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New from Blue

7 Millermatic® 125 Hobby

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23 Continuum™ 350

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95/96 Digital Infinity™ Series Welding Helmets and Safety Glasses

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Shop with Speed and Convenience
Visit MillerWelds.com for a fast and easy way to buy welding products for your home or shop.
Finding the welding or cutting 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 or cut.

Welding processes

**MIG (GMAW)** ★
- 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)** ★★
- 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)** ★
- 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)** ★★
- Well suited for windy, outdoor conditions
- More forgiving when welding on dirty or rusty metal

**TIG (GTAW)** ★★★
- 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)** ★★★
- More control on thin metals
- Less heat distortion on thin metals

**Process skill level** ★ Low ★★ Moderate ★★★ High

**Metal type**
- **Steel** (S)
- **Stainless Steel** (SS)
- **Aluminum** (AL)
- **Cast Iron** (CI)
- **Copper/Brass** (CB)
- **Magnesium Alloys** (Mg)
- **Titanium** (Ti)
- **All Electrically Conductive** (EC)

**Resistance Spot** ★
- Simple, easy-to-operate welder for light industrial applications

**Submerged Arc (SAW)** ★★
- High deposition rates can enhance weld speed and production
- Excellent mechanical properties for high-quality code and X-ray requirements
- Improves welding operator comfort and appeal

**Cutting processes**

**Plasma Arc Cutting and Gouging (PAC)** ★
- Use with any electrically conductive metals
- Small and precise cut
- Small heat-affected zone which helps prevent warping or paint damage

**Oxy-fuel Cutting** ★
- Cuts ferrous (containing iron) steels
- Requires no electricity
- Highly portable

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

**Air Carbon Arc Cutting and Gouging (CAC-A)** ★★
- Wide variety of metals
- Removes discontinuities or inferior welds
Evaluate your needs: input power, output power, generator power and portability.

**Input power**

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

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

  **Single-phase power** is found in most homes and garages. Check to see if the machine you’re considering requires single-phase power, and whether its voltage requirements (120 or 240 volts) are met by the electrical service at the intended location.

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

**Output power**

- **Light industrial** products are suitable for the home hobbyist or occasional user. They are designed to be easy to operate, are affordably priced and typically have a 20 percent duty cycle and rated output of 230 amps or lower.
- **Industrial** products are suitable for applications that do not require high-volume production. They typically have a 40 to 60 percent duty cycle and/or rated output of 300 amps or lower. Industrial products are an appropriate choice for professional welders.
- **Heavy industrial** products are suited to high-volume production and/or welding of thicker materials. They typically have a duty cycle of 60 to 100 percent and a rated output of at least 300 amps. Heavy industrial products are designed with the arc characteristics and product features professional welders demand for code-quality work.

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

**About duty cycles**

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

**Power icons**

- Unit requires single-phase input power
- Unit requires three-phase input power
- Unit supplies alternating current weld output
- Unit supplies direct current weld output
- Unit supplies constant-current weld output
- Unit supplies constant-voltage weld output

**Generator power**

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

**Portability**

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

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

**Check out the Product Guides.**

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

**Go to product descriptions.**

(Specifications are subject to change without notice.)

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

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

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

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

<table>
<thead>
<tr>
<th>Product</th>
<th>Weldable Metals</th>
<th>Welding Output Range</th>
<th>Special Features</th>
<th>Typical Applications</th>
</tr>
</thead>
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<tr>
<td><strong>Millermatic</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>125 Hobby</td>
<td>All-in-one, 115 V input, Auto-Set™ for .030 solid wire</td>
<td>30-130 A</td>
<td></td>
<td>Up to 3/16 in.*** using self-shielded wire, hobby</td>
</tr>
<tr>
<td>141</td>
<td>All-in-one, 120 V input, Auto-Set™ Smooth-Start™</td>
<td>30-140 A</td>
<td></td>
<td>Up to 3/16 in.*** using self-shielded wire maintenance/repair, auto body, hobby</td>
</tr>
<tr>
<td>190</td>
<td>All-in-one, 240 V input, Auto-Set™ Smooth-Start™</td>
<td>30-190 A</td>
<td></td>
<td>Up to 5/16 in.*** maintenance/repair, auto body, hobby</td>
</tr>
<tr>
<td>211</td>
<td>All-in-one, 120 or 240 V input, Auto-Set™ Smooth-Start™</td>
<td>30-230 A</td>
<td></td>
<td>Up to 3/8 in.*** maintenance/repair, auto body, hobby</td>
</tr>
<tr>
<td><strong>Millermatic</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>212 Auto-Set™</td>
<td>All-in-one, 230 V input, Fan-On-Demand™ Gun-On-Demand™</td>
<td>30-210 A</td>
<td></td>
<td>Up to 3/8 in.*** fabrication, farm, garage/body shops</td>
</tr>
<tr>
<td><strong>Millermatic</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>252</td>
<td>All-in-one, standard timers menu, Fan-On-Demand™</td>
<td>30-300 A</td>
<td></td>
<td>Up to 1/2 in.*** industrial production/fabrication, farm</td>
</tr>
<tr>
<td><strong>Millermatic</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>350P</td>
<td>All-in-one, can connect standard MIG gun, push-pull gun or spool gun — auto body aluminum repair system available (see page 15)</td>
<td>25-400 A</td>
<td></td>
<td>Up to 1/2 in.*** industrial production/fabrication, pulsed MIG ideal for thin gauge aluminum</td>
</tr>
<tr>
<td><strong>Invension</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>352 MPa Plus System</td>
<td>All-in-one, 115 V input, Auto-Set™ Smooth-Start™</td>
<td>14-44 V</td>
<td>Hi/lo stabilizer, power efficient</td>
<td>Equip/auto mfg, metal fab, construction, agri equipment</td>
</tr>
<tr>
<td>350 Plus System</td>
<td>All-in-one, 240 V input, Auto-Set™ Smooth-Start™</td>
<td>10-32 V</td>
<td>Power efficient, material-specific output terminals</td>
<td>Equip/auto mfg, metal fab, construction, agri equipment</td>
</tr>
<tr>
<td>350P Aluminum</td>
<td>All-in-one, 230 V input, Fan-On-Demand™ Gun-On-Demand™</td>
<td>10-38 V</td>
<td>Power efficient, material-specific output terminals</td>
<td>Equip/auto mfg, metal fab, construction, agri equipment</td>
</tr>
<tr>
<td><strong>Invension</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>350P Aluminum</td>
<td>All-in-one, optimized for feeding aluminum wire only using a push-pull gun or spool gun</td>
<td>15-600 A</td>
<td>Alumination™ allows push/pull gun, optimized with 74 MPa Plus wire feeder</td>
<td>Manufacturing and production</td>
</tr>
<tr>
<td><strong>AlumaFeed</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>450 Aluminum System</td>
<td>All-in-one, optimized for feeding aluminum wire only using a push-pull gun or spool gun</td>
<td>15-600 A</td>
<td>Alumination™ allows push/pull gun, optimized with 74 MPa Plus wire feeder</td>
<td>Manufacturing and production</td>
</tr>
<tr>
<td><strong>Invension</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>450 Plus System</td>
<td>All-in-one, 115 V input, Auto-Set™ Smooth-Start™</td>
<td>14-44 V</td>
<td>Hi/lo stabilizer, power efficient</td>
<td>Equip/auto mfg, metal fab, construction, agri equipment</td>
</tr>
<tr>
<td><strong>Invension</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>450 Plus System</td>
<td>All-in-one, 240 V input, Auto-Set™ Smooth-Start™</td>
<td>10-32 V</td>
<td>Power efficient, material-specific output terminals</td>
<td>Equip/auto mfg, metal fab, construction, agri equipment</td>
</tr>
<tr>
<td><strong>Invension</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>450 Plus System</td>
<td>All-in-one, 230 V input, Fan-On-Demand™ Gun-On-Demand™</td>
<td>10-38 V</td>
<td>Power efficient, material-specific output terminals</td>
<td>Equip/auto mfg, metal fab, construction, agri equipment</td>
</tr>
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<td>450 Aluminum System</td>
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<td>15-600 A</td>
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<td>Manufacturing and production</td>
</tr>
</tbody>
</table>

### Power Sources

#### Spoolmate Spool Guns
- **12 ft. (100) or 20 ft. (150/200/3035) cable**
  - Weldable Metals: Steel, stainless, aluminum
  - Welding Output Range: 30-130 A
  - Special Features: .023-.035 in. (0.6-0.9 mm) wire capacity, economical, 135 A (100), 150 A (150/3035), 160 A (200)
  - Typical Applications: Light industrial aluminum fabrication

#### Spoolmate Spool Guns
- **15 or 30 ft. cable**
  - Weldable Metals: Steel, stainless, aluminum
  - Welding Output Range: 30-140 A
  - Special Features: .030-.16 in. (0.8-1.6 mm) wire capacity, easy-to-rotate, self-seating head tube on Pro model
  - Typical Applications: Industrial aluminum fabrication

#### XR-Pistol Push-Pull Guns
- **15 or 30 ft. (Pistol) or 15, 25 or 35 ft. (Pistol-Pro) cable**
  - Weldable Metals: Aluminum
  - Welding Output Range: 30-190 A
  - Special Features: .030-.16 in. (0.8-1.6 mm) wire capacity, air- and water-cooled models; easy-to-rotate, self-seating head tube on Pro model
  - Typical Applications: Heavy industrial aluminum fabrication

#### XR-Aluma-Pro Lite Push-Pull Gun
- **25 ft. cable**
  - Weldable Metals: Aluminum
  - Welding Output Range: 30-230 A
  - Special Features: .030-.3/64 in. (0.8-1.2 mm) wire capacity, lightweight, air-cooled
  - Typical Applications: Industrial aluminum fabrication

#### XR-Aluma-Pro Push-Pull Guns
- **15, 25 or 35 ft. cable**
  - Weldable Metals: Aluminum
  - Welding Output Range: 30-230 A
  - Special Features: .030-.16 in. (0.8-1.6 mm) wire capacity, high-amperage, air- and water-cooled models
  - Typical Applications: Heavy industrial aluminum fabrication

#### XR-Controls
- **Handles, optional cart**
  - Weldable Metals: Steel, stainless, aluminum
  - Welding Output Range: 30-230 A
  - Special Features: .030-.16 in. (0.8-1.6 mm) wire capacity, push-pull
  - Typical Applications: Heavy industrial aluminum fabrication

### Product Key

- **Class:** Light Industrial, Industrial, Heavy Industrial
- **Capability:** Designed for this process, Capable of this process

**New! or Improved! products appear in blue type.**

*Guns and controls require pulse capable power source. **Using self-shielded wire on a CC/CV machine, use CV weld output. ***In a single pass. See MIG packages chart (page 11) and aluminum solutions chart (page 14) for additional information.*
Millermatic™ 125 Hobby See literature no. DC/12.3

Welding Capability

**NEW!**

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

**Manual mode** allows you to set your own parameters.

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

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

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

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

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

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

### Stock Number

- #907 692 with running gear/cylinder rack
- #951 678

### Input Power

115 V, 30–130 A at 18.25 VDC, 20% duty cycle

### Amperage Range

20 A, 115 V, 2.79 KVA, 2.65 kW

### Wire Feed Speed

0–415 ipm (0–11 m/min.)

