contaminants pulled through the cooler. *Only available on Maxstar/Dynasty 280 DX models.*

Dynasty welders add AC TIG capabilities and the following AC features

Waveforms for advanced squarewave, soft squarewave, sine wave and triangular wave.

Balance control provides adjustable oxide removal which is essential for creating the highest quality aluminum welds.

Frequency controls the width of the arc cone and can improve directional control of the arc.

Dynasty 280 DX with Insight

Designed to deliver Welding Intelligence.™ The Dynasty 280 DX with Insight incorporates Insight Core™ (standard) and Insight Centerpoint™ (optional) welding information management systems into its capabilities. These systems help welding operations improve quality, retain weld records, increase productivity and manage costs.

**Refer to owner's manual for 208-volt output ratings and duty cycle. **Sense voltage for low OCV stick and Lift-Arc™ TIG.*

	Model/Stock Number	Welding Process	Input Power	Welding Amp Range	Rated Output at 60% Duty Cycle	Amps Input at Rated Load Output, 50/60 Hz 120 V	208 V	230 V	240 V	400 V	460 V	480 V	575 V	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
DC Maxstar	**Maxstar 210 (907683)** **Maxstar 210 DX (907684) (907684001), CE**	TIG	3-phase	1–210	210 A at 18.4 V	–	14	–	12	7	–	6	–	5.2	4.9	80 VDC (11 VDC**)	H: 346 mm (13.6 in.) W: 219 mm (8.6 in.) 210 D: 495 mm (19.5 in.) 280 D: 569 mm (22.5 in.)	17.2 kg (38 lb.)
			1-phase	1–210	210 A at 18.4 V	–	24	–	20	12	–	10	–	4.9	4.9			
			1-phase (120 V)	1–150	125 A at 15 V	22	–	–	–	–	–	–	–	2.6	2.6			
		Stick	3-phase	5–210	160 A at 26.4 V	–	15	–	13	8	–	6	–	5.5	5.2			
			1-phase	5–210	160 A at 26.4 V	–	26	–	22	13	–	11	–	5.3	5.3			
			1-phase (120 V)	5–100	90 A at 23.6 V	23	–	–	–	–	–	–	–	2.8	2.8			
	Maxstar 280 (907552) (907538) with CPS **Maxstar 280 DX (907539)** with CPS **(907539002), CE**	TIG	3-phase	1–280	235 A at 19.4 V	–	17	15	–	9	7	–	6	6.2	6.0	60 VDC (11 VDC**)		22.7 kg (50 lb.)
			1-phase	1–280	235 A at 19.4 V*	–	28	26	–	15	13	–	10	6.0	6.0			
		Stick	3-phase	5–280	200 A at 28 V	–	20	18	–	10	9	–	7	7.2	7.0			
			1-phase	5–280	180 A at 27.2 V*	–	30	27	–	15	13	–	10	6.2	6.2			
AC/DC Dynasty	**Dynasty 210 (907685) (907685002)** with CPS **Dynasty 210 DX (907686) (907686002),** with CPS **(907686003), CE**	TIG	3-phase	1–210	210 A at 18.4 V	–	14	–	12	7	–	6	–	5.2	4.9	80 VDC (11 VDC**)	H: 346 mm (13.6 in.) W: 219 mm (8.6 in.) D: 569 mm (22.5 in)	22.7 kg (50 lb.)
			1-phase	1–210	210 A at 18.4 V	–	24	–	20	12	–	10	–	4.9	4.9			
			1-phase (120 V)	1–150	125 A at 15 V	22	–	–	–	–	–	–	–	2.6	2.6			
		Stick	3-phase	5–210	160 A at 26.4 V	–	15	–	13	8	–	6	–	5.5	5.2			
			1-phase	5–210	160 A at 26.4 V	–	26	–	22	13	–	11	–	5.3	5.3			
			1-phase (120 V)	5–100	90 A at 23.6 V	23	–	–	–	–	–	–	–	2.8	2.8			
	Dynasty 280 (907550) (907537) with CPS **Dynasty 280 DX (907551) (907514)** with CPS **(907514002), CE (907514003), CE** with Insight and CPS	TIG	3-phase	1–280 (DC) 2–280 (AC)	235 A at 19.4 V	–	19	17	–	10	9	–	7	7.0	6.7	60 VDC (11 VDC**)		25 kg (55 lb.)
			1-phase		235 A at 19.4 V*	–	33	30	–	17	15	–	12	6.9	6.8			
		Stick	3-phase	5–280	200 A at 28 V	–	22	20	–	11	10	–	8	8.2	7.9			
			1-phase		180 A at 27.2 V*	–	34	31	–	17	15	–	12	7.1	7.0			

Maxstar® and Dynasty® 400 and 800

See literature DC/24.5 (Maxstar) and AD/5.5 (Dynasty)

NEW!

Dynasty 400

Dynasty 800

TIG Welding Capability

800 Max. 25.4 mm (1 in.)	800 Max. 25.4 mm (1 in.)
400 Max. 15.9 mm (5/8 in.)	400 Max. 15.9 mm (5/8 in.)
Steel	Aluminum (Dynasty only)
400 Min. 0.3 mm (0.012 in.)	400 Min. 0.4 mm (0.015 in.)
800 Min. 0.5 mm (0.020 in.)	800 Min. 0.5 mm (0.020 in.)

Heavy industrial

CC AC/DC 3 Phase 1 Phase *Maxstar is DC only*

Processes
- TIG (GTAW) • Stick (SMAW)
- Pulsed TIG (GTAW-P)
- Air carbon arc (CAC-A)

400 models come with
- 2.4 m (8 ft.) power cord (no plug)
- Two 50 mm Dinse-style connectors (400)
- Setup video and reference guide

800 models come with
- Thread-lock torch connector
- Two thread-lock weld cable connectors
- Setup video and reference guide

Note: Power cord is NOT included with 800 models.

Most popular accessories
- Runner™ Cart 300244
- Coolmate™ 3.5 300245
- Coolant 043810
- Remote Controls
  043688 RCCS-14 fingertip control
  194744 RFCS-14 HD foot control

WIRELESS REMOTE COMPATIBLE — Wireless Foot Control 300429

AUTO-LINE Power Management Technology — Allows for any input voltage hook-up (208–575 V) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable power.

Meter calibration allows digital meters to be calibrated for certification.

Cooler Power Supply (CPS) is an integrated 120-volt dedicated-use receptacle for the Coolmate™ 3.5.

Wind Tunnel Technology™ protects internal electrical components from airborne contaminants, extending the product life.

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

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

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

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

Auto-postflow adjusts the length of postflow time based on the amperage setting, shielding your tungsten and eliminating the need to set the postflow time.

AC TIG Features

Independent amplitude/amperage control allows EP and EN amperages to be set independently to precisely control heat input to the work and electrode.

Balance control provides adjustable oxide removal which is essential for creating the highest quality aluminum welds. These models provide extended ranges.

Frequency controls the width of the arc cone and can improve directional control of the arc.

AC Waveforms

Advanced squarewave, fast freezing puddle, deep penetration and fast travel speeds.

Soft squarewave for a soft buttery arc with maximum puddle control and good wetting action.

Sine wave for customers that like a traditional arc. Quiet with good wetting.

Triangular wave reduces the heat input and is good on thin aluminum. Fast travel speeds.

DC TIG Features

Exceptionally smooth and precise arc for welding exotic materials.

Pulse. Pulsing can increase puddle agitation, arc stability and travel speeds while reducing heat input and distortion. These models provide extended ranges.

AC/DC Stick Features

DIG control allows the arc characteristics to be changed for specific applications and electrodes. Lower the DIG setting for smooth running electrodes like E7018 and increase the DIG setting for stiffer, more penetrating electrodes like E6010.

Hot Start™ adaptive control provides positive arc starts without sticking.

AC frequency control adds additional stability when stick welding in AC for smoother welds.

**Sense voltage for low OCV stick and Lift-Arc™ TIG.*

	Model/Stock Number	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	Dimensions	Net Weight
DC Maxstar	**Maxstar 400 (907716), CSA (907716002), CE (907716001)** TIGRunner, **CSA**	TIG/stick	3-phase	3–400	300 A at 32 V, 60% duty cycle	33	30	17	15	12	12.0	11.5	75 VDC (10–15 VDC*)	H: 629 mm (24.75 in.) W: 349 mm (13.75 in.) D: 559 mm (22 in.)	61 kg (135 lb.)
			1-phase	3–400	225 A at 29 V, 60% duty cycle	41	37	–	19	15	8.6	8.2			
	Maxstar 800 (907718), CSA (907718002), CE	TIG/stick	3-phase	5–800	600 A at 44 V, 60% duty cycle	89	80	46	40	32	32	31	75 VDC (10–15 VDC*)	H: 876 mm (34.5 in.) W: 349 mm (13.75 in.) D: 559 mm (22 in.)	90 kg (198 lb.)
AC/DC Dynasty	**Dynasty 400 (907717), CSA (907717002), CE (907717001)** TIGRunner, **CSA**	TIG/stick	3-phase	3–400	300 A at 32 V, 60% duty cycle	35	32	16	16	13	12.7	12.1	60 VDC (11 VDC*)	H: 629 mm (24.75 in.) W: 349 mm (13.75 in.) D: 559 mm (22 in.)	61 kg (135 lb.)
			1-phase	3–400	225 A at 29 V, 60% duty cycle	47	43	–	21	17	9.8	9.1			
	Dynasty 800 (907719), CSA (907719002), CE	TIG/stick	3-phase	5–800	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: 349 mm (13.75 in.) D: 559 mm (22 in.)	90 kg (198 lb.)

Weldcraft™ Series

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 MicroTIG® torches to 900-amp machine-held water-cooled models, there's a Weldcraft torch for nearly every TIG application.

For more detailed information, visit
MillerWelds.com/tigtorches

Setting the standard for performance

Super Cool™ technology provides additional surface area to increase cooling efficiency and capacity.

Comfort and control are increased with the lightweight well-balanced body and handle designs, helping to reduce fatigue.

Robust performance through heavy copper construction that delivers maximum welding capacity for rugged fieldwork.

Simplify torch package installation with ColorSmart™ hose and cable sets that differentiate input water, water/power cable, and gas hoses.

Improve gas coverage and cooling capacity through the use of a gas lens.

Extreme reliability

Reduce downtime due to overheating through consistent water-cooled performance.

Extend parts life using the durable copper components, maximizing current capacity.

Reduce leakage of gas and water through secure mechanical fittings.

Works in cold weather with the Tri-flex™ hose and cable assembly that remains flexible to ease handling and extends cable life.

Product Naming

Former Product Name	Current Product Name Breakdown: Product Line Descriptor	Air/Water and Amperage	Features Set Label	Current Product Name
WP-9FV	Weldcraft	A-125	Flex Valve	Weldcraft A-125 Flex Valve
WP-17F	Weldcraft	A-150	Flex	Weldcraft A-150 Flex
WP-225	Weldcraft	W-225	Modular	Weldcraft W-225 Modular
CS410	Weldcraft	W-410	–	Weldcraft W-410

Example
Weldcraft A-125 Flex Valve

- "Flex Valve" signifies additional feature
- "125" signifies an amperage of 125
- "A" signifies air-cooled

Weldcraft™ Air-Cooled Torches

Recommended for welding amperages under 200 amps. Air-cooled torches are great for portable applications as they do not require a water-circulator. For power sources without a built-in gas solenoid, the air-cooled two-piece torch is the solution of choice.

Weldcraft™ Water-Cooled Torches

Recommended for welding amperages above 200 amps. Offering a small torch design, water-cooled torches allow for precise control due to the efficient around-the-head cooling. This same cooling allows for extended torch life and higher amperage capacities.

Weldcraft™ Specialty Torches

Specialty torches are designed to fit best in unique applications. For those hard-to-reach areas, the **Micro Series** torches provide access and superior maneuverability. The **Modular Series** torches allow for a quick change of many different torch styles for any joint configuration. If high amperage is your need, the **W-500** torch is the answer.

Weldcraft™ Automation Torches

Ideal for mechanized applications, the Weldcraft Automation Series offers air-cooled and water-cooled torches designed for both high and low applications.

Process
- TIG (GTAW)

Suggested power sources
- Dynasty®/Maxstar® 210 (A-150, W-250)
- Dynasty®/Maxstar® 280 (A-200, W-280)
- Dynasty®/Maxstar® 350 (W-375)
- Dynasty®/Maxstar® 700 (W-400)

Fingertip controls
- RCC East/West Rotary
  151086 14-pin
- RCCS North/South Rotary
  195184 6-pin, 4 m (13.25 ft.) cord
  195503 6-pin, 8 m (25.5 ft.) cord
  043688 14-pin
- RMS Momentary Push Button
  195269 6-pin
  187208 14-pin
- RMLS Momentary/Maintained
  129337 14-pin
- RPBS Two-Button Start/Stop
  300666 14-pin

Weldcraft™ Tungsten

Tungsten for the most demanding TIG welding applications!

Available in four types and industry-standard diameters, our line of Weldcraft tungsten electrodes has undergone rigorous testing to ensure the highest quality and durability. Color-coded packages include ten 175 mm (7 in.) tungsten electrodes.

Type	Stock Number	Diameter mm (in.)
2% Ceriated (EWCe-2)		
Performs well in DC welding and arc starting at low-current settings, and offers excellent performance in AC processes.	**WC040X7**	1.0 (0.040)
	WC116X7	1.6 (1/16)
	WC332X7	2.4 (3/32)
	WC018X7	3.2 (1/8)
	WC532X7	4.0 (5/32)
2% Lanthanated (EWLa-2)		
Provides excellent arc starting, arc stability and re-ignition, and less tip erosion in AC or DC welding. Can substitute for 2% Thoriated.	**WL2040X7**	1.0 (0.040)
	WL2116X7	1.6 (1/16)
	WL2332X7	2.4 (3/32)
	WL2018X7	3.2 (1/8)
	WL2532X7	4.0 (5/32)

Type	Stock Number	Diameter in. (mm)
Pure (EWP)		
Forms a clean, balled end when heated and provides good arc stability for AC welding with a balanced or unbalanced squarewave or sine wave.	–	1.0 (0.040)
	WP116X7	1.6 (1/16)
	WP332X7	2.4 (3/32)
	WP018X7	3.2 (1/8)
	–	4.0 (5/32)
Rare Earth (EWG)		
Combines the best of all alloying elements, and provides excellent arc stability in AC or DC welding.	–	1.0 (0.040)
	WG116X7	1.6 (1/16)
	WG332X7	2.4 (3/32)
	WG018X7	3.2 (1/8)
	–	4.0 (5/32)

Note: Refer to manufacturer SDS sheets for proper preparation and safety. Use proper ventilation/capture during preparation. Refer to manufacturer warning regarding ventilation.

Weldcraft™ A-80 Series (Air-cooled)

Formerly known as WP-24 Series

A-80 (WP-24) *A-80 Flex (WP-24F)* *A-80 Flex Valve (WP-24FV)*

Innovative air-cooled torches designed for intricate welding applications, especially in limited-access areas and on thin-gauge materials.

Featherweight torch body is well balanced to improve operator comfort and control.

Minimize discontinuities. Insulating gasket on torch body minimizes gas leakage and minimizes weld discontinuities.

Combining the flexible neck and gas valve is ideal for optimal positioning and gas flow control (A-80 Flex Valve).

Model	Specs	
A-80 **A-80 Flex** **A-80 Flex Valve**	**Rated Output** DC: 80 A at 60% duty cycle AC: 50 A at 60% duty cycle	**Electrode Range** 0.5–2.4 mm (.020–3/32 in.)

Applications
- Shipbuilding ▪ Motorsports
- Aerospace ▪ Restricted areas

Most popular consumables
- Collets
  - 53N16 1.0 mm (.040 in.)
  - 53N14 1.6 mm (1/16 in.)
  - 24C332 2.4 mm (3/32 in.)
- Collet Bodies
  - 53N18 1.0 mm (.040 in.)
  - 53N19 1.6 mm (1/16 in.)
  - 24CB332 2.4 mm (3/32 in.)
- Alumina Nozzles
  - A53N24 #4, 1/4 in.
  - A53N25 #5, 5/16 in.
  - A53N27 #6, 3/8 in.

Most popular accessories
- Collet Body Wrench 53N20

Weldcraft™ A-125 Series (Air-cooled)

Formerly known as WP-9 Series

A-125 Flex Valve (WP-9FV) *A-125 (WP-9)* *A-125 Pencil (WP-9P)*

Air-cooled torches designed for optimal control while welding thin-gauge materials, especially in hard-to-reach places.

The lightweight body reduces fatigue and downtime, and increases operator comfort.

The pencil-style model without a back cap allows for superior access to confined areas (A-125 Pencil).

Combine the flexible neck and gas valve for welding limited-access joints using power sources without gas solenoids (A-125 Flex Valve).

For maximum versatility on multiple welding applications, without adding expenses, use the A-125 Flex Redhead and A-125 Flex Valve Redhead.

Model	Specs	
A-125 **A-125 Valve** **A-125 Flex** **A-125 Flex Valve** **A-125 Pencil**	**Rated Output** DC: 125 A at 60% duty cycle AC: 100 A at 60% duty cycle	**Electrode Range** 0.5–3.2 mm (.020–1/8 in.)

Applications
- Maintenance and repair
- Home/hobby ▪ Motorsports
- Metal art ▪ Fabrication

Most popular consumables
- Collets
  - 13N22 1.6 mm (1/16 in.)
  - 13N23 2.4 mm (3/32 in.)
  - 13N24 3.2 mm (1/8 in.)
- Collet Bodies
  - 13N27 1.6 mm (1/16 in.)
  - 13N28 2.4 mm (3/32 in.)
  - 13N29 3.2 mm (1/8 in.)
- Alumina Nozzles
  - 13N10 #6, 3/8 in.
  - 13N11 #7, 7/16 in.
  - 13N12 #8, 1/2 in.

Most popular accessories
- Accessory Kit AK-1C
  Includes one long back cap, one of each size (#4, #5, #6) alumina nozzle, and one of each size (1.0, 1.6 mm) of the following: collet, collet body, and 175 mm 2% ceriated tungsten electrode.

Weldcraft™ A-150 Series (Air-cooled)

Formerly known as WP-17 Series

Versatile and innovative air-cooled torches designed for maximum comfort in a variety of applications.

Diamond Grip™ head design (A-150 and A-150 Valve) has ergonomic contact points for thumb and fingers. Provides a more comfortable grip and reduces operator fatigue.

Improve control and comfort with the A-150 Flex and the flexible neck that allows access into hard-to-reach areas.

Maximum versatility. Utilize the Redhead™ Series torches in a variety of welding applications without adding expenses.

Model	Specs
A-150 **A-150 Valve** **A-150 Flex** **A-150 Flex Valve** **A-150 Flex Valve Redhead** **A-150 PSH*** **A-150 Valve PSH***	**Rated Output** DC: 150 A at 60% duty cycle AC: 115 A at 60% duty cycle **Electrode Range** 0.5–3.2 mm (.020–1/8 in.)

