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The Power of Blue[®]

WE BUILD[™]

with you

International
Catalog
MillerWelds.com

2018





WE BUILDTM with you

**When imagination meets determination,
we can do anything.**

It begins with a spark of inspiration. That inspiration builds to an idea — and then, a plan.

Work begins. Challenges are overcome. And soon, we've built something new for ourselves and for our world.

The wonder of your imagination. The power of your determination. The capabilities of Miller products. **Together, we build.**

MillerWelds.com/webuild



New from Blue

32 Dynasty® 280 DX
with CV



36 XMT® 350 FieldPro™
System



43 Thunderbolt® 160
Thunderbolt® 210



51 Maxstar® 400/800
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63 Fusion 160



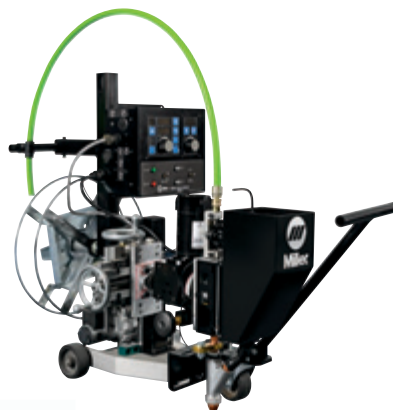
64 Bobcat™ 200 Air Pak™



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77 SubArc 3-Wheel Tractor



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T94-R™ Series



**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 Cl

- 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 Cl

- 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.

MillerMatic 212 Auto-Set See literature DC12-46

Wire Type	Wire Diameter	Wire Speed
Aluminum	3/32 in. (0.91 mm)	20-25 in./min
Aluminum	1/16 in. (1.59 mm)	15-20 in./min

Recommended aluminum wire: Spoolmate 200 (200497)

Stock Number	Power Range	Rated Output	Welding Range	Welding Range	Welding Range	Welding Range	Welding Range	Welding Range	Welding Range
190146	200-275V, 200 A	210 A	200 V	230 V	260 V	280 V	300 V	320 V	340 V
190147	200-275V, 200 A	210 A	200 V	230 V	260 V	280 V	300 V	320 V	340 V

Most popular accessories:

- Spoolmate 200 (200497) (pg 20)
- Dual Ez-Change Low-Profile Rack (300237) (pg 144)
- Spoolmate 200 (200497) (pg 20)
- Dual Ez-Change Low-Profile Rack (300237) (pg 144)
- Rotating Gun and Cable Rack (300235) (pg 144)
- Protective Cover (39542) (pg 117)
- Full Kit Adapter Case (300517) (pg 139)

Brief listing of most popular accessories.

Millermatic® 141 and 211

See literature DC/12.42 (141) and DC/12.58 (211)

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 (Millermatic 141) **OR** 2 m (6.5 ft.) power cord with MVP plugs for 120 V and 240 V (Millermatic 211)
- 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/CO₂ 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 (Millermatic 211 only)



- Running Gear/Cylinder Rack 301239
- Protective Cover 301262
- V-Knurled Drive Roll 202926



Millermatic 141

Millermatic 211



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.



Mild Steel Welding Capability

Max. Model	4.8 mm (3/16 in.)	9.5 mm (3/8 in.)
141		
211		
Min.	0.6 mm (24 ga.)	0.6 mm (24 ga.)

Auto-Set™ automatically provides the right settings to weld mild steel while **infinite voltage control** allows the flexibility to manually set your own parameters. Millermatic 211 model provides additional capabilities.

- Set the wire diameter (141: 0.6/0.8 mm [.024/.030 in.] (211: 0.6/0.8/0.9 mm [.024/.030/.035 in.]), 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!

Aluminum Welding Capability

Max. Model	1.9 mm (14 ga.)	9.5 mm (3/8 in.)
141		
211		
Min.	1.2 mm (18 ga.)	1.2 mm (18 ga.)

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 211 model additional features

Advanced Auto-Set™ includes five different wire/gas combinations and 0.6/0.8/0.9 mm (.024/.030/.035 in.) wire capabilities.

Inverter technology combines best-in-class arc characteristics with the portability of a 17.2 kg (38 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 through the machine.

Aluminum welding with the Millermatic 141 uses optional Spoolmate 100 spool gun and 4043 series aluminum wire. Aluminum welding with the Millermatic 211 uses optional Spoolmate 100 spool gun with 4043 aluminum series wire or optional Spoolmate 150 spool gun with 4000 or 5000 series aluminum wire.

Recommended aluminum solution

Spoolmate 100 (300371) with both Millermatic models **OR** 150 (301272) with Millermatic 211.



Model/Stock Number	Input Power	Amperage Range	Rated Output	Amps Input at Rated Output, 50/60 Hz				Wire Feed Speed	Wire Type and Diameter Capacity	Power Source Dimensions	Power Source Net Weight
				120 V	240 V	KVA	KW				
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.)
	240 V	30-230	115 A at 19.8 VDC, 20% duty cycle	24.3	–	2.9	2.9				
Millermatic 211 (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.)	17.2 kg (38 lb.)	
	240 V	30-230	150 A at 21.5 VDC, 40% duty cycle	–	16.6	4.0	4.0				

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/CO₂ 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				Wire Feed Speed	Wire Type and Diameter Capacity	Dimensions	Net Weight
			200 V	230 V	KVA	KW				
(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, bumback, 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/CO₂ 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						Wire Feed Speed	Wire Type and Diameter Capacity	Dimensions	Net Weight
			200 V	230 V	460 V	575 V	KVA	KW				
(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.)
(907322) 230/460/575 V		250 A at 28 VDC, 40% duty cycle	—	46	23	18	9.5	7.5				

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 1
Phase 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/CO₂ 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/CO₂ 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					Wire Feed Speed	Wire Type and Diameter Capacity	Dimensions	Net Weight
				200 V	230 V	460 V	KVA	KW				
Millermatic 350P (907300) 200/230/460 V Millermatic 350P Auto Body Aluminum Repair System (907300002) 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.)
	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 1**
Phase 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					Wire Feed Speed	Wire Type and Diameter Capacity	Dimensions	Net Weight
				200 V	230 V	460 V	KVA	KW				
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



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



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.

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.

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 a variety of different wires.

Adjustable burback control reduces wire stubbing, arc flaring and prevents wire burback 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.)

Light industrial ●

CV	DC	1	220/220DX
		Phase	
CV	DC	3	250/250DX
		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

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	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 220DX (CE) (029015521) 220/240 V, 50/60 Hz						
Migmatic 250 (CE) (029015524) 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 250DX (CE) (029015525) 230/380-400 V, 50/60 Hz						

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 

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 a variety 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		Max. Open-Circuit Voltage	Wire Feed Speed	Wire Type and Diameter Capacity	Dimensions	Net Weight
		230 V	400 V					
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



Industrial ● CV DC 3 Phase



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.

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		Max. Open-Circuit Voltage	Dimensions	Net Weight
				230 V	400 V			
XPS 350	(029015531) 400 V, 50 Hz, 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.)
	(029015528) 400 V, 50 Hz with aux power, digital meters and Fan-On-Demand, CE							
XPS 450	(029015535) 230/400 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	H: 930 mm (37 in.) W: 570 mm (22.5 in.) D: 860 mm (34 in.)	153 kg (337 lb.)
	(029015532) 400 V, 50 Hz with aux power, CE							
	(029015529) 400 V, 50 Hz with aux power, digital meters and Fan-On-Demand, CE							

Miller recommends



Hobart® aluminum filler metals — wire and cut lengths — have been designed to provide the best performance for the best welds. These products are backed by the deep industry knowledge of Hobart welding specialists who can help customers find the right aluminum filler metal solution. Every time. No matter how challenging the application.

Visit HobartBrothers.com or your local distributor to learn more.

Questions? Hobart is here to help.

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.



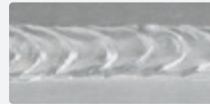
AlumaPower™ 350 model allows for any input voltage hookup (230–575 V, three-phase) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable power. 450 model is 400 V only, three-phase.

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
- XR-Aluma-Pro™ Plus Air
 - 300000001 4.6 m (15 ft.)
 - 300001001 7.6 m (25 ft.)
 - 300264001 10.6 m (35 ft.)
- XR-Aluma-Pro™ Plus Water
 - 300003001, **CE** 4.6 m (15 ft.)
 - 300004001, **CE** 7.6 m (25 ft.)
 - 300265001 10.6 m (35 ft.)
- XR™-Pistol Grip Plus Air
 - 300753 4.6 m (15 ft.)
 - 300754 7.6 m (25 ft.)
 - 300755 10.6 m (35 ft.)
- XR™-Pistol Grip Plus Water
 - 300756 4.6 m (15 ft.)
 - 300757 7.6 m (25 ft.)
 - 300758 10.6 m (35 ft.)

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				KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
			230 V	400 V	460 V	575 V					
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 14-pin compliant, but only operates synergically w/MPa power sources	Input Power 24 VAC, 5 A, 50/60 Hz	Input Welding Circuit Rating 400 A at 100% duty cycle System duty cycle is limited to gun rating	Wire Feed Speed 1.3–22.9 mpm (50–900 ipm)	Wire Diameter Capacity 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.			Maximum Spool Size Capacity 305 mm (12 in.)		Dimensions H: 406 mm (16 in.) W: 241 mm (9.5 in.) D: 540 mm (21.25 in.)	Net Weight 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



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						Max. Open-Circuit Voltage	Dimensions*	Net Weight
				200 V	230 V	460 V	575 V	KVA	KW			
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

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

Must be purchased from ITW Italy



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.



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 

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
- S-74 MPa Plus 300577, **CE**
- D-74 MPa Plus 300578, **CE**
- MIG 4/0 Cable Kit with Dinse 300405
- MIG 4/0 Cable Kit with lug connectors 300390

Model/Stock Number	Amp/Volt Ranges	Rated Output	Amps Input at Rated Load Output				KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
			230 V	400 V	460 V	575 V					
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

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

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

Heavy Industrial

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
- Continuum Feeders
301195 Single
301195010 Single, **CE**
301199 Dual
301199010 Dual, **CE**
- Continuum Swingarc™
Boom Single
301219 2.4 m (8 ft.)
301220 3.7 m (12 ft.)
301221 3.9 m (16 ft.)
ROI Single
301227, **CE**
Boom Dual 3.7 m (12 ft.) 301223
ROI Dual 301434, **CE**
- Pipe Post
149838 1.2 m (4 ft.)
149839 1.8 m (6 ft.)

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.

*While idling.

Model	Stock Number	Amperage/ Voltage Range	Rated Output	Amps Input at Rated Output, 50/60 Hz, 3-Phase							Max. Open-Circuit Voltage	Net Weight (power source only)
				230V	380V	400V	460V	575V	KVA	KW		
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	21.8	20.8	18.8	14.6	14.4	13.8	75 VDC	57.6 kg (127 lb.)
				0-1*	0-1*	0-1*	0-1*	0-1*	0.8*	0.17*		
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	—	33.2	28.9	23.3	23.1	21.9	67.1 kg (148 lb.)	
				0-1*	—	0-1*	0-1*	0-1*	0.8*	0.17*		

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 Access® systems, the two systems are not compatible. Continuum systems are designed to allow future upgradability, to expand with your operation's needs.

*While idling.

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
- Auto-Continuum Robotic MIG Kit 301455
Consists of 7.6 m (25 ft.) motor control cable, 3.7 m (12 ft.) motor control extension, two 9 m (30 ft.) weld cables, 3.7 m (12 ft.) weld cable extension, 9 m (30 ft.) gas hose, flowmeter regulator, 5 m (16.4 ft.) Ethernet cable, 0.9/1.2 mm (.035/.045-in.) V-groove drive roll kit with guides, and conduit assembly with quick disconnects.
- 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.

Model	Stock Number	Amp/Volt Ranges	Rated Output	IP Rating	Amps Input at Rated Output, 50/60 Hz, 3-Phase							Max. Open-Circuit Voltage	Dimensions (Includes lift eye)	Net Weight
					230 V	380 V	400 V	460 V	575 V	KVA	KW			
Auto-Continuum 350	(907656) EtherNet/IP™	20-400 A, 10-44 V	350 A at 31.5 VDC, 100% duty cycle	IP23	36.7	21.8	20.8	18.8	14.6	14.4	13.8	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.)
	(907658) EtherNet/IP™ with auxiliary power				0-1*	0-1*	0-1*	0-1*	0-1*	0.8*	0.17*			
Auto-Continuum 500	(907657) EtherNet/IP™	20-600 A, 10-44 V	500 A at 39 VDC, 100% duty cycle	IP23	58.7	34.9	33.2	28.9	23.3	23.1	21.9	75 VDC		69 kg (150 lb.)
	(907659) EtherNet/IP™ with auxiliary power				0-1*	0-1*	0-1*	0-1*	0-1*	0.8*	0.17*			
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 Series Features

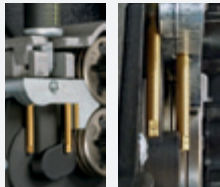
Feature	X-TREME		ArcReach			12RC
	8VS	12VS	8	12	Smart	
Remote voltage control (control cable required)						●
Remote voltage control (without a cord)			●	●	●	
Digital meters	●	●	●	●	●	●
Impact-resistant case	●	●	●	●	●	●
Gas purge	●	●	●	●	●	●
Wire jog	●	●	●	●	●	●
● Standard ● Optional						

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.)

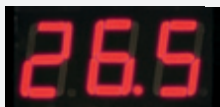
Wide voltage range for small and large wires with no contactor chatter or arc outages.



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. (SuitCase X-TREME™ and ArcReach® SuitCase 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-adaptor 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 (8 in.) spool of wire, can be carried to remote welding sites and fits through a 356 mm (14 in.) manhole/manway. 12VS model is sized for an 203 or 305 mm (8 or 12 in.) spool of wire. 305 mm (12 in.) spools are the most common in structural steel and fabrication.

ArcReach® SuitCase® 8 and 12 and ArcReach Smart Feeder See literature M/6.55

ArcReach Remote control of the power source without a cord. With a ArcReach SuitCase 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.


Easy process changeover. Simply connect the ArcReach feeder to your leads and you are ready to go. All controls automatically shift to the ArcReach feeder.

Additional features of ArcReach Smart Feeder

Delivers excellent synergic RMD® and pulsed MIG welding up to 61 meters (200 ft.) away from the power source with no control cords – twice the distance previously possible. RMD and pulsed MIG welding permits procedures with one wire and one gas to eliminate process switch-over time. RMD and pulsed MIG processes also help reduce weld failures and eliminate backing gas on some stainless and chrome-moly applications. The ArcReach Smart Feeder requires an XMT® 350 FieldPro™ or PipeWorx 350 FieldPro™ connected to three-phase power or an ArcReach-equipped engine drive.

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 (100 ft.) of the power source and control cords are acceptable.

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

Processes

- MIG (GMAW) ▪ Flux-cored (FCAW)

Suggested power sources

- Dimension™ Series
- XMT® Series
- PipeWorx 350 FieldPro™
- 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	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.)
		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 Smart Feeder (301177) Dinse, CE (300935) Tweco® (300935002) Tweco® w/flowmeter	XMT 350 FieldPro or PipeWorx 350 FieldPro connected to three-phase power or an ArcReach-equipped engine drive	275 A at 60% duty cycle	1.3-19.8 mpm (50-780 ipm) dependent on arc voltage	0.9-1.1 mm (.035-.045 in.)	305 mm (12 in.), 15 kg (33 lb.)	H: 457 mm (18 in.) W: 330 mm (13 in.) D: 546 mm (21.5 in.)
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.)

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.



20 and 70 Series Features

Feature	20 Series		70 Series		
	22A	24A	74S	74D	74MPA
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 ¹Field 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.

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

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

Feeders include a 3 meter (10 ft.) 14-pin interconnecting cord.

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.

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

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

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, bumback 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.



Industrial  20 Series
Heavy industrial  70 Series

CVDC 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

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

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 <i>(For MPa Plus feeders only)</i>		Cable Length			Welding Current Rating	Wire Feed Speed	Wire Type and Diameter Capacity	Dimensions	Net Weight
		4.6 m (15 ft.)	7.6 m (25 ft.)	10.6 m (35 ft.)					
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

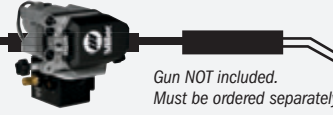
See literature M/3.0

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



S-74 MPa Plus shown.

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

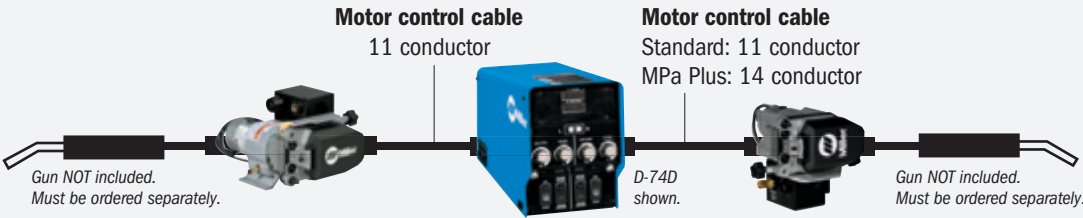


Gun NOT included. Must be ordered separately.

- 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.



- 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.