### Wire Type and Diameter Capacity

- **Solid steel**
  - .023–.030 in. (0.6–0.8 mm)
- **Stainless**
  - .023 in. (0.6 mm)
- **Flux-cored**
  - .030–.035 in. (0.8–0.9 mm)

### Machine Dimensions

- H: 16.875 in. (429 mm)
- W: 9.675 in. (245 mm)
- D: 12.125 in. (308 mm)

### Machine Only Net Weight

49.7 lb. (22.5 kg)

### GMAW MIG ALL-IN-ONE Welding Capability

- **Max. 3/16 in. (4.8 mm)**
- **Min. 24 ga. (0.6 mm)**

### Processes

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

### Comes complete with

- 8 ft. (2.4 m) M-80 MIG gun and cable assembly
- 8 ft. (2.4 m) work cable with clamp
- Power cord with plug
- Quick Select™ drive roll for .024 in. (0.6 mm) or .030/.035 in. (0.8/0.9 mm) solid wire, and .030/.035 in. (0.8/0.9 mm) flux-cored wire

### Fixed flow regulator and gas hose, two .030 in. contact tips, Hobart® spool of .030 in. solid wire and material thickness gauge (#229 895)

### Most popular accessories

- Running Gear/Cylinder Rack #301 239 (pg 106)
- Protective Cover #301 333 (pg 109)

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

### The Miller® Owners Club

Created for welders who are passionate about what they do, the Miller Owners Club provides a personalized experience at Owners.MillerWelds.com. Since membership is limited to Miller equipment owners, members have exclusive access to product previews, welding tips and project ideas that support a welder’s ability to do great work.

**Sign up now at Owners.MillerWelds.com**
Millermatic® 141 and 190

See literature no. DC/12.42 (141) and DC/12.44 (190)

**Processes**
- MIG (GMAW) • Flux-cored (FCAW)
- Comes complete with:
  - 10 ft. (3 m) M-100 MIG gun and cable assembly (#248 282)
  - 10 ft. (3 m) work cable with clamp
  - 6.5 ft. (2 m) power cord with plug
  - Quick Select™ drive roll for .024 in. (0.6 mm) or .030/.035 in. (0.8/0.9 mm) solid wire, and .030/.035 in. (0.8/0.9 mm) flux-cored wire
  - Flow gauge regulator and gas hose for argon or AR/CO₂ mix, two .030 in. contact tips, Hobart® spool of .030 in. solid wire, hook-and-loop cord wraps and material thickness gauge (#229 895)
- Most popular accessories
  - Spoolmate™ 100 #300 371 (pg 18)
  - Running Gear/Cylinder Rack #301 239 (pg 106)
  - Protective Cover #301 262 (pg 109)
- Visit MillerWelds.com or your distributor for other Miller® options and accessories.

**Auto-Set™** automatically provides the right settings to weld mild steel while infinite voltage control allows the flexibility to manually set your own parameters.
- Set the wire diameter (.024- or .030-inch diameter solid steel wire), a blue light shows Auto-Set is activated
- Dial in the thickness of material you are welding
- Start welding with the exact parameters you need!

**Angled cast-aluminum drive system** with calibrated tension knob creates consistent feeding and easy setup with included 10-foot (3 m) MIG gun or optional 15-foot (4.6 m) M-150 MIG gun (pg 11).

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

**Millermatic 190 model additional features**

**Inverter technology** combines best-in-class arc characteristics with the portability of a 35-pound machine. The arc is extremely forgiving to variations in arc length and travel speeds.

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

**Mild Steel Welding Capability**

<table>
<thead>
<tr>
<th>Max.</th>
<th>Model</th>
<th>Min.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/16 in. (4.8 mm)</td>
<td>141</td>
<td>24 ga. (0.6 mm)</td>
</tr>
<tr>
<td>5/16 in. (7.9 mm)</td>
<td>190</td>
<td>24 ga. (0.6 mm)</td>
</tr>
</tbody>
</table>

**Aluminum Welding Capability**

<table>
<thead>
<tr>
<th>Max.</th>
<th>Model</th>
<th>Min.</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 ga. (1.9 mm)</td>
<td>141</td>
<td>1/4 in. (6.4 mm)</td>
</tr>
<tr>
<td>18 ga. (1.2 mm)</td>
<td>190</td>
<td>18 ga. (1.2 mm)</td>
</tr>
</tbody>
</table>

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

**Recommended aluminum solution**

Spoolmate 100 (#300 371).

**Recommended solution for aluminum welding**

Spoolmate 100 (#300 371).

**Rated Output**

- **Millermatic 141** (#907 612) with running gear/cylinder rack
  - 120 V: 30-140, 90 A at 18.5 VDC, 20% duty cycle
  - 240 V: 30-190, 140 A at 21 VDC, 40% duty cycle

- **Millermatic 190** (#907 613) with running gear/cylinder rack
  - 240 V: 30-190, 140 A at 21 VDC, 40% duty cycle

**Wire Feed Speed**

- 15-360 ipm (0.4-9.1 m/min.)
- 60-600 ipm (1.5-15.2 m/min.)

**Wire Type and Diameter Capacity**

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Amperage Range</th>
<th>Rated Output</th>
<th>Amps Input at Rated Output, 60 Hz</th>
<th>Wire Feed Speed</th>
<th>Wire Type and Diameter Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Input Power</td>
<td></td>
<td>120 V 240 V 120 V KVA KW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Millermatic 141</td>
<td>120 V</td>
<td>30-140</td>
<td>90 A at 18.5 VDC, 20% duty cycle</td>
<td>20 — 3.0 2.45</td>
<td>Solid steel 0.023-0.030 in. (0.6-0.8 mm)</td>
</tr>
<tr>
<td>(#907 612) with running gear/cylinder rack</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Stainless Flux-cored 0.030-0.035 in. (0.8-0.9 mm)</td>
</tr>
<tr>
<td>Millermatic 190</td>
<td>240 V</td>
<td>30-190</td>
<td>140 A at 21 VDC, 40% duty cycle</td>
<td>21 5.0 3.8</td>
<td>Solid steel 0.023-0.035 in. (0.6-0.9 mm)</td>
</tr>
<tr>
<td>(#907 613) with running gear/cylinder rack</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Stainless Flux-cored 0.030-0.035 in. (0.8-0.9 mm)</td>
</tr>
</tbody>
</table>

**Dimensions**

- **Millermatic 141**
  - H: 12.5 in. (318 mm)
  - W: 11.25 in. (286 mm)
  - D: 20.5 in. (521 mm)

- **Millermatic 190**
  - H: 12.5 in. (318 mm)
  - W: 11.25 in. (286 mm)
  - D: 20.5 in. (521 mm)

<table>
<thead>
<tr>
<th>Machine Only Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Weight</td>
</tr>
<tr>
<td>12.5 lb. (5.7 kg)</td>
</tr>
<tr>
<td>51 lb. (23.1 kg)</td>
</tr>
</tbody>
</table>
Millermatic® 211

See literature no. DC/12.58

Welding Capability

<table>
<thead>
<tr>
<th>Amperage</th>
<th>Rated Output</th>
<th>Amps Input at Rated Output, 60 Hz</th>
<th>Wire Feed Speed</th>
<th>Wire Type and Diameter Capacity</th>
<th>Machine Only</th>
<th>Machine Only</th>
<th>Machine Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>120 V</td>
<td>30–130</td>
<td>115 A at 19.8 VDC, 20% duty cycle</td>
<td>24.3 –</td>
<td>Solid steel .023–.035 in. (0.6–0.9 mm)</td>
<td>H: 12.5 in. (318 mm)</td>
<td>W: 11.25 in. (286 mm)</td>
<td>D: 20.5 in. (521 mm)</td>
</tr>
<tr>
<td>240 V</td>
<td>30–230</td>
<td>150 A at 21.5 VDC, 40% duty cycle</td>
<td>16.6 –</td>
<td>Flux-cored .030–.045 in. (0.8–1.2 mm)</td>
<td>38 lb. (17.2 kg)</td>
<td>38 lb. (17.2 kg)</td>
<td>38 lb. (17.2 kg)</td>
</tr>
</tbody>
</table>

Advanced Auto-Set™ now includes five different wire/gas combinations and .024-, .030- and .035-inch wires. The easiest welder to use just became more versatile. Manual mode allows you to set your own parameters while welding.

Inverter technology combines best-in-class arc characteristics with the portability of a 38-pound machine. The Arc is extremely forgiving to variations in arcing length and travel speeds.

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

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

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

Fan-On-Demand™ and thermal overload protection protect your investment (see page 8 for more information).

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

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

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

Recommended aluminum solutions
Spoolmate 100 (#300 371) or 150 (#301 272).

Light Industrial

Millermatic® 212 Auto-Set™

See literature no. DC/12.46

Welding Capability

<table>
<thead>
<tr>
<th>Amperage</th>
<th>Rated Output</th>
<th>Amps Input at Rated Output, 60 Hz</th>
<th>Wire Feed Speed</th>
<th>Wire Type and Diameter Capacity</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>30–210</td>
<td>160 A at 24.5 VDC, 60% duty cycle</td>
<td>31 28 6.2 5.2</td>
<td>50–700 ipm (1.3–17.8 m/min.)</td>
<td>Solid steel .023–.035 in. (0.6–0.9 mm)</td>
<td>H: 30 in. (762 mm)</td>
<td>183 lb. (83 kg)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Stainless .023–.035 in. (0.6–0.9 mm)</td>
<td>W: 19 in. (483 mm)</td>
<td>183 lb. (83 kg)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Flux-cored .030–.045 in. (0.8–1.2 mm)</td>
<td>D: 40 in. (1,016 mm)</td>
<td>183 lb. (83 kg)</td>
</tr>
</tbody>
</table>

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

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

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

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

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

Aluminum MIG welding with optional Spoolmate® 200 spool gun.

Wire feed speed control on the gun saves time by reducing trips back to the machine. Also compatible with the more industrial Spoolmate® spool guns.

Recommended aluminum solution
Spoolmate 200 (#300 497).
Millermatic® 252
See literature no. DC/12.49

Welding Capability

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Amperage Range</th>
<th>Rated Output</th>
<th>Amps Input at Rated Output, 60 Hz</th>
<th>Wire Feed Speed</th>
<th>Wire Type and Diameter Capacity</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>(#907 321)</td>
<td>200(208)/230 V</td>
<td>200 A at 28 VDC</td>
<td>48/42 – – – – (60% duty cycle)</td>
<td>Solid steel .023–.045 in. (0.6–1.2 mm)</td>
<td>Stainless .023–.045 in. (0.6–1.2 mm)</td>
<td>24 in. (610 mm)</td>
<td>15 lb. (6.8 kg)</td>
</tr>
<tr>
<td>(#907 060)</td>
<td>200(208)/230 V</td>
<td>250 A at 28 VDC</td>
<td>48/42 – 23/18 (60% duty cycle)</td>
<td>Flux-cored .030–.045 in. (0.8–1.2 mm)</td>
<td>Stainless .023–.045 in. (0.6–1.2 mm)</td>
<td>24 in. (610 mm)</td>
<td>15 lb. (6.8 kg)</td>
</tr>
<tr>
<td>(#907 322)</td>
<td>230/460/575 V</td>
<td>200 A at 28 VDC</td>
<td>48/42 – 23/18 (60% duty cycle)</td>
<td>Solid steel .023–.045 in. (0.6–1.2 mm)</td>
<td>Stainless .023–.045 in. (0.6–1.2 mm)</td>
<td>24 in. (610 mm)</td>
<td>15 lb. (6.8 kg)</td>
</tr>
<tr>
<td>(#951 065*)</td>
<td>230/460/575 V</td>
<td>200 A at 28 VDC</td>
<td>48/42 – 23/18 (60% duty cycle)</td>
<td>Solid steel .023–.045 in. (0.6–1.2 mm)</td>
<td>Stainless .023–.045 in. (0.6–1.2 mm)</td>
<td>24 in. (610 mm)</td>
<td>15 lb. (6.8 kg)</td>
</tr>
</tbody>
</table>

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

*With Spoolmatic 30A, regulator, gas hose and dual cylinder rack.