**PSH = positive stop handle (threaded handle).*

Applications
- Fabrication ▪ Maintenance and repair
- Aerospace ▪ Food/beverage industry
- Metal art ▪ Petro/chemical
- Shipbuilding

Most popular consumables
- Collets
  10N23 1.6 mm (1/16 in.)
  10N24 2.4 mm (3/32 in.)
  10N25 3.2 mm (1/8 in.)
- Collet Bodies
  10N31 1.6 mm (1/16 in.)
  10N32 2.4 mm (3/32 in.)
  10N28 3.2 mm (1/8 in.)
- Alumina Nozzles
  10N48 #6, 3/8 in.
  10N47 #7, 7/16 in.
  10N46 #8, 1/2 in.

Most popular accessories
- **Accessory Kit**
  AK-150MFC
  Allows A-150 torch custom-ization. Converts into 28 different torch styles while using existing cable. Includes collets, collet bodies, nozzles, torch heads, handle and more.

Weldcraft™ A-200 Series (Air-cooled)

Formerly known as WP-26 Series

Dependable, top-performing air-cooled torches designed for heavy-duty welding applications.

Eliminate the expense of a water-cooled system. The air-cooled capability pairs reliability with cost-effectiveness for all field applications.

Combining the flexible neck and gas valve advances capabilities with greater comfort and control (A-200 Flex Valve).

Maximum versatility. Utilize the Redhead Series torches in a variety of welding applications without adding expenses.

Model	Specs
A-200 **A-200 Valve** **A-200 Flex** **A-200 Flex Valve** **A-200 Flex Redhead** **A-200 Flex Valve Redhead**	**Rated Output** DC: 200 A at 60% duty cycle AC: 150 A at 60% duty cycle **Electrode Range** 0.5–4.0 mm (.020–5/32 in.)

Applications
- Fabrication ▪ Maintenance and repair
- Manufacturing ▪ Shipbuilding
- Vocational

Most popular consumables
- Collets
  10N23 1.6 mm (1/16 in.)
  10N24 2.4 mm (3/32 in.)
  10N25 3.2 mm (1/8 in.)
- Collet Bodies
  10N31 1.6 mm (1/16 in.)
  10N32 2.4 mm (3/32 in.)
  10N28 3.2 mm (1/8 in.)
- Alumina Nozzles
  10N47 #7, 7/16 in.
  10N46 #8, 1/2 in.
  10N45 #10, 5/8 in.

Most popular accessories
- Accessory Kit AK-3C

Weldcraft™ W-180 (Water-cooled)

Formerly known as WP-24W

One of the smallest water-cooled TIG torches on the market and designed for welding in confined areas that require high amperage.

Use high amperage in confined areas for efficient welding.

Superior maneuverability in limited-access locations with the compact torch body.

Excellent weld capacity without increasing torch size, due to the efficient cooling system.

Model	Specs	
W-180	**Rated Output** DC: 180 A at 100% duty cycle AC: 115 A at 100% duty cycle	**Electrode Range** 0.5–2.4 mm (.020–3/32 in.)

Applications

- Aerospace ▪ Manufacturing
- Food/beverage industry ▪ Shipbuilding
- Maintenance and repair
- Petro/chemical ▪ Precision fabrication

Most popular consumables

- Collets
  - 53N16 1.0 mm (.040 in.)
  - 53N14 1.6 mm (1/16 in.)
  - 24C332 2.4 mm (3/32 in.)
- Collet Bodies
  - 53N18 1.0 mm (.040 in.)
  - 53N19 1.6 mm (1/16 in.)
  - 24CB332 2.4 mm (3/32 in.)
- Alumina Nozzles
  - A53N24 #4, 1/4 in.
  - A53N25 #5, 5/16 in.
  - A53N27 #6, 3/8 in.

Weldcraft™ W-200 Pencil Flex (Water-cooled)

Formerly known as WP-25

Versatile water-cooled torch optimized for use in limited-access welding situations.

Pencil-style, flexible neck designed for both high-amperage applications and confined area access.

Decreased downtime and longer trouble-free service due to overheating with the innovative cooling design.

Comfort and control are increased with the lightweight, well-balanced body design.

Model	Specs	
W-200 Pencil Flex	**Rated Output** DC: 200 A at 100% duty cycle AC: 140 A at 100% duty cycle	**Electrode Range** 0.5–3.2 mm (.020–1/8 in.)

Applications

- Aerospace ▪ Manufacturing
- Food/beverage industry ▪ Shipbuilding
- Maintenance and repair
- Petro/chemical ▪ Precision fabrication

Most popular consumables

- Insulator (non-gas lens and gas lens) (required) 598882
- Collets (non-gas lens and gas lens)
  - 13N20 0.5 mm (.020 in.)
  - 13N21 1.0 mm (.040 in.)
  - 13N22 1.6 mm (1/16 in.)
  - 13N23 2.4 mm (3/32 in.)
  - 13N24 3.2 mm (1/8 in.)
- Collet Bodies
  - 13N25 0.5 mm (.020 in.)
  - 13N26 1.0 mm (.040 in.)
  - 13N27 1.6 mm (1/16 in.)
  - 13N28 2.4 mm (3/32 in.)
  - 13N29 3.2 mm (1/8 in.)
- Gas Lens
  - 45V41 0.5 mm (.020 in.)
  - 45V42 1.0 mm (.040 in.)
  - 45V43 1.6 mm (1/16 in.)
  - 45V44 2.4 mm (3/32 in.)
  - 45V45 3.2 mm (1/8 in.)
- Alumina Nozzles
  - 13N08 #4, 1/4 in.
  - 13N09 #5, 5/16 in.
  - 13N10 #6, 3/8 in.
  - 13N11 #7, 7/16 in.
  - 13N12 #8, 1/2 in.
  - 13N13 #10, 5/8 in.
  - 53N58 #4, 1/4 in. (gas lens)
  - 53N59 #5, 5/16 in. (gas lens)
  - 53N60 #6, 3/8 in. (gas lens)
  - 53N61 #7, 7/16 in. (gas lens)
  - 53N61S #8, 1/2 in. (gas lens)

Weldcraft™ W-225 Pencil (Water-cooled)

Formerly known as WP-20P

Water-cooled torch designed for long-term, trouble-free service with consistent welding performance in general applications.

Extend torch life and minimize downtime due to overheating with the efficient around-the-head cooling design.

Pencil-style head allows for greater access into hard-to-reach joints.

Comfort and control are increased with the lightweight, compact body design.

Model	Specs	
W-225 Pencil	**Rated Output** DC: 225 A at 100% duty cycle AC: 160 A at 100% duty cycle	**Electrode Range** 0.5–3.2 mm (.020–1/8 in.)

Weldcraft™ W-250 Series (Water-cooled)

Formerly known as WP-20 Series

Water-cooled torch provides consistent performance and long-term trouble-free service with around-the-head water cooling.

Extend torch life and minimize downtime due to overheating with the efficient around-the-head cooling design.

Reduce leakage of gas and water through secure mechanical fittings and connections.

Easy hose replacement with the innovative mechanical fittings design (W-250 Valve).

Model	Specs
W-250 **W-250 Valve**	**Rated Output** DC: 250 A at 100% duty cycle AC: 180 A at 100% duty cycle **Electrode Range** 0.5–3.2 mm (.020–1/8 in.)

Weldcraft™ W-280 Super Cool™ (Water-cooled)

Formerly known as WP-280

Reliable water-cooled torch designed for demanding, high-amperage applications.

Super Cool technology provides additional surface area to increase cooling efficiency and capacity.

Reduce downtime due to overheating through consistent water-cooled performance.

Reduce leakage of gas and water through secure mechanical fittings and connections.

Model	Specs	
W-280 Super Cool	**Rated Output** DC: 280 A at 100% duty cycle AC: 195 A at 100% duty cycle	**Electrode Range** 0.5–3.2 mm (.020–1/8 in.)

Weldcraft™ W-375 Super Cool™ (Water-cooled)

Reliable water-cooled torch designed for demanding, high-amperage applications.

Super Cool technology provides additional surface area to increase cooling efficiency and capacity.

Reduce downtime due to overheating through consistent water-cooled performance.

Reduce leakage of gas and water through secure mechanical fittings and connections.

Model	Specs	
W-375 Super Cool	**Rated Output** DC: 375 A at 100% duty cycle AC: 265 A at 100% duty cycle	**Electrode Range** 0.5–3.2 mm (.020–1/8 in.)

Applications

- Aerospace ▪ Aluminum fabrication
- Automotive ▪ Manufacturing
- Exotic material fabrication
- Precision metal fabrication
- Pressure vessel fabrication
- Shipbuilding ▪ Tool and die
- Tube and pipe ▪ Vocational

Most popular consumables

- Insulator (non-gas lens and gas lens) (required) 598882
- Collets (non-gas lens and gas lens)
  - 13N20 0.5 mm (.020 in.)
  - 13N21 1.0 mm (.040 in.)
  - 13N22 1.6 mm (1/16 in.)
  - 13N23 2.4 mm (3/32 in.)
  - 13N24 3.2 mm (1/8 in.)
- Collet Bodies
  - 13N25 0.5 mm (.020 in.)
  - 13N26 1.0 mm (.040 in.)
  - 13N27 1.6 mm (1/16 in.)
  - 13N28 2.4 mm (3/32 in.)
  - 13N29 3.2 mm (1/8 in.)
- Gas Lens
  - 45V41 0.5 mm (.020 in.)
  - 45V42 1.0 mm (.040 in.)
  - 45V43 1.6 mm (1/16 in.)
  - 45V44 2.4 mm (3/32 in.)
  - 45V45 3.2 mm (1/8 in.)
- Alumina Nozzles
  - 13N08 #4, 1/4 in.
  - 13N09 #5, 5/16 in.
  - 13N10 #6, 3/8 in.
  - 13N11 #7, 7/16 in.
  - 13N12 #8, 1/2 in.
  - 13N13 #10, 5/8 in.
  - 53N58 #4, 1/4 in. (gas lens)
  - 53N59 #5, 5/16 in. (gas lens)
  - 53N60 #6, 3/8 in. (gas lens)
  - 53N61 #7, 7/16 in. (gas lens)
  - 53N61S #8, 1/2 in. (gas lens)
- Back Caps
  - 41V33 Short
  - 41V35 Medium
  - 41V24 Long

Most popular accessories

- **Accessory Kit** AK-4C
  Includes one long back cap, one of each size (#5, #6, #7) alumina nozzle, and one of each size (1.6, 2.4, 3.2 mm) of the following: collet, collet body, and 175 mm 2% ceriated tungsten electrode.

Weldcraft™ W-350 Series (Water-cooled)

Formerly known as WP-18 Series

Rugged water-cooled torches engineered for high-amperage and continuous hand-held welding in mechanized applications.

Reduce downtime and costs by minimizing overheating with the unique cooling design engineered for operator comfort.

Reduce discomfort and fatigue using the comfortable handle design.

Superior gas flow control offered through the built-in fingertip gas control (W-350 Valve).

Model	Specs
W-350 **W-350 Valve**	**Rated Output** DC: 350 A at 100% duty cycle AC: 250 A at 100% duty cycle **Electrode Range** 0.5–4.0 mm (.020–5/32 in.)

Applications
- Fabrication
- Manufacturing
- Maintenance and repair
- Shipbuilding
- Tube and pipe

Most popular consumables
- Collets
  - 10N24 2.4 mm (3/32 in.)
  - 10N25 3.2 mm (1/8 in.)
  - 54N20 4.0 mm (5/32 in.)
- Collet Bodies
  - 10N32 2.4 mm (3/32 in.)
  - 10N28 3.2 mm (1/8 in.)
  - 406488 4.0 mm (5/32 in.)
- Alumina Nozzles
  - 10N48 #6, 3/8 in.
  - 10N47 #7, 7/16 in.
  - 10N46 #8, 1/2 in.
  - 10N45 #10, 5/8 in.
  - 10N44 #12, 3/4 in.

Weldcraft™ W-400 Super Cool™ (Water-cooled)

Formerly known as WP-18SC

Water-cooled torch designed to endure some of the most demanding applications while minimizing overheating.

Extend torch and consumable life with the full-flow water chamber that provides around-the-head cooling.

Improve gas coverage and cooling capacity with gas lens usage with heavy-duty stubby collet body.

Extend parts life using the durable copper components, maximizing current capacity.

Model	Specs	
W-400 Super Cool	**Rated Output** DC: 400 A at 100% duty cycle AC: 280 A at 100% duty cycle	**Electrode Range** 0.5–4.8 mm (.020–3/16 in.)

Applications
- Heavy fabrication
- Tool and die
- Pipe and tube fabrication
- Pressure vessel fabrication

Most popular consumables
- Heavy-Duty Collets
  - 10N25HD 3.2 mm (1/8 in.)
  - 54N20HD 4.0 mm (5/32 in.)
  - 18C36 4.8 mm (3/16 in.)
- Heavy-Duty Nose Collet Body (all sizes) NCB-36
- Alumina Nozzles
  - 54N16 #6, 3/8 in.
  - 54N15 #7, 7/16 in.
  - 54N14 #8, 1/2 in.
- Back Caps
  - 57Y04 Short
  - 300M Medium

Weldcraft™ W-410 (Water-cooled)

Formerly known as CS410

Water-cooled torch that increases amperage output without increasing torch size. Designed for demanding applications.

D-Handle™ design features a self-indexing flat top that allows for torch orientation by feel.

Work in cold weather with the Tri-Flex™ hose and cable assembly that remains flexible to ease handling and extends cable life.

Improve high-frequency shielding and minimize gas leakages with the double-lip back cap seal.

Model	Specs	
W-410	**Rated Output** DC: 410 A at 100% duty cycle AC: 310 A at 100% duty cycle	**Electrode Range** 0.5–4.0 mm (.020–5/32 in.)

Applications
- Aerospace
- Tube and pipe
- Exotic material fabrication
- Pipe and tube fabrication

Most popular consumables
- Collets
  - 10N24 2.4 mm (3/32 in.)
  - 10N25 3.2 mm (1/8 in.)
  - 54N20 4.0 mm (5/32 in.)
- Collet Bodies
  - 10N32 2.4 mm (3/32 in.)
  - 10N28 3.2 mm (1/8 in.)
  - 406488 4.0 mm (5/32 in.)
- Alumina Nozzles
  - 10N46 #8, 1/2 in.
  - 10N45 #10, 5/8 in.
  - 10N44 #12, 3/4 in.

Weldcraft™ W-125 Micro Series (Water-cooled)

Formerly known as WP-125 Series

W-125 Medium Micro (89 mm) (WP-125M)

W-125 Long Micro (127 mm) (WP-125L)

Water-cooled MicroTig® torches designed for limited-access joints.

Low-profile nozzle fits into holes as small as 16 mm diameter.

45-degree, 90-degree, and 180-degree options improve access in tight areas.

Lower maintenance costs incurred with the replaceable silicone rubber insulator and head components.

Model	Specs	
W-125 Medium Micro **W-125 Long Micro**	**Rated Output** DC: 125 A at 100% duty cycle AC: 80 A at 100% duty cycle	**Electrode Range** 1.0–2.4 mm (.040–3/32 in.)

Applications

- Aerospace ▪ Food/beverage industry
- HVAC ▪ Automotive ▪ Petro/chemical
- Precision fabrication

Most popular consumables

- 90° Chucks
  125C40-90 1.0 mm (.040 in.)
  125C116-90 1.6 mm (1/16 in.)
  125C332-90 2.4 mm (3/32 in.)
- 90° Glass Nozzle (all sizes) 125N90
  Other nozzles are available.

Most popular accessories

- **Accessory Kit** AK-125C
  Includes one of each size (180°, 45°, 90°, 90° short) glass nozzle, and one of each size (1.0, 1.6 mm) of the following: 180° chuck, 45° chuck, 90° chuck, and 175 mm 2% ceriated tungsten electrode.

Weldcraft™ W-500 (Water-cooled)

Formerly known as WP-12

Dependable water-cooled torch designed for high-capacity, demanding applications.

Comfort and reduced downtime due to the sealed water chamber that minimizes torch overheating.

Heavy-duty components provide reliable welding performance, even after continuous and demanding use.

100-percent-copper construction ensures maximum thermal conductivity.

Model	Specs	
W-500	**Rated Output** DC: 500 A at 100% duty cycle AC: 350 A at 100% duty cycle	**Electrode Range** 1.6–6.4 mm (1/16–1/4 in.)

Applications

- Heavy fabrication ▪ Tool and die
- Pipe and tube fabrication
- Pressure vessel fabrication

Most popular consumables

- Insulator (required) 12NG
- Collets
  85Z17 4.0 mm (5/32 in.)
  85Z18 4.8 mm (3/16 in.)
  85Z19 6.4 mm (1/4 in.)
- Collet Body (all sizes) 11WP65
- Alumina Nozzles
  14N59 #6, 3/8 in.
  14N60 #7, 7/16 in.
  14N61 #8, 1/2 in.
  14N61-10 #10, 5/8 in.
  14N61-12 #12, 3/4 in.

Weldcraft™ Modular Series

A-150 Modular (WP-150)

A-150 Modular Valve (WP-150V)

A-200 Modular Valve (WP-200V)

W-225 Modular (WP-225)

Air-cooled and water-cooled torches engineered to weld multiple joint configurations for various applications and angles.

Built-in, efficient cooling system reduces overheating to extend parts and consumable life.

Modular design minimizes costs and downtime for torch changeover and parts inventory.

Easy configurable head options provide greater flexibility and joint access, and minimize downtime for torch changeover.

Gas valve provides greater shielding gas flow control (A-150 Modular Valve and A-200 Modular Valve).

Model	Specs *(Torch head dependent)*	
A-150 Modular **A-150 Modular Valve** *(Air-cooled)*	**Rated Output** DC: 150 A at 60% duty cycle AC: 105 A at 60% duty cycle	**Electrode Range** 0.5–3.2 mm (.020–1/8 in.)
A-200 Modular Valve *(Air-cooled)*	DC: 200 A at 60% duty cycle AC: 150 A at 60% duty cycle	0.5–4.0 mm (.020–5/32 in.)
W-225 Modular *(Water-cooled)*	DC: 225 A at 100% duty cycle AC: 160 A at 100% duty cycle	0.5–4.0 mm (.020–5/32 in.)

Applications

- Maintenance and repair ▪ Aerospace
- Metal art ▪ Food/beverage industry
- Petro/chemical ▪ Shipbuilding
- Manufacturing ▪ Vocational
- Precision fabrication ▪ Tube and pipe

Most popular accessories

- **Accessory Kit**
  AK-150MFC For A-150 torch
  AK-225MFC For W-225 torch

Welding Intelligence™

Transform data into actionable information that drives continuous improvement.

Increase productivity

Improve weld quality

Manage costs

Complete coverage for any application.

Choose the Right Welding Intelligence System

		Insight Core™	*Insight* Centerpoint™	*Insight* Pipe and Vessel	*Insight* ArcAgent™
For Use With	**Factory-Installed**	▪ Continuum™/Auto-Continuum™ ▪ Axcess®/Auto-Axcess™ ▪ Dynasty® 280 DX	▪ Continuum™/Auto-Continuum™ ▪ Dynasty® 280 DX	–	▪ ANY welding power source (old or new) ▪ ANY brand ▪ ANY welding process
	Field-Installed/ Activated	▪ 14-pin compliant power source (see MillerWelds.com/insight) ▪ Axcess®/Auto-Axcess™	▪ Continuum™/Auto-Continuum™ ▪ Dynasty® 280 DX	▪ PipeWorx 400	
Requirements		▪ Internet connection (wired/wireless)	▪ PC and Ethernet connection	▪ PC and Ethernet connection	▪ PC and Ethernet connection
What Capability Do You Need?		▪ Productivity monitoring ▪ Weld parameter verification ▪ Simplicity/basic monitoring ▪ Goal setting	▪ Prevent/detect missed welds ▪ Minimize overwelding/underwelding ▪ Electronic work instructions ▪ Measure overall equipment effectiveness (OEE)	▪ Real time contract, spool, joint documentation ▪ Enterprise resource planning system integration (ERP) ▪ Productivity/quality metrics	With use of Centerpoint: ▪ Prevent/detect missed welds ▪ Minimize overwelding/underwelding ▪ Electronic work instructions
Data Storage		▪ Cloud based	▪ Local server or PC	▪ Local PC	▪ Local server or PC

Insight Core™

Simplified, Internet-based welding information solution that reports operator productivity and weld parameter verification.