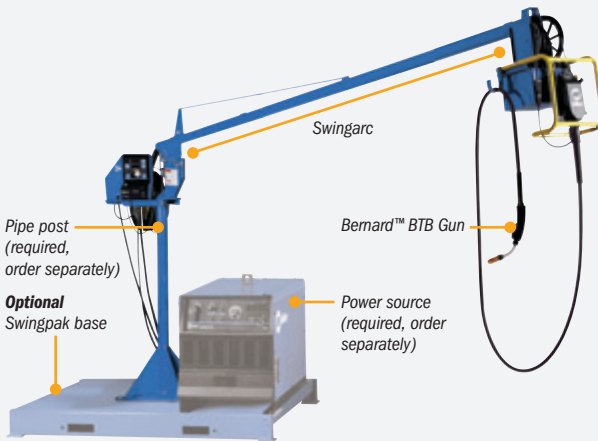


- Feeder Base** 195369 For use with spooled wire.

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 boom and 360-degree rotation and 60-degree lift angle maximizes work area.

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

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

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

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 (1.8 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	2.4 m (8 ft.) (300518)	S-74S (300881), CE	DS-74S8	2.4 m (8 ft.) (300521)	D-74S (300886), CE
SS-74D8	2.4 m (8 ft.) (300518)	S-74D (300882), CE	DS-74D8	2.4 m (8 ft.) (300521)	D-74D (300887), CE
SS-74DX8	2.4 m (8 ft.) (300518)	S-74MPa Plus (300738), CE	DS-74DX8	2.4 m (8 ft.) (300521)	D-74MPa Plus (300739), CE
SS-74MPa Plus-8	2.4 m (8 ft.) (300818)		DS-74MPa Plus-8	2.4 m (8 ft.) (300821)	
SS-74S12	3.7 m (12 ft.) (300519)	S-74S (300881), CE	DS-74S12	3.7 m (12 ft.) (300522)	D-74S (300886), CE
SS-74D12	3.7 m (12 ft.) (300519)	S-74D (300882), CE	DS-74D12	3.7 m (12 ft.) (300522)	D-74D (300887), CE
SS-74DX12	3.7 m (12 ft.) (300519)	S-74MPa Plus (300738), CE	DS-74DX12	3.7 m (12 ft.) (300522)	D-74MPa Plus (300739), CE
SS-74MPa Plus-12	3.7 m (12 ft.) (300819)		DS-74MPa Plus-12	3.7 m (12 ft.) (300822)	
SS-74S16	4.9 m (16 ft.) (300520)	S-74S (300881), CE	DS-74S16	4.9 m (16 ft.) (300523)	D-74S (300886), CE
SS-74D16	4.9 m (16 ft.) (300520)	S-74D (300882), CE	DS-74D16	4.9 m (16 ft.) (300523)	D-74D (300887), CE
SS-74DX16	4.9 m (16 ft.) (300520)	S-74MPa Plus (300738), CE	DS-74DX16	4.9 m (16 ft.) (300523)	D-74MPa Plus (300739), CE
SS-74MPa Plus-16	4.9 m (16 ft.) (300820)		DS-74MPa Plus-16	4.9 m (16 ft.) (300823)	
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

	Class	MIG	Pulsed MIG*	Flux-cored**	Hard	Wire Types			Wire Diameter Capacity	Available Cable Lengths	Typical Applications
						Flux-cored Dual-shld	Flux-cored Self-shld	Alum.			
Bernard™ BTB MIG Guns	●	●	●	●	●	●	● CV**	●	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
Bernard™ Clean Air™ Fume Extraction Guns	●	●	●	●	●	●	● CV**	●	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
Bernard™ FILTAIR™ Fume Extraction Guns	●	●	●	●	●	●	● CV**	●	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
Bernard™ Dura-Flux™ Gun with Fixed Liner	●			●			● 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
Bernard™ Dura-Flux™ Gun with Replaceable Liner	●			●			● 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
XR-Aluma-Pro™ Lite Push-Pull Gun	●	●	●		●			●	0.8-1.2 mm (.030-.047 in.)	7.6 m	Industrial aluminum fabrication
XR-Aluma-Pro™ Push-Pull Guns	●	●	●		●			●	0.8-1.6 mm (.030-1/16 in.)	4.5, 7.6 or 10.6 m	Heavy industrial aluminum fabrication
XR™-Pistol Push-Pull Guns	●	●	●		●			●	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
XR™ Controls	●	●	●		●			●	0.8-1.6 mm (.030-1/16 in.)	-	Heavy industrial aluminum fabrication

Steel

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.

Miller recommends



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.



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

Bernard™ Semi-Automatic Guns

Miller 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 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.



The C Series straight gun handle expands our handle lineup to seven choices. The C Series handle provides all the benefits of the T Series large straight handle, plus additional ergonomic benefits such as the handle overmold and rear swivel at no extra cost!

See chart below for a pre-configured BTB MIG gun that best matches your needs or visit MillerWelds.com to view a complete list. Or you may choose to configure your BTB MIG gun from the following array of options by visiting BernardWelds.com/ConfigureMyGun.

- Three high-performance consumable lines – Centerfire,™ Quik Tip™ or TOUGH LOCK™
- 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



All guns in chart come with a Miller® power pin and a Universal Conventional liner except as noted below.
*Comes with a Miller power pin and a QUICK LOAD liner AutoLength™ system.

Stock Number	Amperage	Cable Length	Handle	Trigger	Neck	Consumables	Wire Size
Q3015AE8XMC	300	4.5 m (15 ft.) industrial	B Series small curved	Standard	Rotatable med. 45°	Centerfire (flush)	1.2 mm (.045 in.)
Q3015AE8EMC	300	4.5 m (15 ft.) industrial	B Series small curved	Standard	Rotatable med. 45°	Centerfire	1.2 mm (.045 in.)
Q3015TE5EMC	300	4.5 m (15 ft.) industrial	O Series small curved	Standard	Rotatable med. 45°	Quik Tip	1.2 mm (.045 in.)
Q3015AE8HMC	300	4.5 m (15 ft.) industrial	B Series small curved	Standard	Rotatable med. 45°	Centerfire	1.3 mm (.052 in.)
Q4015AE8EMC	400	4.5 m (15 ft.) industrial	B Series large curved	Standard	Rotatable med. 45°	Centerfire	1.2 mm (.045 in.)
Q4015TE5EMC	400	4.5 m (15 ft.) industrial	O Series small curved	Standard	Rotatable med. 45°	Quik Tip	1.2 mm (.045 in.)
Q4015VS3EML*	400	4.5 m (15 ft.) industrial	C Series straight	Standard	Fixed med. 60°	TOUGH LOCK	1.2 mm (.045 in.)
Q4015MS3EMC	400	4.5 m (15 ft.) industrial	T Series large straight	Standard	Fixed med. 60°	TOUGH LOCK	1.2 mm (.045 in.)
Q4015AE8HMC	400	4.5 m (15 ft.) industrial	B Series large curved	Standard	Rotatable med. 45°	Centerfire	1.3 mm (.052 in.)
Q4020MF8HMC	400	6 m (20 ft.) industrial	T Series large straight	Standard	Rotatable med. 60°	Centerfire	1.3 mm (.052 in.)
Q4015AE8IMC	400	4.5 m (15 ft.) industrial	B Series large curved	Standard	Rotatable med. 45°	Centerfire	1.6 mm (1/16 in.)
Q4025MF8IMC	400	7.6 m (25 ft.) industrial	T Series large straight	Standard	Rotatable med. 60°	Centerfire	1.6 mm (1/16 in.)
S4025MF8IMC	400	7.6 m (25 ft.) steel monocoil	T Series large straight	Standard	Rotatable med. 60°	Centerfire	1.6 mm (1/16 in.)
Q4015MS3IMC	400	4.5 m (15 ft.) industrial	T Series large straight	Standard	Fixed med. 60°	TOUGH LOCK	1.6 mm (1/16 in.)
Q4015NS3IMC	400	4.5 m (15 ft.) industrial	T Series large straight	Locking	Fixed med. 60°	TOUGH LOCK	1.6 mm (1/16 in.)

Heavy Industrial ●

Processes

- MIG (GMAW) • Flux-cored (FCAW)

Duty cycle ratings

- 100% with CO₂
- 60% with mixed gases

Suggested feeders

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

Suggested power source

- Millermatic® 350P

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

Quik Tip Consumable Series

Diffusers (amps)

- D118Q 200, 300, 400
- D114Q 500, 600

Plated Copper Nozzles (inches)

- N1C58Q 5/8 ID
- N1C34HQ 3/4 ID, HD

Contact Tips (mm)

- T1035 0.9
- T1045 1.2

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 (straight handle) and SP-FFE (curved handle)

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 and a FILTAIR® fume extractor.

Clean Air™ straight handle gun

- Available in 300-, 400-, 500- and 600-amp models
- Compatible with Centerfire, Quik Tip and TOUGH LOCK consumables
- Ergonomic, lightweight handle with rear swivel improves operator comfort

Clean Air™ curved handle 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.

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

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



Heavy industrial ●

Processes

- MIG (GMAW) ▪ Flux-cored (FCAW)

Duty cycle ratings

- 100% with CO₂
- 60% with mixed gases

Suggested feeders

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

Suggested power source

- Millermatic® 350P

Suggested fume extractor

- FILTAIR® 130

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

Quik Tip Consumable Series

Diffusers (amps)

D118Q 200, 300, 400

D114Q 500, 600

Plated Copper Nozzles (inches)

N1C58Q 5/8 ID

N1C34HQ 3/4 ID, HD

Contact Tips (mm)

T1035 0.9

T1045 1.2

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

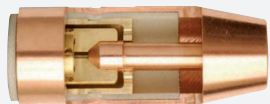
403-14-45-25 1.2 SD

403-20-45-25 1.2 HD

403-20-52-25 1.4 HD

403-20-116-25 1.6 HD

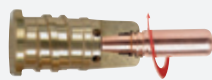
Bernard Welding Consumables (cutaways shown)



Centerfire™

See Bernard literature SP-CFC

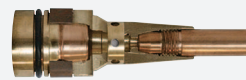
- Drop-in contact tip (no tools required to replace tip or nozzle) means quick changeover and reduced downtime
- Spatter shield within nozzle holds tip in place, protects diffuser and directs gas evenly with reduced turbulence
- Diffuser mates securely with contact tip for better conductivity



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



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

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 150

PORTABLE!



Spoolmate 200



Spoolmate 3035

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 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 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 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

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

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 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™ and XR™-Pistol-Pro guns.

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

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

Industrial 
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

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.)



Miller recommends



Filler metals are a critical component in any weld project. They become part of your end product and choosing the right filler metal can affect the look and quality of your weld.

To make your filler metal choice easier, **Hobart offers a FREE app for download** on both Android™ and Apple® devices. Features of the app include:

- Recommendations for aluminum, carbon steel and stainless steel welding
- Calculates the amount of filler metal needed for your job
- Heat input calculator
- Hardfacing cross-reference function

Download the Filler Metal Selector and Calculator app today.

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.



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.

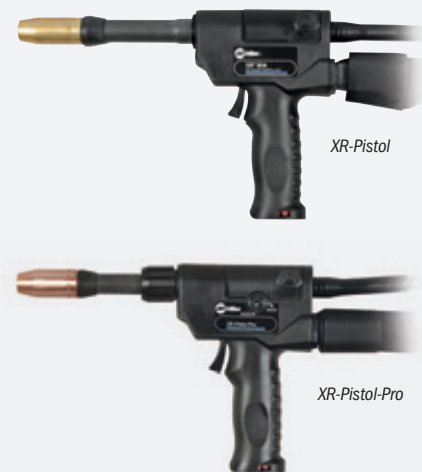
XR-Aluma-Pro™ Lite See literature M/1.75

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 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				Welding Current Rating	Wire Feed Speed*	Wire Type and Diameter Capacity	Dimensions	Gun Only Net Weight
	4.6 m (15 ft.)	7.6 m (25 ft.)	9 m (30 ft.)	10.6 m (35 ft.)					
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.



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 bumpback.

XR-D (additional features)

Adds basic programmable weld sequencing that allows adjustments for preflow, postflow, start, and crater providing higher quality welds.

Heavy industrial 

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.)

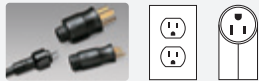
Feeding aluminum – choose the right gun solution

Push-only Guns	UPGRADE	Spool Guns	UPGRADE	Push-pull Guns
 <p>Known as standard MIG guns, these guns are only used for occasional aluminum work.</p> <ul style="list-style-type: none"> • 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 		 <p>Integrated wire spools and better aluminum wire feedability make spool guns great for repair and small jobs.</p> <ul style="list-style-type: none"> • Low initial cost versus push-pull guns • Work with many power sources • Light and simple to use • Limited deposition because of wire spool size 		 <p>Preferred guns for industrial production work with the best overall aluminum wire feedability.</p> <ul style="list-style-type: none"> • 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.

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.

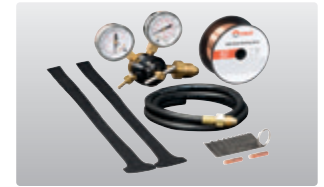
Light industrial ● CC CV DC 1 Phase

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/CO₂ 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				Wire Feed Speed	Max. Open- Circuit Voltage	Dimensions	Net Weight		
					120 V	230 V/240 V	KVA	KW						
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
	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
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.)
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									
240 V	30-230	CC: TIG		120 V	20-150	140 A at 15.6 V, 40% duty cycle	24.6	–	3.0	3.0				
		240 V		20-210	190 A at 17.6 V, 20% duty cycle	–	18.0	6.7	6.7					
240 V	30-100	90 A at 23.6 V, 40% duty cycle		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 

Industrial  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 Q2010A08DE
200-amp Q-Gun with 3 m (10 ft.)
cable



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.

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		

Miller recommends



Robust. Resilient. Repeatable.

The robotic MIG welding guns and peripherals that **you** can rely on.

Tregaskiss understands that automated welding applications require reliable products that maximize production uptime and throughput. This is why industrial manufacturers repeatedly turn to Tregaskiss and its proven track record in providing resilient, easy to maintain, robotic MIG welding guns, consumables and peripherals.

Visit Tregaskiss.com for more information or to configure a robotic gun for your welding application today.



Dynasty® 280 DX with CV

See literature AD/4.95

Multiprocess performance in a portable package. Designed for industrial applications that require a versatile solution with superior arc performance.

NEW!



SuitCase X-TREME™ feeder paired with the CV output of the power source gives this unit MIG process capabilities.

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.

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.

Pulsed TIG can be used to increase puddle agitation, arc stability and travel speeds while reducing heat input and distortion.

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

Cooler-On-Demand™ feature operates the auxiliary cooling system only when needed, reducing noise, energy use, and airborne contaminants pulled through the cooler.



Dynasty 280 DX MIG shown with SuitCase® X-TREME™ 8VS feeder and Bernard™ gun.

Industrial ● CC CV AC DC Phase 3 1

Processes

- TIG (GTAW) ▪ Pulsed TIG (GTAW-P)
- MIG (GMAW) ▪ Flux-cored (FCAW)
- Stick (SMAW) ▪ Air carbon arc (CAC-A)

Comes with

- 2.4 m (8 ft.) power cord (no plug)
- Two 50 mm Dinse-style connectors
- Quick reference guide

Most popular accessories

- SuitCase® X-TREME™ Feeders
8VS 300877
12VS 300876
- Small Runner™ Cart 301318
- Coolmate™ 1.3 300972
- Contractor Kits
301311 w/RCCS-14 finger control
301309 w/RFCs-14 HD foot control
- Weldcraft™ Water-Cooled Torch Kits
300185 W-250 (WP-20)
300990 W-280 (WP-280)
301268 W-375
- Remote Controls

Stock Number (907514007) Power source only	Welding Process	Input Power	Welding Amp Range	Rated Output at 60% Duty Cycle	Amps Input at Rated Load Output, 50/60 Hz						Max. Open-Circuit Voltage	Dimensions	Net Weight	
	TIG	3-phase	1–280 (DC)	235 A at 19.4 V	19	17	10	9	7	7.0	60 VDC (11 VDC**)	H: 346 mm (13.6 in.) W: 219 mm (8.6 in.) D: 569 mm (22.5 in.)	25 kg (55 lb.)	
		1-phase	2–280 (AC)	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

Dimension™ Series

See literature DC/19.2

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

Heavy industrial ● CC CV AC DC 3 Phase

Processes

- MIG (GMAW) ▪ Flux-cored (FCAW)
- Stick (SMAW) ▪ TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A)
(Dimension 452: 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 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™ 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).

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   

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
- ArcReach® SuitCase® Feeders
8 301457
12 301456
- 70 Series Feeders
- ArcReach Stick/TIG Remote
301325
- Bernard™ MIG Guns
- Running Gear Cylinder Rack
300408
- 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				Max. Open-Circuit Voltage	Power Source Dimensions (Includes lift eye)	Power Source Net Weight
			380 V	460 V	KVA	KW			
Dimension 650 (907617) 380/460 V power source only (907618) 380/460 V, CE	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)
Dimension 650 ArcReach (907617001) 380/460 V power source only									

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.



Input power choices

AUTO-LINE™ (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
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.