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

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

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

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

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

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

Table:

<table>
<thead>
<tr>
<th>Processes</th>
<th>Millermatic® 252</th>
</tr>
</thead>
<tbody>
<tr>
<td>Millermatic® 350P</td>
<td></td>
</tr>
</tbody>
</table>

Welding Capability

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Amperage Range</th>
<th>Rated Output</th>
<th>Amps Input at Rated Output, 60 Hz</th>
<th>Wire Feed Speed</th>
<th>Wire Type and Diameter Capacity</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>(#907 300)</td>
<td>200/230/460 V</td>
<td>300 A at 32 VDC</td>
<td>34/30 15 11.6 11.5</td>
<td>MIG gun 50–700 ipm (1.3–17.8 m/min.)</td>
<td>Solid steel .023–.045 in. (0.6–1.2 mm)</td>
<td>33 in. (838 mm)</td>
<td>181 lb. (82 kg)</td>
</tr>
<tr>
<td>(#951 065*)</td>
<td>200/230/460 V</td>
<td>300 A at 32 VDC</td>
<td>34/30 15 11.6 11.5</td>
<td>Optional spool gun/push-pull gun 50–800 ipm (1.3–20 m/min.)</td>
<td>Stainless .023–.045 in. (0.6–1.2 mm)</td>
<td>33 in. (838 mm)</td>
<td>181 lb. (82 kg)</td>
</tr>
<tr>
<td>(#907 301)</td>
<td>200/230/460 V</td>
<td>300 A at 32 VDC</td>
<td>34/30 15 11.6 11.5</td>
<td>Metal-cored .035–.052 in. (0.9–1.3 mm)</td>
<td>Stainless .023–.045 in. (0.6–1.2 mm)</td>
<td>33 in. (838 mm)</td>
<td>181 lb. (82 kg)</td>
</tr>
<tr>
<td>(#907 302)</td>
<td>200/230/460 V</td>
<td>300 A at 32 VDC</td>
<td>34/30 15 11.6 11.5</td>
<td>Flux-cored .030–.052 in. (0.8–1.3 mm)</td>
<td>Stainless .023–.045 in. (0.6–1.2 mm)</td>
<td>33 in. (838 mm)</td>
<td>181 lb. (82 kg)</td>
</tr>
</tbody>
</table>

Recommended aluminum solution
XR-Aluma-Pro push-pull gun (see page 20).

Built-in pulsed MIG programs. All programmed information is restored after each power up — aluminum/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, burnback, spot and delay (stitch) 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.

Table:

<table>
<thead>
<tr>
<th>Processes</th>
<th>Millermatic® 350P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Millermatic® 350P</td>
<td></td>
</tr>
</tbody>
</table>
MIGmatic™ M-Series MIG Guns

An ideal match for Miller® all-in-one MIG machines or other Miller wire feeders.

Three-piece nozzle construction extends nozzle life by reducing wear and helps prevent rocking of nozzle on contact tip adapter.

Interchangeable contact tips and mono coil liners help reduce parts inventory.

Brass contact tip adapter helps prevent galling, sticking and stripping of threads.

Single-piece high-impact handle is almost indestructible with ergonomic design.

Steel spring strain relief protects power cable from wear and helps prevent liner from kinking, allowing better wire feedability.

360-degree rotatable gooseneck permits trigger activation with either the finger or thumb.

### MIG Packages for Demanding Industrial Applications

#### Power Source

**Welding Performance**

<table>
<thead>
<tr>
<th>Material</th>
<th>CP-302 (pg 12)</th>
<th>Deltaweld® 302 (pg 12)</th>
<th>InvisiMax™ 352 MPa w/5-740 Plus (pg 15)</th>
<th>Access® 300 w/Feeder (pg 22)</th>
<th>Continuum® 350 w/Feeder (pg 23)</th>
<th>Deltaweld® 452 (pg 12)</th>
<th>InvisiMax™ 450 MPa w/5-740 Plus (pg 15)</th>
<th>Access® 450 w/Feeder (pg 22)</th>
<th>Continuum® 500 w/Feeder (pg 23)</th>
<th>Deltaweld® 652 (pg 12)</th>
<th>Access® 675 w/Feeder (pg 22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild Steel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Stainless Steel</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Aluminum</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Material Thickness

- **Gauge (.020-.125 in.)**
- **Sheet (.125-.375 in.)**
- **Plate (.375-1 in.)**
- **Plate (1+ in.)**

#### Wire Size

- .030 in.
- .035 in.
- .045 and .052 in.
- 1/16 in.
- 5/64 in.
- 3/32 in.

#### Process

- **Short Circuit**
- **Pulsed Spray**
- **Accu-Pulse®**
- **RMD®**
- **CAC-A**

### Icon Key

- **_capability:** Designed for
- **_capable of:_**
- **Process Quality:** Good Better Best Optimized

### Processes

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

### Suggested power sources

- **Millermatic® 141/190/211 (M-100/M-150) (pg 8/9)**
- **Millermatic® 212 Auto-Set®/252 (M-25) (pg 9/10)**
- **Multimatic 200 (M-150) (pg 31)**

### Most popular accessories

- **MIGmatic M-Series Consumable Kits (pg 109)**
- **For M-100/M-150 #234 607 .023 in. (0.6 mm)**
- **#234 608 .030 in. (0.8 mm)**
- **#234 609 .035 in. (0.9 mm)**
- **For M-25 #234 610 .030 in. (0.8 mm)**
- **#234 611 .035 in. (0.9 mm)**
- **#234 612 .045 in. (1.2 mm)**
- **Aluminum Conversion Kit #172 136 (pg 109)**

Visit MillerWelds.com or your distributor for other Miller® options and accessories.
Industrial 302 models

Heavy industrial 452/652 models

### Processes
- MIG (GMAW) • Flux-cored (FCAW)
- Air carbon arc gouging (CAG-A)
- Deltaweld 452: 1/4 in. carbons
- Deltaweld 652: 3/8 in. carbons

### Stationary package includes
- Power source
- 22A (CP-302) or S-74D (Deltaweld) feeder with .035/.045 in. drive rolls
- Bernard® BTB Gun 300 A (CP-302) or BTB Gun 400 A (Deltaweld)
- Industrial MIG 4/0 kit consisting of flowmeter regulator with 10 ft. (3 m) gas hose, 10 ft. (3 m) 4/0 feeder weld cable with lugs, and 15 ft. (4.6 m) work cable with 600-amp C-clamp.

### MIGRunner™ package includes above plus
- Factory-installed standard running gear and standard cylinder rack

### Most popular accessories
- 20 Series Feeders (pg 44)
- 70 Series Feeders (pg 44)
- Bernard® MIG Guns (pg 47)
- Standard Running Gear #042 886 (pg 106)
- Standard Cylinder Rack #042 887 (pg 106)
- Industrial MIG 4/0 kit with lug connectors #300 390 (pg 109)
- Extension Cables (pg 114)
  - #242 208 025  25 ft. (7.6 m)
  - #242 208 050  50 ft. (15 m)
  - #242 208 080  80 ft. (24.4 m)

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

---

### Deltaweld® Series

See literature no. DC/16.2

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

**Large analog meters** are easy to read and display preset and actual voltage and amperage.

**14-pin receptacle** provides a quick, direct connection to Miller® wire feeders.

**115-volt power** for tools and coolant systems.

**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.

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

**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.

---

### Models/Packages

*Additional packages are available — visit MillerWelds.com or your distributor.

<table>
<thead>
<tr>
<th>Models</th>
<th>Power Source Only Stock Number</th>
<th>Stationary Package Stock Number*</th>
<th>MIGRunner Package Stock Number*</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP-302</td>
<td>(#903 786) 200/230/460 V</td>
<td>(#951 231)</td>
<td>(#951 230)</td>
</tr>
<tr>
<td>Deltaweld 302</td>
<td>(#903 376) 200/230/460 V</td>
<td>(#951 235)</td>
<td>(#951 234)</td>
</tr>
<tr>
<td></td>
<td>(#903 392) 230/460/575 V</td>
<td>–</td>
<td>(#951 300)</td>
</tr>
<tr>
<td>Deltaweld 452</td>
<td>(#903 377) 200/230/460 V</td>
<td>(#951 237)</td>
<td>(#951 236)</td>
</tr>
<tr>
<td></td>
<td>(#903 394) 230/460/575 V</td>
<td>(#951 301)</td>
<td>(#951 302)</td>
</tr>
<tr>
<td>Deltaweld 652</td>
<td>(#903 396) 230/460/575 V</td>
<td>(#951 239)</td>
<td>(#951 238)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>Voltage Range</th>
<th>Rated Output</th>
<th>Amps Input at Rated Output, 60 Hz</th>
<th>Open-Circuit Voltage</th>
<th>Dimensions (Includes lift eye and strain relief)</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP-302</td>
<td>14–44</td>
<td>300 A at 32 VDC, 100% duty cycle</td>
<td>38 33 16.5 13.1 12.3</td>
<td>14–44 VDC</td>
<td>H: 30 in. (762 mm) W: 23 in. (585 mm) 302 D: 30.5 in. (775 mm) 452/652 D: 38 in. (966 mm)</td>
<td>332 lb. (151 kg)</td>
</tr>
<tr>
<td>Deltaweld 302</td>
<td>10–32</td>
<td>300 A at 32 VDC, 100% duty cycle</td>
<td>48 21 17 19.9 12.9</td>
<td>42 VDC max.</td>
<td></td>
<td>323 lb. (147 kg)</td>
</tr>
<tr>
<td>Deltaweld 452</td>
<td>10–38</td>
<td>450 A at 32 VDC, 100% duty cycle</td>
<td>72 32 25 21.1 11.1</td>
<td>48 VDC max.</td>
<td></td>
<td>384 lb. (174 kg)</td>
</tr>
<tr>
<td>Deltaweld 652</td>
<td>10–44</td>
<td>650 A at 44 VDC, 100% duty cycle</td>
<td>– 48 38 38.2 34.2</td>
<td>54 VDC max.</td>
<td></td>
<td>472 lb. (214 kg)</td>
</tr>
</tbody>
</table>
Invision™ MPa Plus System

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

**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.

Invision 352 model 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. 450 model is 230/460 V manual link or 575 V, three-phase only.

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

**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.

---

### Models/Packages

*Additional packages are available – visit MillerWelds.com/equiptoweld or your distributor.