Visit our online Insight Core simulator at **Insight-simulator.MillerWelds.com**

How it works

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

Factory installed on Continuum™/Auto-Continuum™ and Dynasty® 280 DX power sources.

Compatible with 14-pin compliant Miller® power sources. See MillerWelds.com/insight for a list of 14-pin compatible power sources.

Insight Core dashboard descriptions

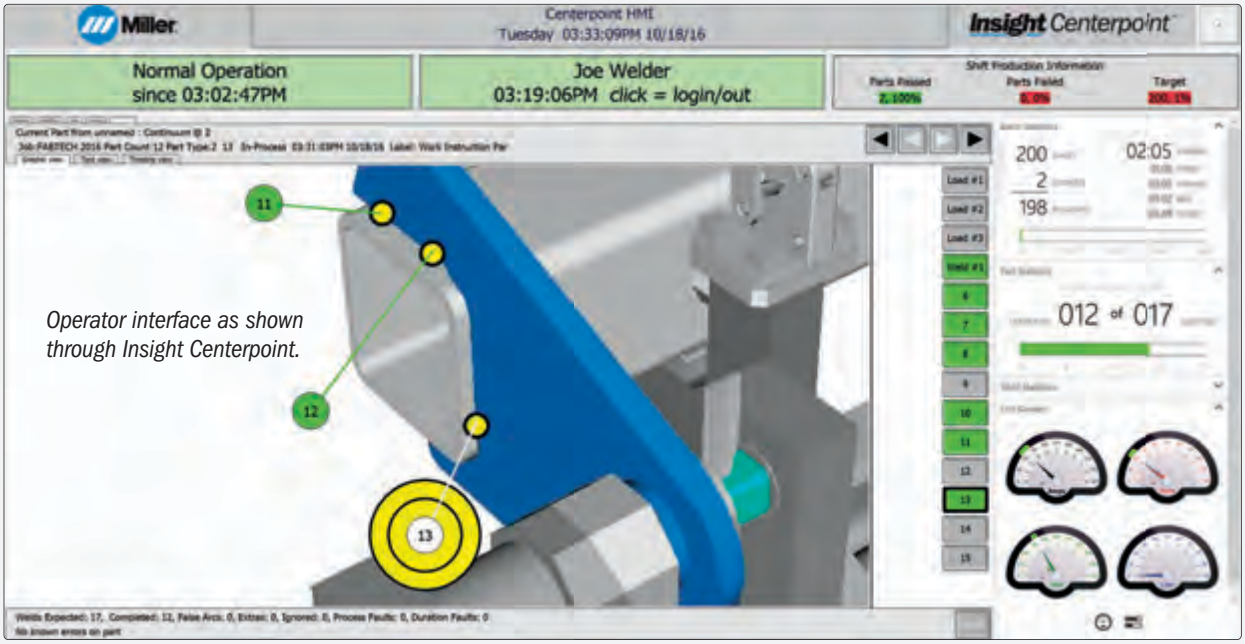
1. **Asset tree.** A list of power sources within your fleet that are enabled with Insight Core – organized by building, department or machine – showing real-time activity status icons and active operators.
2. **Productivity dashboard.** Instant visibility of arc-on time and wire deposition, by location, work cell, power source or operator.
3. **Quality dashboard.** Real-time analysis and reporting of all welds, revealing when quality fails to meet established thresholds for amps, volts and WFS. Includes weld trace.
4. **Goals dashboard.** Shows progress toward continuous improvement goals you set for improving arc-on time, deposition rates and arc starts.
5. **Reports.** In-depth information is available in reports that can be easily modified and displayed in a wide variety of customizable formats.
6. **Multiple languages available.** English, German, Spanish, French, Italian, Dutch, Portuguese and Chinese.

**Additional stock numbers are available – visit MillerWelds.com/insight.*
***SubArc Digital Series requires Insight Core to SubArc Digital Series Adapter Kit (301295).*

Type		Continuum Model /Stock Number*		Axcess Model/Stock Number*		Dynasty Model/Stock Number		14-pin Compliant Miller Power Sources
Factory-Installed Insight Core Power Sources	MIG	Continuum 350 (907636) Continuum 500 (907640) Auto-Continuum 350 (907656) Auto-Continuum 500 (907657)	MIG	–	TIG	Dynasty 280 DX (907514003)	Accessory	–
Field-Installed Insight Core Upgrade Modules	MIG	–	MIG	Axcess Module (301081) Auto-Axcess Module (301081)	TIG	–	Accessory	**(301072)** Insight Core 14-pin module**

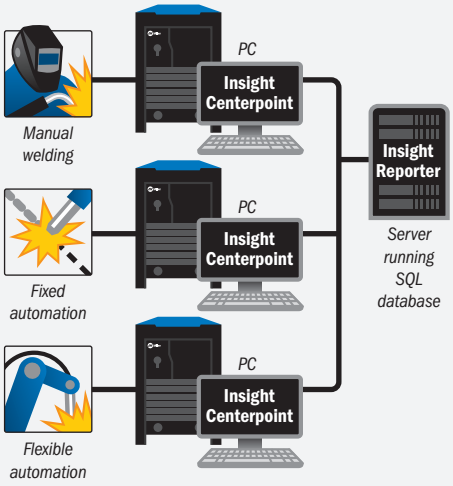
Insight Centerpoint™

Advanced, real-time operator feedback solution to prevent missed welds, enforce proper weld sequence and ensure consistent weld quality.



Operator interface as shown through Insight Centerpoint.

How it works



Standard capability software (SCP)

- **Part Tracking**™ provides real time operator feedback to ensure accurate weld sequence, prevent missed welds and ensure proper weld parameters.
- **Codes and standards** captures required information relating actual welding parameters to the specific operator, contract, joint and weld pass to ensure productivity and quality requirements are met.

Advanced capability software (ACP)

- **WorkFlow**™ enables you to present electronic work instructions for pre/intra/post weld activities (using video, pdf, and more) to ensure consistent standardized production for every operator.

Optional reporting software

- **Insight Reporter**™ provides preconfigured management charts and reports that provide a wide range of information about weld process, productivity and business metrics, stored in an SQL server database.

Pipe and Vessel. Powerful pipe documentation solution that provides traceability by relating weld data to specific contract/spool/joint. PipeWorx 400 requires Insight Module (301304).

**Additional stock numbers are available – visit MillerWelds.com/insight.*

Type		Model/Stock Number*	Capability Software	Insight Centerpoint	Optional Insight Reporter	Accessories
Factory-Installed Insight Centerpoint Power Sources	MIG	**Continuum 350 (907636)** **Continuum 500 (907640)** **Auto-Continuum 350 (907656)** **Auto-Continuum 500 (907657)**	**(301297)** Standard (SCP) **(301257)** Advanced (ACP) (requires standard capability software) **(301322)** Standard and advanced	**(301255)** Single seat license **(301256)** Site license	**(300709)** Single license (1 required per PC) **(300710)** SQL database (1 required per facility)	**Insight LTD Gun** **(3DM4015-45Q)** For Continuum **M12/RJ45 Ethernet Cables** **(300734)** 3 m (9.8 ft.) **(300735)** 5 m (16.4 ft.) **(300736)** 10 m (32.8 ft.) **Field Application Support** **(195480)** Miller field support (contact distributor for details)
	TIG	**Dynasty 280 DX with Insight (907514003)**	**(301314)** Standard (SCP) **(301323)** Advanced (ACP) (requires standard capability software) **(301315)** Standard and advanced	**(301316)** Single seat license **(301256)** Site license	**(300709)** Single license (1 required per PC) **(300710)** SQL database (1 required per facility)	
Field-Installed Insight Centerpoint Upgrade Module	Pipe	**PipeWorx 400 Module** **(301304)** Only provides Pipe and Vessel	–	–	–	

NEW! Insight ArcAgent™

See literature WI/1.0

Premium Welding Intelligence solutions for any brand of welding power source, designed to integrate with Insight Centerpoint.™

Models

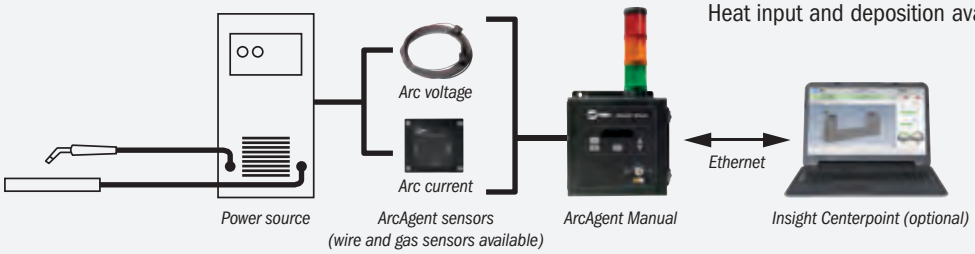
ArcTimer.™ Monitors very basic weld data (displayed on LCD): total arc time, last weld time, current weld time and total arc count. Battery operated (4 C-sized).

Manual. Designed for manual welding. Provides process control and monitoring that detects and prevents missed welds.

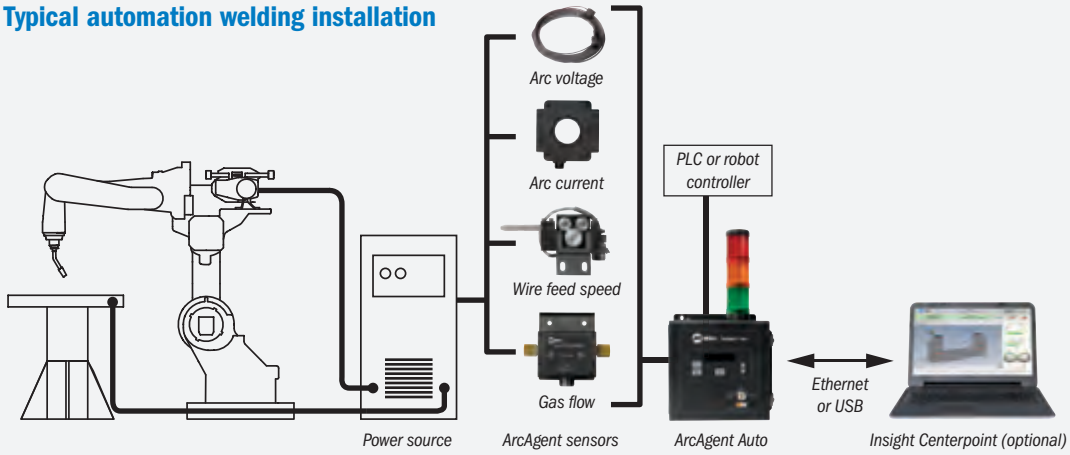
Auto. Designed for automated welding. Real-time monitoring of weld count, length (duration), process set-point parameters (voltage, current, wire feed, gas flow), total arc time, total wire used and total clamp time.

Portable. Advanced system for weld procedure qualification and analysis. High-fidelity Weld Signature™ capture with calculation of peak and back-ground amperages/voltages, pulse width, pulse and shorting frequencies. Heat input and deposition available.

Typical manual welding installation



Typical automation welding installation



Model/Stock Number	Insight Centerpoint	Optional Insight Reporter
ArcTimer (301349), CE	–	–
ArcAgent Manual Series **(301342)** Manual, **CE** **(301343)** Manual with front panel Part Tracking controls, **CE** **(301345)** Manual with Insight torch capability, **CE**	**Optional:** **(301255)** Single seat license **(301256)** Site license	**(300709)** Single license (1 required per PC) **(300710)** SQL database (1 required per facility)
ArcAgent Auto **(301346)** Auto, **CE**	**Optional:** **(301255)** Single seat license **(301256)** Site license	**(300709)** Single license (1 required per PC) **(300710)** SQL database (1 required per facility)
ArcAgent Portable Series **(301347)** Ethernet PC interface, **CE** **(301348)** USB PC interface, **CE**	**Required:** **(301255)** Single seat license **(301256)** Site license	**(300709)** Single license (1 required per PC) **(300710)** SQL database (1 required per facility)

Most popular accessories

Voltage monitoring
- TIG Filter Sensor 301359
  Voltage sensing cable used in TIG applications. Requires 7.6 m (25 ft.) TIG filter cable (301384).
- Voltage Sense Cables
  301365 With lugs
  301366 With quick disconnect
  301385 With alligator clips

Current monitoring
- Standard Current Sensors (for up to 4/0 lugged cables)
  301353 150 A
  301351 650 A
  301352 1,000 A
- Large Diameter Current Sensors (for Dinse- or Tweco®-style cables)
  301355 600 A split core
  301357 600 A solid core
  301354 1,000 A split core
  301356 1,000 A solid core
- Current Sensor Cables
  301364 7.6 m (25 ft.) standard
  301367 7.6 m (25 ft.) large diameter

Wire feed speed monitoring
- Wire Speed Sensor 301350
- Wire Speed Sensor Cable
  301368 7.6 m (25 ft.)

Gas flow monitoring
- Gas Flow Sensor 301358
- Gas Flow Sensor Cable
  301369 7.6 m (25 ft.)

Travel speed monitoring
NOT compatible with ArcAgent Manual or ArcAgent Manual with Part Tracking controls.
- Travel Speed Encoder 301362
  Requires Auxiliary Sensor Module and Travel Speed Wheel.
- Auxiliary Sensor Module (24 VDC) 301374
  Allows for use of travel speed sensors as well as two analog inputs.
- Travel Speed Wheel
  301360 152.4 mm (6 in.)
  301361 304.8 mm (12 in.)
- Travel Speed Encoder Mounting Bracket 301363
- Travel Speed Encoder Cable
  301376 7.6 m (25 ft.)

For a complete accessory list see literature WI/1.0.

Blue Star® 185

See literature ED/2.5

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

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

All engine controls are on front panel.

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-volt GFCI and 240-volt receptacles, 23.7 L (6.25 gal.) fuel capacity, auto-idle and engine hour meter.

Light industrial ● CC DC

Processes
- Stick (SMAW) ▪ TIG (GTAW)

Gasoline engine
Kohler CH440: 13.4 hp at 3,600 rpm
One-cylinder, four-cycle, OHV, air-cooled

Note: Engine is warranted separately by engine manufacturer.

Most popular accessories
- Lifting Eye 195353
- Running Gear 301246
- Protective Cover 301245

Gasoline	Stock Number	Welding Mode	Welding Process	Amperage Range	Rated Output at 40°C (104°F)	Single-Phase Generator Power at 40°C (104°F)	Dimensions	Net Weight
	(907664) Kohler	CC/DC	DC stick/TIG	60–185	185 A at 25 V, 20% duty cycle 150 A at 25 V, 100% duty cycle	Peak: 6,500 watts Continuous: 6,200 watts	H: 629 mm (24.75 in.) W: 524 mm (20.625 in.) D: 794 mm (31.25 in.)	134 kg (296 lb.)

Bobcat™/Trailblazer®: Which is Right for You?

Gas Model Comparison

**Based on typical usage — 150 amps welding 40% of the time; 20 amps generator power 30% of the time; and idling without load 30% of the time.*

Bobcat

The most popular welder/generator:
- Dependable power and weld output
- Cost-effective multiprocess welder/generator
- Easy to maintain
- Quietest in its class

Trailblazer

The best performer in the industry:
- Unbeatable arc performance
- Independent welder and generator power system
- Exclusive technologies — Auto-Speed™ and Excel™ power
- Most fuel efficient and quietest in its class

Sound Levels (at 23 feet)	Bobcat 225	UPGRADE	Bobcat 250	UPGRADE	Trailblazer 275	UPGRADE	Trailblazer 325
At Maximum Load / At 150 Amps	73 dB / 72 dB	➡	73 dB / 72 dB	➡	74 dB / 65 dB		74 dB/65 dB
Sound Quality	Good	➡	Very good	➡	Excellent		Excellent
Fuel System							
Typical Runtime per 12-Gallon Tank*	13 hours	➡	13/ 15.5 hours with EFI	➡	15 hours		Up to 21 hours with options
Efficiency	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	➡	Independent weld and generator power with no interaction between tools and welding arc		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	➡	N/A		**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 (.023–1/16 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

Bobcat™ Series

Gas, LP and Diesel

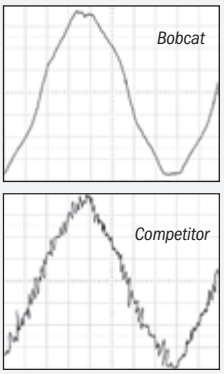
Bobcat 250 EFI shown.

Bobcat engine-driven welder/generators are the top selling in their class because they are engineered to be reliable, powerful and durable. Their multiprocess capabilities make them ideal for maintenance trucks where reduced size and weight are essential.

Cleaner and stronger generator power

11,000 watts (12,000 on Bobcat 250 with EFI) of clean, truly usable generator power that is Accu-Rated™, not inflated – tested to deliver uninterrupted peak output for a minimum of 30 seconds for big loads, so you can get more jobs done.

Advanced generator technology virtually eliminates power spikes and other electrical imperfections so welds are cleaner and jobsite tools can run without interruption, maximizing quality, productivity and profit.



Waveform Comparison

Fewer refueling trips

Large 12-gallon fuel capacity means extended runtimes and less refueling.

Versatile AC and DC welding

Provides AC and DC welding output for greater versatility and quality welds on all types of metals. DC is smooth and easy to run while AC stick is used when arc blow occurs.

More portable, uses less truck space

Smaller and lighter – 17 percent less cubic space and weighing up to 100 pounds less than the competition – means moving Bobcat welder/generators is faster and easier, for maximum productivity. And because they take up less space, they let work trucks carry more equipment and gear so your work crews can meet weight limits and be ready for anything.

17%
LESS CUBIC SPACE THAN THE COMPETITION

Easier maintenance

Easy-to-read front panel maintenance displays show engine hours and hours left before an oil change is due. This intuitive design makes maintenance 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

Bobcat™ 225 (Gas) See literature ED/4.4

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

Features three DC stick/TIG controls, one AC stick/TIG control and one wire range for output control. Stick ranges designed for 2.4, 3.2 and 4 mm (3/32, 1/8 and 5/32 in.). Very easy to set.

Bobcat™ 3 Phase (Gas) See literature ED/4.33

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

Bobcat™ 250 (Gas, LP or Diesel) See literature ED/4.4 (Gas/LP) and ED/4.34 (Diesel)

MOST POPULAR! **Multiprocess engine-driven welder/generator capable of carbon arc gouging features a larger stabilizer for less spatter and smoother arc. Ideal welder/generator for maintenance/repair, construction, farm/ranch or as a stand-alone generator.**

Convenient front panel fuel gauge.