*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   

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
- MIGRunner™ Cart 195445
- Running Gear Cylinder Rack 300408
- Coolmate™ Coolant System
- Industrial MIG 4/0 Kits 300405 (Dinse) 300390 (Lugs)
- Protective Cover (XMT 350/425 only) 195478
- Gas Valve Kit 195286 XMT 350/425 300928 XMT 450

Model/Stock Number	Input Power	Amperage/Voltage Ranges	Rated Output	Amps Input at Rated Load Output							Max. Open-Circuit Voltage	Dimensions	Net Weight
				208 V	230 V	400 V	460 V	575 V	KVA	KW			
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	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 CC/CV (907481) 230/460 V, 60 Hz (907525) 400 V w/auxiliary power*, 50/60 Hz, CE XMT 450 MPa (907479) 230/460 V, 60 Hz (907468) 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			
				–	51	–	27.6	23.6	21.6	18.3 (KVA is 23.5 on 575 V)			

XMT® 350 FieldPro™ System

See literature DC/18.96



XMT 350 FieldPro power source (center) shown with (clockwise from left) ArcReach SuitCase 12 feeder, ArcReach Smart Feeder, ArcReach SuitCase 8 feeder and ArcReach Stick/TIG Remote.

ArcReach®

Every year, outdated welding equipment wastes hundreds of productive work hours – and thousands of dollars in profit – by forcing operators to make numerous walks from the weld joint to the welder. Welding systems with ArcReach technology let operators adjust welding parameters right at the weld joint without a control cord using the wire feeder or remote – maximizing arc-on time, improving safety and impacting the bottom line. **Don't walk. Weld!** Learn more at MillerWelds.com/arcreach

More jobsite productivity and efficiency

Cable Length Compensation (CLC™) ensures that the voltage a weld operator sets is the voltage they get by automatically adjusting voltage based on weld cable length, even hundreds of feet away from the power source.



For portability and reliability, Auto-Line allows for any input voltage hookup (208–575 V, single- or three-phase) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable power.

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

Exceptional arc performance

Common weld failures can be minimized with stick stops that are specifically programmed to eliminate arc strikes outside of the heat-affected zone.

Regulated Metal Deposition (RMD®) and pulsed MIG are fully supported, enabling operators to use these advanced processes in the field for faster, more-efficient welds.

Increased uptime

Delivers the performance you need. XMT 350 FieldPro welders and ArcReach feeders and remotes have been extensively field-proven.

Wind Tunnel Technology™ Internal air flow that protects electrical components and PC boards from dirt, dust debris... greatly improving reliability.

Eliminate expenses related to maintaining or replacing easily damaged control cords because the weld cables are used to communicate weld parameters between the wire feeder and power source.

Improved jobsite safety

Decrease the chances of slip, trip or fall injuries because ArcReach technology allows weld operators to make parameter changes at the wire feeder or remote instead of having to travel through multi-story and cluttered jobsites back to the power source.

Maximum fleet compatibility

Maximize fleet compatibility and get the benefits of ArcReach when you pair XMT 350 FieldPro welders and ArcReach feeders with other ArcReach compatible products.

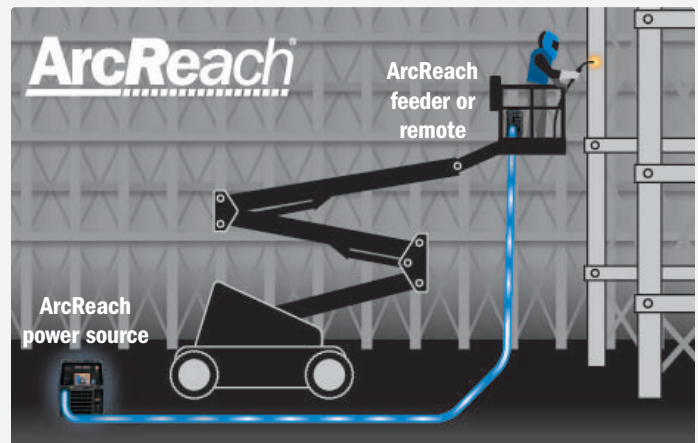
More operator control

Weld operators can Adjust While Welding (AWW™) to change weld parameters while the arc is on.

Inadvertent parameter changes by other jobsite workers can be easily avoided because connecting an ArcReach accessory from the power source automatically locks out the power source's panel controls.

Return to a previous weld process faster because the power source is restored to its previous settings once the ArcReach accessory is removed.

Decrease the chance of an incorrect weld process being used because Auto-Process Select™ automatically sets the power source to the correct weld process based on the polarity applied to the weld accessory.



XMT® 450 CC/CV ArcReach®

See literature DC/18.94



Note: XMT 450 CC/CV ArcReach does not support the new Cable Length Compensation (CLC™) and Adjust While Welding (AWW™) features or the ArcReach Smart Feeder.

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 550 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 550 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.

Remote override of XMT. When an ArcReach feeder is connected to an XMT 450 ArcReach the feeder has full control and the XMT controls are disabled, preventing accidental changes by personnel other than the welding operator.

Heavy industrial ●
CC/CV DC 3 1 XMT 450
 Phase Phase is 3-phase only.

Processes

- MIG (GMAW) ▪ Stick (SMAW)
- TIG (GTAW) ▪ Flux-cored (FCAW)
- RMD* ▪ Pulsed MIG (GMAW-P)*
- 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.]])

*XMT 350 FieldPro only with ArcReach Smart Feeder.

Stick/TIG system

- XMT 350 FieldPro power source
- ArcReach Stick/TIG Remote

MIG/flux-cored system

- XMT 350 FieldPro power source
- ArcReach SuitCase 12 feeder with drive rolls and Bernard BTB Gun 300 A

RMD/pulse system

- XMT 350 FieldPro power source
- ArcReach Smart Feeder with drive rolls and Bernard PipeWorx 300-15 MIG gun

Most popular accessories



- **XMT® 350 FieldPro™ Racks**
 907739 4-pack rack
 907740 6-pack rack
 Rack comes assembled with four or six XMT 350 FieldPro power sources fused for 460/575 V. See literature DC/18.96 for more information.
- **XMT® 450 CC/CV ArcReach Racks**
 907700 4-pack rack
 Rack comes assembled with four XMT 450 CC/CV ArcReach power sources fused for 460 V.
- XR-AlumaFeed® 300509
- ArcReach® Feeders
- 20 and 70 Series Feeders
- Spoolmatic®/WC-24
- XR™ Control

ArcReach® Accessories



ArcReach SuitCase® 8 and 12 feeders (for MIG or flux-cored welding)

301457 ArcReach SuitCase® 8

301456 ArcReach SuitCase® 12

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

ArcReach Smart Feeder (for RMD® or pulsed MIG welding)

300935 Smart Feeder w/Bernard™ PipeWorx 300-15 MIG gun

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.

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).

	Model/Stock Number	Input Power	Amperage/Voltage Ranges	Rated Output	Amps Input at Rated Load Output, 60 Hz	Max. Open-Circuit Voltage	Dimensions	Net Weight
350 A	XMT 350 FieldPro Power Source only (907730) 208-575 V with Tweco® (907730002) 208-575 V with Dinse	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.)	42.2 kg (93 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 (907481004) 230/460 V 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 ArcReach SuitCase 12 feeder.



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 (301457) or 12VS (301456)
- 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)



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



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. <i>(Fuses included for 460 or 575 V operation. Only empty racks require ordering appropriate fuse kit.)</i>	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 

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 (301457) or 12VS (301456) 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 4.6 m (15 ft.) 250-15
195400 4.6 m (15 ft.) 300-15

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

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

PipeWorx Memory Card, Accu-Power 300667

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

*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 230-575 V, 50/60 Hz (907633) Dinse, CE (907533) Tweco®	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		
ArcReach Suitcase 8 (301457), 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.)		
ArcReach Suitcase 12 (301456), 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) Dinse, CE (300935) Tweco® (300935002) Tweco® w/flowmeter	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 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   

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)

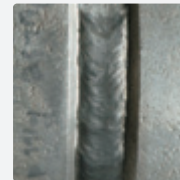
- Higher quality root pass
- Calm stable arc
- Less spatter
- More tolerant of hi-lo conditions
- Reduced training requirements
- Less chance of cold lap or lack of fusion reducing rework
- Can eliminate the need for a hot pass
- Can eliminate backing/purge gas in some stainless applications



RMD carbon steel

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

PipeWorx Memory Card, Accu-Power 300667

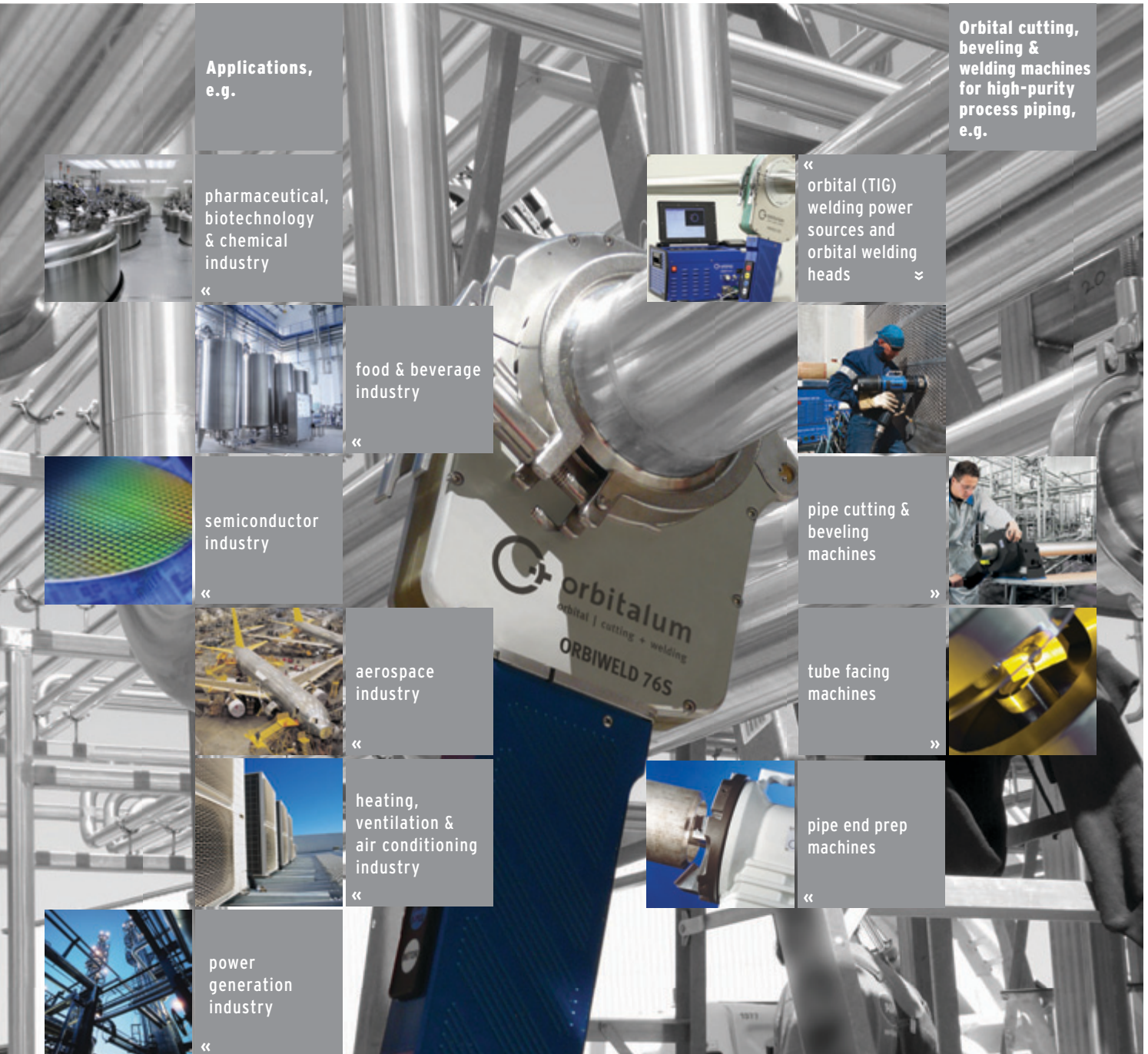
Displays instantaneous power during welding to meet the ASME requirement for calculating heat input on complex waveform processes (RMD and pulsed MIG).

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 PipeWorx Feeder (300949), CE	Input Power	Input Welding Circuit Rating	Wire Feed Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight		
	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



ITW Orbital Cutting & Welding



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beveling &
welding machines
for high-purity
process piping,
e.g.

pharmaceutical,
biotechnology
& chemical
industry

« orbital (TIG)
welding power
sources and
orbital welding
heads »

food & beverage
industry

pipe cutting &
beveling
machines

semiconductor
industry

tube facing
machines

aerospace
industry

pipe end prep
machines

heating,
ventilation &
air conditioning
industry

power
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Product Guide

	Class	Stick	DC TIG	Flux-cored*	CACA	Portability	Weldable Metals	Welding Amperage Range	Special Features	Typical Applications		
1-Phase	Thunderbolt® 160	●	●			Handle, shoulder strap	Steel, stainless	20-160 DC	Infinite amperage control, dual-voltage MVP™ plugs	Job shops, maintenance/repair, farm		
	Thunderbolt® 210	●	●					25-210 DC			Infinite amperage control	Job shops, maintenance/repair, farm
	Maxstar® 161 S	●	●			Handle/shoulder strap, optional case		20-160 DC	120-240 V Auto-Line™ digital meter	MRO, ship installation/repair, farm/ranch		
1- & 3-Ph	Maxstar® 210 STR	●	●	●		Handles, shoulder strap, optional carts	Steel, stainless	5-210 DC	120-480 V Auto-Line™ digital meters	Construction, fabrication, pipe, steel erection, shipbuilding		
	CST™ 280	●	●	●		Handle, optional cart			5-280 DC	Portable at 41 lb., optional meter, also available in multioperator rack	Construction, fabrication, pipe, steel erection, shipbuilding	
3-Phase	CST™ 280 Rack	●	●	●	5/16**	Lift eye, optional running gear	Steel, stainless	5-280 DC	Up to 4 or 8 operators, lightweight	Construction, maintenance/repair, shipbuilding		
	Gold Star® 452/602	●	●	●	5/16*			20-590 DC			Built-in arc control	Steel erection, pipe, fab, shipbuilding, foundries
	Gold Star® 652/852	●	●	●	3/8*			50-850 DC			Built-in arc control	Steel erection, pipe, fab, shipbuilding, foundries

Product Key

Class: ● Light industrial ● Industrial ● Heavy industrial Capability: ● Designed for this process ● Capable of this process
 New! or Improved! products appear in blue type. *Constant-current (stick) machines can utilize voltage-sensing wire feeders for some flux-cored applications. **Two machines paralleled.

Thunderbolt® 160 and 210

See literature DC/37.0

NEW!



Thunderbolt 210 shown.

Best-in-class dependable, portable, powerful stick welder.

Nearly 45 kg (100 lb.) lighter so you can work smarter not harder by bringing the welder to the work. It's portable so it's easier to carry and store.

More powerful – up to 85 more amps – compared to leading competitive machine means you can weld thicker materials.

Hot Start™ technology provides easy, quick and reliable arc starts.



Thunderbolt 160 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.

Light industrial ● **CC DC 1** Phase

Process - Stick (SMAW)

Comes complete with

- 3 m (10 ft.) No. 4 electrode cable with heavy-duty electrode holder
- 3 m (10 ft.) work cable with clamp
- 2 m (6.5 ft.) power cord with MVP™ plugs for 120 V and 240 V (160 model) **OR** 240 V plug (210 model)
- Cable pouch

Model/Stock Number	Input Power	Welding Amperage Range	Rated Output	Amps Input at Rated Output	Max. Open-Circuit Voltage	Dimensions	Net Weight
Thunderbolt 160 (907721)	120 V	20-80	65 A at 20% duty cycle	20.7	91 VDC	H: 267 mm (10.5 in.) W: 181 mm (7.125 in.) D: 340 mm (13.375 in.)	6.8 kg (15 lb.)
	240 V	20-160	160 A at 30% duty cycle	27.8	91 VDC		
Thunderbolt 210 (907722)	240 V	25-210	210 A at 20% duty cycle	43.4	85 VDC		7.0 kg (15.5 lb.)

Maxstar® 161 S

See literature DC/27.3

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



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



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

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

Adaptive Hot Start™ for stick arc starts.

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

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

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
- Quick-reference guide

907709001 includes above plus

- Protective X-CASE™

Most popular accessories

- Protective X-CASE™ 301429

*Sense voltage for stick.

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
Stock Number (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: 10.3 in. (262 mm) W: 5.6 in. (142 mm) D: 13.5 in. (343 mm)	13 lb. (5.9 kg)
	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

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



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

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.

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

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

Remote amperage control.

Digital meters for more precise control when presetting or monitoring welding amperage.

Portable with adjustable shoulder strap.

*Sense voltage for stick and Lift-Arc TIG.

Industrial ● **CC DC 3 1**
Phase Phase

Processes

▪ Stick (SMAW) ▪ TIG (GTAW)

Comes complete with

- 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 (907682)	Welding Process	Input Power	Welding Amperage Range	Rated Output	Phase	Amps Input at Rated Load Output, 50/60 Hz							Max. Open-Circuit Voltage	Dimensions	Net Weight
						120 V	208 V	240 V	400 V	480 V	KVA	KW			
	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			
	TIG	208-480 V	1-210	210 A at 18.4 V, 60% duty cycle	Three-phase	23	–	–	–	–	2.8	2.8			
						Single-phase	–	24	20	12	10	4.9			
	TIG	120 V	1-210	125 A at 15 V, 60% duty cycle	Single-phase	–	–	–	–	–	2.6	2.6			

Gold Star® Series

See literature DC/8.1

Rugged, reliable performance and superior arc characteristics.



Gold Star 452 shown.



Hot Start™ makes it easy to start difficult stick electrodes such as E-6010 and E-7018.