### Power Source Only

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Invision 352 MPa</td>
<td>(#907 431) 208-575 V</td>
<td>S-74 (single-wire feeder with one gun)</td>
<td>25 ft. air-cooled</td>
<td>With Dinse connectors</td>
<td>MIGrunner cart</td>
</tr>
<tr>
<td>(#907 431) 208-575 V with auxiliary power</td>
<td>(#907 431) 208-575 V</td>
<td>S-74 (single-wire feeder with two guns)</td>
<td>25 ft. air-cooled</td>
<td>With Dinse connectors</td>
<td>Running gear cylinder rack</td>
</tr>
<tr>
<td>Invision 450 MPa</td>
<td>(#907 485) 230/460 V</td>
<td>D-74 (dual-wire feeder with two guns)</td>
<td>–</td>
<td>With Dinse connectors</td>
<td>MIGrunner cart</td>
</tr>
<tr>
<td>(#907 485) 230/460 V with auxiliary power</td>
<td>(#907 485) 230/460 V</td>
<td>D-74 (dual-wire feeder with two guns)</td>
<td>–</td>
<td>With Dinse connectors</td>
<td>Running gear cylinder rack</td>
</tr>
</tbody>
</table>

---

**Note:** See aluminum solutions comparison chart on page 14.

### Heavy Industrial

**Invision 450** is 3-phase only.

#### Processes

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

#### Optimized wire feeding options

- 70 Series MPa Plus feeders (pg 44)
- XR-Aluma-Pro® Plus and XR™-Pistol Plus push-pull guns (pg 45)
- 70 Series SwingArc™ with MPa Plus control box (pg 46)
- Single- and dual-remote configurations (pg 46, for more information see literature no. DC/23.6)

#### Most popular accessories

- MIGrunner™ Cart (single feeders only) #195 445 (pg 107)
- Running Gear Cylinder Rack #300 408 (pg 107)
- Coolmate™ #043 007 (pg 107)
- Industrial MIG 4/0 Kits (pg 109) #300 405/406 (352 MPa only)
- #300 390 With lug connectors (450 MPa only)

Consists of flowmeter regulator with 10 ft. (3 m) gas hose, 10 ft. (3 m) 4/0 feeder weld cable, and 15 ft. (4.6 m) work cable with 600-amp C-clamp.

- Extension Cables (pg 114)
  #247 831 025 25 ft. (7.6 m)  
  #247 831 050 50 ft. (15 m)  
  #247 831 080 80 ft. (24.4 m)

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

---

### Process Capabilities

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

---

**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. See page 45 for stock numbers.

---

**Build-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.

**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.

---

**Invision 352 MPa with 5-74 MPa Plus feeder shown.**
Choose the Right Industrial Aluminum MIG Solution

For additional aluminum MIG solutions, see spool guns, push-pull guns and controls on pages 18–21.

<table>
<thead>
<tr>
<th>Millermatic® 350P Aluminum Push-Pull Gun System (page 16)</th>
<th>AlumaFeed® Synergic Aluminum Welding System (page 17)</th>
<th>Invision® MPa Plus System (page 13)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power Source</strong></td>
<td>Millermatic 350P Aluminum (all-in-one)</td>
<td>AlumaPower® 350 MPa or 450 MPa</td>
</tr>
<tr>
<td><strong>Feeder</strong></td>
<td>All-in-one — built-in running gear with cylinder rack</td>
<td>Single-wire XR-AlumaFeed — portable feeder can be carried up to 100 feet from power source</td>
</tr>
<tr>
<td><strong>Input Voltage</strong></td>
<td>Single- or three-phase</td>
<td>350 MPa: Auto-Line™ — allows for any primary input voltage (208–575 V, single- or three-phase, 50 or 60 Hz) with no manual linking. Also adjusts for voltage spikes within the entire range.</td>
</tr>
<tr>
<td><strong>Rated Output</strong></td>
<td>300 A at 60% duty cycle</td>
<td>350 MPa: 350 A at 60% duty cycle 450 MPa: 450 A at 100% duty cycle</td>
</tr>
<tr>
<td><strong>Primary Connection</strong></td>
<td>Auto-Link™ — automatically links the power source to primary voltage being applied. Auto-link is used to link to 208 or 230 V and manually moving a link board is required to link to 460 V.</td>
<td>352 MPa: Auto-Line™ — allows for any primary input voltage (208–575 V, single- or three-phase, 50 or 60 Hz) with no manual linking. Also adjusts for voltage spikes within the entire range. 450 MPa: 230/460 V manual linking or 575 V manual linking within the entire range.</td>
</tr>
<tr>
<td><strong>Aluminum Wire Diameters</strong></td>
<td>.035–.047 in. (0.9–1.2 mm)</td>
<td>.035–1/16 in. (0.9–1.6 mm)</td>
</tr>
<tr>
<td><strong>Gun Capability</strong></td>
<td>XR-Aluma-Pro®, XR-Aluma-Pro™ Lite, or XR™-Pistol</td>
<td>XR-Aluma-Pro®, XR-Aluma-Pro™ Lite, or XR™-Pistol</td>
</tr>
<tr>
<td><strong>MIG Modes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Profile Pulse™</strong></td>
<td>—</td>
<td>Yes — achieve a “stacked dime” appearance quickly and easily without gun manipulation</td>
</tr>
<tr>
<td><strong>Synergic Pulsed MIG</strong></td>
<td>Yes — “one-knob” control, only need to change wire feed speed to weld different material thicknesses</td>
<td>Yes — “one-knob” control, only need to change wire feed speed to weld different material thicknesses</td>
</tr>
<tr>
<td><strong>MIG</strong></td>
<td>Spray transfer MIG — for aluminum wires</td>
<td>Spray transfer MIG — for aluminum wires</td>
</tr>
</tbody>
</table>

**Features**

<table>
<thead>
<tr>
<th>Built-In Pulsed Programs</th>
<th>Aluminum</th>
<th>Aluminum</th>
<th>Aluminum, steel, stainless and others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portability</td>
<td>Built-in running gear with cylinder rack — easily maneuverable from area to area</td>
<td>Lightweight, portable feeder with handle — can be carried up to 100 feet from power source</td>
<td>Stationary feeder — can be mounted up to 100 feet from power source</td>
</tr>
<tr>
<td>Trigger Hold</td>
<td>Yes — reduces operator fatigue from holding trigger</td>
<td>Yes — reduces operator fatigue from holding trigger</td>
<td>Yes — reduces operator fatigue from holding trigger</td>
</tr>
<tr>
<td>Trigger Schedule Select</td>
<td>Yes — allows operator to switch between two preset weld conditions by tapping the trigger</td>
<td>Yes — allows operator to switch between two preset weld conditions by tapping the trigger</td>
<td>Yes — allows operator to switch between two preset weld conditions by tapping the trigger</td>
</tr>
<tr>
<td>Program Locks</td>
<td>—</td>
<td>Yes — prevents unintended changes to the welding program weld parameters</td>
<td>Yes — prevents unintended changes to the welding program weld parameters</td>
</tr>
<tr>
<td>Flow Meter</td>
<td>—</td>
<td>Yes — allows flow to be set at feeder even when gas supply is a long distance away</td>
<td>—</td>
</tr>
</tbody>
</table>
Bernard semi-automatic MIG guns and consumables have been used and trusted for decades by top companies in agriculture, shipbuilding and fabrication. This is why Miller not only recommends Bernard MIG guns but also pairs these guns with many of their industrial wire feeders and power sources.

To learn more about Bernard MIG guns and the Miller equipment that they are offered with, please see page 47 in this catalog.

For information on additional Bernard MIG gun options and for detailed technical support information, please visit BernardWelds.com or your local distributor to learn more.
Feeding Aluminum

Choose the Right Gun Solution

Push-only guns (pg 11/47)

Also known as standard MIG guns, these guns are only used for occasional aluminum work.

- Typically used with hard wire or flux-cored wires in general manufacturing
- For aluminum, guns should be limited to 12-foot lengths and configured with correct aluminum liner and consumables

Spool guns (pg 18/19)

Integrated wire spools and better feedability make spool guns great for repair and small jobs.

- Low initial cost versus push-pull guns
- Works with many power sources
- Light and simple to use
- Usually lower duty cycles
- Limited deposition because of wire size

Push-pull guns (pg 20)

Preferred guns for production work with the best overall aluminum wire feedability.

- Built for longevity
- Can feed various wire sizes
- Great arc starts and performance
- Higher duty cycles and amp ratings
- Air- and water-cooled models

Learn more at MillerWelds.com/aluminum
AlumaFeed® Synergic Aluminum Welding System

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

AlumaPower® 350 model 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. 450 model is 230/480 V manual link or 575 V, three-phase only.

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

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

Synergic pulsed MIG. 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.

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.

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

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

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 package (#951 147) shown.

Models/Packages

*Additional packages are available — visit MillerWelds.com or your distributor.

<table>
<thead>
<tr>
<th>Power Source Only</th>
<th>Power Source Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock Number*</td>
<td>Stock Number*</td>
</tr>
<tr>
<td>AlumaPower 350 MPa</td>
<td>AlumaPower 450 MPa</td>
</tr>
<tr>
<td>(#907 420)</td>
<td>(#907 483)</td>
</tr>
<tr>
<td>208–575 V</td>
<td>230/460 V</td>
</tr>
<tr>
<td>with auxiliary power</td>
<td>with auxiliary power</td>
</tr>
<tr>
<td>(#951 147)</td>
<td>(#951 483)</td>
</tr>
<tr>
<td>w/350 model (#907 420)</td>
<td>w/450 model (#907 483)</td>
</tr>
<tr>
<td>(#951 149)</td>
<td>(#951 588)</td>
</tr>
<tr>
<td>w/350 model (#907 420)</td>
<td>w/450 model (#907 483)</td>
</tr>
<tr>
<td>(#951 151)</td>
<td>(#951 599)</td>
</tr>
<tr>
<td>w/350 model (#907 420)</td>
<td>w/450 model (#907 483)</td>
</tr>
</tbody>
</table>

AlumaPower 450 MPa

<table>
<thead>
<tr>
<th>Stock Number*</th>
<th>Stock Number*</th>
</tr>
</thead>
<tbody>
<tr>
<td>AlumaPower 450 MPa</td>
<td>AlumaPower 450 MPa</td>
</tr>
<tr>
<td>(#907 483)</td>
<td>(#907 483)</td>
</tr>
<tr>
<td>230/460 V</td>
<td>575 V</td>
</tr>
<tr>
<td>with auxiliary power</td>
<td>with auxiliary power</td>
</tr>
<tr>
<td>(#951 460)</td>
<td>(#951 588)</td>
</tr>
<tr>
<td>w/450 model (#907 483)</td>
<td>w/450 model (#907 483)</td>
</tr>
<tr>
<td>(#951 459)</td>
<td>(#951 599)</td>
</tr>
<tr>
<td>w/450 model (#907 483)</td>
<td>w/450 model (#907 483)</td>
</tr>
</tbody>
</table>

Note: All packages listed include gun drive rolls, feeder drive rolls and consumables for .035 and 3/64-inch (0.9 and 1.2 mm) wire. All systems come set up out of the box to run 3/64-inch wire. 1/16-inch consumables not included — order separately. See aluminum solutions comparison chart on page 14.