More precise amperage settings with wider range for optimal stick/flux-cored welding.

Features four AC/DC stick/TIG controls and two wire ranges for output control. Stick ranges designed for 2.4, 3.2, 4 and 4.8 mm (3/32, 1/8, 5/32 and 3/16 in.). Very easy to set.

Add optional electronic fuel injection (EFI) — improved fuel efficiency for maximum productivity and profitability

Adding EFI to your Bobcat 250 welder/generator provides multiple benefits. With EFI you'll get faster, more reliable starts in any weather — no choke adjustments needed. EFI-equipped Bobcat 250 machines are also up to 42 percent more fuel efficient than standard carbureted models, improving profitability. Plus, refueling less frequently means you'll spend more of your time welding, improving productivity.

**Recommended for operation at altitudes above 5,000 feet.*

Industrial ● CC/CV AC/DC

Processes

- AC/DC stick (SMAW)
- MIG (GMAW)[1] ▪ Flux-cored (FCAW)[1]
- AC[2]/DC TIG (GTAW)
- Air carbon arc cutting and gouging (CAC-A)[3] (rated 4.8 mm [3/16 in.] carbons)

[1] With voltage-sensing feeder only.
[2] With Dynasty® 210 Series or HF-251 (non-critical).
[3] Bobcat 250 models only.

Engines

Gas: Kohler CH730
23.5 hp at 3,600 rpm
EFI gas: Kohler ECH730
23 hp at 3,600 rpm
LP: Kohler CH730
Liquid withdrawal LP system
21.5 hp at 3,600 rpm
V-twin-cylinder, four-cycle, overhead valve, industrial, air-cooled
EPA Tier 4 Final Diesel: Kubota D722
19 hp at 3,600 rpm
Three-cylinder, industrial, liquid-cooled

Note: Engines are warranted separately by engine manufacturer.

Most popular accessories

- SuitCase® X-TREME™ Feeders
- Dynasty® 210 Series
- Spectrum® 625 X-TREME™
- Multi-Terrain Running Gear
- Off-Road Running Gear
- Protective Cage with Cable Holders
- Hose and LP Tank Mounting Assembly
- Remote Oil Drain/Filter Kit
- All-Purpose Running Gear
- Full KVA Adapter Cord 300517
- Protective Cover
- HWY-Mid Frame Trailer 301438
- GFCI Panel Mount 120 VAC Duplex Kit 300975
- Electric Fuel Pump Kit* (gas models only) 300976
- Spark Arrestor Kit (gas models only) 300924

	Model	Stock Number	Welding Mode	Process	Amp/Volt Ranges	Rated Output at 40°C (104°F)	Generator Power at 40°C (104°F)	Dimensions	Net Weight
Gasoline	Bobcat 225	**(907498001)** Kohler **(907498)** 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: 9,500 watts	H: 711 mm (28 in.) H: 832 mm (32.75 in.) to top of exhaust W: 508 mm (20 in.) D: 1,029 mm (40.5 in.)	220 kg (485 lb.)
			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	**(907505)** 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: 9,500 watts/10,000 watts		225 kg (495 lb.)
			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			
Gas or LP	Bobcat 250	**(907500001)** Kohler **(907500)** Kohler with GFCI **(907500002)** Kohler with electric fuel pump* **(907502) EFI** Kohler **(907504) LP** Kohler with GFCI *Order hose and LP tank mounting assembly (300917) 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: 9,500 watts **EFI model** **Peak: 12,000 watts** **Continuous: 10,500 watts**	H: 711 mm (28 in.) H: 832 mm (32.75 in.) to top of exhaust W: 508 mm (20 in.) D: 1,029 mm (40.5 in.)	227 kg (501 lb.)
			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	**(907565)** Kubota with GFCI	CC/AC CC/DC	Stick/TIG	40–275 A	250 A at 25 V, 100% duty cycle	Single-phase Peak: 11,000 watts Continuous: 9,500 watts	H: 711 mm (28 in.) H: 876 mm (34.5 in.) to top of exhaust W: 508 mm (20 in.) D: 1,156 mm (45.5 in.)	289 kg (638 lb.)
			CV/DC	MIG/FCAW	17–28 V	275 A at 25 V, 60% duty cycle 250 A at 28 V, 100% duty cycle			

Trailblazer® Series

Gas, LP and Diesel

See literature ED/4.75 (Gas/LP) and ED/4.8 (Diesel)

Trailblazer 325 EFI shown.

Trailblazer welder/generators deliver unbeatable arc performance providing the smoothest, most stable arc in the industry. The Trailblazer exclusive Auto-Speed™ technology delivers superior runtimes, increased fuel efficiency, and improved welder/generator performance.

Unbeatable arc performance

Wide amperage output with better welding deposition rates means you can get jobs done faster, saving time and money. The Trailblazer also has precise arc control, which allows you to fine-tune the arc to match your personal preferences and quickly dial in the perfect parameters to optimize weld quality and maximize productivity across a variety of applications and welding processes.

Cleaner and stronger generator power

Combines a 25 hp engine and 12,000 watts of clean, truly usable generator power that is Accu-Rated™, not inflated – tested to deliver uninterrupted peak output for a minimum of 30 seconds for big loads, so you can get more jobs done.

Maximum cost savings

Less money spent on fuel means more profit for you. Every Trailblazer welder/generator has fuel-saving Auto-Speed technology – add optional Excel™ power and EFI to save even more on fuel costs and enjoy a combination of advanced, profit-enhancing features that are only available on a Trailblazer welder/generator.

Safer, more productive jobsites

Quieter jobsites are safer and more productive because work crews can communicate easier, and work can start earlier and end later – even in noise-sensitive areas.

IT WOULD TAKE 7 TRAILBLAZERS TO EQUAL THE SOUND OUTPUT OF 1 COMPETITOR MACHINE.

Auto-Speed technology

Get the welding power you need – plus reduced fuel consumption and lower noise levels for a more-profitable, safer jobsite. Unlike competitive machines that operate at 3,600 rpm (max) under any load, Miller-exclusive Auto-Speed technology responds to weld requirements by automatically adjusting engine speed to one of four rpm levels so the engine never works harder than necessary. Refueling time and operating costs are reduced, which means more productivity and profitability. Auto-Speed technology – available only from Miller.

Welding at idle speed

Welding below 150 A	Welding between 151–210 A	Welding between 211–250 A	Welding above 250 A
2,400 RPM	2,800 RPM	3,200 RPM	3,600 RPM

Auto-Speed™ in XX18 mode

Fewer refueling trips

Spend more time working and less time refueling. Only Trailblazer welder/generators provide Auto-Speed technology, plus Excel power and electronic fuel injection (EFI) options, to deliver maximum runtime.

More portable, uses less truck space

Smaller and lighter – 17 percent less cubic space and 10 percent less machine weight than the competition – means moving Trailblazer welder/generators is faster and easier, for maximum productivity.

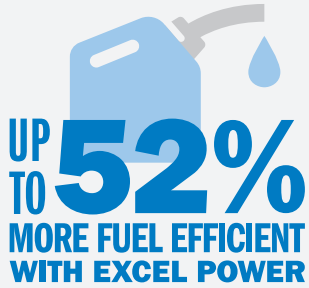
17% LESS CUBIC SPACE THAN THE COMPETITION

Options to Maximize Your Trailblazer 325 Performance

Excel™ power

Unlike competitive machines that provide auxiliary power only at 3,600 rpm (max), Excel power delivers a full 2,400 watts (20 A) of 120-volt inverter-based, pure sine wave power at all speeds, including idle. With Excel power you can operate jobsite tools like grinders at quiet, fuel-saving speeds.

Refueling time and operating costs are reduced with Excel power, which means more productivity and profitability. Plus everyone on the jobsite gets a better working environment because noise levels and exhaust emissions are lowered. Excel power – available only from Miller.

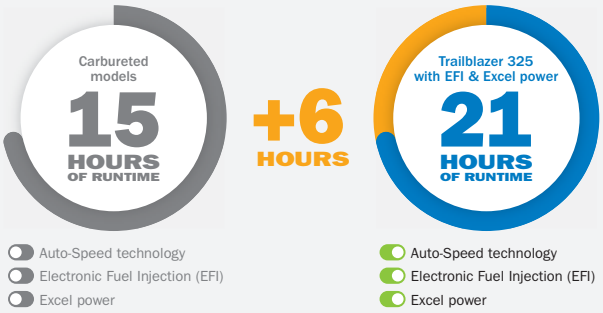


Based on generator-only use for total runtime.

EFI (gas models)

Adding EFI to your Trailblazer welder/generator adds multiple benefits. With EFI, you'll get faster, more-reliable starts in any weather – no choke adjustments needed. EFI-equipped Trailblazer machines are also up to 42 percent more fuel efficient than standard carbureted models, improving profitability. Plus, refueling less frequently means you'll spend more of your time welding, improving productivity.

Add Excel power to your Trailblazer with EFI, and you'll have the most fuel-efficient compact welder/generator available.



Based on typical usage – 150 amps welding 40% of the time; 20 amps generator power 30% of the time; and idling without load 30% of the time.

Battery charge/jump start (gas models)

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.

Note: Battery charge/jump cables (300422) must be ordered separately.

Heavy industrial ● CC CV DC

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) (rrated 4.8 mm [3/16 in.] carbons, capable 6.4 mm [1/4 in.] carbons)

[1] *With wire feeder.*
[2] *Two-piece TIG torch recommended.*

Engines

Gas: Kohler CH730
23.5 hp at 3,600 rpm
EFI gas: Kohler ECH730
23 hp at 3,600 rpm
LP: Kohler CH730
Liquid withdrawal LP system
21.5 hp at 3,600 rpm
V-twin-cylinder, four-cycle, overhead valve, industrial, air-cooled
EPA Tier 4 Final Diesel: Kubota D902
24.8 hp at 3,600 rpm
Three-cylinder, industrial, liquid-cooled

Note: Engines are warranted separately by engine manufacturer.

Most popular accessories

- SuitCase® X-TREME™ 12VS
- Spoolmatic® 30A / WC-24 Control 130831 / 137549
- Dynasty® Series
- Spectrum® 625 X-TREME™
- Multi-Terrain Running Gear
- Off-Road Running Gear
- Protective Cage with Cable Holders
- Hose and LP Tank Mounting Assembly
- All-Purpose Running Gear
- Full KVA Adapter Cord 300517
- Protective Cover
- HWY-Mid Frame Trailer 301438
- Electric Fuel Pump Kit (gas models only) 300976 Recommended for operation at altitudes above 5,000 feet.
- 7.6 m (25 ft.) Battery Charge/Jump Cables with plug (for Trailblazer 325 EFI 907512002 only) 300422

**Recommended for operation at altitudes above 5,000 feet.*

	Model	Stock Number	Welding Mode	Process	Amp/Volt Ranges	Rated Output at 40°C (104°F)	Single-Phase Generator Power at 40°C (104°F)	Dimensions	Net Weight
Gas or LP	Trailblazer 275	**(907506)** Kohler with GFCI **(907691) LP** Kohler with Excel power and GFCI *Order hose and LP tank mounting assembly (300917) separately*	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 9,500 watts (LP) **Excel power (optional) 2,400 watts** 20 A at 120 V, 60 Hz pure generator power at idle speed and while welding.	H: 711 mm (28 in.) H: 832 mm (32.75 in.) to top of exhaust W: 508 mm (20 in.) D: 1,029 mm (40.5 in.)	208 kg (459 lb.)
			CV/DC	MIG/FCAW	10–35 V	275 A at 28 V, 100% duty cycle			
Gasoline	Trailblazer 325	**(907510 001)** Kohler **(907510)** Kohler with GFCI **(907510002)** Kohler w/electric fuel pump* **(907512) EFI** Kohler **(907512001) EFI** Kohler with Excel power **(907512002) EFI** Kohler with Excel power and battery charge/jump start **(907512003) EFI** Kohler with Excel power and GFCI	CC/DC	Stick/TIG	10–325 A	325 A at 28 V, 100% duty cycle		H: 711 mm (28 in.) H: 832 mm (32.75 in.) to top of exhaust W: 508 mm (20 in.) D: 1,029 mm (40.5 in.)	209 kg (460 lb.)
			CV/DC	MIG/FCAW	10–35 V	325 A at 28 V, 100% duty cycle			
Diesel	Trailblazer 325 Diesel	**(907566001)** Kubota **(907566)** Kubota with GFCI **(907566002)** Kubota with Excel power **(907566005)** Kubota with GFCI International receptacles	CC/DC	Stick/TIG	10–325 A	325 A at 33 V, 100% duty cycle		H: 711 mm (28 in.) H: 876 mm (34.5 in.) to top of exhaust W: 508 mm (20 in.) D: 1,156 mm (45.5 in.)	281 kg (620 lb.)
			CV/DC	MIG/FCAW	10–35 V	325 A at 33 V, 100% duty cycle			

Big Blue® 400X Pro

See literature 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.

400-amp output now available in a compact package. Provides up to 400 amps at 100 percent duty cycle.

The vault — ultimate control board reliability. A sealed aluminum case protects the circuit board from dust, dirt, moisture and heat.

Low OCV stick (VRD) for improved operator safety without compromising arc starts.

Tailored arc control (DIG) allows arc characteristics to be changed for specific applications and electrodes. Smooth running 7018 or stiffer, more penetrating 6010.

Quiet operation. Only 71.6 decibels (96 Lwa) under full load. Improves jobsite communication and safety.

EPA, CSA, IEC and NEMA compliant.

Standard features include digital weld meters, auto idle, 120-volt block heater and output contactor control.

Heavy industrial ● CC CV DC

Processes

- Stick (SMAW) ▪ MIG (GMAW)
- Flux-cored (FCAW) ▪ DC TIG (GTAW)
- Air carbon arc cutting and gouging (CAC-A) (rated 4.8 mm [3/16-in.] carbons)

Diesel engines

CAT C1.5: 21.7 hp at 1,800 rpm
Three-cylinder, industrial, liquid-cooled
Kubota V1505: 20.2 hp at 1,800 rpm
Four-cylinder, industrial, liquid-cooled

Note: Engines are warranted separately by engine manufacturer.

Most popular accessories

- SuitCase® Feeders
- Dynasty® 210/280 Series
- Protective Cover 195301

WIRELESS REMOTE COMPATIBLE

Wireless Hand Control/ Wireless Antenna Kit 300430/300749

Diesel	Stock Number	Welding Mode	Process	Amp/Volt Ranges	Rated Output at 40°C (104°F)	IP Rating	Single-Phase Generator Power at 40°C (104°F)	Dimensions	Net Weight
	(907630) CAT, **CE** **(907631)** Kubota, **CE**	CC/DC	DC stick/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	IP23	Peak: 12,000 watts Continuous: 10,000 watts	H: 813 mm (32 in.) W: 667 mm (26.25 in.) D: 1,422 mm (56 in.)	**CAT** 458 kg (1,010 lb.) **Kubota** 431 kg (950 lb.)
		CV/DC	MIG/FCAW	14–40 V					

Big Blue® 500X Pro

See literature ED/11.0

Clean, quiet, multiprocess machines designed to give welders the output they need for heavy-duty applications on construction and fabrication sites.

Meter maintenance displays include coolant temperature, oil pressure, battery voltmeter and fuel gauge/hour meter/oil change interval/engine shutdown indicator.

Infinite arc control allows the arc characteristics to be changed for specific applications in stick, MIG and flux-cored welding.

Low OCV stick (VRD) for improved operator safety without compromising arc starts.

Auto Remote Sense™ (ARS) detects if a remote control is plugged into the 14-pin receptacle and eliminates confusion of a remote/panel switch.

Thermal overload protection prevents machine damage if the duty cycle is exceeded or airflow is blocked.

EPA, CSA, IEC and NEMA compliant.

Standard features include digital preset weld meters, automatic idle, and cold weather starting aids.

Deluxe models add a polarity reversing switch and a vandalism lockout (protects control panel and receptacles, see photo at right).

Heavy industrial ● CC CV DC

Processes

- Stick (SMAW) ▪ MIG (GMAW)
- Flux-cored (FCAW) ▪ DC TIG (GTAW)
- Air carbon arc cutting and gouging (CAC-A) (rated 8 mm carbons)

Diesel engines

Perkins 404D.22:
32.6 hp at 1,800 rpm
Four-cylinder, industrial, liquid-cooled

Deutz D2011L03i:
32 hp at 1,800 rpm
3-cylinder, air/oil-cooled

Note: Engines are warranted separately by engine manufacturer.

Most popular accessories

- SuitCase® Feeders
- Dynasty® 210/280 Series
- Protective Cover 194683

WIRELESS REMOTE COMPATIBLE

Wireless Hand Control/ Wireless Antenna Kit 300430/300749

	Stock Number	Welding Mode	Process	Amp/Volt Ranges	Rated Output at 40°C (104°F)	IP Rating	Generator Power at 40°C (104°F)	Dimensions	Net Weight
Diesel	**(907602)** Perkins, **CE** **(907602001)** Perkins Deluxe, **CE** **(907603)** Deutz **(907603001)** Deutz Deluxe **(907635)** Deutz with US Style Receptacles	CC/DC	DC stick/TIG	20–500 A	400 A at 36 V, 100% duty cycle 450 A at 33 V, 60% duty cycle 500 A at 30 V, 40% duty cycle	IP23	Three-phase Peak: 21,000 watts Continuous: 15,000 watts Single-phase Peak: 15,000 watts Continuous: 12,000 watts	H: 1,067 mm (42 in.) W: 724 mm (28.5 in.) D: 1,654 mm (65.125 in.)	**Perkins:** 694 kg (1,530 lb.) **Deutz:** 703 kg (1,550 lb.)
		CV/DC	MIG/FCAW	14–50 V					

Big Blue® 500X CC and 600X CC

See literature ED/10.11

Designed for fleet owners that demand the ultimate in reliability and performance. Built with reliable, heavy-duty industrial components for operation in remote locations, without downtime.

Big Blue 600 X CC shown.

Meter maintenance displays:

- 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

Enclosed robust case design protects internal components from impact and allows air flow to cool and prolong the life of the engine. Also reduces sound levels.

Hot Start™ provides positive stick electrode starts making it easy to start all types of electrodes and it also works great for bead tie-ins.

Arc-Drive™ makes welding easy. Automatically enhances stick welding, especially on pipe, by focusing the arc and preventing the electrode from going out.

5,500-watt peak AC power independent of weld settings means no interaction between tools and welding arc.

Quick and easy maintenance with single-side access to oil level check, oil fill, oil filter, fuel filter and air cleaner.

Heavy industrial ● CC DC

Diesel engines

500 X – Deutz D2011L03i
3-cylinder, industrial, air/oil-cooled

500 X – Perkins 404D-22
4-cylinder, industrial, liquid-cooled

600 X – Deutz F3L912
3-cylinder, industrial, air-cooled

600 X – Deutz D2011L04i
4-cylinder, industrial, air/oil-cooled

Note: Engines are warranted separately by engine manufacturer.