Built-in arc control lets you get in tight without sticking the electrode. An electrode compensation circuit ensures consistent arc control performance regardless of the electrode size.

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

14-pin receptacle provides quick, direct connection to Miller® 14-pin remote controls and switches.

115-volt duplex receptacle provides 15 amps of auxiliary power.

Power efficient for exceptional value and return on your investment.

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

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

Most popular accessories

- Standard Running Gear 042886
- Standard Cylinder Rack 042887
- Remote Controls
- Digital volt and amp meters 300359 For models after KG283595 300321 For models after MF100119C
- Easy-to-install front-panel mount.

Model	Stock Number	Amperage Range in CC Mode	Rated Output	Amps Input at Rated Output, 60 Hz							Max. Open-Circuit Voltage	Dimensions (Includes lift eye and strain relief)	Net Weight
				200 V	230 V	460 V	575 V	KVA	KW				
Gold Star 452/602	(903374)	200(208)/230/460 V, 60 Hz	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.)
	(903400)	230/460/575 V, 60 Hz											
	(907363)	380/400/440 V, 50/60 Hz, CE											
Gold Star 652/852	(903402)	230/460/575 V, 60 Hz	50-850	650 A at 44 VDC, 60% duty cycle	–	124	62	50	49.4	36	72 VDC		229 kg (505 lb.)
	(907364)	380/400/440 V, 50/60 Hz, CE											

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 1**
Phase 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								Max. Open-Circuit Voltage	Dimensions	Net Weight	
					208 V	220 V	230 V	400 V	440 V	460 V	575 V	KVA	KW			
(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).

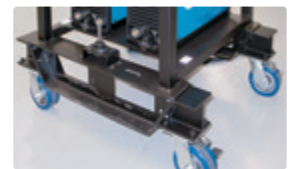
Optional rack running gear available for moving the rack.

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								KVA	KW	Dimensions	Net Weight
				220 V	230 V	400 V	440 V	460 V	575 V						
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.	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.)	161 kg (355 lb.)		
8-Pack Rack	(907365) Tweco®	8 units	Dinse units include one set of male connectors; Tweco units do not. See above for information on CST 280.	274	268	158	145	140	114	116.8	81.6	8-pack W: 1,168 mm (46 in.) D: 673 mm (26.5 in.)			
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.)		

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

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Diversion™ 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.)



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.

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

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.).

*While idling.

Light industrial ● **CC** AC/DC **1** Phase

Process • TIG (GTAW)

Comes with

- Power cord with MVP plugs for 120 V and 240 V
- 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	Stock Number (907627)	Input Power	Welding Amp Range	Rated Output	Amps Input at Rated Output	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
			115 V	10-125	125 A at 15 V, 35% duty cycle	26.5 (.88*)	3.1 (.1*)	3.0 (.03*)	80 VDC	H: 433 mm (17 in.) W: 251 mm (9.875 in.) D: 608 mm (23.875 in.)
		230 V	10-180	150 A at 16 V, 20% duty cycle 180 A at 17.2 V, 10% duty cycle	16 (.44*) 20.5 (.44*)	3.7 (.1*) 4.7 (.1*)	3.6 (.03*) 4.6 (.03*)			

Maxstar® 161 STL and STH DC TIG and Stick

See literature DC/27.5

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



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.

Digital meter for more precise control.

Fan-On-Demand™ power source cooling system.

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

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

*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
- Air-cooled TIG torch connector
- Quick-reference guide

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
- AK2C TIG torch accessory kit
- RCCS-6M remote fingertip control (packages 907710002 and 907711001 only)

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	Maxstar 161 STH (907711) Power source only	TIG	120 V	5-130	130 A at 15.2 V, 30% duty cycle	22.6	2.73	2.70	48 VDC	H: 262 mm (10.3 in.) W: 142 mm (5.6 in.) D: 343 mm (13.5 in.)
	(907710001) TIG/stick package	(907711001) TIG/stick package with remote fingertip control		240 V	5-160	160 A at 16.4 V, 20% duty cycle	15.05	3.62	3.49	(12-16 VDC*)		
	(907710002) TIG/stick package with remote fingertip control		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.**



TIG Welding Capability

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



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.)

Light industrial ● CC AC 1 DC 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.
- Spoolmate™ 150 spool gun 301272

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
	(907596001) 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.

Heavy industrial 

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.



Syncrowave 250

Syncrowave 350

TIG Welding Capability

350 Max. 15.9 mm (5/8 in.)	350 Max. 12.7 mm (1/2 in.)
250 Max. 12.7 mm (1/2 in.)	250 Max. 9.5 mm (3/8 in.)
Steel	Aluminum
Min. 0.3 mm (0.012 in.)	Min. 0.4 mm (0.015 in.)



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.

Model/Stock Number	Welding Amperage Range	Rated Output	Amps Input at Rated Output, 50/60 Hz						Max. Open-Circuit Voltage	Power Source Dimensions	Power Source Net Weight
			200 V	230 V	460 V	575 V	KVA	KW			
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			

AC/DC

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)



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 3 1
DC Phase 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 300429 Wireless Foot Control
- Contractor Kits 301311 w/ RCCS-14 finger control 301309 w/ RFCS-14 HD foot pedal



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										Max. Open-Circuit Voltage	Dimensions	Net Weight				
						120 V	208 V	230 V	240 V	400 V	460 V	480 V	575 V	KVA	KW							
DC Maxstar	Maxstar 210 (907683)	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							
	Maxstar 210 DX (907684) (907684001), CE		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	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								
	Maxstar 280 DX (907553) (907539) with CPS (907539002), CE	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	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							
	Dynasty 210 DX (907686) (907686002), with CPS (907686003), CE		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	TIG	3-phase	1–280 (DC)	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	2–280 (AC)	235 A at 19.4 V*	–	33	30	–	17	15	–	12	6.9				6.8			
Dynasty 280 DX (907551) (907514) with CPS (907514002), CE (907514003) with Insight and CPS	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)



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.)

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 through 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.

Heavy industrial ●
CC AC **3** DC 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

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 300429 Wireless Foot Control



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	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.

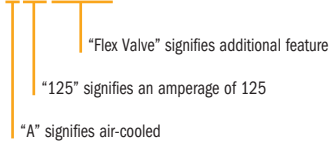
Works in cold weather with the Tri-flex™ hose and cable assembly that remains flexible to ease handling and extends cable life.

Product Naming

Former Product Name	Current Product Name Breakdown			Current Product Name
	Product Line Descriptor	Air/Water and Amperage	Features Set Label	
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



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.)	Type	Stock Number	Diameter in. (mm)
2% Ceriated (EWCe-2)			Pure (EWP)		
Performs well in DC welding and arc starting at low-current settings, and offers excellent performance in AC processes.	WC040X7	1.0 (0.040)	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)
	WC116X7	1.6 (1/16)		WP116X7	1.6 (1/16)
	WC332X7	2.4 (3/32)		WP332X7	2.4 (3/32)
	WC018X7	3.2 (1/8)		WP018X7	3.2 (1/8)
	WC532X7	4.0 (5/32)		—	4.0 (5/32)
2% Lanthanated (EWLa-2)			Rare Earth (EWG)		
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)	Combines the best of all alloying elements, and provides excellent arc stability in AC or DC welding.	—	1.0 (0.040)
	WL2116X7	1.6 (1/16)		WG116X7	1.6 (1/16)
	WL2332X7	2.4 (3/32)		WG332X7	2.4 (3/32)
	WL2018X7	3.2 (1/8)		WG018X7	3.2 (1/8)
	WL2532X7	4.0 (5/32)		—	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



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	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.)
A-80 Flex		
A-80 Flex Valve		

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



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	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.)
A-125 Valve		
A-125 Flex		
A-125 Pencil		

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 customization. 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	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.)
W-250 Valve	

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

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.)

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-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.)

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



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.)

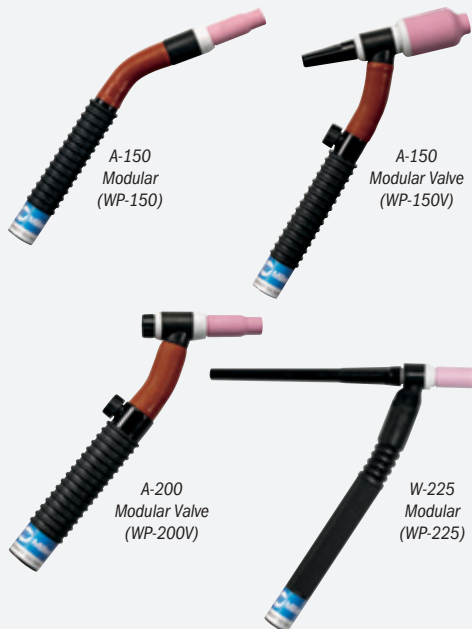
Applications

- 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



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

Transform data into actionable information that drives continuous improvement.

NEW!

ArcAgent for Insight Core brand-neutral solution now available.



Insight

WELDING INTELLIGENCE™

Core / Centerpoint / Pipe and Vessel / ArcAgent



Increase productivity



Improve weld quality



Manage costs

Complete coverage for any application.

Aerospace



Manufacturing



Pipe and vessel



Automation



Submerged arc



Choose the Right Welding Intelligence System

		Insight Core™	Insight Centerpoint™	Insight Pipe and Vessel	Insight ArcAgent™
For Use With	Factory-Installed	<ul style="list-style-type: none"> Continuum™/Auto-Continuum™ Dynasty®280 DX 	<ul style="list-style-type: none"> Continuum™/Auto-Continuum™ Dynasty®280 DX 	—	<ul style="list-style-type: none"> ANY welding power source (old or new) ANY brand ANY welding process
	Field-Installed/Activated	<ul style="list-style-type: none"> 14-pin compliant power source (see MillerWelds.com/insight) 	<ul style="list-style-type: none"> Continuum™/Auto-Continuum™ Dynasty®280 DX 	<ul style="list-style-type: none"> PipeWorx 400 	
Requirements		<ul style="list-style-type: none"> Internet connection (wired/wireless) 	<ul style="list-style-type: none"> PC and Ethernet connection 	<ul style="list-style-type: none"> PC and Ethernet connection 	<ul style="list-style-type: none"> See Insight Core/Insight Centerpoint requirements
What Capability Do You Need?		<ul style="list-style-type: none"> Productivity monitoring Weld parameter verification Simplicity/basic monitoring Goal setting Analytic tools 	<ul style="list-style-type: none"> Prevent/detect missed welds Minimize overwelding/underwelding Electronic work instructions Measure overall equipment effectiveness (OEE) 	<ul style="list-style-type: none"> Real time contract, spool, joint documentation Enterprise resource planning system integration (ERP) Productivity/quality metrics 	<ul style="list-style-type: none"> Brand-neutral solution for use with Insight Core or Insight Centerpoint
Data Storage		<ul style="list-style-type: none"> Cloud based 	<ul style="list-style-type: none"> Local server or PC 	<ul style="list-style-type: none"> Local PC 	<ul style="list-style-type: none"> See Insight Core/Insight Centerpoint requirements

Insight Core™

Simplified, Internet-based welding information solution to report operator productivity and deposition, as well as weld parameter verification.



Visit our online Insight Core simulator at Insight-simulator.MillerWelds.com

Insight Core dashboard descriptions

- 1 Asset tree.** A list of power sources within your fleet – 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 Analytics tools.** Business analytic tools allowing for weld data analysis based on individual/cell performance as well as overall financial terms.
- 7 Notifications.** Email/text notifications based on your desired frequency and subject.
- 8 Multiple languages available.** English, German, Spanish, French, Italian, Dutch, Portuguese and Chinese.

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 Miller® 14-pin compliant power sources. See MillerWelds.com/insight for a list of 14-pin compatible power sources.

NEW! ArcAgent for Insight Core brand-neutral solution now available.

Standard data storage: 90 days plus current month stored in cloud. Extended data options now available (see below).

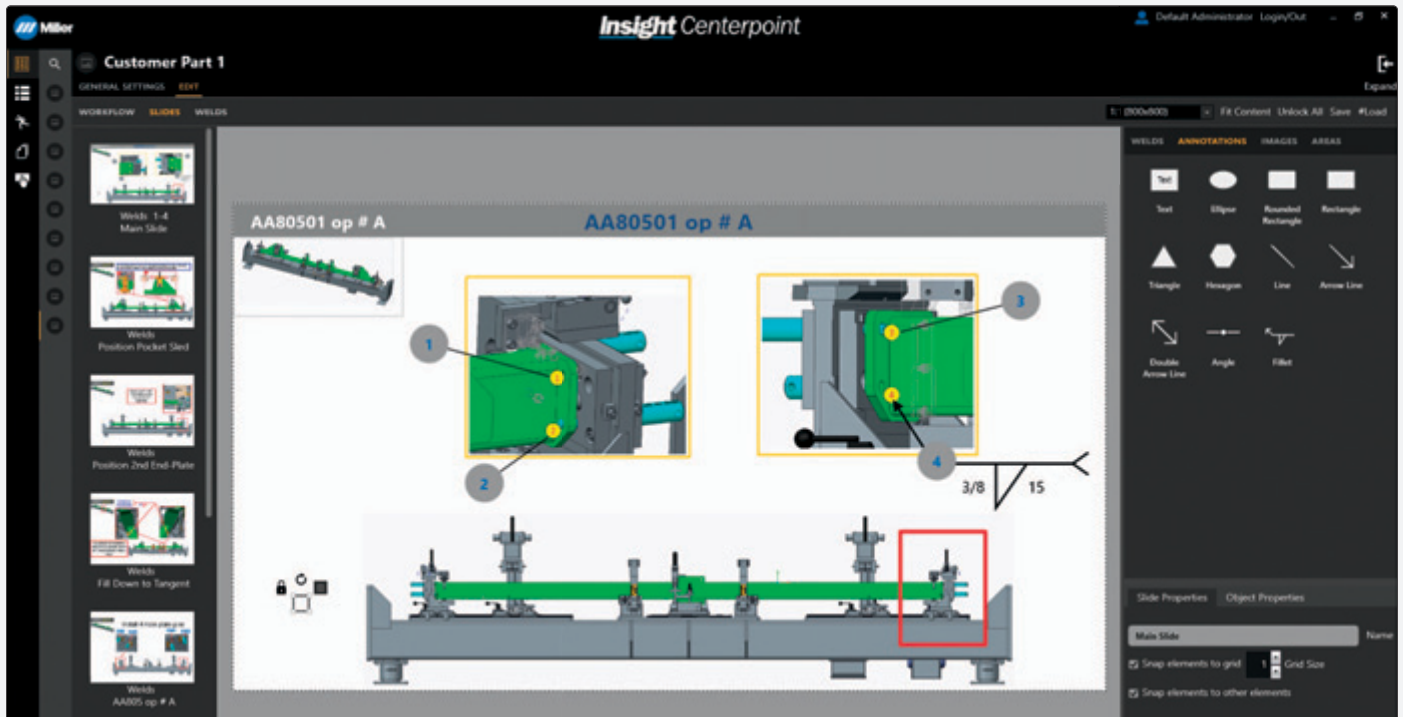
*Additional stock numbers are available – visit MillerWelds.com/insight.

**SubArc Digital Series requires Insight Core to SubArc Digital Series Adapter Kit (301295).

Type	Continuum Model/Stock Number*	Miller 14-Pin Compliant Power Sources	Optional Extended Data Storage per Location (Time Period of Data Storage/Number of Devices)	High-Data Usage
Factory-Installed Insight Core Power Sources	Continuum 350 (907636) Continuum 500 (907640) Auto-Continuum 350 (907656) Auto-Continuum 500 (907657)	–	(301501) 12 months/under 50 devices (301501001) 12 months/51-100 devices (301501002) 12 months/each 100 units over 100 devices	(301503) Over 20K welds per day
Field-Installed Insight Core Module or ArcAgent	–	(301072) Insight Core 14-pin module**		

Insight Centerpoint™

Most established, advanced solution in the industry, providing PC-based operator feedback to detect missed welds, verify proper weld sequence and provide weld defect detection – all in real time.



New and improved Version 10

- Designed for ease of use
- Faster start up time
- Drastically shortened learning curve

Software features

Part Tracking™ provides real time operator feedback to ensure accurate weld sequence, prevent missed welds and ensure proper weld parameters.

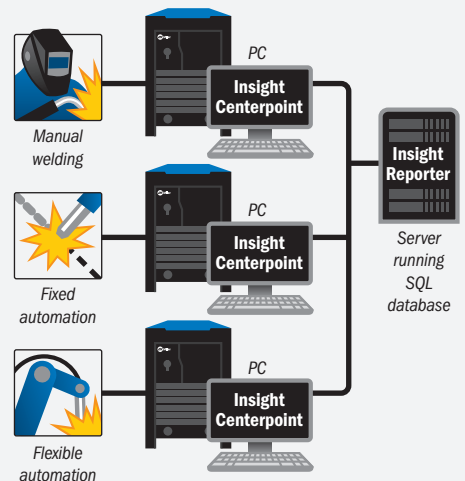
Codes and standards captures information relating actual welding parameters to the specific operator, contract, joint and weld pass to ensure productivity and quality requirements are met.

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.

How it works



*Additional stock numbers are available – visit MillerWelds.com/insight. **Insight Centerpoint requires BOTH software license AND annual software maintenance.