<table>
<thead>
<tr>
<th>Model</th>
<th>Input Power</th>
<th>Amp/Volt Ranges</th>
<th>Rated Output</th>
<th>Amps Input at Rated Load Output, 60 Hz</th>
<th>KVA</th>
<th>KW</th>
<th>Max. Open-Circuit Voltage</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AlumaPower 350 MPa</td>
<td>Three-phase</td>
<td>5–425 A 10-38 V</td>
<td>350 A at 34 VDC, 60% duty cycle</td>
<td>40.4</td>
<td>36.4</td>
<td>26.8</td>
<td>17.8</td>
<td>14.1</td>
<td>14.2</td>
</tr>
<tr>
<td></td>
<td>Single-phase</td>
<td>5–425 A 10-38 V</td>
<td>300 A at 32 VDC, 60% duty cycle</td>
<td>60.8</td>
<td>54.6</td>
<td>29.7</td>
<td>24.5</td>
<td>19.9</td>
<td>11.7</td>
</tr>
<tr>
<td>AlumaPower 450 MPa</td>
<td>Three-phase</td>
<td>15–600 A 10-38 V</td>
<td>450 A at 36.5 VDC, 100% duty cycle</td>
<td>49.4</td>
<td>27.2</td>
<td>23.6</td>
<td>21.6</td>
<td>(23.5 on 215 V)</td>
<td>18.3</td>
</tr>
<tr>
<td>XR-AlumaFeed</td>
<td>14-pin compliant, but only operates synergically w/MPa power sources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Input Power</td>
<td>24 VAC, 5 A, 50/60 Hz</td>
<td>400 A at 100% duty cycle</td>
<td>System duty cycle is limited to gun rating</td>
<td>50–900 ipm (1.3–22.9 m/min.)</td>
<td>.035–.063 in. (0.9–1.6 mm)</td>
<td>Requires wire kit #195 591 for control box to run 1/16 in. (1.6 mm) wire</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Spool Size Capacity</td>
<td>12 in. (305 mm)</td>
<td>H: 16 in. (406 mm)</td>
<td>W: 9.5 in. (241 mm)</td>
<td>D: 21.25 in. (540 mm)</td>
<td>42.5 lb. (19.2 kg)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Spoolmate™ Spool Guns

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

### Spoolmate 100

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

- **12-foot direct-connect cable** with heavy-duty strain relief provides extended reach and accessibility to your work.
- **Dual V-knurled drive rolls with adjustable tension control** for consistent feeding of different types of wire.
- **Clear spool canister** protects the wire and allows easy view of spool.

Includes carrying case, extra contact tips and nozzle.

### Spoolmate 150

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

- **20-foot 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

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

- **20-foot 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. Three optional head tubes.

### Spoolmate 3035

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

- **20-foot 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.**

### Model/Stock Number

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Welding Current Rating</th>
<th>Wire Feed Speed</th>
<th>Wire Type and Diameter Capacity</th>
<th>Maximum Spool Size Capacity</th>
<th>Dimensions</th>
<th>Net Weight with Cable Assembly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spoolmate 100</td>
<td>150 A at 60% duty cycle</td>
<td>5-625 ipm (1.7–15.9 m/min.)</td>
<td>Aluminum .030–.035 in. (0.8–0.9 mm)</td>
<td>4 in. (102 mm)</td>
<td>L: 11.5 in. (291 mm)</td>
<td>W: 2.25 in. (57 mm)</td>
</tr>
<tr>
<td>Spoolmate 150</td>
<td>160 A at 60% duty cycle</td>
<td>115–715 ipm (2.9–18.1 m/min.)</td>
<td>Aluminum .030–.035 in. (0.8–0.9 mm)</td>
<td>4 in. (102 mm)</td>
<td>H: 11.5 in. (291 mm)</td>
<td>W: 2.25 in. (57 mm)</td>
</tr>
<tr>
<td>Spoolmate 200</td>
<td>180 A at 60% duty cycle, 70–875 ipm (1.8–22.2 m/min.)</td>
<td>115–715 ipm (2.9–18.1 m/min.)</td>
<td>Aluminum .030–.035 in. (0.8–0.9 mm)</td>
<td>115–715 ipm (2.9–18.1 m/min.)</td>
<td>H: 11.5 in. (291 mm)</td>
<td>W: 2.25 in. (57 mm)</td>
</tr>
</tbody>
</table>

### Suggested accessories

- **For Spoolmate 100**
  - Spoolmatic Adapter Cable #195 287
  - 5-Inch Head Tube #243 385
  - 45-Degree Head Tube #300 371
  - 9-Inch Extension Head Tube #300 372
  - 45-Degree Head Tube #300 497

- **For Spoolmate 150**
  - Spoolmatic Adapter Cable #195 287
  - 5-Inch Head Tube #243 385
  - 45-Degree Head Tube #300 497

- **For Spoolmate 200**
  - Spoolmatic Adapter Cable #195 287
  - 5-Inch Head Tube #243 385
  - 45-Degree Head Tube #300 497

### Use with CV, DC power sources

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

### Most popular accessories

- **For Spoolmate 200**
  - 5-Inch Head Tube #243 385
  - 45-Degree Head Tube #300 371

- **For Spoolmate 3035**
  - SGA 100 #043 856 (pg 114)
  - SGA 100C #043 857 (pg 114)
  - Heavy-Duty Head Tube #195 375

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

Portable, aluminum wire feeder for industrial applications.

Spoolmatic

Cost-effective, industrial aluminum spool gun.

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

Available in 15- or 30-foot 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

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

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

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

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

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

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

See literature no. M/1.73 (Spoolmatic) and M/1.76 (Spoolmatic Pro)

*Spoolmatic Pro requires wire kit #230 708 to run 1/16 in. (1.6 mm) wire.

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Welding Current Rating</th>
<th>Wire Feed Speed</th>
<th>Wire Type and Diameter Capacity</th>
<th>Maximum Spool Size Capacity</th>
<th>Dimensions</th>
<th>Gun Only Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spoolmatic (#195 156) 15 ft. (4.5 m) cable (#130 831) 30 ft. (9 m) cable</td>
<td>200 A at 100% duty cycle</td>
<td>70–875 ipm (1.8–22.2 m/min)</td>
<td>Aluminum* .030–1/16 in. (0.8–1.6 mm)</td>
<td>4 in. (102 mm)</td>
<td>H: 10.25 in. (260 mm) W: 2.5 in. (64 mm) L: 15.125 in. (384 mm)</td>
<td>2.9 lb. (1.3 kg)</td>
</tr>
<tr>
<td>Spoolmatic Pro (#301 147) 15 ft. (4.5 m) cable (#301 148) 30 ft. (9 m) cable</td>
<td>200 A at 100% duty cycle</td>
<td>70–900 ipm (1.8–23 m/min.)</td>
<td>Hard wire .030–.045 in. (0.8–1.1 mm)</td>
<td>4 in. (102 mm)</td>
<td>H: 10.75 in. (273 mm) W: 2.5 in. (64 mm) L: 15.375 in. (390 mm)</td>
<td>3.0 lb. (1.4 kg)</td>
</tr>
</tbody>
</table>
XR™ Push-Pull Guns

XR-Aluma-Pro and XR-Pistol guns work in conjunction with XR Controls, 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

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

XR-Aluma-Pro™

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

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

XR™-Pistol-Pro

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.

<table>
<thead>
<tr>
<th>Model</th>
<th>15 ft. (4.6 m)</th>
<th>25 ft. (7.6 m)</th>
<th>30 ft. (9 m)</th>
<th>35 ft. (10.6 m)</th>
<th>Welding Current Rating</th>
<th>Wire Feed Speed*</th>
<th>Wire Type and Diameter Capacity</th>
<th>Dimensions</th>
<th>Gun Only Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>XR-Aluma-Pro Lite (Air-cooled)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>2.0 lb. (0.9 kg)</td>
</tr>
<tr>
<td>XR-Aluma-Pro (Air-cooled)</td>
<td>(#300 000)</td>
<td>(#300 001)</td>
<td>—</td>
<td>(#300 264)</td>
<td>175 A at 60% duty cycle</td>
<td>70–900 ipm</td>
<td>Aluminum .030–.047 in. (0.8–1.2 mm)</td>
<td>H: 4.5 in. (114 mm) W: 1.9 in. (48 mm) L: 15 in. (381 mm)</td>
<td>—</td>
</tr>
<tr>
<td>XR-Aluma-Pro (Water-cooled)</td>
<td>(#300 003)</td>
<td>(#300 004)</td>
<td>—</td>
<td>(#300 265)</td>
<td>300 A at 100% duty cycle</td>
<td>70–900 ipm</td>
<td>Aluminum** .030–.1/16 in. (0.8–1.6 mm)</td>
<td>H: 5 in. (127 mm) W: 2.5 in. (64 mm) L: 17 in. (432 mm)</td>
<td>2.5 lb. (1.1 kg)</td>
</tr>
<tr>
<td>XR-Pistol (Air-cooled)</td>
<td>(#159 127)</td>
<td>—</td>
<td>(#158 128)</td>
<td>—</td>
<td>400 A at 100% duty cycle</td>
<td>200–285 ipm</td>
<td>Aluminum .030–.1/16 in. (0.8–1.6 mm)</td>
<td>H: 3.75 in. (95 mm) W: 1.875 in. (48 mm) L: 10.625 in. (270 mm)</td>
<td>2.2 lb. (1 kg)</td>
</tr>
<tr>
<td>XR-Pistol (Water-cooled)</td>
<td>(#158 129)</td>
<td>(#158 130)</td>
<td>—</td>
<td>—</td>
<td>200 A at 100% duty cycle</td>
<td>70–900 ipm</td>
<td>Aluminum** .030–.1/16 in. (0.8–1.6 mm)</td>
<td>—</td>
<td>2.4 lb. (1.1 kg)</td>
</tr>
<tr>
<td>XR-Aluma-Pro Lite (Air-cooled)</td>
<td>—</td>
<td>(#300 782)</td>
<td>(#300 783)</td>
<td>—</td>
<td>200 A at 100% duty cycle</td>
<td>70–900 ipm</td>
<td>Aluminum .030–.1/16 in. (0.8–1.6 mm)</td>
<td>—</td>
<td>2.2 lb. (1 kg)</td>
</tr>
<tr>
<td>XR-Aluma-Pro (Water-cooled)</td>
<td>(#300 786)</td>
<td>(#300 787)</td>
<td>—</td>
<td>(#300 788)</td>
<td>400 A at 100% duty cycle</td>
<td>70–900 ipm</td>
<td>Aluminum .030–.1/16 in. (0.8–1.6 mm)</td>
<td>—</td>
<td>2.4 lb. (1.1 kg)</td>
</tr>
</tbody>
</table>

*Dependent on control box or Millermatic used. **Wire kit #300 708 required to run 1/16 in. (1.6 mm) wire.
XR Controls
See literature no. M/1.7

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

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

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

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

Trigger hold for making long weldments without hand fatigue.