Most popular accessories

- Engine Filter Kits
  Deutz 2011 246988
  Deutz 912 246989
  Perkins 404 246985
- Cold Weather Starting Aids available for all units

WIRELESS REMOTE COMPATIBLE

Wireless Hand Control/ Wireless Antenna Kit 300430/300749

Model	Stock Number	Description*	Process	Amp/Volt Ranges	Rated Output at 40°C (104°F)	Generator Output Rated at 40°C (104°F)	Shipping Weight
Big Blue 500 X CC	**(907185)** **(907185001)** w/auto idle	Deutz D2011L03i	DC, Stick/TIG	55-500 A	400 A at 36 V (14.4 kW), 100% duty cycle 450 A at 38 V (17.1 kW), 60% duty cycle 500 A at 30 V (15 kW), 40% duty cycle	**Peak:** 5500 watts **Continuous:** 4000 watts, 34/17 A, 120/240 VAC, 50/60 Hz while welding	**907185:** 728 kg (1604 lb.) **907187:** 732 kg (1614 lb.)
	(907187), CE **(907187021), CE**	Perkins 404.22, **CE**					
Big Blue 600 X CC	**(907193)** **(907193001)** w/auto idle	Deutz D2011L04i		65-600 A	500 A at 40 V (20 kW), 100% duty cycle 550 A at 34 V (18.7 kW), 60% duty cycle 600 A at 30 V (18 kW), 40% duty cycle		**Deutz:** 769 kg (1695 lb.) **Perkins:** 762 kg (1680 lb.) **Deutz F4L:** 826 kg (1820 lb.)
	(907189)	Deutz F3L912					

Big Blue® 450X Duo CST™

See literature ED/5.5

Durable dual-operator welder/generator, delivers proven CST 280 Stick/TIG performance maximizing productivity and efficiency. Two separate outputs powered by one low-speed diesel engine delivers 280 amps of output per operator. Fuel efficient and quiet operation makes it ideal for any jobsite.

Two superior arcs in one compact package.

Save fuel, reduce maintenance costs and increase productivity.

Simple-to-operate process **selector knob automatically sets proper DIG setting** on E6010 and E7018 electrodes providing superior Stick performance.

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

Remote amperage control permits the use of standard and wireless amperage control devices.

Quiet operation. At just 72.2 dB at 7 m (23 ft.) it's quieter than most single-operator models, improving jobsite communication and safety.

Low-speed Mitsubishi diesel engine.

Heavy industrial ● CC DC

Processes
- Stick (SMAW) ▪ TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (rated 4.8 mm [3/16 in.] carbons, capable 6.4 mm [1/4 in.] carbons)

Diesel engine
Mitsubishi S4L2:
24.7 HP at 1800 RPM
Four-cylinder, industrial, liquid-cooled
Note: Engine is warranted separately by engine manufacturer.

Most popular accessories
- Wireless Remote Hand Control/Wireless Antenna Kit 300430/300749
- Adapter Cord, Full KVA 300517
- Single-Phase Full KVA Plug Kit 119172
- Protective Cover 195301
- Engine Filter Kit 252782

Diesel

Stock Number	Mode/ Process	Output Mode	Amperage Range	Rated Output at 50°C (122°F)	Single-Phase Generator Power at 50°C (122°F)	Dimensions	Net Weight
(907473) Mitsubishi	CC/DC (Stick/TIG)	Separate (dual outputs)	5-225 A (each side) 5-280 A (one side only)	175 A at 27 V, 100% duty cycle	Continuous: 10,000 watts	H: 813 mm (32 in.) W: 667 mm (26.25 in.) D: 1,422 mm (56 in.)	483 kg (1,064 lb.)
		Paralleled (combined)	10-450 A	350 A at 27 V, 100% duty cycle			

Big Blue® 700X Duo Pro

See literature ED/5.6

A 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.

Two independent pipe quality arcs in one compact package.

Multiprocess CC/CV capability provides independent operator controls and the best Stick, MIG, Flux-cored and TIG performance available with no interaction.

Easy arc starts and better arc control for best in class performance.

Independent remote control connections allow the use of standard and wireless volt/amperage control devices for each operator.

Quiet operation. At just 68 dB at idle or 76 dB at 7 m (23 ft.) at full load, it's quieter than many single-operator models, improving jobsite communication and safety.

Smaller, lighter, quieter, and smoother running than competitive models with comparable output.

Standard features include oil pan heater, intake manifold heater, output paralleling switch and automatic idle.

Smart feeder compatible (SF model only). Advanced RMD® and pulsed MIG processes are now available in an engine-driven welder/generator. Discover increased productivity, quality, and improved efficiency in field welding.

Heavy industrial ● CC CV DC

Processes
- Stick (SMAW) ▪ MIG (GMAW)
- Flux-cored (FCAW) ▪ TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (rated 9.5 mm [3/8 in.] carbons)
- RMD (SF model only)

Diesel engine
Deutz D2011L04i:
48.6 HP at 1800 RPM
Four-cylinder, industrial, air/oil-cooled
Note: Engine is warranted separately by engine manufacturer.

Most popular accessories
- SuitCase® X-TREME™ 8VS/12VS
- Wireless Remote Hand Control/Wireless Antenna Kit 300430/300749
- Spectrum® 875
- Adapter Cord, Full KVA 300517
- Full KVA Plug Kit: 1-Phase 119172
  3-Phase 254140
- Protective Cover 194683
- HWY-225 Trailer 301338
- Engine Filter Kit 246988

Diesel

Stock Number	Welding Mode/Process	Output Mode	Amp Range	Rated Output at 40°C (104°F)	Generator Output Rated at 40°C (104°F)	Dimensions	Net Weight
(907520) Deutz **(907520001)** Deutz with 3-Phase Power and Parallel Switch **(907520002)** Deutz with SF	CC/DC (Stick/TIG)	Separate (dual outputs)	20-400 A (each side)	300 A at 28 VDC, 100% duty cycle 400 A at 36 VDC, 40% duty cycle	Single-Phase: 4,000 watts continuous **Optional Generator Power** Three-Phase: 20,000 watts continuous or Single-Phase: 12,000 watts continuous 380/400V Three-Phase Auxiliary Power	H: 1,092 mm (43 in.) W: 724 mm (28.5 in.) D: 1,654 mm (65.125 in.)	784 kg (1,729 lb.)
		Paralleled (combined)	40-800 A	500 A at 34 VDC, 100% duty cycle 700 A at 24 VDC, 60% duty cycle			
	CV/DC (MIG/FCAW)	Separate (dual outputs)	14-50 V (each side)	300 A at 28 VDC, 100% duty cycle 400 A at 34 VDC, 40% duty cycle			
		Paralleled (combined)	14-50 V	500 A at 34 VDC, 100% duty cycle 700 A at 24 VDC, 60% duty cycle			

Big Blue® 800X Duo Air Pak™

See literature ED/13.0

Our most powerful engine drives offer dual-operator productivity, independent compressor controls and multiprocess flexibility.

WIRELESS REMOTE COMPATIBLE

Multi-arc welding. One dependable engine – two independent arcs with up to 400 amps each. Or plug in additional inverters for a true multioperator work platform! Example: Two additional XMT machines equals four operators, up to 200 amps each. Premium quality arcs allow operators to work independently with no arc interaction. Multioperator welding has never been easier or more versatile.

Ingersoll Rand ultra-reliable industrial rotary screw compressor. 30,000-hour life expectancy. Independent on/off control for applications not requiring compressed air – allows greater fuel savings and longer compressor service intervals.

The Vault – ultimate control board reliability. Housed in a sealed aluminum case, sealed connections are made through watertight plugs that protect the circuit board from dust, dirt, moisture and heat.

Low OCV stick (VRD) reduces the open-circuit voltage to 15 volts when the welding power source is not in use, increasing operator safety without compromising arc starts.

Auto Remote Sense™ (ARS) detects if a remote control is plugged into the 14-pin receptacle and eliminates confusion of a remote/panel switch.

Electronic engine display simultaneously displays fuel level, engine hours, coolant temperature, oil pressure, battery volts and engine rpm. Also tracks oil change intervals and displays engine diagnostics for easier servicing. Air Pak model adds air pressure and compressor hours displays.

Increased efficiency. More arcs and better fuel economy equal increased profits for your business. Estimated savings are 34 percent with a dual-operator unit versus two single-operator units.

Infinite arc control allows the arc characteristics to be changed for specific applications in stick, MIG and flux-cored welding.

Thermal overload protection prevents machine damage if the duty cycle is exceeded or airflow is blocked.

Standard features include digital weld meters, automatic idle, 120-volt block heater, lockout/tagout battery disconnect switch and vandalism lockout (protects control panel and receptacles, see photo at right).

Heavy industrial

CC CV DC

Processes

- Stick (SMAW) ▪ MIG (GMAW)
- Flux-cored (FCAW) ▪ DC TIG (GTAW)
- Air carbon arc cutting and gouging (CAC-A) (rated 12.7 mm [1/2-in.] carbons)
- Stud (12.7 mm [1/2 in.])

Diesel engine

Deutz TD2011L04i
63.4 hp at 1,800 rpm
Turbo-charged, four-cylinder, industrial, air/oil-cooled

Note: Engines are warranted separately by engine manufacturer.

Most popular accessories

- SuitCase® X-TREME™ 8VS/12VS
- Full KVA Adapter Cord 300517
- Full KVA Plug Kit
  119172 Single-phase
  254140 Three-phase
- Protective Cover 301113
- Wireless Remote Hand Control/ Wireless Antenna Kit 300430/300749

- **Desiccant Air Dry System**
  195117 Side mount
  195117001 Rear mount
  Eliminates moisture in the air stream and prevents air line freeze-ups in cold climates.
- Spark Arrestor Kit 195012

Diesel

Stock Number	Welding Mode/Process	Output Mode	Amp/Volt Ranges	Rated Output at 100% Duty Cycle at 40°C (104°F)	Generator Power at 40°C (104°F)	Dimensions	Net Weight
(907634) Deutz with US Style Receptacles **(907536)** Deutz with International Style Receptacles	CC/DC (Stick/TIG)	Separate (dual outputs)	20–400 A	400 A at 36 V (each side)	Three-phase Peak: 27,000 watts Continuous: 20,000 watts Single-phase Peak: 15,000 watts Continuous: 12,000 watts 380/400V Three-phase auxiliary power	H: 1,194 mm (47 in.) H: 1,397 mm (55 in.) to top of exhaust W: 724 mm (28.5 in.) D: 1,765 mm (69.5 in.)	968 kg (2,095 lb.)
		Paralleled (combined)	40–800 A	700 A at 44 V, 800 A at 38 V			
	CV/DC (MIG/FCAW)	Separate (dual outputs)	14–50 V	400 A at 34 V (each side)			
		Paralleled (combined)	14–50 V	750 A at 40 V, 800 A at 38 V			

Ingersoll Rand CE55 G1 Air Compressor	Features	Free Air Delivery	Working Pressure Constant	Duty Cycle	Oil Capacity	Automatic Compressor Shutdowns
	Rotary screw with electric clutch for on/off, oil change intervals of 500 hours, life expectancy of 30,000 hours	Idle: 1.13 m3/min (40 cfm) Weld: 1.70 m3/min (60 cfm)	100 psig (7 bar)	100%	3.79 L (4 qt.)	Oil temperature

Miller offers an array of versatile submerged arc components, including power sources, controls, wire drives, torches, tractors and a variety of other accessories.

SubArc Digital Series

See literature AD/7.3

The SubArc Digital Series of power sources, interface controls and accessories include digital control and communication electronics designed to improve weld performance and simplify the integration of the equipment in more advanced applications.

SubArc DC 800 Digital

SubArc DC 1250 Digital

SubArc AC/DC 1250 Digital

Two DC power source models and one AC/DC power source model. Power sources have sufficient power capacity to cover applications from traditional DC single-arc to multi-wire tandem welding. In the case of electroslag welding or other high-current demand, two or more power sources can easily be paralleled (both DC and AC/DC machines).

Low-voltage accessory operation and improved environmental protection. The Digital Series accessories are powered with 24 VAC control voltage from the power source. All power sources, interface controls and wire drives are IP23 rated providing a high level of protection for harsh environments.

Easy to integrate. Our SubArc power sources are easy to integrate by using a standard Modbus® connection.

All power sources also feature thermal overload protection, line voltage compensation and Fan-On-Demand.™

Heavy industrial ●

CC CV AC/DC DC 3 Phase *SubArc DC Series is DC only.*

Processes

- Submerged arc (SAW)
- Electroslag (ESW)
- Air carbon arc cutting and gouging (CAC-A)

Most popular accessories

- 14-pin Insight Core™ Module 301072
  Requires Insight Core to SubArc Digital Series Adapter Kit (301295).
- ArcAgent™ Auto 301346
- 4.6 m (15 ft.) SubArc Parallel Cable 260775015
- 4.6 m (15 ft.) SubArc Tandem Cable 260878015

*While idling.

Model/Stock Number	Amperage Range (CC Mode)	Voltage Range (Sub Arc Mode)	Rated Output	IP Rating	Amps Input at Rated Output, 50 Hz 380 V	400 V	440 V	KVA	KW	Max Open-Circuit Voltage	Dimensions *(Includes lift eye, but not strain relief)*	Net Weight
SubArc DC 650 Digital **(907622)** 230/460/575 V **SubArc DC 800 Digital, 50 Hz** **(907623)** 380/400/440 V, 50 Hz, **CE**	50–815 A	20–44 V	650 A at 44 V, 100% duty cycle	IP23	95 1.9*	90 1.8*	83 1.6*	50 1.52*	34.8 0.76*	75 Vpk	H: 762 mm (30 in.) W: 584 mm (23 in.) D: 965 mm (38 in.)	269 kg (593 lb.)
SubArc DC 1000 Digital **(907624)** 230/460/575 V **SubArc DC 1250 Digital, 50 Hz** **(907625)** 380/400/440 V, 50 Hz, **CE**	100–1,250 A	20–44 V	1,000 A at 44 V, 100% duty cycle	IP23	135 5.2*	128 5.0*	117 4.5*	73 3.2*	53 0.5*	68 Vpk		309 kg (682 lb.)
SubArc AC/DC 1000 Digital **(907620)** 460 V **SubArc AC/DC 1250 Digital, 50 Hz** **(907621)** 380/400 V, 50 Hz, **CE**	300–1,250 A	20–44 V	1,000 A at 44 V, 100% duty cycle	IP23	179 3.0*	176 3.0*	– –	122 2.37*	67 0.95*	93 Vpk	H: 1,092 mm (43 in.) W: 711 mm (28 in.) D: 1,219 mm (48 in.)	538 kg (1,187 lb.)

SubArc Interface Controls

See literature AD/7.3

SubArc Interface Digital

SubArc Interface Analog

Easier setup and operation. The SubArc Digital Series Interface controls recognize the power source and wire drive connected, and automatically configure the system for proper operation.

Internal terminal strip is able to integrate with positioners, sidebeams, turning rolls and other peripheral equipment.

Most popular accessories

- SubArc Control Cables
  260622030 9 m (30 ft.)
  260622050 15 m (50 ft.)
  260622060 18.3 m (60 ft.)
  260622080 24.4 m (80 ft.)
  260622100 30.5 m (100 ft.)
  260622120 36.6 m (120 ft.)
  260622200 61.0 m (200 ft.)

Model/Stock Number	Input Power from Welding Power Source	Welding Power Source Type	Dimensions	Net Weight
SubArc Interface Digital (300936), CE	24 VAC, 1-phase, 25 A, 50/60 Hz	Constant voltage (CV), AC or DC, with remote contactor and output control capabilities	H: 292 mm (11.5 in.) W: 305 mm (12 in.) D: 178 mm (7 in.)	7.2 kg (15.8 lb.)
SubArc Interface Analog (300937), CE	24 VAC, 1-phase, 25 A, 50/60 Hz	Constant current (CC), constant voltage (CV), DC, with remote contactor and output control capabilities		

SubArc Remote Operator Interface

See literature AD/7.3

NEW!

Motor Control Digital

Remote Pendant Digital

Point-of-use installation. Remote Pendant can be handheld or secured at point of use to improve operation.

Remote installation. Motor Control can be remotely installed, resulting in reduced cables at the operator workstation.

Side handles on Remote Pendant provides option for handheld operation with full functionality of a traditional SubArc Interface.

Most popular accessories

- Continuum Control/Motor Cables
  263368015 4.6 m (15 ft.)
  263368025 7.6 m (25 ft.)
  263368050 15 m (50 ft.)
- SubArc Control Cables
  260622030 9 m (30 ft.)
  260622050 15 m (50 ft.)
  260622080 24.4 m (80 ft.)

Model/Stock Number	Input Power from Welding Power Source	Welding Power Source Type	Dimensions	Net Weight
SubArc Motor Control Digital (301425), CE (requires SubArc Remote Pendant Digital below and Continuum control/motor cable)	24 VAC, 1-phase, 25 A, 50/60 Hz	Constant voltage (CV), AC or DC, with remote contactor and output control capabilities	H: 292 mm (11.5 in.) W: 305 mm (12 in.) D: 178 mm (7 in.)	5.9 kg (13 lb.)
SubArc Remote Pendant Digital (301424), CE (requires SubArc Motor Control Digital above and Continuum control/motor cable)			H: 279 mm (11 in.) W: 270 mm (10.63 in.) D: 80 mm (3.125 in.)	1.4 kg (3 lb.)

SubArc Wire Drive Assemblies

See literature AD/7.3

SubArc Strip Drive 100 Digital Low Voltage

SubArc Wire Drive 400 Digital Low Voltage

SubArc Strip Drive 100 Digital Low Voltage is a heavy-duty, right-angle drive assembly designed for automated strip clad applications.

SubArc Wire Drive 400 and 780 Digital Low Voltage are right-angle wire drive assemblies. The 400 model is standard speed and the 780 is high speed.

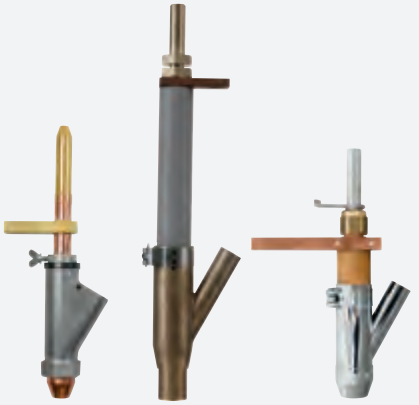
Most popular accessories

- Motor Extension Cables
  254232005 1.5 m (5 ft.)
  254232010 3 m (10 ft.)
  254232025 7.6 m (25 ft.)
  254232065 19.8 m (65 ft.)
- Single-Wire Straightener 199733
- Twin-Wire Straighteners
  (for twin-wire torches only)
  301160 Single adjustment
  301162 Double/separate adjustment
- Drive Rolls
- Manual Slide

Model	Stock Number	Input Power	Input Power Cord	Rating	Wire Feed Speed	Wire Diameter Capacity	Net Weight
SubArc Strip Drive 100 Digital Low Voltage	**(300940)** With mounting bracket, **CE**	38 VDC	1.2 m (4 ft.)	1/5 hp, 21 rpm	0.3–1.6 mpm (10–69 ipm)	N/A (strip cladding applications)	13 kg (29 lb.)
SubArc Wire Drive 400 Digital Low Voltage	**(300938)** Standard speed, **CE** **(300938001)** Standard speed, for use with tractor, **CE**	38 VDC	1.2 m (4 ft.)	1/5 hp, 85 rpm	0.8–10.2 mpm (30–400 ipm)	2.4–4.8 mm (3/32–3/16 in.)	11.8 kg (26 lb.)
SubArc Wire Drive 780 Digital Low Voltage	**(300941)** High speed, **CE**	38 VDC	1.2 m (4 ft.)	1/4 hp, 143 rpm	1.3–19.8 mpm (50–780 ipm)	1.6–3.2 mm (1/16–1/8 in.)	11.8 kg (26 lb.)