Type	Continuum Model/ Stock Number*	Brand-Neutral Power Sources	Software Activation	Insight Centerpoint Software Single License** Site License**		Optional Insight Reporter	Accessories
Factory-Installed Insight Centerpoint Power Sources	Continuum 350 (907636) Continuum 500 (907640) Auto-Continuum 350 (907656) Auto-Continuum 500 (907657)	–	(301490)	(301485) Software (301486) Maintenance	10–25 devices (301485001) Software (301486001) Maintenance	(300709) Single license (1 required per PC) (300710) SQL database (1 required per facility)	Insight LTD Gun (Q4015J3EML) For Continuum Insight LTD Remote (301383)
Field-Installed Insight Centerpoint ArcAgent	–	ArcAgent Manual Series (301342) Manual, CE (301343) Manual with front panel Part Tracking controls, CE (301345) Manual with Insight torch capability, CE ArcAgent Auto (301346), CE	–		26–50 devices (301485002) Software (301486002) Maintenance 51–100 devices (301485003) Software (301486003) Maintenance		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)



Insight ArcAgent™

See literature WI/1.0

Premium data acquisition tools that enable both Insight Core™ and Insight Centerpoint™ solutions to integrate with any brand of welding power source.



Models

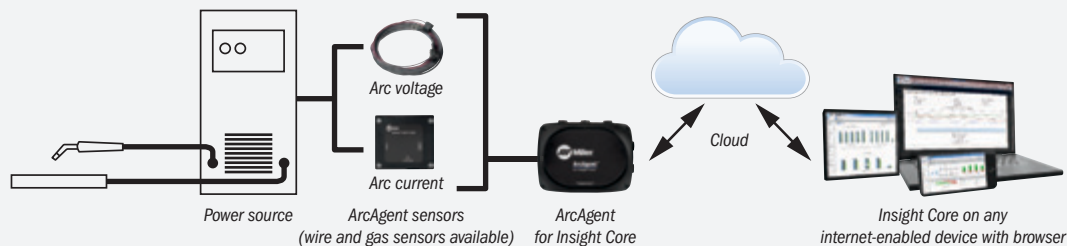
ArcTimer™ Monitors very basic weld data (displayed on LCD): total arc time, last weld time, current weld time and total arc count. Battery operated (4 C-sized).

NEW! ArcAgent for Insight Core. Internet-based system to report operator productivity and deposition, as well as provide weld parameter verification. Monitors voltage, current, two wire feed speeds and gas flow.

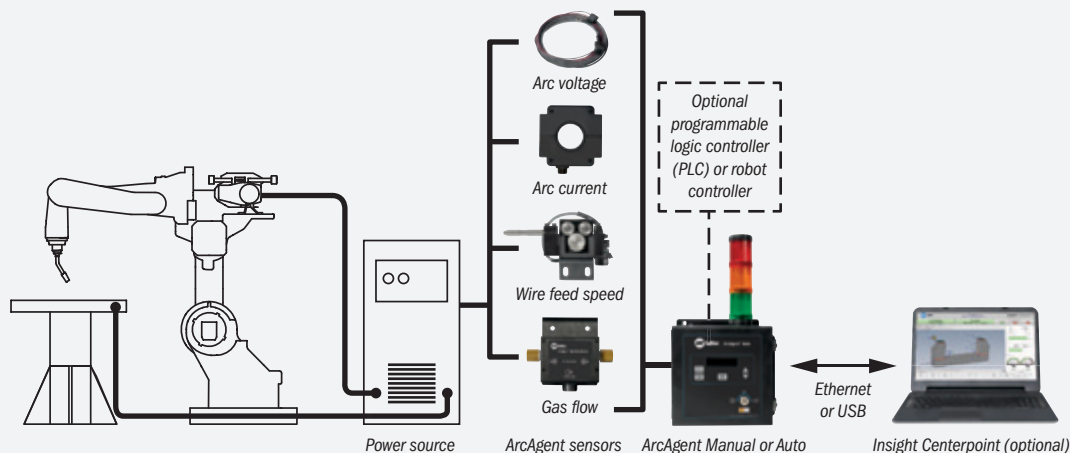
ArcAgent Manual. Designed for manual welding. Provides process control and monitoring that detects and prevents missed welds.

ArcAgent Auto. Designed for automated welding. Real-time monitoring of weld count, length (duration), process set-point parameters (voltage, current, wire feed speed, gas flow), total arc time, total wire used and total clamp time.

Typical ArcAgent for Insight Core welding installation



Typical ArcAgent Manual or ArcAgent Auto welding installation for Insight Centerpoint



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

Current monitoring

- Standard Current Sensors (for up to 4/0 lugged cables) 301353 150 A 301351 650 A
- Large Diameter Current Sensors (for Dinse- or Tweco®-style cables) 301357 600 A solid 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.)
- 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.

ArcTimer (301349), CE	ArcAgent Manual (301342) Manual, CE (301343) Manual with front panel Part Tracking controls, CE (301345) Manual with Insight torch capability, CE	ArcAgent Auto (301346), CE
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Fusion 160

See literature ED/2.8

The Fusion 160 delivers a smooth, stable arc from either engine power or 120/240-volt utility power, providing a unique combination of versatility and productivity in a lightweight package.



Fusion 160 with electric start shown.

NEW!



POWER SHIFT

Work anywhere convenience.

PowerShift technology provides weld capabilities using either the Fusion 160 gasoline engine or 120/240-volt utility power. You'll have the confidence of knowing

that you can weld virtually anywhere – outdoors and indoors – with just one machine. The multi-voltage plug (MVP™) makes it easy to connect the welder to either 120- or 240-volt power.

Easier to transport. The Fusion 160 welder/generator weighs 101 kg (222 lb.). That's up to 31.7 kg (70 lb.) less than similar machines, so moving the Fusion 160 is easier and faster. Less time is spent waiting, and more work can get done.

Less rework. The Fusion 160 uses inverter technology to deliver a smooth, stable stick arc that's forgiving of variations in arc length and travel speed, so it's easier to produce clean welds that meet specifications – and avoid the time and expense of rework.

Light industrial ● **CC DC** 1 Phase

Process

- Stick (SMAW)

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
- Twist Lock Adapter Cord 301489
- Protective Cover 301245

Gasoline	Stock Number	Input Power	Welding Mode	Welding Process	Amperage Range	Rated Output at 40°C (104°F)	Amps Input at Rated Output, 50/60 Hz, 1-Phase	Single-Phase Generator Power at 40°C (104°F)	Dimensions	Net Weight
	(907720) Kohler with recoil start	Engine power	CC/DC	DC stick	30-160	160 A at 26.4 V, 20% duty cycle 110 A at 24.4 V, 100% duty cycle	–	Peak: 6,500 watts Continuous: 6,200 watts	H: 629 mm (24.75 in.) W: 510 mm (20.125 in.) D: 794 mm (31.25 in.)	Recoil: 101 kg (222 lb.) Electric: 110 kg (242 lb.)
	(907720001) Kohler with electric start	Power Shift 120 V			30-100	90 A at 23.6 V, 40% duty cycle	22.7	–		
		Power Shift 240 V			30-160	160 A at 26.4 V, 20% duty cycle 110 A at 24.4 V, 100% duty cycle	25.0	–		

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™ 200 Air Pak™

See literature ED/4.35

The industry-leading power solution for increasing your capabilities, reducing expenses, and boosting profitability and efficiency.

NEW!



Maximize available payload. Reduce weight by up to 249 kg (550 lb.) and increase available payload by up to 24 cubic feet by reducing the equipment on the truck.

Reduce fuel consumption. Minimize fuel costs by reducing truck engine idle time by as much as 75 percent or if you have a separate engine driven compressor by only operating one engine.

Minimize operating costs. Save up to \$50,000 over ten years from increased fuel efficiency, decreased maintenance costs and increased asset life.

Industrial rotary-screw air compressor. Easily outperforms and outlasts reciprocating compressors. Many air tools can be powered by the compressor including most 19 mm (3/4 in.) impact wrenches. Immediately supplies 0.79 m³/min. (28 cfm) at 175 psi, 100 percent duty cycle, continuous air output.

210-amp stick welder. Maximize downtime and delays by making metal repairs in the field to stay on schedule.

5,500-watt generator power. Two 120-volt duplex receptacles and one 240-volt receptacle provide 60 Hz current to support jobsite tools, lights, and high-demand applications like plasma cutters and TIG welders.

Battery charge/crank assist. Provides up to 100 amps to quickly charge 12- and 24-volt batteries. Jobsite equipment with weak batteries can get up to 300 amps of crank assist.

Light industrial ● CC DC

Process

- Stick (SMAW)

Gasoline engine

Kohler CH730 with eChoke™:

23.5 hp at 3,600 rpm
Twin-cylinder, four-cycle, overhead valve, industrial, air-cooled

Note: Engine is warranted separately by engine manufacturer.

Most popular accessories

- Spectrum® 375 X-TREME™
- Multi-Terrain Running Gear 301460
- Full KVA Adapter Cord 300517
- Protective Cover 301475 Without running gear 301476 With running gear
- HWY-Mid Frame Trailer 301438
- 25 ft. Battery Charge/Jump Cables with Plug 300422
- Air Compressor Oil Heater 301448
- Auxiliary Fuel Tank Pump 301450
- GFCI Panel Mount 120 VAC Duplex Kit 300975
- Spark Arrestor Kit 300924

Gasoline

Stock Number	Process	Output Ranges	Rated Weld Output at 40°C (104°F)	Single-Phase Generator Power at 40°C (104°F)	Dimensions	Net Weight
(907706) Kohler	DC stick	50-210 A	150 A at 26 V, 100% duty cycle 180 A at 27 V, 60% duty cycle 210 A at 25 V, 20% duty cycle	Continuous/peak: 5,500 watts	H: 604 mm (23.76 in.) H: 756 mm (29.78 in.) to top of exhaust W: 508 mm (20 in.) D: 1,185 mm (46.64 in.)	253 kg (558 lb.)
Air Compressor	Features	Free Air Delivery	Working Pressure	Duty Cycle	Oil Capacity	
	Rotary screw with auto idle, oil change intervals of 500 hours	0.79 m ³ /min. (28 cfm) at 3,600 rpm	80-175 psig	100%	1.89 L (2 qt.)	



Bobcat™ Series Gas, LP and Diesel



Bobcat 250 EFI shown.



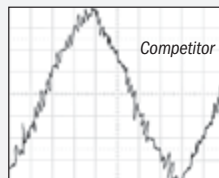
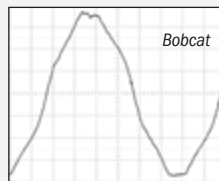
Bobcat engine-driven welder/generators are the top selling in their class because they are engineered to be reliable, powerful and durable. Their multiprocess capabilities

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)²
- AC²/DC TIG (GTAW)
- Air carbon arc cutting and gouging (CAC-A)³ (rated 4.8 mm [3/16 in.] carbons)

¹With voltage-sensing feeder only.

²With Dynasty® 210 Series or HF-251 (non-critical).

³Bobcat 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			
Gasoline	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	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.)	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	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.)
			CC/DC	Stick/TIG	40–275 A	250 A at 25 V, 100% duty cycle			
			CV/DC	MIG/FCAW	17–28 V	275 A at 25 V, 60% duty cycle 250 A at 28 V, 100% duty cycle			

Trailblazer® Series

Gas, LP and Diesel See literature ED/4.75 (Gas/LP) and ED/4.8 (Diesel)



Trailblazer 325 EFI shown.

IMPROVED!

Now available with ArcReach.

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.

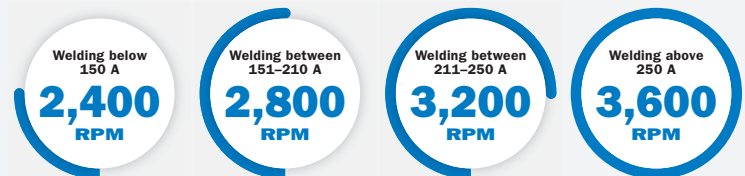
**IT WOULD TAKE
7 TRAILBLAZERS
TO EQUAL THE
SOUND OUTPUT OF
1 COMPETITOR
MACHINE.**



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



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.

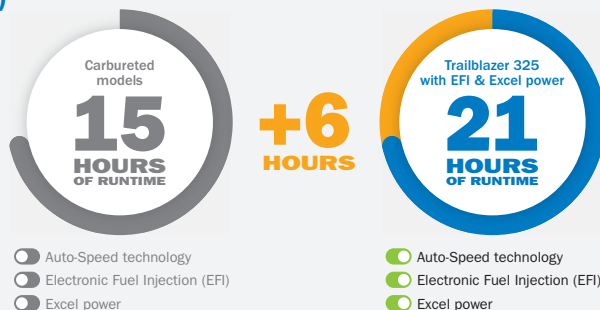
**17%
LESS CUBIC SPACE
THAN THE COMPETITION**

Options to Maximize Your Trailblazer 325 Performance

Electronic fuel injection 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.

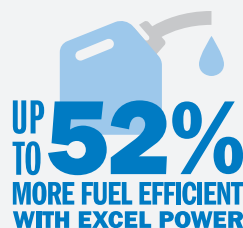


Based on typical usage — 150 amps welding 40% of the time; 20 amps generator power 30% of the time; and idling without load 30% of the time.

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.

ArcReach® remote control technology

Remote control of the power source without a control cord. An ArcReach system allows you to change weld settings from your ArcReach feeder or remote, saving a trip to the power supply. 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



Battery charge/crank assist (gas models)

Reduce downtime with battery charge/crank assist 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. Provides up to 75 amps of DC current to quickly charge 12- and 24-volt batteries. Jobsite equipment with weak batteries can get up to 350 amps of crank assist.

Note: Battery charge/jump cables (300422) must be ordered separately.

*Recommended for operation at altitudes above 1,524 m (5,000 ft.).

**For LP models order Hose and LP Tank Mounting Assembly (301458) separately.

Heavy Industrial ● CC CV DC

Processes

- Stick (SMAW) • MIG (GMAW)¹
- Flux-cored (FCAW)¹ • DC TIG (GTAW)²
- RMD³ • Pulsed MIG (GMAW-P)³
- Air carbon arc cutting and gouging (CAC-A) (rated 4.8 mm [3/16 in.] carbons)

¹With wire feeder.

²Two-piece TIG torch recommended.

³ArcReach model only with ArcReach Smart Feeder.

Engines

Gas: Kohler CH730

23.5 hp at 3,600 rpm

EFI gas: Kohler ECH730

23 hp at 3,600 rpm

LP: Kohler PCH740

Vapor withdrawal LP system

25 hp at 3,600 rpm

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
- ArcReach® SuitCase® 8/12
- ArcReach® Stick/TIG Remote 301325 (for ArcReach model only)
- Spoolmatic® 30A / WC-24 Control 130831 / 137549
- 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
- Protective Cover
- HWY-Mid Frame Trailer
- Electric Fuel Pump Kit (for gas models only) 300976 Recommended for operation at altitudes above 1,524 m (5,000 ft.).
- 7.6 m (25 ft.) Battery Charge/Jump Cables with plug (for Trailblazer 325 EFI 907754003 only) 300422

	Model	Stock Number	Welding Mode	Process	Amp/Volt Ranges	Rated Output at 104°F (40°C)	Single-Phase Generator Power at 40°C (104°F)	Dimensions	Net Weight
Gas or LP	Trailblazer 325	(907753) Kohler (907753001) Kohler with GFCI (907753002) Kohler with electric fuel pump*	CC/DC	Stick/TIG	10-325 A	325 A at 28 V, 100% duty cycle	Peak: 12,000 watts 11,800 watts (LP) Continuous: 10,500 watts 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.)	Gas 209 kg (460 lb.) LP 215 kg (475 lb.)
		(907754) EFI Kohler (907754001) EFI Kohler with Excel power (907754002) EFI Kohler with GFCI, Excel power and ArcReach (907754003) EFI Kohler w/Excel power and battery charge/crank assist (907727**) EFI LP Kohler with GFCI (907727001**) EFI LP Kohler with GFCI and Excel power	CV/DC	MIG/FCAW	10-35 V	325 A at 28 V, 100% duty cycle			
Diesel	Trailblazer 325 Diesel	(907755) Kubota (907755001) Kubota with GFCI (907755002) Kubota with GFCI and Excel power (907755003) Kubota with GFCI, Excel power and ArcReach (907755007) Kubota with International Receptacles, Excel power, ArcReach and XX18 stick mode at 1800 RPM	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			

Trailblazer® 302 Air Pak™ See literature ED/4.78

Powerful all-in-one tool designed for repair and construction with multiprocess weld quality, generator power, air compressor and battery charge/jump start.



Superior arc performance. Preset dig settings optimized for the majority of stick welding applications, best-in-class wire arc performance, and two Lift-Arc™ TIG modes for most DC TIG applications.

Strongest combined generator/compressor power. Delivers an industry-leading 13,000 watts of peak generator power independent of weld settings — can power a Spectrum® 875 plasma cutter, and provide air for plasma cutting at the same time (rated 13 mm [1/2 in.] mild steel).

Rotary screw air compressor. Delivers up to 0.88 m³/min. (31 cfm) and 160 psi of air with no storage tank. Gives 100 percent deliverable air and runs many tools at idle speed. Air outputs are rated at an industry-high 40°C (104°F). Front panel air pressure adjustment and automatic overpressure shutdown with indication. Designed for more than 30,000 hours of operation and warranted for three years by Miller.

Battery charge/crank assist. Provides selectable 12- or 24-volt battery charging with up to 450 amps of battery crank assist capability. Convenient front panel access.