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

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

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

Product Specifications

<table>
<thead>
<tr>
<th>Mode/Stock Number</th>
<th>Input Power</th>
<th>Wire Feed Speed</th>
<th>Wire Diameter Capacity</th>
<th>Maximum Spool Size Capacity</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>XR-S (#300 601)</td>
<td>24 VAC, 50/60 or 100 Hz</td>
<td>50–900 ipm (1.3–23 m/min.)</td>
<td>Aluminum .030–1/16 in. (0.8–1.6 mm)</td>
<td>Requires drive roll kit #195 591 to run 1/16 in. (1.6 mm) wire</td>
<td>H: 16 in. (406 mm) W: 9.25 in. (235 mm) D: 21.25 in. (540 mm)</td>
<td>42.5 lb. (19.2 kg)</td>
</tr>
<tr>
<td>XR-D (#300 687)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

Questions? Hobart is here to help.

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

XR-S
XR-D

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.
Axcess® and Auto-Axcess™ Systems

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

**Multi-MIG® Welding Process Capabilities**

- **Weld Puddle Control**
  - Flat/Horizontal
  - All Position Performance
  - Thin Materials/Gap Filling

- **Process**
  - Standard Spray
  - Pulsed Spray
  - Accu-Pulse®, Accu-Curve™ (Optional)
  - Accu-Speed™ (Optional)
  - Standard Short Circuit
  - RMD®-Regulated Metal Deposition (Optional)

- **Accu-Pulse®** provides shorter arc lengths, along with a more focused arc column, which provides significantly improved puddle control and arc stability. Accu-Pulse also improves welding in tight corners without arc wandering as well as greatly reduced spatter.

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

- **AA-40GB wire drive motor assembly with OCP (over current protection)** to protect against current surges. Direct-panel-mounted to eliminate motion stress on the motor’s power and tachometer feedback wires. (Required for Auto-Axcess and used for Axcess remote configurations.)

- **Welding Intelligence®** Increase productivity, improve quality and manage costs with Insight Core® and Insight Centerpoint™ welding information systems (see pages 24 and 25).

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

**Models/Packages**

- **Axcess 300 (907 150)**
- **Axcess 450 (907 152)**
- **Axcess 675 (907 154)**
- **Auto-Axcess 300 (907 151)**
- **Auto-Axcess 450 (907 153)**
- **Auto-Axcess 675 (907 155)**

- **Stationary Package Stock Number**
- **MIGRunner Package Stock Number**

- **Multi-MIG® Welding Process Capabilities**

- **Processes Multi-MIG**
  - Accu-Pulse MIG (GMAW-P)
  - Accu-Curve
  - Accu-Speed (optional)
  - Accu-Pulse tandem (factory option available on Auto-Axcess only)
  - Pulsed MIG (GMAW-P) • MIG (GMAW)
  - Metal-cored • RMD (optional)
  - Air carbon arc gouging (CAC-A) can also be activated

- **Stationary package includes**
  - Access power source
  - Access feeder with Bernard® BTB Gun and drive rolls
  - DeviceNet Interconnecting feeder control cable
  - Industrial MIG 4/0 kit consisting of flowmeter regulator with 10 ft. (3 m) gas hose, 10 ft. (3 m) 4/0 feeder weld cable with lugs, and 15 ft. (4.6 m) work cable with 600-amp C-clamp.

**MIGRunner® package includes above plus**

- Running gear cylinder rack (pg 107)

**Wire feeding options** (see lit. no. DC/8.0 and AU/8.0 for more information and required cables)

- Access Feeders  
  - #951 311 Single-wire  
  - #951 431 Dual-wire  
  - #951 432 Single-wire w/BBG  
  - #951 500 4/0 kit w/BBG  
  - #951 506 Single-wire w/BBG  

**Most popular accessories**

- Access File Management Software for PC #300 529
- Industrial MIG 4/0 Kit (with lug connectors) #300 390 (pg 109)

**D: 22.5 in. (572 mm)**
**W: 17 in. (432 mm)**
**H: 39 in. (991 mm)**

**Dimensions**

- **Net Weight**
  - 112 lb. (50.8 kg)
  - 163 lb. (73.9 kg)
  - 215 lb. (97.5 kg)
Continuum™ Systems

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

Improved processes
New Versa-Pulse™ and improvements to Accu-Pulse®, RMD® and MIG processes allow you to take the performance of each process to the highest level.

All-new 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 (see pages 24 and 25).

All-new feeder design
Tru-Feed™ technology provides precise feeding operation for stable arc performance.

• New low-inertia motor provides faster response for the best arc starts with the least amount of spatter

• Balanced-pressure drive-roll design and tensioners feed wire in its truest and straightest form for consistent feedability, resulting in better welding performance.

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

Continuum Processes

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Amps Input at Rated Output, 50/60 Hz, 3-Phase</th>
<th>Max. Open-Circuit Voltage</th>
<th>Machine Only Dimensions (Includes lift eye)</th>
<th>Machine Only Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>#951 635 Single-wire</td>
<td>36.7 A, 230 V (62.4 lb. (28.3 kg))</td>
<td>H: 13.812 in. (351 mm)</td>
<td>10 ft. (3 m) work cable with 600-amp clamps</td>
<td>60 lb. (27.9 kg)</td>
</tr>
<tr>
<td>#951 673 Dual-wire</td>
<td>36.7 A, 230 V (62.4 lb. (28.3 kg))</td>
<td>H: 13.812 in. (351 mm)</td>
<td>10 ft. (3 m) work cable with 600-amp clamps</td>
<td>60 lb. (27.9 kg)</td>
</tr>
</tbody>
</table>

Note: As the technological advances offered by Continuum extend beyond the capability of Axcess systems, the two systems are not compatible.

Continuum systems are designed to allow future upgradability, to expand with your operation’s needs.

*While idling.

Processes
• Accu-Pulse MIG (GMAW-P)
• Versa-Pulse • RMD • MIG (GMAW)
• High-deposition MIG (GMAW)
• Air carbon arc gouging (CAC-A)

MIGRunner™ package includes
• Continuum power source
• Continuum single feeder with Bernard® BTB Gun 400 A and .035/.045 in. V-groove drive rolls
• Continuum running gear/cylinder rack
• 3 ft. (0.9 m) control/motor cable

• Industrial MIG 4/0 kit consisting of flowmeter regulator with 10 ft. (3 m) gas hose, 10 ft. (3 m) 4/0 feeder weld cable with lugs, and 15 ft. (4.6 m) work cable with 600-amp clamps.

Wire feeding options
• Continuum Feeders
• Bernard® MIG Guns
• Continuum Running Gear/Cylinder Rack #301 264 (pg 107)
• Coolmate™ Coolant Systems (pg 107)
• Industrial MIG 4/0 Kit (with lug connectors) #300 390 (pg 109)
• Continuum Control/Motor Cables #263 358 903 3 ft. (0.9 m)
• #263 358 015 15 ft. (4.6 m)
• #263 358 020 20 ft. (6.1 m)
• #263 358 025 25 ft. (7.6 m)
• #263 358 050 50 ft. (15 m)
• #263 358 080 80 ft. (24.4 m)

Most popular accessories
• Insight Centerpoint™ Software (pg 25)
• Bernard® MIG Guns (pg 47)
• Continuum Running Gear/Cylinder Rack #301 264 (pg 107)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.
Insight Welding Intelligence helps your operation be more competitive and profitable by delivering accurate, decision-ready information about your welding processes.

**Knowledge to Drive Your Business Forward**

- **Increase Productivity**
  Evaluate key indicators of operator productivity

- **Improve Weld Quality**
  Measure important indicators of weld quality

- **Manage Costs**
  Monitor and analyze welding costs

A simplified, Internet-based weld data solution that collects, transmits and presents actionable information to any Web-connected device in the world.

### Basic monitoring
- 14-pin provides arc-on time and weld parameters (volts/amps) and deposition (MPa feeder required)
- Axcess®/Auto-Axcess™ and Continuum™ provide arc-on time, deposition, wire feed speed, process, wire type/diameter, gas type and machine error codes

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

**No special software or applications required**, for easier installation and more accessible reports.

**Factory Installed** on Axcess®/Auto-Axcess™, Continuum™ and Dynasty® 280 DX with Insight power sources.

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

#### Factory-installed Insight Core Power Sources

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Model with Insight Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>#907 150 002</td>
<td>Axcess 300 with Insight Core</td>
</tr>
<tr>
<td>#907 152 002</td>
<td>Axcess 450 with Insight Core</td>
</tr>
<tr>
<td>#907 154 002</td>
<td>Axcess 675 with Insight Core</td>
</tr>
<tr>
<td>#907 151 004</td>
<td>Auto-Axcess 300 with Insight Core</td>
</tr>
<tr>
<td>#907 153 004</td>
<td>Auto-Axcess 450 with Insight Core</td>
</tr>
<tr>
<td>#907 155 006</td>
<td>Auto-Axcess 675 with Insight Core</td>
</tr>
<tr>
<td>#907 151 005</td>
<td>Auto-Axcess 300 DeviceNet with Insight Core</td>
</tr>
<tr>
<td>#907 153 005</td>
<td>Auto-Axcess 450 DeviceNet with Insight Core</td>
</tr>
<tr>
<td>#907 155 005</td>
<td>Auto-Axcess 675 DeviceNet with Insight Core</td>
</tr>
<tr>
<td>#907 636</td>
<td>Continuum 350</td>
</tr>
<tr>
<td>#907 640</td>
<td>Continuum 500</td>
</tr>
<tr>
<td>#907 514 003</td>
<td>Dynasty 280 DX with Insight</td>
</tr>
</tbody>
</table>

#### Field-installed Insight Core Upgrade Modules

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>#301 072*</td>
<td>14-pin compliant Miller power source module</td>
</tr>
<tr>
<td>#951 617</td>
<td>14-pin compliant Miller power source module w/S-74 MPa Plus wire feeder</td>
</tr>
<tr>
<td>#301 081</td>
<td>Axcess/Auto-Axcess module</td>
</tr>
</tbody>
</table>

*SubArc Digital Series requires Insight Core to SubArc Digital Series Adapter Kit (#301 295).