SubArc Torches

See literature AD/7.3



OBT 600 *OBT 1200* *1200-Amp Twin-Wire*

OBT 600 is a 600-amp, 100 percent duty cycle torch with concentric flux flow nozzle. Can be used with 1.6–4.0 mm (1/16–5/32 in.) wire.

OBT 1200 is a 1,200-amp, 100 percent duty cycle torch with concentric flux flow nozzle. Can be used with 1.6–4.8 mm (1/16–3/16 in.) wire. OBT 1200 features a replaceable breakaway adapter end to prevent costly damage should torch run into an obstruction.

1200-Amp Single-Wire Torch (short) and **1200-Amp Twin-Wire Torch (short or long).** The single-wire torch uses 1.6–4.0 mm (1/16–5/32 in.) consumables and the twin-wire torches use 1.2–2.4 mm (3/64–3/32 in.) consumables.

Most popular accessories

- OBT 600 Torch Body Extensions
  043967 25.4 mm (1 in.)
  043969 50.8 mm (2 in.)
  043973 101.6 mm (4 in.)
  043975 152.4 mm (6 in.)
- OBT 1200 Torch Body Extension
  043981
- Contact Tips

Model/Stock Number	Rated Output	Wire Diameter Capacity	Single/Twin	Torch Body Length
OBT 600 (043923)	600 A at 100% duty cycle	1.6–4.0 mm (1/16–5/32 in.)	Single	260.4 mm (10.25 in.)
OBT 1200 (043900)	1,200 A at 100% duty cycle	1.6–4.8 mm (1/16–3/16 in.)	Single	438.2 mm (17.25 in.)
1200-Amp Single-Wire Torch (301141) Short	1,200 A at 100% duty cycle	1.6–4.0 mm (1/16–5/32 in.)	Single	291 mm (11.46 in.)
1200-Amp Twin-Wire Torch (301143) Short	1,200 A at 100% duty cycle	1.2–2.4 mm (3/64–3/32 in.)	Twin	291 mm (11.46 in.)
1200-Amp Twin-Wire Torch (301144) Long	1,200 A at 100% duty cycle	1.2–2.4 mm (3/64–3/32 in.)	Twin	431 mm (16.97 in.)

External Cladding Head

See literature AY/52.0

Cost-efficient means of depositing stainless steel and Ni-alloy materials to create corrosion- or wear-resistant overlays on large non- or low-alloyed steel components.

Designed for both submerged arc and electroslag strip cladding applications.

Flexible external cladding head accommodates strip widths from 30 to 90 mm.

Individually adjustable spring-loaded contact jaws provide optimal current transfer, reducing risk of cladding failures.

Most popular accessories

- SubArc Strip Drive 100 Digital Low Voltage 300940
- Coolant Flow Switch Kit 195461
- Coolmate™ 3
  043007 115 V
  043008 230 V
- Water Hose Extensions
  40V76R6 1.8 m (6 ft.)
  40V76R 3.8 m (12.5 ft.)
  40V76LR 7.6 m (25 ft.)
- Water Coupler 11N18
- Quick-Release Water Kit QRW

Stock Number	Rated Output	Strip Width Range	Cooling Method	Dimensions	Net Weight
External Cladding Head 30–90 mm (301167)	3,000 A at 100% duty cycle	30–90 mm	Coolant	H: 379 mm (14.92 in.) W: 223 mm (8.76 in.) D: 226 mm (8.9 in.)	17.5 kg (38.5 lb.)

SubArc Flux Hopper

See literature AD/7.3

Improved flux delivery system. Our SubArc Flux Hopper Digital Low Voltage utilizes a flux valve mechanism that assures continuous delivery of flux to the arc.

Sight glass allows the weld operator to visually monitor the remaining flux in the hopper.

Versatile opening is sized to allow hook-up of any flux-hopper-mounted recovery system.

Includes slag screen to capture fused slag particles from entering the flux hopper.

Most popular accessories

- Flux Hopper Extension Cables
  260623010 3 m (10 ft.)
  260623025 7.6 m (25 ft.)
  260623065 19.8 m (65 ft.)

Stock Number	Input Power	Input Power Cord	Flux Capacity	Net Weight
SubArc Flux Hopper Digital Low Voltage (300942)	12 VDC (PWM signal from SubArc Interface)	3.3 m (11 ft.)	11 kg (25 lb.)	5 kg (11 lb.)

SubArc Tractor

See literature AD/7.5

Digital weld controller package shown.

Designed and built to provide maximum reliability in the toughest conditions. This simple-to-use self-propelled submerged arc welding tractor can easily connect to SubArc DC or AC/DC Digital power supplies.

Vertical, horizontal and rotary torch adjustment allows for greater access to hard-to-reach spots.

Heavy-duty, four-wheel, chain-driven trackless operation with rubber wheels provides superior and reliable mobility.

Manual clutch enables freewheeling movement of the tractor.

Travel speed is precisely controlled by a closed-loop microprocessor control with tach feedback.

Required system components (sold separately)

- SubArc Tractor with remote start/stop control and guide rolls 300945
- SubArc Interface control
  300936 Digital
  300937 Analog
- SubArc Wire Drive 400 for Tractor 300938001
- 11.3 kg (25 lb.) capacity flux hopper with valve 300942
- 27 kg (60 lb.) wire reel 108008
- OBT 600 torch
- Wire straightener

Most popular accessories

- SubArc Control Cables
- Contact Tips
- Drive Rolls

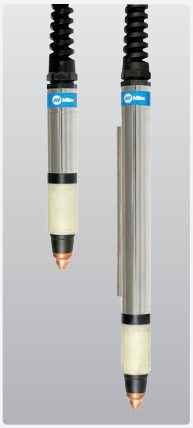
Stock Number	Input Power from Welding Power Source	Wire Feed Speed	Wire Diameter Capacity	Gun Positioning Slides	Drive Motor	Travel Speed	System Dimensions	System Net Weight
(300945) Tractor only	24 VAC, 1-phase, 50/60 Hz, 200 watts	0.8–10.2 mpm (30–400 ipm)	1.6–4.0 mm (1/16–5/32 in.)	101.6 mm (4 in.) vertical and horizontal	24 VDC permanent magnet gear motor	0.1–1.68 mpm (4–66 ipm)	H: 1,102 mm (43.375 in.) W: Varies depending on system configuration D: 903 mm (35.5 in.)	73 kg (162 lb.) without flux or wire

Spectrum® Automation-Ready Machines

See literature PC/9.6 (625 X-TREME) or PC/9.8 (875 models)

Spectrum 625 X-TREME™ machine torch package (907579002) shown.

Spectrum 875 Auto-Line™ machine torch package (907584002) shown. Spectrum 875 machine torch package also available (without remote pendant control).



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 (at right).

Long and short body machine torches. XT40M (for 625 X-TREME) and XT60M (for 875 models) machine torches can be ordered separately and are available in long or short body configurations. XT60M is also available in 7.6 or 15.2 m (25 or 50 ft.) cable lengths.

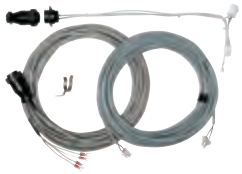
Note: Machine torch packages above are shown with long body torches.

Automation kits

Converts hand-held torch packages to add machine torch capabilities. Machine torches are NOT included in automation kits and must be ordered separately.

- **Spectrum 625 X-TREME Automation Kit** 301158

Note: Requires a Spectrum 625 X-TREME with Ultra-Quick Connect™ feature for unit to be converted for use with long or short body machine torches.



- **Spectrum 875 Automation Kit** 301156

- **Spectrum 875 Auto-Line Automation Kit** 301157
  Includes remote pendant control for manual on/off.

Spectrum® Series

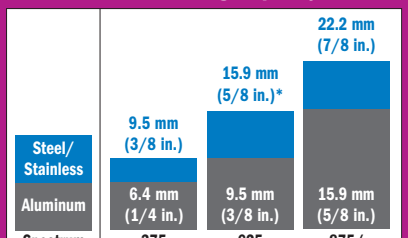
Plasma Cutters

Our Spectrum line of plasma cutters provides big cutting power in portable packages and with features like flexible cables and Auto-Refire technology they are better than ever. Step up to Spectrum 625 X-TREME™ or 875/875 Auto-Line™ models to add Ultra-Quick Connect hand-held torches and machine torch capabilities.

Spectrum Features

Feature	375 X-TREME	625 X-TREME	875	875 Auto-Line
Auto-Line (120–240 V)	●	●		
Auto-Line (208–575 V)				●
MVP™ plugs/adapters	●	●		
Ultra-Quick Connect torch with flexible cable		●	●	●
Quick connect flexible work cable with 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



*Stainless: 12.7 mm (1/2 in.) for Spectrum 625 X-TREME.

Cut capacity ratings are based on traveling speed of approximately 381 mm (15 in.) 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.

Spectrum 375 X-TREME *Spectrum 625 X-TREME* *Spectrum 875* *Spectrum 875 Auto-Line*

Power factor correction (PFC). Uses less energy by utilizing input power more efficiently and increases productivity by reducing nuisance circuit breaker trips.

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.

Quick connect flexible work cable with heavy-duty clamp.

Spectrum 625 X-TREME and 875/875 Auto-Line hand-held and machine torches

Ultra-Quick Connect™ hand-held torches with flexible cables. XT40 (625 X-TREME) and XT60 (875 models) hand-held torches feature quick torch connection, ergonomic handles to help prevent operator fatigue and flexible cables that make maneuvering easier.

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.

Long and short body machine torches. XT40M (625 X-TREME) and XT60M (875 models) machine torches are available in long or short body configurations. XT60M is also available in 7.6 or 15.2 m (25 or 50 ft.) cable lengths.

Models/ packages

Spectrum 375 X-TREME hand-held torch package (907529) shown.

Spectrum 875 Auto-Line machine torch package (907584002) shown.

Model	Hand-Held Torch Packages			Machine Torch Packages			
				7.6 m (25 ft.)		15.2 m (50 ft.)	
	3.7 m (12 ft.)	6.1 m (20 ft.)	15.2 m (50 ft.)	Long Body	Short Body	Long Body	Short Body
Spectrum 375 X-TREME	(907529)	–	–	–	–	–	–
Spectrum 625 X-TREME	(907579)	(907579001)	–	(907579002)	(907579003)	–	–
Spectrum 875	–	(907583)	(907583001)	(907583002)	(907583003)	–	–
Spectrum 875 Auto-Line	–	(907584)	(907584001)	(907584002)	(907584003)	(907584004)	(907584005)

Spectrum® 375 X-TREME™/625 X-TREME™

See literature PC/9.2 (375 X-TREME) and PC/9.6 (625 X-TREME)

AUTO-LINE Power Management Technology Allows for any input voltage hook-up (120–240 V, single-phase, 50/60 Hz for 375 X-TREME and 60 Hz for 625 X-TREME) 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 X-TREME or MVP™ adapter on 625 X-TREME allows connection to 120- or 240-volt receptacles without tools.

Automatic air regulation compensates for input pressure variation to provide constant recommended torch pressure for optimum cutting performance.

Automatic gouging consumable detection (625 X-TREME only). Detects gouging consumable and adjusts gas pressure to optimize performance, eliminating the need for a manual regulator.

Spectrum 625 X-TREME shown.

375 X-TREME model includes XT30 hand-held torch with ergonomic design and flexible cable.

625 X-TREME model includes Ultra-Quick Connect™ XT40 hand-held torch with ergonomic design and flexible cable; or **XT40M long body or short body machine torch.**

Spectrum® 875/875 Auto-Line™

See literature PC/9.8

AUTO-LINE Power Management Technology **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.

Spectrum 875 shown.

Includes Ultra-Quick Connect™ XT60 hand-held torch with ergonomic design and flexible cable; or **XT60M long body or short body machine torch.**

Model	Input Power	Rated Output at 40°C (104°F)	Amps Input at Rated Output	KVA	KW	Compressor Requirement	Dimensions	Net Weight with Torch
Spectrum 375 X-TREME 120–240 V, 50/60 Hz	Single-phase	120 V (15 A): 20 A at 88 VDC, 35% duty cycle	18.1	2.2	2.1	142 L/min. (5.0 cfm) at 621 kPa (90 psi)	H: 229 mm (9 in.) W: 140 mm (5.5 in.) D: 337 mm (13.25 in.)	8.6 kg (19 lb.)
		120 V (20 A): 27 A at 91 VDC, 20% duty cycle	25.6	3.1	3.0			
		240 V: 30 A at 92 VDC, 35% duty cycle	13.6	3.3	3.1			
Spectrum 625 X-TREME 120–240 V, 60 Hz	Single-phase	120 V (15 A): 20 A at 88 VDC, 35% duty cycle	18.1	2.2	2.1	170 L/min. (6.0 cfm) at 621 kPa (90 psi)	H: 229 mm (9 in.) W: 140 mm (5.5 in.) D: 337 mm (13.25 in.)	**3.7 m (12 ft.)** 9.5 kg (21 lb.) **6.1 m (20 ft.)** 10.5 kg (23 lb.) **7.6 m (25 ft.)** 10.7 kg (24 lb.)
		120 V (20 A): 27 A at 91 VDC, 20% duty cycle	25.6	3.0	2.9			
		240 V: 40 A at 140 VDC, 50% duty cycle	13.6	6.4	6.3			
Spectrum 875 208/230 V, 50/60 Hz	Single-phase	208 V: 60 A at 140 VDC, 40% duty cycle 230 V: 60 A at 140 VDC, 50% duty cycle	208 V: 47 230 V: 42	9.9	9.8	191 L/min. (6.75 cfm) at 621 kPa (90 psi)	H: 343 mm (13.5 in.) W: 222 mm (8.75 in.) D: 470 mm (18.5 in.)	**6.1 m (20 ft.)** 22.2 kg (49 lb.) **15.2 m (50 ft.)** 26.3 kg (58 lb.)
Spectrum 875 Auto-Line 208–575 V, 50/60 Hz	Three-phase	208 V: 60 A at 140 VDC, 40% duty cycle 230–380 V: 60 A at 140 VDC, 50% duty cycle 380–575 V: 60 A at 140 VDC, 60% duty cycle 380–575 V: 50 A at 140 VDC, 100% duty cycle	208 V: 27.5 230 V: 25 380 V: 15 460 V: 12.4 575 V: 9.8	9.9	9.4			**6.1 m (20 ft.)** 24.5 kg (54 lb.) **7.6 m (25 ft.)** 25.4 kg (56 lb.) **15.2 m (50 ft.)** 28.6 kg (63 lb.)
	Single-phase	208 V: 60 A at 140 VDC, 40% duty cycle 230 V: 60 A at 140 VDC, 40% duty cycle 230 V: 50 A at 140 VDC, 100% duty cycle	208 V: 47.4 230 V: 42.2	9.9	9.7			

Light industrial ● *375/625 models*
Industrial ● *875 models*

DC 3 Phase 1 Phase *Only 875 Auto-Line has 3-phase capabilities.*

Processes
- Air plasma cutting
- Air plasma gouging (625/875 models)

375 X-TREME package comes complete with
- XT30 hand-held torch with 3.7 m (12 ft.) cable
- Heavy-duty work clamp with 3.7 m (12 ft.) flexible cable
- 3 m (10 ft.) power cord with MVP 5-15P (120 V, 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 packages come complete with
- XT40 hand-held torch with 3.7 m (12 ft.) or 6.1 m (20 ft.) cable **OR** XT40M long body or short body machine torch with 7.6 m (25 ft.) cable
- Heavy-duty work clamp and flexible cable with quick connect
- 3.7 m (12 ft.) power cord with 240 V, L6-30P twist lock plug
- MVP adapters with 5-15P (120 V, 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 packages come complete with
- XT60 hand-held torch with 6 m (20 ft.) or 15.2 m (50 ft.) cable **OR** XT60M long body or short body machine torch with 7.6 m (25 ft.) or 15.2 m (50 ft.) cable
- Heavy-duty work clamp and flexible cable with quick connect
- 3 m (10 ft.) power cord
- Extra consumables
- Machine torch packages include corresponding automation kit

Most popular accessories
- Automation Kits
- Cables and Cable Covers
- Cutting Guides
- Filters
- Plugs and Cords
- Protective Covers/Cases
- Torches
- Torch Consumables

LiveArc™ System

Welding Performance Management System

The reality-based recruiting, screening, training, and re-qualification solution for industrial, manufacturing and educational markets.

IMPROVED!

Now available with SmartStinger which adds SMAW process training capabilities.

LiveArc GMAW/FCAW/SMAW system (907714001) shown.

Only available at authorized training distributors!

LiveArc GMAW/FCAW system comes complete with

- SmartGun with 4.6 m (15 ft.) cable (277826)
- Calibration tool (278115)
- Two table clamps (257285)
- C-clamp assembly (270725)
- Removable arm extension for right- and left-hand applications (270728)
- Extra Tregaskiss consumables

LiveArc GMAW/FCAW/SMAW system includes above plus

- SmartStinger with 4.6 m (15 ft.) cable (277824)
- Router box (275484)
- Software update for SMAW applications

Better training. While utilizing a live arc, the intuitive system promotes user independence and provides objective, quantitative feedback on key performance parameters. The flexible system is ideal for recruiting, screening, training and performance management.

Faster results. Independent usage accelerates personal development. Accelerated training times put trainees in production lines faster while shorter educational periods allow trainees to focus on additional learning opportunities.

More cost effective. Trainers and educators have more time for one-on-one training while pre-weld simulation saves money on coupons, wire and gas (GMAW/FCAW only). Also reduces the frequency of poor-quality welding and defects, rework and downtime.

Welding positioning arm allows training in out-of-position welding applications.

SmartGun is an industry-exclusive 400-amp MIG gun featuring built-in LEDs that are tracked by the system's cameras. The ergonomic soft-grip handle provides tactile vibration feedback that helps guide real-time performance adjustments, reinforcing optimal position and movement.

OLED display on gun provides initial visual feedback to guide proper gun positioning. Pushbuttons provide a convenient alternative to the touch screen for navigation.

Angles CTWD Aim

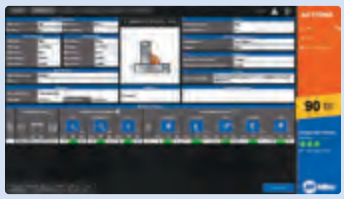
***NEW!* SmartStinger** extends training capabilities to the SMAW process. LiveArc guides pre-weld positioning for travel and work angles via the display panel in the system's computer case.