Note: Battery charge/jump cables (300422) must be ordered separately.

Heavy industrial 

Processes

- AC/DC stick (SMAW)
- MIG (GMAW)¹ • Flux-cored (FCAW)¹
- AC²/DC³ TIG (GTAW)
- Air carbon arc cutting and gouging (CAC-A) (rated 4.8 mm [3/16 in.] carbons, capable 6.4 mm [1/4 in.] carbons)

¹ With wire feeder.

² With Dynasty® 210 Series.

³ Two-piece TIG torch recommended.

Gasoline engine

Kohler CH750: 27 hp at 3,600 rpm V-twin-cylinder, four-cycle, overhead valve, industrial, air-cooled

Note: Engine is warranted separately by engine manufacturer.

Most popular accessories

- SuitCase® X-TREME™ 12VS
- Spoolmatic® 30A Aluminum Spool Gun / WC-24 Control 130831 / 137549
- HWY-Mid Frame Trailer 301438
- 7.6 m (25 ft.) Battery Charge/Jump Cables with Plug 300422

*Recommended for operation at altitudes above 1,524 m (5,000 ft.).

Gasoline	Stock Number		Welding Mode	Process	Amp/Volt Ranges	Rated Weld Output at 40°C (104°F)	Single-Phase Generator Power at 40°C (104°F)	Dimensions	Net Weight
	(907549001) Kohler		CC/DC	Stick/TIG	10-300 A	280 A at 32 V, 100% duty cycle	Peak: 13,000 watts	H: 711 mm (28 in.)	350 kg (771 lb.)
	(907549) Kohler with GFCI and electric fuel pump*		CV/DC	MIG/FCAW	13-35 V, 350 A	300 A at 32 V, 100% duty cycle 350 A at 32 V, 60% duty cycle	Continuous: 11,000 watts	H: 876 mm (34.5 in.) to top of exhaust	
	(907549003) Kohler with GFCI, cooler/separator and electric fuel pump*		CC/AC	Stick/TIG	10-225 A	200 A at 25 V, 60% duty cycle		W: 508 mm (20 in.)	
						D: 1,514 mm (59.625 in.)			
Air Compressor		Features	Free Air Delivery			Working Pressure Constant	Duty Cycle	Oil Capacity	
		Rotary screw with electric clutch for on/off, oil change intervals of 500 hours	0.88 m ³ /min. (31 cfm) at 3,600 rpm 0.79 m ³ /min. (28 cfm) at 3,000 rpm 0.62 m ³ /min. (22 cfm) at 2,400 rpm (idle)			80-160 psig	100%	1.7 L (1.75 qt.)	

Big Blue® 400X Pro See literature ED/5.7

The professional welder's choice — designed with the professional in mind, the Big Blue 400X Pro is the best for ease of use, reliability and fuel economy.



IMPROVED!

Now available with ArcReach.

ArcReach® Available on select models. Remote control of the power source without a control cord.

Tailored arc control (DIG) allows arc characteristics to be changed for specific applications and electrodes. Smooth running 7018 or stiffer, more penetrating 6010.

Industrial USB port. Quickly upload the latest software and download machine log files to retrieve in-depth information such as diagnostics and machine statistics.

10,000 watts of pure generator power. Plug in an extra Miller® inverter-based power source for an additional welding arc!

Quiet operation. Only 71.6 decibels (96 Lwa) under full load. Improves jobsite communication and safety.

Standard features include digital meters with SunVision™, automatic idle, adjustable Hot Start™, output contactor control and 120-volt block heater.

Heavy industrial 

Processes

- Stick (SMAW) • MIG (GMAW)
- Flux-cored (FCAW) • DC TIG (GTAW)
- RMD®* • Pulsed MIG (GMAW-P)*
- Air carbon arc cutting and gouging (CAC-A) (rated 4.8 mm [3/16-in.] carbons)

*ArcReach models only with ArcReach Smart Feeder.

Diesel engines

Kubota V150S: 20.2 hp at 1,800 rpm

Four-cylinder, industrial, liquid-cooled

CAT C1.5: 21.7 hp at 1,800 rpm

Three-cylinder, liquid-cooled

Note: Engines are warranted separately by engine manufacturer.

Most popular accessories

- ArcReach® SuitCase® Feeders
- ArcReach® Smart Feeder**
- ArcReach® Stick/TIG Remote**
- Dynasty® 210 Series
- Protective Cover 195301

**For ArcReach models only.

Diesel	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	
	(907732010) Kubota, CE		CC/DC	Stick/TIG	20-400 A	300 A at 32 V, 100% duty cycle 350 A at 27 V, 100% duty cycle	Peak: 12,000 watts	Continuous: 10,000 watts	H: 813 mm (32 in.)	Kubota 456 kg (1,003 lb.) CAT 500 kg (1,100 lb.)
	(907732011) Kubota w/ArcReach, CE		CV/DC	MIG/FCAW	14-40 V	400 A at 24 V, 100% duty cycle	W: 667 mm (26.25 in.)			
(907758) CAT, CE						D: 1,422 mm (56 in.)				

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.

IMPROVED!

Now standard with ArcReach.



ArcReach®

Remote control of the power source without a control cord.



Arc control is beneficial when welding with stick and solid wires for easier fine-tuning of tough-to-weld materials and out-of-position applications.

Industrial USB port. Quickly upload the latest software and download machine log files to retrieve in-depth information such as diagnostics and machine statistics.

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.

15,000 watts of pure generator power. Plug in an extra Miller® inverter-based power source for an additional welding arc!

Standard features include digital meters with SunVision™, adjustable Hot Start™, output contactor control, automatic idle, thermal overload protection and 120-volt block heater.

Heavy Industrial **CC CV DC**

Processes

- Stick (SMAW) ▪ MIG (GMAW)
- Flux-cored (FCAW) ▪ DC TIG (GTAW)
- RMD® ▪ Pulsed MIG (GMAW-P)*
- Air carbon arc cutting and gouging (CAC-A) (rated 8 mm carbons)

*ArcReach models only with ArcReach Smart Feeder.

Diesel engines

Perkins 404D.22:

32.6 hp at 1,800 rpm

Four-cylinder, industrial, liquid-cooled

Note: Engines are warranted separately by engine manufacturer.

Most popular accessories

- SuitCase® X-TREME™ 8VS/12VS
- ArcReach® SuitCase® 8/12
- ArcReach® Smart Feeder**
- ArcReach® Stick/TIG Remote**
- Dynasty 210® Series
- Full KVA Adapter Cord
- Full KVA Plug Kit
- Protective Cover 301495 301113
- HWY-225 Trailer 301338
- Wireless Remote Hand Control/Wireless Antenna Kit 300430/300749
- Spark Arrestor Kit 195012

**For ArcReach models only.

Diesel	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
	(907761) Perkins with ArcReach, CE	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	Three-phase Peak: 27,000 watts Continuous: 20,000 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 (65.1 in.)	694 kg (1,530 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 600X 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

Processes

- Stick (SMAW)
- TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (500X: rated 8 mm [5/16 in.] carbons); (600X: rated 9.5 mm [3/8 in.] carbons)

Diesel engines

500X – Deutz D2011L03i

3-cylinder, industrial, air/oil-cooled

500X – Perkins 404D-22

4-cylinder, industrial, liquid-cooled

600X – 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
- Weld Meters 195131
- Battery Voltmeter 195454
- Spark Arrestor Kit 195012
- Protective Cover 194683
- RHC-3GD34A Remote Hand Control 041122

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)	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	Perkins 404.22, CE					
Big Blue 600 X CC	(907193)	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.)

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.



IMPROVED!

ArcReach®

Remote control of the power source without a control cord.

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/ampereage 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. 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 • Pulsed MIG (GMAW-P) with ArcReach Smart Feeder

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
- ArcReach® SuitCase®
8: 301457 / 12: 301456
- ArcReach® Smart Feeder 300935
- ArcReach® Stick/TIG Remote 301325
- 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
	(907762) Deutz with ArcReach and Parallel Switch	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	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				

DONT WALK WELD™



LESS WALKING MEANS BIGGER SAVINGS

"Business as usual" could cost you thousands of dollars a year, and unnecessarily waste hundreds of hours of productive time. Weld operators can get more done — and your business can save more money — when you use Miller® products with ArcReach® technology.

With ArcReach® technology, weld parameters can be adjusted remotely without a control cable, saving weld operators multiple walks back and forth from the power supply. You can increase productivity, improve weld quality and keep them safer — all while maximizing your profits.

Investing in ArcReach® technology today can add up to big savings over time.



Big Blue® 800X Duo Air Pak™

See literature ED/13.0

The most powerful diesel welder/generator in the industry. Robust output for welding and power generation, and ideal for dual-operator applications on labor intensive jobsites, or jobsites with limited space.

IMPROVED!

Now with ArcReach.



ArcReach®

Remote control of the power source without a control cord.



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.

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.

Simple paralleling switch makes switching from a single operator to dual operators a breeze. Weld up to 400 amps per side when set up in dual-operator mode, or up to 800 amps in single-operator mode.

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.

Arc control is beneficial when welding with stick and solid wires for easier fine-tuning of tough-to-weld materials and out-of-position applications.

Industrial USB port. Quickly upload the latest software and download machine log files to retrieve in-depth information such as diagnostics and machine statistics.

20,000 watts of pure generator power. Plug in an extra Miller® inverter-based power source for an additional welding arc!

Standard features include digital meters with SunVision™, automatic idle, 120-volt block heater and vandalism lockout (protects control panel and receptacles, see photo at right).



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.

Heavy industrial 

Processes

- Stick (SMAW) • MIG (GMAW)
- Flux-cored (FCAW) • DC TIG (GTAW)
- RMD** • Pulsed MIG (GMAW-P)*
- Air carbon arc cutting and gouging (CAC-A) (rated 12.7 mm [1/2-in.] carbons)
- Stud (12.7 mm [1/2 in.]

*With ArcReach Smart Feeder.

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
- ArcReach® SuitCase® 8: 301457 / 12: 301456
- ArcReach® Smart Feeder 300935
- ArcReach® Stick/TIG Remote 301325
- Dynasty 210® Series
- Full KVA Adapter Cord 300517
- Full KVA Plug Kit 119172 Single-phase 254140 Three-phase
- Protective Cover 301113
- HWY-225 Trailer 301338
- Four-Wheel Off-Road Trailer 042801
- Wireless Remote Hand Control/ Wireless Antenna Kit 300430/300749



Desiccant Air Dry System (Air Pak model only)

- 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

*Welder truck specific models available – visit MillerWelds.com or your distributor.

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
	(907763) Deutz with ArcReach	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 380/400V Three-phase auxiliary power		
		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)	Single-phase Peak: 15,000 watts Continuous: 12,000 watts			
		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
		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.)



Submerged Arc

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™.

*While idling.

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

Model/Stock Number	Amperage Range (CC Mode)	Voltage Range (Sub Arc Mode)	Rated Output	IP Rating	Amps Input at Rated Output, 50 Hz					Max Open-Circuit Voltage	Dimensions (Includes lift eye, but not strain relief)	Net Weight
					380 V	400 V	440 V	KVA	KW			
SubArc DC 650 Digital (907622) 230/460/575 V, 60 Hz	50-815 A	20-44 V	650 A at 44 V, 100% duty cycle	IP23	95	90	83	50	34.8	75 Vpk	H: 762 mm (30 in.) W: 584 mm (23 in.) D: 965 mm (38 in.)	269 kg (593 lb.)
SubArc DC 800 Digital, 50 Hz (907623) 380/400/440 V, 50 Hz, CE					1.9*	1.8*	1.6*	1.52*	0.76*			
SubArc DC 1000 Digital (907624) 230/460/575 V, 60 Hz	100-1,250 A	20-44 V	1,000 A at 44 V, 100% duty cycle	IP23	135	128	117	73	53	68 Vpk		309 kg (682 lb.)
SubArc DC 1250 Digital, 50 Hz (907625) 380/400/440 V, 50 Hz, CE					5.2*	5.0*	4.5*	3.2*	0.5*			
SubArc AC/DC 1000 Digital (907620) 460 V, 60 Hz	300-1,250 A	20-44 V	1,000 A at 44 V, 100% duty cycle	IP23	179	176	—	122	67	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 AC/DC 1250 Digital, 50 Hz (907621) 380/400 V, 50 Hz, CE					3.0*	3.0*	—	2.37*	0.95*			

SubArc Interface Control

See literature AD/7.3



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 Remote Operator Interface

See literature AD/7.3



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.)

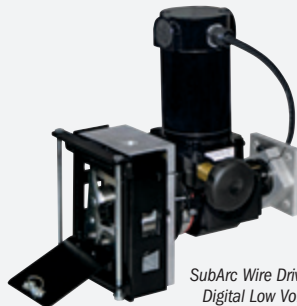
Model/Stock Number	Input Power from Welding Power Source	Welding Power Source Type	Dimensions	Net Weight
SubArc Motor Control Digital (301425), CE (requires SubArc Remote Pendant Digital below and Continuum control/motor cable)	24 VAC, 1-phase, 25 A, 50/60 Hz	Constant voltage (CV), AC or DC, with remote 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 Low Voltage is a right-angle drive assembly with standard 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

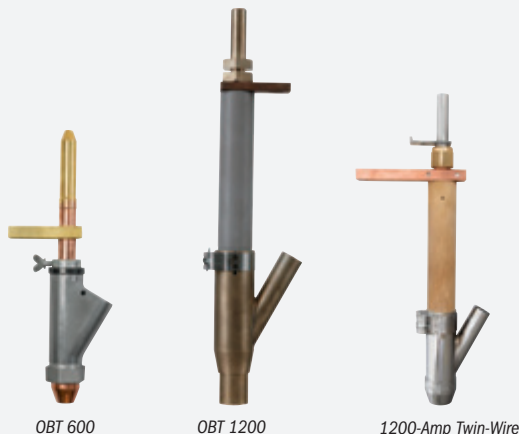
Model	Stock Number	Input Power	Input Power Cord	Rating	Wire Feed Speed	Wire Diameter Capacity	Net Weight
SubArc Strip Drive 100 Digital Low Voltage	(300940) With mounting bracket, CE	38 VDC	1.2 m (4 ft.)	1/5 hp, 21 rpm	0.3-1.6 mpm (10-69 ipm)	N/A (strip cladding applications)	13 kg (29 lb.)
SubArc Wire 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.)



Submerged Arc

SubArc Torches

See literature AD/7.3



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 Twin-Wire Torch (long) is a 1,200-amp, 100 percent duty cycle torch. For use with 1.2–2.4 mm (3/64–3/32 in.) wire.

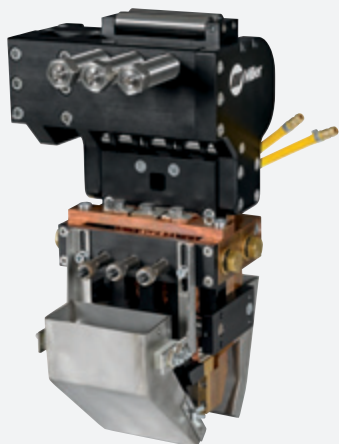
Most popular accessories

- 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 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 3-Wheel Tractor

See literature AD/7.7

NEW!



Easy-to-use foot- or hand-operated clutch allows for easy engagement of tractor drive and disengagement to move tractor into position.

Flexible mast configuration allows torch to be positioned in multiple weld zones and adapts to your weld application.

SubArc Tractor Interface Digital provides easy-to-operate single control for power source and tractor operation.

Regulated travel speed ensures your actual and set travel speeds are consistent, improving weld quality.

Locking front wheel can be set in place to desired travel path.

Easily accommodates a 27 kg (60 lb.) wire reel for fewer time-consuming wire changeovers.

Low-voltage operation and improved environmental protection. The new 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.

Required system components (sold separately)

- SubArc 3-Wheel Tractor 301446
- SubArc Tractor Interface Digital 301423
- SubArc Wire Drive 400 Digital Low Voltage 300938002
- 4.5 kg (10 lb.) capacity flux hopper with manual valve 301445
- 27 kg (60 lb.) wire reel 108008
- OBT 600 torch 043923
- Wire straightener 199733

Required power source

- SubArc Digital Series

Most popular accessories

- SubArc Control Cables
- Contact Tips
- Drive Rolls

Input Power from Welding Power Source	Wire Feed Speed	Wire Diameter Capacity	Gun Positioning Slides	Drive Motor	Travel Speed	Dimensions	Net Weight
24 VAC, 1-phase, 50/60 Hz, 25 A	0.8-10.2 mpm (30-400 ipm)	1.6-4.0 mm (1/16-5/32 in.)	88.9 mm (3.5 in.)	38 VDC	0.13-1.75 m/min. (5-70 ipm)	H: 914 mm (36 in.) W: 1,149 mm (43.25 in.) D: 803 mm (31.63 in.)	54.4 kg (120 lb.) without flux or wire

Miller recommends



Innovation

Focused on optimizing quality, ease-of-use and cost

Collaboration

Partnering to meet customer needs

Trusted source

Deep product and application expertise to deliver success



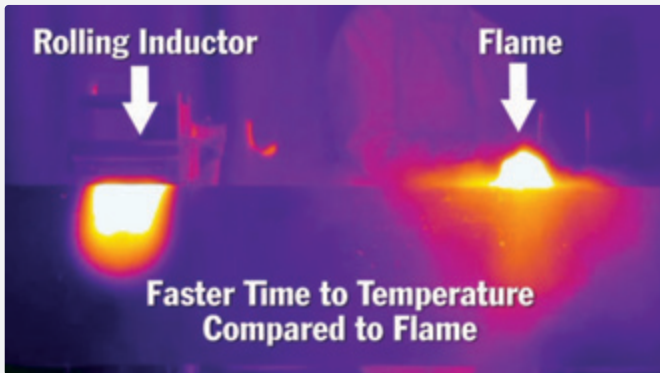
Visit HobartBrothers.com for more information.