For more detailed information, visit MillerWelds.com/insight.
**Insight Centerpoint™**

Focused on monitoring welding outputs

14-pin products (Deltaweld®, Dimension®, Invision®, XMT® and SubArc Digital)

**Axcess®**/Auto-Axcess®, Continuum® and Dynasty® 280 DX with Insight

**Insight Core™**

Brings advanced process control into weld cell

**Axcess® E/Auto-Axcess® E, Continuum® and Dynasty® 280 DX with Insight**

**SOPHISTICATION OF INFORMATION AVAILABLE**

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

---

**Advanced MIG Factory-installed Insight Centerpoint Power Sources**

- #907 440 Axcess E 300
- #907 439 Axcess E 450
- #907 444 Axcess E 675
- #907 442 Auto-Axcess E 300 Analog
- #907 443 Auto-Axcess E 450 Analog
- #907 444 Auto-Axcess E 675 Analog
- #907 497 Auto-Axcess E 300 Digital
- #907 496 Auto-Axcess E 450 Digital
- #907 495 Auto-Axcess E 675 Digital
- #301 255 Insight Centerpoint single seat license
- #301 256 Insight Centerpoint site license
- #301 257 Advanced capability software
- #300 708 Insight Reporter single license (1 required per PC)
- #300 710 Insight Reporter SQL database (1 required per facility)

- #907 636 Continuum 350
- #907 640 Continuum 500
- #301 255 Insight Centerpoint single seat license
- #301 256 Insight Centerpoint site license
- #301 257 Advanced capability software
- #300 709 Insight Reporter single license (1 required per PC)
- #300 710 Insight Reporter SQL database (1 required per facility)

---

**TIG Factory-installed Insight Centerpoint Power Sources**

- #907 514 003 Dynasty 280 DX with Insight
- #301 315 Insight Centerpoint single seat license
- #301 256 Insight Centerpoint site license
- #301 314 Standard capability software
- #301 323 Advanced capability upgrade (requires standard capability to use)
- #301 315 Standard and advanced capability software
- #300 709 Insight Reporter single license (1 required per PC)
- #300 710 Insight Reporter SQL database (1 required per facility)

---

**Field-installed Insight Centerpoint Upgrade Modules**

- #300 641 Axcess E module
- #300 852 Auto-Axcess E Analog module
- #300 648 Auto-Axcess E Digital module
- #301 304 PipeWorx 400 module (only provides codes and standards)

---

**Accessories**

- #3DM4015-450 Insight LTD gun for Axcess E or Continuum
- #300 677 Axcess E semi-automatic wire feeder
- #300 720 Axcess E remote operator interface (ROI)
- #300 734 9.8 ft. (3 m) M12/RJ45 ethernet cable
- #300 735 16.4 ft. (5 m) M12/RJ45 ethernet cable
- #300 736 32.8 ft. (10 m) M12/RJ45 ethernet cable
- #195 480 Field application support

---

Advanced, real-time operator feedback to provide process control — to maximize quality and efficiency in welding and fabrication.

**Monitor and control**

- Part Tracking™ — human machine interface (HMI) in the cell for real-time feedback; sequence and weld quality control; reports by part, arc time, welds, deposition, cell downtime and more
- Work Flow™ — welding and non-welding work instructions to govern the entire fabrication process
- Codes and Standards — captures required information relating actual welding parameters to the specific operator, contract, joint and weld pass to ensure productivity and quality requirements are met
- Optional Insight Reporter™ — 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

Axcess® E/Auto-Axcess® E, Continuum® and Dynasty® 280 DX with Insight deliver complete software functionality.

**Insight Pipe and Vessel**

Tailored to the unique needs of pipe and vessel fabricators. PipeWorx 400 requires Insight Module (#301 304).
A family of pre-engineered solutions integrating Miller® welding technology to solve your manufacturing challenges.

Fast installation. Pre-wired and pre-assembled making set up fast and easy. Most systems are up and running in under two hours from delivery (connect power/wire/gas and mounting tooling).

Integrated controls. Control station and full-color teach pendant keep the operator informed, maximizing production uptime.

Flexibility. Fully welded frame allows for easy relocation and reconnection as production plans or layouts change.

To order automation solutions:
Contact local Miller district manager or email MWASales@MillerWelds.com

For automation service/parts:
Call 1-630-653-6819 or email MWAService@MillerWelds.com

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

- PA250M 250 lb./side
- PA350S 350 lb./side
- PA750S/PA750SW 750 lb./side

60 in. manually indexed table
66 in. servo indexing table
92 or 108 in. servo indexing table

Single-station load and unload H-frame configurations

Dual head and tailstock/single- or dual-robot configuration
- PA550H 550 lb./side
- PA550HW 550 lb./side
- PA1100H 1,100 lb./side

48 in. long x 34 in. turning diameter on 92 in. servo indexer
60 in. long x 40 in. turning diameter on 108 in. servo indexer

Side-by-side configurations — operator walks around system

- Robot between dual head and tailstock/single- or dual-robot configuration
- PA1100SS 1,100 lb./side
- PA2200SS 2,200 lb./side

120 in. long x 44 in. turning diameter
120 in. long x 66 in. turning diameter

Ferris wheel configurations — high-volume production

Dual head and tailstock/single-, dual- or triple-robot configuration
- PA1100FW 1,100 lb./side
- PA1100SS 1,100 lb./side
- PA1100FW 1,100 lb./side

118 in. long x 43 in. turning diameter
118 in. long x 43 in. turning diameter

Automation components

- Auto-Axcess™/Auto-Axcess™ E power sources
- Panasonic® robots
- Tregaskiss™ MIG guns
- FILTAR® system with low profile hood
- Miller recommends Hobart® filler metals
Active Wire Process (AWP)

Active wire is an advanced short arc welding process combining the robot motion path, welder waveform and servo wire feed control simultaneously reversing the wire at the short circuit to control the weld deposition precisely.

- **Spatter control.** Spatter is virtually eliminated in all phases of the weld using mixed argon 90/10 or 100 percent CO₂ gas.
- **Fast and clean arc striking.** At the moment the wire touches the base the wire is reversed, reducing arc strike spatter by up to 90 percent.
- **Flexibility.** Large variations in torch angle are possible allowing push-pull in and out of corners without increasing spatter.
- **Appearance.** The precise nature of the process allows many customers an alternative to TIG welding.
- **Wide range of materials.** Mild steels, stainless steels and aluminum from thin to medium gauge benefit from AWP.

Thick Plate Welding

Fast and easy programming even on the most complex multi-pass weldments. All required commands and sensor setup in a single menu screen. Welding procedures can be developed quickly and transported easily from part to part.

- **Graphical, menu-driven interface.** Pop-up graphical windows allow for fast programming of any welding joint in a single location.
- **Multi-layer path control.** Easy-to-use interface to sequence the location of starts/stops and create multi-layer weld paths with appropriate offsets.
- **Advanced sensors.** High-voltage touch sensing with menu-driven touch macros, a specialized high-amperage arc sensor system, and adaptive fill capability allow the weld process to adapt to incoming/varying production parts.

DeskTop Programming and Simulation (DTPS)

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

- **Specialized software** generates programs and simulates the actual taught paths from your desktop.
- **Cutting edge technology and innovation** to manage the challenges of manufacturing and create customer success in metal fabrication.
- **Native language programming.** Same language and functions that the technician will see on the teaching pendant, making program generation off-line easier than competitive code-based systems.
- **File transfer (from old to new).** DTPS has the ability to transfer robot programs between robot types, sizes and controller generations with no additional formatting requirements.
TM/TL Series Welding Robots

Best-in-class robot speed and greatly improved trajectory control — now 20 percent faster with 16 times better trajectory control than TA/TB Series robots. For thermal process applications including MIG, TIG or laser welding and plasma or laser cutting.

**TM Series.** Versatile design accepting conventional or thru-arm torch configurations.

**TL Series.** Dedicated design accepting conventional torch configurations (long arm, niche application support).

**TM/TL Series features include**
- Dedicated welding robot design (application specific)
- Collision detection software (reduced downtime)
- Password protection software (increased security)
- Automated program backup (program recovery)
- Advanced error recovery (better uptime)
- Axis mastering pins (improved maintenance)
- Optional wire conduit through the base axis (reduced maintenance)

**Fixed Automation**

Fixed automation systems integrate MIG, submerged arc and TIG weld process solutions based on your application requirements.

**Longitudinal seamers (LS)** for straight line welding.

**Circumferential seamers (CS)** for circular welding.

**Weld head locators (WHL)** for customized welding.

---

![TM1400G3 robots](image)

<table>
<thead>
<tr>
<th>Model</th>
<th>Reach</th>
<th>Payload</th>
</tr>
</thead>
<tbody>
<tr>
<td>TM1100</td>
<td>45.7 in. (1,163 mm)</td>
<td>12.2 lb. (6 kg)</td>
</tr>
<tr>
<td>TM1400</td>
<td>56.5 in. (1,437 mm)</td>
<td>12.2 lb. (6 kg)</td>
</tr>
<tr>
<td>TM1600</td>
<td>64.7 in. (1,645 mm)</td>
<td>8.8 lb. (4 kg)</td>
</tr>
<tr>
<td>TM1800</td>
<td>71.2 in. (1,809 mm)</td>
<td>12.2 lb. (6 kg)</td>
</tr>
<tr>
<td>TL1800</td>
<td>70.9 in. (1,801 mm)</td>
<td>17.6 lb. (8 kg)</td>
</tr>
<tr>
<td>TL2000</td>
<td>78.7 in. (1,999 mm)</td>
<td>12.2 lb. (6 kg)</td>
</tr>
</tbody>
</table>

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For automation service/parts:
Call 1-630-653-6819 or email MWAService@MillerWelds.com
Tregaskiss™ Robotic Guns

Air-Cooled MIG Guns

Available with all PerformArc® robotic welding systems, fully configurable TOUGH GUN™ robotic MIG guns are engineered for precision, durability, accuracy, repeatability, minimal downtime and fast and easy maintenance.

TOUGH GUN CA3 MIG Guns
See Tregaskiss literature no. SP-CA3

Designed for high-volume production environments.
Replaceable unicable reduces downtime through faster repair and extended service life.
Cable guide minimizes stress on cable connection as the robot articulates.
Re-engineered neck clamp improves durability and consistency of clamping force.

TOUGH GUN TA3 MIG Guns
See Tregaskiss literature no. SP-TA3

Designed for precise, repeatable performance on today's through-arm style robots.
Re-engineered neck clamp improves durability and consistency of clamping force.
Available as a complete package from the power pin to the contact tip.
Easy maintenance with minimal downtime.

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

Tregaskiss.com

Visit Tregaskiss.com to configure a robotic gun for your welding application today.
Or call 1-855-MIGWELD (644-9353) for more information.
## Power Source Welding Performance

<table>
<thead>
<tr>
<th>Power Source Welding Performance</th>
<th>150 A</th>
<th>250 A</th>
<th>300 Amp</th>
<th>350 Amp</th>
<th>450 Amp</th>
<th>650 Amp</th>
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</thead>
<tbody>
<tr>
<td><strong>Material</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Mild Steel</td>
<td>●</td>
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</tr>
<tr>
<td>Stainless Steel</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Aluminum*</td>
<td></td>
<td></td>
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<tr>
<td><strong>Material Thickness</strong></td>
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<tr>
<td>Gauge (.020–.125 in.)</td>
<td>●</td>
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<tr>
<td>Sheet (.125–.375 in.)</td>
<td>●</td>
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</tr>
<tr>
<td>Plate (.375–1 in.)</td>
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<tr>
<td>Plate (1+ in.)</td>
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</tr>
<tr>
<td><strong>Wire Size</strong></td>
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<td>.023 in.</td>
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<td>.030 in.</td>
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<td>.035 in.</td>
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<td>.045 in.</td>
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<td>.052 in.</td>
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<td>1/16 in.</td>
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<td>5/64 in.</td>
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<td>3/32 in.</td>
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<tr>
<td><strong>Process</strong></td>
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<tr>
<td>Short Circuit</td>
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<tr>
<td>Pulsed Spray</td>
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<tr>
<td>Stick</td>
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<td>TIG</td>
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<tr>
<td>CAC-A</td>
<td>3/16 in.</td>
<td>1/4 in.</td>
<td>1/4 in.</td>
<td>1/4 in.</td>
<td>1/4 in.</td>
<td>5/16 in.</td>
</tr>
</tbody>
</table>

### Icon Key
- Designed for
- Capable of

### Process Quality
- Good
- Better
- Best
- Optimized

*XR push-pull system recommended for best results.
An economical single-phase DC multiprocess power source that provides versatility and outstanding arc performance in CV mode (MIG) and CC mode (stick and TIG).