Work angle and travel angle

Intuitive user interface

Assignment selection screen

- Guides the user through a range of targeted exercises
- Includes a library of assignments designed by Miller and the flexibility to configure customized assignments
- Offers assignment completion status, history summary and easy access to detailed performance history data



Welding procedure specification (WPS) screen

- Guides the user through proper selection and preparation of materials
- Provides correct power source and wire feeder settings
- Provides target values and limits for various parameters
- Assignment parameters can be configured to suit the skill level (and scoring potential) of the user
- Displays instructor-determined target score and assignment completion criteria

Post-weld feedback screen

- Data is provided following tests in both simulation and live-arc modes
- Performance feedback on various parameters is provided
- All test data is stored and allows for monitoring and evaluation

Stock Number	Input Power	Processes	Positions	Multi-Pass	Rated Output	Electrode Diameter	Computer	Monitor	Dimensions	Net Weight
(907714) LiveArc GMAW/FCAW system **(907714001)** LiveArc GMAW/FCAW/SMAW system **Only available at authorized training distributors**	120 V, 60 Hz Compatible with Miller wire feed power sources	GMAW, GMAW-S, GMAW-P, FCAW-G	2F–4F, 1G–4G	Groove and fillet up to 25 mm (1 in.) plate	**SmartGun** 400 A at 60% duty cycle (mixed gases)	**SmartGun** Up to 2.0 mm (5/64 in.)	Intel core i7, 128 GB SSD, fanless cooling, HDMI port supports most secondary monitors (not included)	21.5 HD LCD touch screen display	H: 1,969 mm (77.5 in.) W: 1,168 mm (46 in.) D: 787 mm (31 in.)	**GMAW/FCAW system** 218 kg (480 lb.) **GMAW/FCAW/SMAW system** 239 kg (527 lb.)
		SMAW	2F–4F, 1G–4G	Limited groove applications	**SmartStinger** 250 A at 60% duty cycle	**SmartStinger** Up to 3.2 mm (1/8 in.)				

For more detailed information, visit
MillerWelds.com/accessories

Automated MIG

For adapters and drive motors, visit MillerWelds.com.

Coolant Flow Switch
195461
For Auto-Axcess and External Cladding Head. 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. 15.2 m (50 ft.) cable with connector and separate shell connector for simple modification to desired length in the field. It can be mounted on Auto-Axcess or as desired elsewhere. Quarter-turn quick connection.

MCS-2 Motorized Cross Slide
098380 Control
045623 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 Torch and Weld Cable Connectors in TIG Accessories.

For Invision 352 MPa, AlumaFeed System, XMT 304/350, CST 280, Maxstar, Dynasty and Syncrowave. 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 Connector Kits
042418 Accepts #4 to #1/0 AWG cable
042533 Accepts #1/0 to #2/0 AWG cable
Kits include one male Dinse-style plug which attaches to the work and/or weld cables and plugs into the Dinse-style receptacles on the power source.

Extension Kit for Dinse-Style Cable Connectors
042419 Accepts #4 to #1/0 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.

Extensions for Dinse-Style Cable Connectors
134460 Male Dinse-style plug
136600 Female Dinse-style receptacle
Used to adapt or extend weld and/or work cables. Accepts #1/0 to #2/0 AWG cable.

Tweco®-Style Connector
191981
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 042465
Dinse/Cam-Lok Adapter 042466
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 210061
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.

Feeder Cart 142382
A low-profile, creeper cart which allows the operator to easily move the feeder around the work area.

Carrying Cart 056301
For wire feeders, XMT, CST 280 and smaller Maxstar/Dynasty. Cart is 864 mm high x 762 mm wide x 432 mm deep (34 x 30 x 17 in).

Cylinder Cart 042537
For Invision, XMT and CST 280. Has adjustable handles and is slanted for convenient access to power source front panel controls. Carries two 72.6 kg (160 lb.) gas cylinders with feeder mounted to tray above power source. Accommodates Coolmate 3 or 4 coolant system.

Universal Cart and Cylinder Rack 042934
For Invision 352 MPa, XMT 304/350, CST 280, Diversion, Maxstar 210/280 and Dynasty 210/280. Also accommodates a single gas cylinder up to 1,422 mm (56 in.) high measuring 152 to 229 mm (6 to 9 in.) in diameter. Provides storage for auxiliary items such as electrodes, helmets and gloves.

Running Gear/ Cylinder Rack
301239
For Millermatic 125 Hobby/141/ 190/211, Multimatic 200/215 and Diversion. Heavy-duty construction with 203 mm (8 in.) rubber rear wheels. Convenient front handles, cable holders and plastic consumable box. For gas cylinders no greater than 178 mm (7 in.) in diameter or 29.5 kg (65 lb.) in weight.

Dual EZ-Change™ Low Cylinder Rack with Elevated Gun and Cable Rack 300337
For Millermatic 212 Auto-Set/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 300335
For Millermatic 212 Auto-Set/252 and Syncrowave 210. For use with single-cylinder rack. *(Included with Dual EZ-Change Low Cylinder Rack.)*

Dual Cylinder Rack 195299
For Millermatic 350P/ 350P Aluminum. Replaces single-cylinder rack.

Shopmate 300 Running Gear/Dual Cylinder Rack
300145
For Shopmate 300 DX. The large 254 mm (10 in.) rear wheels and 127 mm (5 in.) 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.

MIGRunner™ Cart 195445
For Invision, AlumaFeed system, and XMT with single feeders. Small footprint and easily maneuverable, with a dual-cylinder rack low enough that you do not have to lift bottles. Durable, heavy-duty ergonomic handles are designed for comfort.

Running Gear Cylinder Rack 300408
For Invision, Axcess 300/450, Dimension 650, and XMT 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.

Continuum Running Gear/ Cylinder Rack 301264
For Continuum 350/500. Small footprint and easily maneuverable, with cylinder rack low enough that you do not have to lift bottles.

Shown with optional cylinder rack (042887).

Standard Running Gear and Cylinder Rack
042886 Running gear
042887 Cylinder rack
For CP-302, Deltaweld, Dimension 302/452 and Gold Star. Running gear has 254 mm (10 in.) rear wheels and wheels and 127 mm (5 in.) 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.

Dimension 650 Running Gear 301307
For Dimension 650. Large 254 mm (10 in.) rear wheels and 127 mm (5 in.) front casters provide excellent mobility. Easy to install. Compatible with single and dual 70 Series feeders. Handles double as a cable holder.

Note: Does not accommodate gas cylinders. Use Running Gear Cylinder Rack (300408) when gas cylinders are required.

Thunderbolt XL Running Gear 043927
For Thunderbolt XL. Mounts easily to unit and provides convenient portability. Includes two wheels, two feet and a handle.

2-Wheel Trolley Cart 300971
For Maxstar 210/280 and Dynasty 210/280 with or without Coolmate 1.3. Easy-to-maneuver 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 301318
For Maxstar 210/280 and Dynasty 210/280 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 300244
For Maxstar 350/700 and Dynasty 350/700 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 195282
For Syncrowave 250 DX/350 LX. Includes two 254 mm (10 in.) wheels, two wheels and 127 mm (5 in.) casters, two-compartment rack for gas cylinders, and handles. Provides excellent mobility and easy to install.

Coolant Systems

See literature AY/7.2

1 Phase

Coolmate 1.3 Coolmate 3 Coolmate 3.5 Coolmate 4

**May vary with torch design and cable length. Miller coolant systems are backed by the best warranty in the industry — one full year.*

Coolmate™ 1.3 300972 120 V
For Maxstar 210/280 and Dynasty 210/280. Light industrial, 4.9 L (1.3 gal.) cooler designed for water-cooled torches on power sources rated up to 280 amps*.

Coolmate™ 3 043007 120 V, **CE** **043008** 240 V, **CE**
Economical, 11.4 L (3 gal.) cooler designed for water-cooled torches rated up to 500 amps*.

Coolmate™ 3.5 300245 120 V, **CE**
For Maxstar 350/700 and Dynasty 350/700. Industrial, 13.2 L (3.5 gal.) cooler designed for water-cooled torches rated up to 600 amps*.

Coolmate™ 4 042288 120 V
Best performer in its class — industrial, 15 L (4 gal.) cooler designed for water-cooled torches rated up to 600 amps*.

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 -38°C (-37° Fahrenheit) or boiling to 108°C (227° Fahrenheit).

Low-Conductivity Coolant (clear, pre-mixed) 043810
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) 043809
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 1.3	115 V, 60 Hz	4.7 A (60 Hz)	3,400 W (11,600 Btu/hr.) 3.6 L/min (.3.8 qt./min.)	1,330 W (4,540 Btu/hr.) 1 L/min. (1.1 qt./min.)	4.9 L (1.3 gal.)	H: 286 mm (11.25 in.) W: 264 mm (10.38 in.) D: 610 mm (24 in.)	20 kg (43 lb.)
Coolmate 3, CE	115 V, 50/60 Hz	5.9 A (50 Hz), 4.7 A (60 Hz)	3,820 W (13,000 Btu/hr.) 4.0 L/min. (4.2 qt./min.)	1,420 W (4,840 Btu/hr.) 1 L/min. (1.1 qt./min.)	11.4 L (3 gal.)	H: 337 mm (13.25 in.) W: 311 mm (12.25 in.) D: 584 mm (23.25 in.)	18 kg (40 lb.)
	230 V, 50/60 Hz	2.5 A (50 Hz), 3.0 A (60 Hz)					
Coolmate 3.5, CE	115 V, 50/60 Hz	5.9 A (50 Hz), 4.7 A (60 Hz)	4,140 W (14,000 Btu/hr.) 4.7 L/min. (5.0 qt./min.)	1,660 W (5,660 Btu/hr.) 1 L/min. (1.1 qt./min.)	13.2 L (3.5 gal.)	H: 298 mm (11.75 in.) W: 400 mm (15.75 in.) D: 660 mm (26 in.)	29 kg (64 lb.)
Coolmate 4	115 V, 50/60 Hz	5.9 A (50 Hz), 4.7 A (60 Hz)	5,500 W (18,000 Btu/hr.) 5.6 L/min. (5.9 qt./min.)	1,780 W (6,070 Btu/hr.) 1 L/min. (1.1 qt./min.)	15 L (4 gal.)	H: 413 mm (16.25 in.) W: 387 mm (15.25 in.) D: 476 mm (18.75 in.)	17 kg (38 lb.)

Engine Drive Accessories

Also see Trailers and HF Arc Starters.

Big Blue Accessories

Cable Holder 043946
For Big Blue 500 Pro/600 Series/ 700 Duo Pro/800 Series.

Vandalism Lockout Kit 399802 Field
For Big Blue 500 Pro/600 Series/ 700 Duo Pro. Lockable hinged steel panels cover and protect name plate gauges and ignition switch (padlock included). Also includes engine compartment door lock and key.

Blue Star Accessories

Lifting Eye 195353
*For **current model** Blue Star 185.*

Running Gear 301246
*For **current model** Blue Star 185.* Compact and balanced, lightweight wheelbarrow-style running gear provides easy onsite mobility.

Bobcat and Trailblazer Accessories (Gas/LP)

Multi-Terrain Running Gear
300913 Inner tubes
300914 Never Flat™ tires
For gas/LP Bobcat and Trailblazer. Includes two heavy-duty 381 mm (15 in.) tires, two 203 mm (8 in.) 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
300909 Inner tubes
300910 Never Flat™ tires
For gas/LP Bobcat and Trailblazer. Includes four heavy-duty 381 mm (15 in.) tires and a rugged handle to provide maximum maneuverability.

Off-Road Running Gear with Protective Cage and Never Flat™ Tires 300912
For gas/LP Bobcat and Trailblazer. Running gear and rugged cage with cable holders protects your investment and is easy to move around the jobsite.

Protective Cage with Cable Holders
300921 *For gas/LP Bobcat and Trailblazer.*
300473 *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 300918
For gas Bobcat and Trailblazer. 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 300917
For LP Bobcat and Trailblazer. Designed for use with Running Gear, Protective Cage, or by itself. Includes bracket and clamp to mount 15 and 19.5 kg (33 and 43 lb.) 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 Kit 300923 Field
For gas Bobcat and Trailblazer. Front mount for Kohler engines makes servicing easy when engine drive is mounted in tight spots.

Bobcat and Trailblazer Accessories (Diesel)

All-Purpose Running Gear with Never Flat™ Tires 300477
For diesel Bobcat and Trailblazer. Includes two heavy-duty 381 mm (15 in.) tires, two 203 mm (8 in.) 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 195331
For diesel Bobcat and Trailblazer. 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 195330
For diesel Bobcat and Trailblazer. 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

Full KVA Adapter Cord 300517
For Bobcat, Trailblazer and Big Blue models. 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 119172
For Bobcat, Trailblazer and Big Blue models. Can be wired for 120- or 240-volt loads.

Three-Phase Full KVA Plug Kit
165963 *For Bobcat 3 Phase.*
254140 *For Big Blue 500 Pro/600 Series/700 Duo Pro/ 800 Series.*

Protective Covers

Protective covers (300919) and (195301) shown.

Protective Covers
Heavy-duty, water- and mildew-resistant covers protect and maintain the finish of the welder.

301245 *For **current model** Blue Star 185.*
300919 *For **current model** gas Bobcat and Trailblazer (except Air Pak) **without** Protective Cage or Running Gear.*
300920 *For **current model** gas Bobcat and Trailblazer (except Air Pak) **with** Protective Cage or Running Gear.*
301099 *For **current model** diesel Bobcat and Trailblazer **without** Protective Cage or Running Gear.*
300379 *For Trailblazer 302 Air Pak.*
195301 *For Big Blue 350 PipePro/400 Pro/450 Duo CST.*
194683 *For Big Blue 500 Pro (CA model)/700 Duo Pro.*
301113 *For Big Blue 600 Series/800 Series.*

Trailers

See literature AY/20.0

HWY-Mid Frame Trailer 301438
For Bobcat, Trailblazer, and Big Blue 350/400/450 Pro models. A 646 kg (1,424 lb.) capacity highway trailer with welded steel tubing frame, heavy-duty axle with roller bearing hubs and leaf-spring suspension. Includes jack stand, fenders, lights, and dual hitch with 50 mm (2 in.) ball hitch and 76 mm (3 in.) lunette eye.

4 West Four-Wheel Steerable Off-Road Trailer 042801
For Big Blue 500 Pro/600 Series/ 700 Duo Pro/800 Series. A heavy-duty 1,166 kg (2,570 lb.) capacity trailer designed for use in mines, quarries and other rough terrain. Has narrow 6.7 m (22 ft.) turning radius. Includes 76 mm (3 in.) lunette eye, universal hitch and safety chains.

HWY-225 Trailer 301338
For Big Blue models. A 1,225 kg (2,700 lb.) capacity highway trailer with welded steel tubing frame, heavy-duty axle with roller bearing hubs and leaf-spring suspension. Includes jack stand, fenders, lights, and dual hitch with 50 mm (2 in.) ball hitch and 76 mm (3 in.) lunette eye.

Trailer accessories

Dual Hitch 301441
For HWY-Mid Frame and HWY-225. Combination 50 mm (2 in.) ball hitch and 76 mm (3 in.) lunette eye in one reversible assembly.

Cable Tree 043826
For HWY-Mid Frame and HWY-225. Provides an area to conveniently wrap weld cables and extension cords.

Fender Kit 301439
For HWY-Mid Frame and HWY-225. Replacement fenders.

*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-Mid Frame	728 kg (1,605 lb.)	646 kg (1,424 lb.)	646 kg (1,424 lb.)	495 mm (19.5 in.)	203 mm (8 in.)	1,168 mm (46 in.)	ST175/80D-13 Load Range C	L: 2,565 mm (101 in.) W: 1,397 mm (55 in.)*	82 kg (181 lb.)
4 West	907 kg/axle (2,000 lb./axle)	1,361 kg (3,000 lb.)	1,157 kg (2,550 lb.)	540 mm (21.25 in.)	203 mm (8 in.)	1,403 mm (55.25 in.)	B78-13	L: 2,311 mm (91 in.)** W: 1,556 mm (61.25 in.)	191 kg (420 lb.)
HWY-225	1,588 kg (3,500 lb.)	1,360 kg (2,999 lb.)	1,225 kg (2,700 lb.)	483 mm (19 in.)	191 mm (7.5 in.)	1,270 mm (50 in.)	ST175/80R-13 Load Range D	L: 2,680 mm (105.5 in.) W: 1,435 mm (56.5 in.)*	127 kg (280 lb.)

Load Banks

LBP-350 043329
Designed to provide an adjustable load for trouble-shooting 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 4 m (13 ft.) 115-volt power cord and has seven 50-amp load switches, providing a maximum capacity of 350 amps.

Welding Power Load Bank 902804
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.

MIG Accessories

Gun and Machine Accessory Kits

MIGmatic™ M-Series Gun Consumable Kits

For M-100 and M-150 guns
234607 0.6 m (.023 in.) wire
234608 0.8 m (.030 in.) wire
234609 0.9 m (.035 in.) wire

For M-25 gun
234610 0.8 m (.030 in.) wire
234611 0.9 m (.035 in.) wire
234612 1.2 m (.045 in.) wire

M-100/M-150 kits include 10 contact tips, 1 tip adapter 1 standard nozzle and a consumable storage box.
M-25 kits add 1 nozzle adapter.

Aluminum Conversion Kit 172136
For M-25 gun. Allows 3 m (10 ft.) guns to feed 1.2 mm (3/64 in.) aluminum wire.

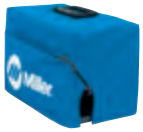
MIG kit (300405) shown.

Industrial MIG 4/0 Kit
300390 *For single feeders.*
300957 *For dual feeders.*
Consists of flowmeter regulator with 3 m (10 ft.) gas hose, 3 m (10 ft.) 4/0 feeder weld cable with lugs, and 4.6 m (15 ft.) work cable with 600-amp C-clamp. Dual kit comes with two flowmeter regulators and gas hoses.

Industrial MIG 4/0 Kit with Dinse Connectors
300405 *For single feeders.*
300956 *For dual feeders.*
Same as above except weld and work cables have Dinse-style connector on one end instead of lug.

Shopmate 300 MIG Kit 300150
Includes flow gauge regulator and 3 m (10 ft.) gas hose for argon or AR/CO_2 mix, 3 m (10 ft.) 1/0 interconnecting cable, 4.6 m (15 ft.) 1/0 work cable with clamp, and consumable storage box.

Protective Covers



301333
For Millermatic 125 Hobby.

301262
For Millermatic 141/190/211 and Multimatic 215.

195142
For Millermatic 212 Auto-Set/ 252/350P/350P Aluminum and Syncrowave 210. Features side pocket.

Plasma Cutter Accessories

Automation Kits

Automation Kit for Spectrum 625 X-TREME 301158
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.

Automation kit (301157) shown.

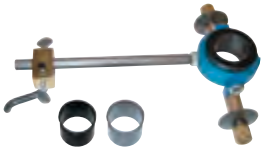
Automation Kits for Spectrum 875 and 875 Auto-Line
301156 *For Spectrum 875.*
301157 *For Spectrum 875 Auto-Line.*
Automation kits upgrade hand-held torch packages to add machine torch capabilities. Automation kit for Spectrum 875 Auto-Line **(301157)** includes a remote pendant control for manual on/off. Machine torches are NOT included in kits and must be ordered separately.

Cables and Cable Covers

Flexible Work Cable
234838 6.1 m (20 ft.)
234930 15.2 m (50 ft.)
Work cable with quick connect and heavy-duty clamp.

Cable Covers
239642 6.1 m (20 ft.)
231867 7.6 m (25 ft.)
231868 15.2 m (50 ft.)

Cutting Guides



Plasma Circle-Cutting Guides 253055
For XT30C/XT30/XT40/XT60 torches. Cut straight lines or circles up to 305 mm (12 in.) in diameter.