More than just filler metal... SOLUTIONS for your business.

ProHeat™ Induction Heating

Induction heating is a simple and cost-effective heating process that can deliver fast and consistent heat. Applications that would typically require hours to heat can be done in minutes.

- Welding fabrication and construction
- Preheating of welds
- Post-weld heat treatment (PWHT)
- Hydrogen bake out
- Shrink fit applications



Induction heating solves many key issues in today's environment.

- Does not produce the exposure to burns associated with open flames and electrical resistance wires (only the work part becomes hot)
- No significant expense of fuel gases
- Produces fewer fumes than flame heating
- Produces less particulate from overheated insulation caused by high-temperature electrical wires and ceramic pads

Induction heating applications:

- Process piping
- Refinery
- Petrochemical
- Power piping
- Pressure vessels
- Structural
- Shipbuilding
- Pipeline



To learn more:

Contact your distributor or regional ITW Welding office

ProHeat 35 Power Source

The ProHeat 35 induction power source is equipped with a built-in temperature controller allowing for manual or temperature-based programming using up to four control thermocouples. At more than 90-percent efficiency, the ProHeat 35 power source transfers more energy to the part, reducing operating costs over different heating methods.

Digital Recorder (optional)

The digital recorder is commonly used in stress relieving and critical preheat applications. The recorder stores temperature data based on time. It is not required to perform successful heating applications.

Heavy-Duty Induction Cooler (optional)

Optimized for induction heating applications, cooler features a 9.5 L (2.5 gal.) rustproof polyethylene tank, high-pressure pump and blower to yield a high cooling capacity.



ProHeat 35 power source shown with optional heavy-duty induction cooler, running gear and digital recorder.

Note: Primary input cable is not included with power source.

One ProHeat™ System – Three Basic Induction Heating Configurations

ProHeat 35 induction heat systems solve preheating, post weld heat treat (PWHT) and stress relieving problems.

Liquid-Cooled Cables See literature IN/15.0

Preheat applications up to 788°C (1,450°F).

- A highly versatile tool for preheating, stress relieving, hydrogen bake out, post weld heat treat and shrink fit in a variety of pipe diameters and flat plate
- Designed with flexibility in mind, the ProHeat liquid-cooled induction heating cables can be wrapped into coils of various shapes and sizes to fit almost any induction heating application



Liquid-Cooled Rolling See literature IN/13.0

Preheat of moving parts up to 315°C (600°F).

- Ideal for preheating rolling pipe and moving parts with easy and time saving set up and movement for maintaining and adhering to preheat and interpass temperatures
- It enables the benefits of rolled pipe welding while also addressing some of the concerns associated with other popular heating methods, such as open flame and resistance heating



Air-Cooled Blankets See literature IN/14.0

Preheating applications up to 204°C (400°F).

- Air-cooled blankets are available for pipe diameters from 20–152 cm (8–60 in.) or in the case of plate, the lengths are 1–5.2 m (41–205 in.)
- The blankets easily conform to circular and flat parts and install in a matter of seconds
- Manufactured from durable high-temperature materials, flexible induction blankets are designed to withstand the tough conditions in both industrial and construction applications



Plasma Cutters

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	625	875	
	X-TREME		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

Spectrum	375 X-TREME		625 X-TREME		875/875 Auto-Line	
	Steel/Stainless	Aluminum	Steel/Stainless	Aluminum	Steel/Stainless	Aluminum
	9.5 mm (3/8 in.)	6.4 mm (1/4 in.)	15.9 mm (5/8 in.)*	9.5 mm (3/8 in.)	22.2 mm (7/8 in.)	15.9 mm (5/8 in.)

*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			Long Body Machine Torch Packages	
	3.7 m (12 ft.)	6.1 m (20 ft.)	15.2 m (50 ft.)	7.6 m (25 ft.)	15.2 m (50 ft.)
Spectrum 375 X-TREME	(907529)	—	—	—	—
Spectrum 625 X-TREME	(907579)	(907579001)	—	(907579002)	—
Spectrum 875	—	(907583)	(907583001)	(907583002)	—
Spectrum 875 Auto-Line	—	(907584)	(907584001)	(907584002)	(907584004)

Spectrum® 375 X-TREME™/625 X-TREME™

See literature PC/9.2 (375 X-TREME) and PC/9.6 (625 X-TREME)



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



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.**

Light industrial ● 375/625 models
Industrial ● 875 models

DC 3 1 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

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	208 V: 47	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.)
		230 V: 60 A at 140 VDC, 50% duty cycle	230 V: 42					
Spectrum 875 Auto-Line 208–575 V, 50/60 Hz	Three-phase	208 V: 60 A at 140 VDC, 40% duty cycle	208 V: 27.5	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.)
		230–380 V: 60 A at 140 VDC, 50% duty cycle	230 V: 25					
		380–575 V: 60 A at 140 VDC, 60% duty cycle	380 V: 15					
Spectrum 875 Auto-Line 208–575 V, 50/60 Hz	Single-phase	460 V: 12.4	460 V: 12.4	9.9	9.7			
		575 V: 9.8	575 V: 9.8					
Spectrum 875 Auto-Line 208–575 V, 50/60 Hz	Single-phase	208 V: 60 A at 140 VDC, 40% duty cycle	208 V: 47.4	9.9	9.7			
		230 V: 60 A at 140 VDC, 40% duty cycle	230 V: 42.2					
		230 V: 50 A at 140 VDC, 100% duty cycle						

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.



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.



BernardWelds.com

1-855-MIGWELD (644-9353)

Miller recommends

It's the tie that binds



Finding the right filler metal solution for your welding needs is critical in an industry that is about getting the job done right. Filler metals are more than just a component of welding — they are **the tie that binds science and people**. The right solutions. Solutions to make our world more secure. More dynamic. More of what you need.

Every day, every project, every weld is another opportunity for Hobart to earn and secure your trust by helping you find the right filler metal solution.

That kind of help and finding your welding solutions is our passion.


Visit HobartBrothers.com for more information.

SCIENCE + PEOPLE

Find Your Solution. Today.

Welding Safety & Health

All of our products are designed and built to protect the welder behind the hood and their environment – because that’s what we know. By listening to welders and working with them side-by-side, we understand their pain points and have developed products that offer protection from the unique physical dangers and health risks prevalent within welding applications. Miller’s complete line of Head and Face, Hand and Body, and Weld Fume protection is designed to protect and perform in demanding welding, cutting and grinding applications.

For more detailed information, visit  MillerWelds.com/safety

Welding Helmets



3 YEAR WARRANTY
Serious dependability backed with a three-year warranty (unless noted).

	T94i™	T94™	Digital Infinity™	Digital Elite™	Digital Performance™	Classic Series VSi™	Classic Series VS	Classic Series FS#10 Flip-Up
Viewing Area	9.0 sq. in.	9.0 sq. in.	13.4 sq. in.	9.2 sq. in.	7.2 sq. in.	5.9 sq. in.	5.2 sq. in.	5.1 sq. in.
Auto-Darkening	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ClearLight™ Lens Technology	Yes	Yes	Yes	Yes	Yes	–	–	–
Shades	Cut: 5-8 Weld: 8-13	Cut: 5-8 Weld: 8-13	Cut: 5-8 Weld: 8-13	Cut: 5-8 Weld: 8-13	Cut: 5-8 Weld: 8-13	8-13	8-12	10
Modes	Weld/Cut/X-Mode/ Flip grind	Weld/Cut/X-Mode/ External grind	Weld/Cut/ Grind/X-Mode	Weld/Cut/ Grind/X-Mode	Weld/Cut/ Grind	Weld/X-Mode/ Flip grind	Weld	Weld/ Flip grind
Integrated Grind Shield	Yes	–	–	–	–	Yes	–	Yes
Auto-on	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sensors	4	4	4	4	3	3	2	2
TIG Rating	3 amps	3 amps	5 amps/below	5 amps/below	5 amps	5 amps/below	20 amps	20 amps
Switching Speed	1/20,000	1/20,000	1/20,000	1/20,000	1/20,000	1/20,000	1/10,000	1/3,600
Digital Controls	Yes	Yes	Yes	Yes	Yes	–	–	–
Premium Headgear	Yes	Yes	Yes	Yes	Yes	–	–	–
InfoTrack™	Yes - 2.0	Yes - 2.0	Yes - 1.0	–	–	–	–	–
Weight	737 g (26 oz.)	599 g (21 oz.)	652 g (23 oz.)	510 g (18 oz.)	482 g (17 oz.)	673 g (24 oz.)	454 g (16 oz.)	396 g (14 oz.)
Warranty	3 years	3 years	3 years	3 years	3 years	2 years	2 years	2 years

See chart above for feature availability.

Industry’s largest viewing area. Digital Infinity™ Series helmets feature a 13.4 square inch viewing area allowing for a wide range of view.

ClearLight™ Lens Technology optimizes contrast and clarity in welding and light states. 1/1/1/2 optical clarity rating allows for a lighter light state while not welding – keeping the helmet down – maximizing safety and productivity.

X-Mode™ Electromagnetically senses the weld to eliminate sunlight interference and continuously detects the arc even if sensors are blocked.

Premium headgear. Features ample adjustability settings and enhanced support for the perfect fit, maximizing comfort.

InfoTrack™ data monitoring technology tracks arc time and features a clock. Version 2.0 adds arc count.

T94™ Series Maximized comfort, visibility and productivity for the professional welder. See literature AY/41.1



T94i™
260483

Industry’s largest integrated grind shield



T94™
260482

External grind control

ClearLight™ Lens Technology optimizes contrast and clarity in welding and light states.

Silver finish reflects ambient heat, keeping the user cooler.

InfoTrack™ 2.0 monitors arc time and arc count.

Four operating modes for ultimate versatility: weld, cut, grind and X-Mode™

Best-in-class comfort for all-day wearability



4% **LIGHTER** for reduced fatigue



14% **BETTER BALANCE** for elevated comfort



17% **LESS TORQUE** for reduced neck strain

Statistics above compare T94i to previous model.

Digital Infinity™ Series Industry's largest viewing area maximizes visibility. See literature AY/42.0



Black
280045, CE

Black Ops™
280047, CE

Departed™
280048, CE

Stars and Stripes™
280049, CE

NEW! **Cat® 2nd Edition**
282007, CE

Digital Elite™ Series Industry-leading helmet provides high-performance versatility. See literature no. AY/43.0



Black
281000, CE

Lucky's Speed Shop™
281001, CE

Stars and Stripes™ III
281002, CE

Inferno™
281003, CE

Vintage Roadster™
281004, CE

NEW! **Raptor™**
281007, CE

Cat® Edition 1
281006, CE

Digital Performance™ Series See literature AY/44.0

Lightweight helmet with superior headgear for increased efficiency.



Black
282000, CE

Blue Rage™
282001, CE

'64 Custom™
282002, CE

Camouflage
282003, CE

MP-10™ Helmet

Best-in-class traditional passive helmet.



Passive shade 10 lens

Black
238497

Classic Series Helmets for the value-minded welder. See literature AY/45.0



VSI™
260938, CE

FS#10 Flip-Up
263038, CE

Black (VS)
251292, CE

Metalworks™ (VS)
271346, CE

NEW! **Rise™ (VS)**
271349



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design marks are registered
trademarks of Caterpillar.
Miller Electric Mfg. Co. is a
licensee of Caterpillar Inc.

Helmet Accessories



Gen II Headgear 256174

- Extensive adjustability settings and a pivoting top for better fit and comfort



Gen III Headgear 271325

- Oversized comfort cushion provides extensive adjustability, settings, and enhanced support



Gen IV Headgear 260486

- Ergonomic, four-point flexible design provides a secure fit, while avoiding major pressure points within the head – for the T94™ Series helmets



Slotted Hard Hat Adapter 259637

- Compatible with most slotted hard hats. Helmet and hat not included



Hard Hat Adapter 213110

- XL and XLI
222003 Elite, Performance, Classic, MP-10, Titanium, Pro-Hobby, XLix

- Compatible with most Fibre Metal and MSA hats. Other brands may fit depending on size and shape. Helmet and hat not included



2x4 Auto-Darkening Lens

- 770660 Shade 8
- 770659 Shade 9
- 770226 Shade 10
- 770961 Shade 11
- Fits all 2x4-inch windows
- Solar powered
- Two arc sensors
- Light state shade 3
- Two-year warranty



Helmet Bib 253882

- Flame-resistant WeldX™ material provides additional neck coverage for the Infinity, Elite, Performance, Classic and MP-10 Series helmets



Helmet Bib 279078

- Flame-resistant material provides additional neck coverage for the T94™ Series helmets



Helmet Cape 279080

- Flame-resistant material provides additional head and back-of-the-neck coverage for the T94™ Series helmets



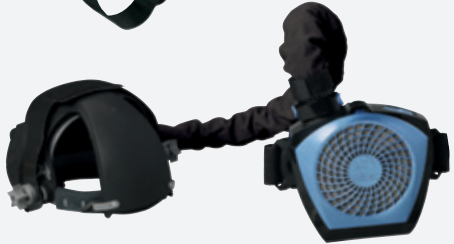
Helmet Hook 251018

- Holds welding helmets, grinding shields or other helmets with a headgear
- Silicone strap secures the helmet in place



Jobsite Tool Bag 228028

- Over twenty separate pockets
- Opening of 305 x 470 mm (12 x 18.5 inches)



CoolBelt™ Belt-Mounted Cooling System 245230

- Up to **17 degrees Fahrenheit cooler** under the hood
- Provides all-day comfort through maximized airflow power
- Multiple airflow speeds eliminate stagnant air and reduce fogging
- Lightweight design extends wearability
- Compatible with Infinity, Elite, Performance, Classic and MP-10 Series helmets

Weld-Mask™

See literature AY/40.0



Compact auto-darkening lenses allow users to weld in spaces where access with traditional welding helmets is limited. Close-fitting soft eye covering provides total darkness for precision welding. Face shield and flame-resistant head cover provide coverage for UV/IR rays and applications with limited spatter.



Weld-Mask 267370

- Shades 5, 7, 9, 11 and 13 for use with MIG, TIG, stick, and gas welding and cutting
- Extremely lightweight (8 oz.), virtually eliminates neck strain



NEW!

Weld-Mask 2 280982

- Ideal for industrial or construction environments – can be worn under a hard hat with a Miller® Half Mask Respirator and select safety glasses
- Shades 5–13 for use with MIG, TIG, stick, and gas welding and cutting
- X-Mode™ electromagnetically senses the weld to eliminate sunlight interference and continuously detects the arc even if sensors are blocked
- Wide, singular lens provides unmatched auto-darkening range of visibility

Safety Glasses

See literature AY/46.0



- Anti-fog coating and high-quality optics
- Form-fitting orbital eye coverage
- Shatterproof polycarbonate lenses
- Wrap-around designs meet ANSI side shield requirements
- ANSI Z87.1+ compliant
- I/O (indoor/outdoor) lenses feature light shading with a mirrored finish
- Smoke lenses provide shade protection in outdoor applications
- Shade 3 and 5 green IR lenses are for cutting, brazing or soldering

Safety and Cutting Glasses Chart

Frame Style/Color	Clear	I/O	Smoke	Shade 3	Shade 5
Classic	272187	–	–	–	–
Classic with Strap	272188	–	–	–	–
Spark™	272190	–	–	–	–
Spatter™ - Black	272191	–	272195	–	–
Spatter™ - White	272198	–	272199	–	–
Slag™ - Black	272201	272202	272203	272204	272205
Slag™ - White	272206	272207	272208	272196	272209
Gen I - Black	238979	–	235656	235662	235658

Welding Apparel

See literature AY/47.5



Grain Leather Jacket (See size chart)

- Top-grain pigskin leather
- Expandable leather strategically placed for optimal mobility
- Flame-resistant inside cuff
- Satin lining
- Tapered, athletic cut
- Sewn entirely with Kevlar® thread, adding structural durability at each seam



Split Leather Jacket (See size chart)

- Premium pig split leather
- Extended rear tail for additional protection
- Expandable leather strategically placed for optimal mobility
- Mesh lining
- Sewn entirely with Kevlar® thread, adding structural durability at each seam



WeldX™ Jacket (See size chart)

- 7-ounce WeldX front and flame-resistant navy cotton back
- Lightweight exclusive material with extreme flame-resistant properties
- Vented back/extended rear tail
- Zipper closure with hook-and-loop fastened flap
- Chromium free



Combo Jacket (See size chart)

- 9-ounce Indura® flame-resistant cotton (flame resistance guaranteed for life of jacket)
- Top grain leather
- Pre-shrunk fabric
- Allows for patented bib/apron attachment



Indura® Cloth Jacket (See size chart)

- 9-ounce Indura® flame-resistant cotton (flame resistance guaranteed for life of jacket)
- Pre-shrunk fabric
- Nomex® flame-resistant thread



Classic Cloth Jacket (See size chart)

- 9-ounce flame-resistant navy cotton
- Pre-shrunk fabric
- Fold-in sleeve snaps
- Finished hems and reinforced stitching



Leather Bib/Apron 231125

- Attaches to combo jacket with snaps across the chest as a bib or along the bottom as an apron



Combo Sleeves 231096

- Indura® flame-resistant cotton/top grain leather
- 21-inch length



Classic Cloth Sleeves 247148

- 18-inch length
- Fold-in sleeve snaps
- One-handed cinch closure



Classic Cloth Apron 247149

- 35-inch length with accessible front pocket
- Adjustable drawstring ensures a good fit

Welding Apparel Size Chart

Apparel	Small	Medium	Large	X-Large	2X-Large	3X-Large	4X-Large	5X-Large
Grain Leather Jacket	—	—	231090	231091	231092	—	—	—
Split Leather Jacket	273212	273213	273214	273215	273216	273217	273218	273219
WeldX Jacket	247114	247115	247116	247117	247118	247119	247120	247121
Combo Jacket	—	—	231082	231083	231084	—	—	—
Indura Cloth Jacket	—	258097	258098	258099	258100	—	—	—
Classic Cloth Jacket	244749	244750	244751	244752	244754	244755	244756	244758

Welding Gloves

See literature AY/47.0

Performance — unprecedented comfort and performance with exceptional dexterity and flexibility.