Suction/Magnetic Pivot Base 195979
Add this to your cutting guide for convenient attachment to all flat surfaces. The extended arm accommodates holes up to 762 mm (30 in.) in diameter.

Plasma Standoff Roller Guide 253054
Helps maintain recommended standoff distance to maximize cutting performance and improve tip life.

Filters

In-Line Air Filter Kit 228926
For Spectrum 375 X-TREME/625 X-TREME/875/875 Auto-Line. Mounts to back of the plasma cutter. Includes male and female 6.4 mm (1/4 in.) NPT quick-disconnect fittings and hose for easy on/off connection. The replaceable filter element **(228928)** filters to .85 microns for removal of 99.9 percent of water, dirt and oil.

RTI Filter and Bracket 300491
For Spectrum 875/875 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 **(212771).**

Plugs and Cords

MVP™ Plugs

219258
For 6-50P power cable (230/240 V, 50 A).

219261
For 5-15P power cable (115/120 V, 15 A).

219259
For 5-20P power cable (115/120 V, 20 A).

For Spectrum 375 X-TREME, Millermatic 211, Multimatic 200/215 and Diversion 180. 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

Female Receptacle

254328
For connection to 6-50P receptacle (240 V, 50 A).

254330
For connection to 5-15P receptacle (120 V, 15 A).

254331
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

Full KVA Adapter Cord 300517
NEMA 14-50P to NEMA 6-50R. Adapts engine drive 120/240-volt plug to common Millermatic and Spectrum 240-volt plug.

230-Volt Extension Cord 770644
6.1 m (20 ft.) NEMA 6-50P to NEMA 6-50R heavy-duty extension cord. 8-gauge cord has lighted ends that show power is on and a molded, integrated strain relief.

Protective Covers

Protective Cover 300388
For Spectrum 875.

X-CASE 300184
For Spectrum 375 X-TREME/625 X-TREME.
301429
For Maxstar 161 models.

Torches

See your Miller® distributor for complete information on the following XT plasma torches and their consumables:

Spectrum Plasma Cutter Hand-Held Torches
For Spectrum 375 X-TREME
249949 3.7 m (12 ft.) XT30
For Spectrum 625 X-TREME
260633 3.7 m (12 ft.) XT40
260635 6.1 m (20 ft.) XT40
For Spectrum 875 and 875 Auto-Line
249953 6.1 m (20 ft.) XT60
249954 15.2 m (50 ft.) XT60

Spectrum Plasma Cutter Machine Torches
For Spectrum 625 X-TREME
259305 7.6 m (25 ft.) long body XT40M
257462 7.6 m (25 ft.) short body XT40M
For Spectrum 875 and 875 Auto-Line
249955 7.6 m (25 ft.) long body XT60M
249956 15.2 m (50 ft.) long body XT60M
257464 7.6 m (25 ft.) short body XT60M
263952 15.2 m (50 ft.) short body XT60M

Each consumable kit includes a storage box.

Plasma Torch Consumable Kits
253520 *For XT30 torch.* Includes 5 electrodes, 5 tips, 1 swirl ring, 1 retaining cup, 1 o-ring and silicone grease.
253521 *For XT40 torch.* Includes 5 electrodes, 5 tips (40 A), 3 tips (30 A), 1 drag shield (40 A), 2 drag shields (30 A), 1 deflector, 1 o-ring, 1 swirl ring, 1 retaining cup, 1 gouge tip (40 A), 1 gouge shield and silicone grease.
256033 *For XT60 torch.* Includes 3 standard electrodes, 3 standard tips, 1 drag shield, 1 deflector, 1 o-ring, 1 swirl ring, 1 retaining cup, 1 gouge tip, 1 gouge shield and silicone grease.
127493 Empty consumable storage box.

Polarity Switches/Controls

Polarity Control 042871
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 042872
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 Remote Controls in TIG Accessories.

PRHC-14 Hand Control 195511
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 38 m (125 ft.) cord with plugs.

Remote On/Off Control 242197025
For Deltaweld, Dimension 302/452, and Gold Star. Allows you to turn power source on or off from a distance of 7.6 m (25 ft.). This is useful if power source is up in a mezzanine.

Stick Accessory Kits

No. 2 Stick Cable Sets
195196 4.6 m (15 ft.)
300836 15.2 m (50 ft.)
Consists of either 4.6 or 15.2 m electrode cable with holder and work cable with clamp. 200 A, 100% duty cycle.

2/0 Stick Cable Set
173851 15.2 m (50 ft.), 350 A
043952 30/15 m (100/50 ft.), 300 A
Consists of either 15.2 or 30 m 2/0 electrode cable with holder and 15.2 m work cable with clamp. 100% duty cycle.

Weld Cables
195457 2/0 cable with electrode holder, 400 A
195458 2/0 cable with work clamp, 400 A
301387 1/0 cable with electrode holder, 250 A
Consists of a stud/Tweco® adapter and 3 m (10 ft.) weld cable with a Tweco male connector and either an electrode holder or work clamp.

2/0 Weld Cable Extensions
195456 15.2 m (50 ft.)
195455 30.5 m (100 ft.)
Extends weld cables **(195457, 195458** and **301387)**.

Submerged Arc Accessories

Cables

Continuum Motor/Control Cables
263368015 4.6 m (15 ft.)
263368020 6.1 m (20 ft.)
263368025 7.6 m (25 ft.)
263368050 15.2 m (50 ft.)
263368080 24.4 m (80 ft.)
263368100 30.5 m (100 ft.)
Cable between SubArc Motor Control and SubArc Remote Pendant.

Flux Hopper Extension Cables
260623010 3 m (10 ft.)
260623025 7.6 m (25 ft.)
260623065 19.8 m (65 ft.)
Cable between SubArc Interface or Motor Control and flux hopper.

Motor Extension Cables
254232005 1.5 m (5 ft.)
254232010 3 m (10 ft.)
254232025 7.6 m (25 ft.)
254232065 19.8 m (65 ft.)
Cable between SubArc Interface or Motor Control and drive motor.

SubArc Control Cables
260622030 9.1 m (30 ft.)
260622050 15 m (50 ft.)
260622060 18.3 m (60 ft.)
260622080 24.4 m (80 ft.)
260622100 30.5 m (100 ft.)
260622120 36.6 m (120 ft.)
260622200 61.0 m (200 ft.)
Cable between SubArc Interface or Motor Control and power source.

SubArc Parallel Cable
260775015 4.6 m (15 ft.)

SubArc Tandem Cable
260878015 4.6 m (15 ft.)

Torch Accessories

OBT 600 Torch Body Extensions
043967 25.4 mm (1 inch)
043969 50.8 mm (2 inch)
043973 101.6 mm (4 inch)
043975 152.4 mm (6 inch)

OBT 1200 Torch Body Extension 043981
Overall length with extension is 228.6 mm (9 inches). Actual length of extension is 215.9 mm (8.5 inches).

OBT Torch Contact Tips

OBT 600	OBT 1200	Wire Size
192700	192141	1.6 mm (1/16 in.)
192701	199026	2.0 mm (5/64 in.)
192702	192142	2.4 mm (3/32 in.)
192703	200771	2.8 mm (7/64 in.)
192704	192143	3.2 mm (1/8 in.)
192705	192144	4.0 mm (5/32 in.)
–	192136	4.8 mm (3/16 in.)

1200-Amp Torch Contact Tips

Single-Wire	Twin-Wire	Wire Size
–	264595	1.2 mm (3/64 in.)
264590	264596	1.6 mm (1/16 in.)
264591	264597	2.0 mm (5/64 in.)
264487	264588	2.4 mm (3/32 in.)
264593	–	3.2 mm (1/8 in.)
264594	–	4.0 mm (5/32 in.)

Wire Drive Assembly Accessories

Drive Rolls
132955 1.6 mm (1/16 in.)
132960 2.0 mm (5/64 in.)
132961 2.4 mm (3/32 in.)
132962 2.8 mm (7/64 in.)
132963 3.2 mm (1/8 in.)
193700 4.0 mm (5/32 in.)
193701 4.8 mm (3/16 in.)
V-knurled drive rolls for use with hard-shelled cored wires.

Manual Single Slide 301137
Provides smooth and accurate movement of the welding heads. Allows for 200 mm (7.87 inch) travel adjustment with load capacity of 100 kg (220 pounds) at 500 mm (1.64 feet). ***Not recommended for tandem.***

Single-Wire Straightener 199733
For SubArc Wire Drive 400 Digital Low Voltage and SubArc Wire Drive 780 Digital Low Voltage. For 1.6–4.8 mm (1/16–3/16 inch) wire.

Twin-Wire Straighteners
301160 Single adjustment
301162 Double/separate adjustment
For Twin-Wire torches only.

Wire Reel 108008
Supports 27 kg (60 lb.) coil of wire. Requires Spool Support Assembly **(119438)**.

TIG Accessories

Kits

Contractor kit (301311) shown.

Contractor Kit
301311 TIG/stick pkg with RCCS-14 fingertip
301309 TIG/stick pkg with RFCS-14 HD foot pedal
For Maxstar 210/280 and Dynasty 210/280. 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, 200-amp stick electrode holder with 4.6 m (15 ft.) cable, 300-amp work clamp with 4.6 m (15 ft.) cable, flow gauge regulator with 3.7 m (12 ft.) gas hose, gas hose coupler, AK2C torch accessory kit, and TIG torch connector.

TIG contractor kit (301287) shown.

TIG Contractor Kit
301287 *For Multimatic 200.*
301337 *For Multimatic 215.*
Kit comes with Weldcraft™ A-150 TIG torch with Dinse-style connector, either a RFCS-6M foot control (Multimatic 200 kit) **OR** RFCS-RJ45 foot control (Multimatic 215 kit), flow gauge regulator with 3.7 m (12 ft.) gas hose, and AK2C torch accessory kit.

Torch kit (300990) shown.

Weldcraft™ Water-Cooled Torch Kits
300185 250 A, W-250 (WP-20)
300990 280 A, W-280 (WP-280)
301268 375 A, W-375
300186 400 A, W-400 (WP-18SC)
For Maxstar (except 161 models), Dynasty, and Syncrowave 250 DX/350 LX. Kit comes with 7.6 m (25 ft.) TIG torch with Dinse-style connector (thread-lock on 400-amp kit), torch cable cover, work clamp with 4.6 m (15 ft.) cable [3.7 m (12 ft.) cable on 400-amp kit], flowmeter regulator with gas hose, and torch accessory kit.

Protective Covers

Protective covers (300579) and (195478) shown.

301429 *X-CASE for Maxstar 161 models.*
300579 *For Diversion 165/180.*
301381 *For Maxstar 210.*
301382 *For Maxstar 280 and Dynasty 210/280.*
195142 *For Syncrowave 210.*
195320 *For Syncrowave 250 DX/350 LX.*
195478 *For XMT 304/350.*

Remote Controls

14-Pin to 6-Pin Adapter Cord
300507
For Maxstar 161 STL/STH and Multimatic 200. 305 mm (12 in.) cord adapts Miller® 14-pin foot control or fingertip control to a 6-pin plug.

RCC-6M (6-pin plug)
301118 4 m (13.25 ft.) cord with plug
For Maxstar 161 STL/STH and Multimatic 200.
RCC-14 (14-pin plug)
151086 8 m (26.5 ft.) cord with plug
East/west rotary-motion fingertip current/contactor control attaches to TIG torch using two hook-and-loop fasteners. Great for production or contractors that need quick ramp-up.

RCCS-6M (6-pin plug)
195184 4 m (13.25 ft.) cord with plug
195503 8 m (26.5 ft.) cord with plug
For Maxstar 161 STL/STH and Multimatic 200.
RCCS-RJ45
301146 4 m (13.25 ft.) cord with plug
For Diversion 165/180 and Multimatic 215.
RCCS-14 (14-pin plug)
043688 8 m (26.5 ft.) cord with plug
North/south rotary-motion fingertip current/contactor control attaches to TIG torch using two hook-and-loop fasteners. Great for applications that require a finer amperage control.

RFCS-6M (6-pin plug)
195183 4 m (13.25 ft.) cord with plug
195504 6.1 m (20 ft.) cord with plug
For Maxstar 161 STL/STH and Multimatic 200.
RFCS-5 (5-pin plug)
043716 6.1 m (20 ft.) cord with plug
RFCS-14 (14-pin plug)
043554 6.1 m (20 ft.) cord with plug
Foot pedal current/contactor control.

RFCS-14 HD (14-pin plug) **194744**
Heavy-duty foot pedal current/contactor control provides 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 6.1 m (20 ft.) cord with plug.

RFCS-RJ45 **300432**
For Diversion 165/180 and Multimatic 215. Foot pedal current/contactor control. Includes 4.3 m (14 ft.) cord with plug.

RHC-14* (14-pin plug)
242211020 6.1 m (20 ft.) cord with plug
242211100 30.5 m (100 ft.) cord with plug
Miniature hand current/contactor control.
Dimensions: 102 x 102 x 82 mm (4 x 4 x 3.25 inches).
**For additional lengths visit MillerWelds.com/equiptoweld.*

RMLS-14 (14-pin plug) **129337**
Momentary- and maintained-contact rocker switch for contactor control. Push forward for maintained contact and backward for momentary contact. Includes 8 m (26.5 ft.) cord with plug.

RMS-6M (6-pin plug) **195269**
For Maxstar 161 STL/STH.
RMS-14 (14-pin plug) **187208**
Momentary-contact switch for contactor control. Rubber-covered pushbutton dome switch ideal for repetitive on-off applications. Includes 8 m (26.5 ft.) cord with plug.

RPBS-14 (14-pin plug) **300666**
Attaches to the TIG torch to remotely start and stop the TIG welding process. Includes 7.6 m (25 ft.) cord with plug.

Wireless Remote Foot and Hand Controls

See literature AY/6.5 (Foot) and AY/6.6 (Hand)

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 27.4 m (90 ft.) 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

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.

**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.*

Hand control

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 91 m (300 ft.) 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 (300429) or hand control (300430) transmitter
- Wireless 14-pin receiver (300722)
- Battery box (249297)
- Three AA batteries
- Four Easy-Glide Wear Pads™ (for foot control only) (sold individually, 248274)
- Belt clip (for hand control only) (249233)

Suggested power sources

WIRELESS REMOTE COMPATIBLE

Look throughout this catalog for the icon above signifying compatibility with a wireless remote. For a complete power source compatibility list visit **MillerWelds.com/wireless**.

Model/Stock Number	Component	Power Supply	Battery Life	Rated Range*	Temperature	Radio Frequency	RF Power	Antenna	Dimensions	Weight
Wireless Foot Control System (300429)	Foot control (transmitter)	Three AA batteries	250 hours	27.4 m (90 ft.)	-25° to +70°C (-13° to +158°F)	2.4 Ghz (ISM band)	<3 mW	Internal	H: 152 mm (6 in.) W: 146 mm (5.75 in.) D: 292 mm (11.5 in.)	1.4 kg (3 lb.) w/batteries
Wireless Hand Control System (300430)	Hand control (transmitter)	Three AA batteries	250 hours	91 m (300 ft.)					H: 127 mm (5 in.) W: 70 mm (2.75 in.) D: 35 mm (1.375 in.)	0.27 kg (0.6 lb.) w/batteries

TIG Accessories (continued)

Torch and Weld Cable Connectors

Air-Cooled TIG (GTAW) Torch Connectors

273483[1,2]
For Maxstar 161 and Multimatic 200/215. 25 mm (small) Dinse-style gas thru for one-piece air-cooled torches.

194723 A-200 (WP26)
194722[2] All others
For Syncrowave 210. 50 mm Dinse-style gas thru for one-piece air-cooled torches.

195379 A-200 (WP26)
195378[2] All others
For CST 280, Maxstar 210/280/350, Dynasty 210/280/350, and Syncrowave 250 DX/350 LX. 50 mm Dinse-style for one-piece air-cooled torches.

Water-Cooled TIG (GTAW) Torch Connectors

50 mm Dinse-Style Flow Thru 195380
For Syncrowave 210. Used with all Weldcraft™ water-cooled torches.

50 mm Dinse-Style with Water Return Line 195377
For Maxstar 210/280/350, Dynasty 210/280/350, and Syncrowave 250 DX/350 LX. Used with all Weldcraft™ water-cooled torches.

50 mm Thread-Lock-Style 225028
For Maxstar/Dynasty 700. Used with all Weldcraft™ water-cooled torches.

Thread-Lock-Style Weld Cable Connectors 225029
For Maxstar/Dynasty 700. Contains two male connectors that accept #1/0 to #4/0 AWG size cable.

[1] *Except A-200 (WP26) torch.* [2] *A-80 (WP24) torches require* ***24-5*** *adapter.*

Wire Feeder Accessories

Extension Cables (14-Pin)

8-Conductor Cables*
242208025 7.6 m (25 ft.)
242208050 15.2 m (50 ft.)
242208080 24.4 m (80 ft.)
For XR-Control, SuitCase 12RC feeder, 20 Series feeders, and 70 Series (except MPa Plus) 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*
247831025 7.6 m (25 ft.)
247831050 15.2 m (50 ft.)
247831080 24.4 m (80 ft.)
For XR-AlumaFeed, MPa Plus feeders, and 60M feeders. Eleven 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*
242205025 7.6 m (25 ft.)
242205050 15.2 m (50 ft.)
242205080 24.4 m (80 ft.)
For HDC and WC-115 weld controls, XR Control 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.*

Power Supply Adapter

PSA-2 Control 141604
Required when using SuitCase 12RC, 20 Series, and 70 Series feeders with power sources having only 115-volt power available. Control is equipped with a 14-pin receptacle and a 3 m (10 ft.) 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 047813
7.6 m (25 ft.) cord extends 3 m (10 ft.) cord supplied with PSA-2 control (4-pin to 4-pin connection).

Spool Adapter

047141
For use with 6.4 kg (14 lb.) spool of Hobart or Lincoln self-shielding wire.

Spool Gun Controls and Kits

For more information see literature M/1.5, M/1.73 and M/1.76.

SGA 100 043856
Required to connect Spoolmate 3035 spool gun to any Millermatic 141/190/211. Also allows connection to virtually any similar MIG welder – Miller or other brands. Includes 3 m (10 ft.) 115-volt power cable with plug, 1.8 m (6 ft.) interconnecting cable, and 1.5 m (5 ft.) gas hose.

SGA 100C 043857
SGA with contactor required to connect Spoolmate 3035 spool gun to CV engine drives like the Miller Bobcat. Includes 3 m (10 ft.) 115-volt power cable with plug, 1.8 m (6 ft.) interconnecting cable, and 1.5 m (5 ft.) gas hose.

WC-115A Weld Control
137 546 Without contactor
137546011 With contactor
Operates on 115-volt power and designed primarily for constant-current DC power sources. Can also be used with constant-voltage power sources or DC engine drives supplying 115 volts. 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 137549
For Spoolmate 200, Spoolmatic and Spoolmatic 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
132228 7.6 m (25 ft.)
132229 15.2 m (50 ft.)
For Spoolmatic and Spoolmatic Pro. Extends leads, etc. between spool gun and power source.

Turntable Assembly

146236
Allows feeder to rotate as operator changes work position. Reduces strain and bending of gun cable.

Wire Straightener

For 20 Series and 70 Series.
141580 For 0.9–1.1 mm (.035–.045 inch) wire.
141581 For 1.6–3.2 mm (1/16–1/8 inch) wire.

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