Heavy-Duty MIG/Stick

- Strategically placed patches on palm and back for extended glove life
- Double-layered insulated palm and back
- Pig grain leather palm provides extreme durability and protection



MIG (Lined)

- Dual-padded palm
- Fleece insulated palm, foam insulated back
- Cow grain palm, pig split back and goat grain inner fingers provide exceptional dexterity and comfort



Classic — traditional design for the value-minded welder.

Heavy-Duty MIG/Stick

- Reflective insulation on back reduces heat impact
- Moisture-wicking fleece and foam insulation
- Pig grain palm, pig split back and cuff



TIG

- Completely unlined for heightened feel and dexterity
- Triple-padded palm for added comfort
- Goat grain leather offers superior flexibility and dexterity



TIG/Multitask

- Dual-padded palm for added comfort
- Wool back provides ultimate insulation
- Goat grain leather offers superior flexibility and dexterity



MIG (Pigskin)

- Reinforcement patches enhance durability
- Moisture-wicking fleece and foam insulation
- Pig split leather palm, back and cuff



Work

- Dual-padded palm for added durability
- Fleece back provides ultimate insulation
- Cow grain leather offers superior durability and abrasion resistance



Metalworker

- Durable top grain leather and spandex back for enhanced durability and dexterity
- Neoprene wrist with hook-and-loop closure increases fit and support
- Padded, reinforced palm and thumb saddle for extended wear



MIG (Cowhide)

- Reinforcement patches enhance durability
- Moisture-wicking fleece and foam insulation
- Cow split palm, pig split back and cuff



TIG

- Thin internal padding for added comfort
- Unlined palm for precise dexterity
- Sheep grain palm, cow split back and cuff

Welding Glove Size Chart *All asterisked stock numbers are sold as one pair. All others are sold as six packs (six pairs).

Performance Gloves	Small	Medium	Large	X-Large	2X-Large	Classic Gloves	Medium	Large	X-Large
Heavy-Duty MIG/Stick	—	—	263339	263340	269615*	Heavy-Duty MIG/Stick	—	271877*	271887*
MIG (Lined)	—	263332	263333	263334	269618*	MIG (Pigskin)	—	271888*	271889*
TIG	263346	263347	263348	263349	—	MIG (Cowhide)	—	271890*	271891*
TIG/Multitask	263352	263353	263354	263355	—	TIG	271892*	271893*	271894*
Work	—	266041*	266042*	266043*	—				
Metalworker	—	251066	251067	251068	—				

Respiratory

PAPR Powered Air-Purifying Respirator See literature AY/4.1

Available packages:

NEW!

With T94i-R™ helmet (integrated clear grind shield)

264575 With auto-darkening lens assembly

With T94-R™ helmet (external grind control)

264573 With auto-darkening lens assembly

With Titanium 9400i™ helmet (integrated clear grind shield)

264877 With auto-darkening lens assembly

With Titanium 9400™ helmet (external grind control)

264879 With auto-darkening lens assembly

With hard hat and Titanium 9400™ helmet (integrated clear grind shield)

261659 With auto-darkening lens assembly

With hard hat and Titanium 9400™ helmet (external grind control)

259385 With auto-darkening lens assembly

- HEPA filter provides 99.97 percent filtration of airborne particles, specifically: hexavalent chromium, zinc oxide, manganese, aluminum, cadmium and lead
- NIOSH 42 CFR 84 certified, assigned protection factor of 25



NEW!

A complete system includes blower assembly, HEPA filter, prefilters (6), spark guard, breathing tube, breathing tube cover, padded belt, comfortable shoulder straps, lithium-ion batteries (2), battery charger, flowmeter, tool bag and helmet assembly (see available packages at left).

Designed for comfort

Well-balanced design reduces torque on neck, increasing all-day wear.

Patent-pending Dualtec™ manifold system optimizes helmet balance and sound, while **six-point air distribution system** maximizes cooling through targeted air placement.

Ergonomic headgear provides secure fit without the need for over-tightening.

Lightweight low-profile blower assembly with integrated shoulder straps reduces lower back strain and fatigue.

Superior visibility

ClearLight™ Lens Technology optimizes contrast and clarity in welding and light states, easing eye strain.

Shade 5.0 side windows and oversized clear grind shield maximize downward and peripheral visibility, improving sense of surroundings.

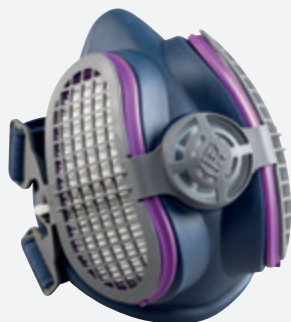
Half-shade lens adjustability provides fine shade adjustment for optimized comfort and vision.

Improved productivity

Enhanced comfort, cooling and visibility maximize all-day wearability – increasing productivity, safety and regulatory compliance.

Low-profile breathing-tube attachment eases on/off process while flexible tube material eliminates breathing tube snags in work cell.

Two lightweight lithium-ion batteries included with each system eliminate downtime.



LPR-100™ Half Mask Respirator See literature AY/4.5

ML00894 Respirator with P100 filters (small/medium)

ML00895 Respirator with P100 filters (medium/large)

ML00994 Respirator with P100 nuisance level OV relief filters (small/medium)

ML00995 Respirator with P100 nuisance level OV relief filters (medium/large)

Filters and accessories

SA00818 P100 filters (one pair)

SA00819 P100 nuisance level OV relief filters (one pair)

261086 Quantitative fit-test kit adapter

- Low-profile design fits under most welding helmets and provides maximum field of vision
- P100 filters provide 99.97 percent filtration of airborne particles, specifically: hexavalent chromium, zinc oxide, manganese, aluminum, cadmium and lead
- NIOSH 42 CFR 84 certified, assigned protection factor of 10



N95 Disposable Mask Respirator See literature AY/4.8

267334 Respirator (10 pack)

267335 Respirator with nuisance level OV relief (10 pack)

267334-2 Respirator (2 pack)

267335-2 Respirator with nuisance level OV relief (2 pack)

- Flame-retardant outer layer designed for welding applications
- N95 filters provide 95 percent filtration of airborne particles, specifically: hexavalent chromium, zinc oxide, manganese, aluminum, cadmium and lead
- NIOSH 42 CFR 84 certified, assigned protection factor of 10

LiveArc™ System Welding Performance Management System

The reality-based recruiting, screening, training, and re-qualification solution for industrial, manufacturing and educational markets.



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
- Calibration tool
- Two table clamps
- C-clamp assembly
- Removable arm extension for right- and left-hand applications
- Extra Bernard consumables

LiveArc GMAW/FCAW/SMAW system includes above plus

- SmartStinger with 4.6 m (15 ft.) cable
- Router box
- Software update for SMAW applications

LiveArc stick upgrade module

- For systems currently with GMAW/FCAW only.
- Includes SmartStinger with 3.7 m (12 ft.) cable, 4.6 m (15 ft.) Dinse-style cable, router box with mounting bracket, software update for SMAW applications, easy-clean dust tray, and dual-purpose holster

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

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	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.)
(907714001) LiveArc GMAW/FCAW/SMAW system										
(301391) LiveArc stick upgrade module		SMAW	2F-4F, 1G-4G	Limited groove applications	SmartStinger 250 A at 60% duty cycle	SmartStinger Up to 3.2 mm (1/8 in.)				

Only available at authorized training distributors

Automated MIG 91

Cable Connectors and Adapters 91/99

Carts, Cylinder Racks and Running Gear 91-92

Coolant Systems 92

Engine Drive Accessories 93-94

- Big Blue Accessories • Blue Star Accessories
- Bobcat and Trailblazer Accessories
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- Machine and Gun Accessory Kits • Protective Covers

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- Cutting Guides • Filters • Plugs and Cords
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TIG Accessories 97-98

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Wire Feeder Accessories 99

- Extension Cables (14-pin) • Power Supply Adapter
- Spool Adapter • Spool Gun Controls and Kits
- Turntable Assembly • Wire Straightener

Automated MIG

For adapters and drive motors, visit MillerWelds.com.



Coolant Flow Switch 195461

For water-cooled guns and external cladding head. To ensure coolant is flowing in the system. A lack of

coolant flow may cause damage to water-cooled guns or cladding head. 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. Quarter-turn quick connection.

Cable Connectors and Adapters

Also see [Torch and Weld Cable Connectors in TIG Accessories](#).

For Alumafed system, Invision 352 MPa, XMT 304/350, CST, 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 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. 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, 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 141/211, Multimatic and Diversion. Heavy-duty construction with 8-inch 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 Cylinder Rack Conversion Kit and Tool Holder 301454

Converts Running Gear/Cylinder Rack (301239) from a single cylinder cart to a dual cylinder cart. Top bracket is able to hold a variety of tools including a welder, adjustable wrench, screwdrivers, chipping hammer, wire brush and filler rod.



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.

... Accessories



MIGRunner™ Cart 195445

For AlumaFeed system, Invision, 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, 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. 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 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 (**042886**).



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 400/800 and Dynasty 400/800 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.

Coolmate™ Coolant Systems

See literature AY/7.2



Coolmate™ 1.3 300972 120 V, CE

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 400/800 and Dynasty 400/800. 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*.

*May vary with torch design and cable length. Miller coolant systems are backed by the best warranty in the industry — one full year.

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, CE	115 V, 60 Hz	4.7 A (60 Hz)	3,400 W (11,600 Btu/hr.) 3.6 L/min (.38 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.

Big Blue Accessories

Cable Holder 043946

For Big Blue 500 Pro/600 Series/800 Series.

Vandalism Lockout Kit 399802 Field

For Big Blue 500 Pro/600 Series. 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 Fusion and Blue Star.



Running Gear 301246

For Fusion and Blue Star. Compact and balanced, lightweight wheelbarrow-style running gear provides easy onsite mobility.



Bobcat and Trailblazer Accessories (Gas/LP)

Multi-Terrain Running Gear 301460

For Bobcat Air Pak. Includes two heavy-duty Never Flat™ 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.



Multi-Terrain Running Gear 300913

Inner tubes 300914 Never Flat™ tires For gas/LP Bobcat and Trailblazer (except Air Pak models). 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 (except Air Pak models). 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 (except Air Pak models). 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 (except Air Pak models).

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 (except Air Pak models). 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. 301458 For LP 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 (except Air Pak models). 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, or with trailer.

Note: Not for use with Protective Cover.

Generator Accessories



Twist Lock Adapter Cord 301489

For Fusion. L14-30R to NEMA 6-50R. Adapts engine drive 120/240-volt twist lock plug to common Millermatic and Spectrum 240-volt plug.



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.



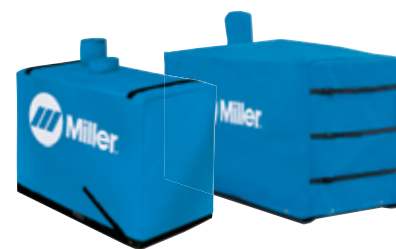
Full KVA Plug Kit

119172 1-phase, 120/240 V, 50 A plug (NEMA 14-50P). For Bobcat, Trailblazer and Big Blue models.

165963 3-phase, 480 V, 30 A plug (NEMA L16-30P). For Bobcat 3 Phase.

254140 3-phase, 240 V, 50 A plug (NEMA 15-50P). For Big Blue 500 Pro/600 Series/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 Fusion and Blue Star.

301475 For Bobcat 200 Air Pak **without** Running Gear.

301476 For Bobcat 200 Air Pak **with** Running Gear.

300919 For gas Bobcat and Trailblazer (except Air Paks) **without** Protective Cage or Running Gear.

300920 For gas Bobcat and Trailblazer (except Air Paks) **with** Protective Cage or Running Gear.

301099 For diesel Bobcat and Trailblazer **without** Protective Cage or Running Gear.

300379 For Trailblazer 302 Air Pak.

195301 For Big Blue 400 Pro/400 PipePro/450 Duo CST.

301495 For Big Blue 500 Pro/600 Pro with Kubota.

301113 For Big Blue 600 Air Pak/800 Series with Deutz.

Accessories

Trailers

See literature AY/20.0



HWY-Mid Frame Trailer 301438

For Bobcat, Trailblazer, and Big Blue 400 Pro/400 PipePro/450 Duo CST 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.

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.

4 West Four-Wheel Steerable Off-Road Trailer 042801

For Big Blue 500 Pro/600 Series/800 Series. A heavy-duty 1,157 kg (2,550 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.

Note: Trailers are shipped unassembled. *Width at outside of fenders. **Does not include tongue.

Trailer accessories

Fender Kit 301439

For HWY-Mid Frame and HWY-225. Replacement fenders.

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.



2-In-1 Document/Fire Extinguisher Holder 301236

For HWY-Mid Frame and HWY-225. Stores documents and holds a 2.3 kg (5 lb.) fire extinguisher.

Note: Holder shown mounted on trailer. Fire extinguisher not included.



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.)
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.)
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.)

Load Banks



LBP-350 043329

Designed to provide an adjustable load for troubleshooting or calibrating welding power sources or generators. Standard equipment

includes analog meters for both AC and DC output with jacks for external metering connections. It comes with a 4 m (13 ft.) 115-volt power cord and has seven 50-amp load switches, providing a maximum capacity of 350 amps.

MIG Accessories

Machine and Gun Accessory Kits

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.

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.

Protective Covers



301262

For Millermatic 141/211 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 quick-connect hand-held torch packages to add machine torch capabilities.

Includes 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.

Upgrades 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, Thunderbolt 160, Diversion, Syncrowave 210 and Fusion. Allows connection of machine to 115/120 V or 230/240 V receptacles without tools – just choose the plug that fits.

MVP™ Adapters



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.



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.

Accessories

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 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



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.



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.



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.



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 Twin-Wire Torch Contact Tips

264595 1.2 mm (3/64 in.)

264596 1.6 mm (1/16 in.)

264597 2.0 mm (5/64 in.)

264588 2.4 mm (3/32 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.)



Single-Wire Straightener 199733

For OBT 600 and OBT 1200 single-wire torches. For 1.6–4.8 mm (1/16–3/16 inch) wire.



Twin-Wire Straighteners

301160 Single adjustment

301162 Double/separate adjustment

For 1200-amp twin-wire torch only.



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.**



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 (301337) 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.
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/contacter 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 and Multimatic 215.

RCCS-14 (14-pin plug)
043688 8 m (26.5 ft.) cord with plug
 North/south rotary-motion fingertip current/contacter control attaches to TIG torch using two hook-and-loop fasteners. Great for applications that require a finer amperage control.



RFCS-RJ45 300432
 For Diversion and Multimatic 215. Foot pedal current/contacter control. Includes 4.3 m (14 ft.) cord with plug.



RFCS-6M HD (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-14 HD (14-pin plug)
194744 6.1 m (20 ft.) cord with plug
 Heavy-duty foot pedal current/contacter 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.



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/contacter control. Dimensions: 102 x 102 x 82 mm (4 x 4 x 3.25 inches).



RMLS-14 (14-pin plug) 129337
 Momentary- and maintained-contact rocker switch for contacter 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 contacter 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 14-pin receiver
(included with both systems)

Wireless hand control

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.*

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.)

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



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.
25 mm (small) Dinse-style gas thru for one-piece air-cooled torches.



194723 A-200 (WP26)
194722² All others
For Syncrowave 210. 50 mm Dinse-style gas thru for one-piece air-cooled torches.



195379 A-200 (WP26)
195378² All others
For CST, Maxstar 210/280/400, Dynasty 210/280/400, 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 210/280/400, Dynasty 210/280/400, and Syncrowave 250 DX/350 LX. Used with all Weldcraft™ water-cooled torches.



50 mm Thread-Lock-Style 225028
For Maxstar/Dynasty 800.
Used with all Weldcraft™ water-cooled torches.



Thread-Lock-Style Weld Cable Connectors 225029
For Maxstar/Dynasty 800.
Contains two male connectors that accept #1/0 to #4/0 AWG size cable.

¹Except A-200 (WP26) torch. ²A-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.

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 141/211. 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.



Engineered for Simplicity. Built for Durability.

Design the perfect MIG guns for all your welds!

Improve welding productivity by choosing the neck length and angle, handle shape and trigger style that allows welders to comfortably and efficiently reach all your welds.

Plus, longer gun life and shared parts and consumables will help to simplify inventory and minimize costs across your shop.

For additional information, please contact your local welding distributor.

To request a catalog, please call or complete our online request form.



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
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