**Welding Capability**

<table>
<thead>
<tr>
<th>Amperage</th>
<th>Voltage</th>
<th>Rated Output</th>
<th>amps input at rated output, 50/60 Hz</th>
<th>Wire Feed Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>250 A</td>
<td>18.5 V</td>
<td>90 A</td>
<td>120 V 230 V KVA KW 7-17.5 145 ipm</td>
<td>90 VDC</td>
</tr>
</tbody>
</table>

**Recommended aluminum solution**

Spoolmate 100 (#300 371) or 150 (#301 272).

**Multimatic™ 200**

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

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

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

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

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

**Recommended aluminum solution**

Spoolmate 100 (#300 371) or 150 (#301 272).

**Shopmate™ 300 DX**

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

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

**Digital meters** for presetting or monitoring voltage and amperage.

**Built-in 10-pin connector** for direct hookup of Spoolmate® spool guns and built-in 14-pin connector for direct hookup of 14-pin, Miller® wire feeders and accessories.

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

**Line voltage compensation** keeps welding parameters constant.

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

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

**Light industrial**

- **MIG (GMAW)** • Flux-cored (FCAW)
- **DC stick (SMAW)** • DC TIG (DC GTA/W)

**Comes complete with**

- 10 ft. (3 m) Bernard® Q150 MIG gun
- 13 ft. (4 m) cable with electrode holder and 25 mm Dinse-style connector
- 10 ft. (3 m) 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 .024 in. (0.6 mm) or .030/.035 in. (0.8/0.9 mm) solid wire, and .030/.035 in. (0.8/0.9 mm) 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 (#229 895)

**Most popular accessories**

- Spoolmate® Spool Guns (pg 18)
- TIG Contractor Kit #301 287 (pg 112)
- 14-Pin to 6-Pin Adapter Cord #300 507 (pg 112)
- RCCS-6M Remote Fingertip Control #195 184 (pg 112)

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

**MIG package comes complete with**

- 22A wire feeder with Bernard® BTB Gun 300 A
- Shopmate 300 MIG kit consisting of flow gauge regulator and 10 ft. (3 m) gas hose for argon or AR/CO2 mix, 10 ft. (3 m) 1/0 interconnecting cable, 15 ft. (4.6 m) 1/0 work cable with clamp and consumable storage box.

**Most popular accessories**

- Shopmate Running Gear/Dual Cylinder Rack #300 145 (pg 107)
- Shopmate 300 MIG Kit #300 150 (pg 109)

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

Dimension™ 302 and 452

Multiprocess performance in a reliable package. Designed for heavy-industrial applications, with 100 percent duty cycle for extended arc-on time.

Built-in arc control for stick welding allows operators more flexibility when welding in tight areas where sticking electrodes is a problem.

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.

115-volt power for tools and coolant systems.

Note: Dimension 652 still available for a limited time; see page 33 for Dimension 650.

Model | Stock Number | Amperage/Voltage Ranges | Rated Output | 200 V | 230 V | 460 V | 575 V | KVA | KW | Machine Only Dimensions (Includes lift eye and strain relief) | Machine Only Net Weight
---|---|---|---|---|---|---|---|---|---|---|---|---
Dimension 302 | (#903 216) 230/460/575 V, Machine only (#951 272) 230/460/575 V, Stationary pkg (#951 276) 230/460/575 V, MIGRunner pkg | CC mode: 15–375 A | 300 A at 32 VDC, 100% duty cycle | 57.5 | 50 | 25 | 20 | 20 | 12.9 | 60 VDC | H: 30 in. (762 mm) | 361 lb. (164 kg)
| | CV mode: 10–32 V | 69 | 60 | 30 | 24 | 23.7 | 13.4 | 36 VDC | W: 23 in. (585 mm) | 361 lb. (164 kg)
| | Dimension 452 | (#903 254) 200/208/230/460 V, Machine only (#903 255) 230/460/575 V, Machine only (#951 273) 230/460/575 V, Stationary pkg | CC mode: 20–565 A | 450 A at 38 VDC, 100% duty cycle | 91 | 79 | 39 | 31 | 31.4 | 22 | 65 VDC | H: 30 in. (762 mm) | 424 lb. (192 kg)
| | CV mode: 10–38 V | 104 | 90 | 45 | 36 | 35.3 | 22.3 | 43 VDC | W: 23 in. (585 mm) | 361 lb. (164 kg)

Note: Dimension 652 still available for a limited time; see page 33 for Dimension 650.

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.
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.

For more information, visit MillerWelds.com/equiptoweld or your distributor for other Miller® options and accessories.

---

**Processes**
- MIG (GMAW)
- Flux-cored (FCAW)
- Stick (SMAW)
- TIG (GTAW)
- Submerged arc (SAW)
- Air carbon arc cutting and gouging (CAC-A) (rated 3/8 in. carbons)

**Stationary package includes**
- Power source
- S-74 MPa Plus feeder with Bernard™ BTB Gun 400 A and .035/.045 in. drive rolls
- Industrial MIG 4/0 kit consisting of flowmeter regulator with 10 ft. (3 m) gas hose, 10 ft. (3 m) 4/0 feeder weld cable with lugs, and 15 ft. (4.6 m) work cable with 600-amp C-clamp.

**MIGRunner™ package includes above plus**
- Running gear cylinder rack

**Most popular accessories**
- SuitCase® X-TREME™ Feeders (pg 42)
- 70 Series Feeders (pg 44)
- Bernard™ MIG Guns (pg 47)
- Running Gear Cylinder Rack #300 408 (pg 107)
- Dimension 650 Running Gear #301 307 (pg 107)
- Extension Cables (pg 114)
- Industrial MIG 4/0 Kit (with lug connectors) #300 390 (pg 109)

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

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**Dimension 650 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 Stick/TIG Remote, saving a trip to the power supply. No extra control cable to purchase, maintain, string or unstring — saving time and money. See page 43 for ArcReach wire feeders.

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**Dimension 650**

See literature no. DC/19.3

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

<table>
<thead>
<tr>
<th>Input Power</th>
<th>300 Amp</th>
<th>350 Amp</th>
<th>450 Amp</th>
</tr>
</thead>
<tbody>
<tr>
<td>3- or 1-phase power</td>
<td>XMT 304 CC/CV</td>
<td>XMT 350 VS</td>
<td>XMT 450 CC/CV</td>
</tr>
<tr>
<td>3- or 1-phase power</td>
<td>XMT 350 CC/CV</td>
<td>XMT 350 MPa</td>
<td>XMT 450 MPa</td>
</tr>
<tr>
<td>Weld Output</td>
<td>300 A at 32 VDC (3-phase input power at 60% duty cycle)</td>
<td>Upgraded link (350 A at 34 VDC (3-phase input power at 60% duty cycle)</td>
<td>450 A at 38 VDC (3-phase input power at 100% duty cycle)</td>
</tr>
<tr>
<td>Carbon Arc Gouging</td>
<td>Rated: 1/4 in. (6.4 mm)</td>
<td>Rated: 1/4 in. (6.4 mm)</td>
<td>Rated: 5/16 in. (7.9 mm)</td>
</tr>
<tr>
<td>Net Weight</td>
<td>79.5 lb. (36.1 kg)</td>
<td>80 lb. (36.3 kg)</td>
<td>122 lb. (55.3 kg)</td>
</tr>
<tr>
<td>Output Connector</td>
<td>Dinse</td>
<td>Dinse or Tweco</td>
<td>14-pin Receptacle</td>
</tr>
<tr>
<td>Pulsed MIG</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>14-pin Compliant</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Insight Core Capable (requires Insight Core 14-pin module)</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

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- or Tweco®-style weld disconnects (304/350 models) provide high-quality weld cable connections.

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

Weld studs (450 models).

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

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

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.

Choose the Right XMT

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-Link® (304 model) automatically links the power source to primary voltage being applied (230/460 V, single- or three-phase).

Auto-Line (350 models) 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 input power.

Standard hookup (450 models). Available as 230/460 V manual link or 575 V models, three-phase only.

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Weld studs (450 models).

14-pin receptacle provides a quick, direct connection to Miller® wire feeders. Capable of remote voltage control.
**XMT® 304 CC/CV** See literature no. DC/18.8

Cost-effective multiprocess machine featuring Auto-Link®.

**XMT® 350 VS** See literature no. DC/18.93

For applications in which 14-pin receptacle is not needed for remote control or 14-pin feeders.

**XMT® 350 CC/CV and 450 CC/CV**

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 no. 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. Profile Pulse® provides TIG appearance with MIG simplicity and productivity. Achieve “staked 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.

**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.

**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.

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

**Synergic pulsed MIG.**

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 “staked 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.

**Processes**

- MIG (GMAW) • Pulsed MIG (GMAW-P)*
- Stick (SMAW) • TIG (GTAW)
- Flux-cored (FCAW)
- Air carbon arc cutting and gouging (CAC-A) (carbons — 304: 1/4 in., 350: 1/4 in., 450: 5/16 in.)

*Only XMT MPa models.

**Most popular accessories for non-VS models**

- XR-AlumaFeed® (pg 17)
- Spoolmatic®/WC-24 (pg 19)
- XR® Controls (pg 21)
- 20 and 70 Series Feeders (pg 44)

**Most popular accessories for all models**

- XMT Rack Available in four- or six-pack models for XMT 304 and 350, or four-pack models for XMT 450. See literature no. DC/18.81 for more information and stock numbers.
- SuitCase® X-TREME® Feeders (pg 42)
- Cylinder Cart #042 537 (pg 106)
- MiGRunner® Cart #195 445 (pg 107)
- Running Gear Cylinder Rack #300 408 (pg 107)
- Coolmate® Coolant System (pg 107)
- Industrial MIG 4/0 Kits (pg 109)
- #300 405 XMT 304/350
- #300 390 XMT 450
- Protective Cover (XMT 304/350 only) #195 478 (pg 112)
- Gas Valve Kit #195 286 XMT 350
- #300 928 XMT 450

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

---

**Power Source Model/Stock Number**

<table>
<thead>
<tr>
<th>Power Source Model/Stock Number</th>
<th>Input Power</th>
<th>Amperage/ Voltage Ranges</th>
<th>Rated Output</th>
<th>Amps Input at Rated Load Output, 60 Hz</th>
<th>Max. Open-Circuit Voltage</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>XMT 304 CC/CV (Dinse) (#903 471) 208–230/460 V</td>
<td>3-phase</td>
<td>5–400 A 10–35 V</td>
<td>300 A at 32 VDC, 60% duty cycle</td>
<td>33.7</td>
<td>79.5 lb. (36.1 kg)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XMT 304 CC/CV (Dinse) (#951 343) 208–230/460 V MIGRunner w/22A*</td>
<td>1-phase</td>
<td>225 A at 29 VDC, 60% duty cycle</td>
<td>30.5</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XMT 350 VS (no remote control) (Tweco®) (#907 224) 208–575 V</td>
<td>3-phase</td>
<td>5–425 A 10–38 V</td>
<td>350 A at 34 VDC, 60% duty cycle</td>
<td>40.4</td>
<td>80 lb. (36.3 kg)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XMT 350 CC/CV (Dinse) (#907 161) 208–575 V</td>
<td>1-phase</td>
<td>40–250 A 10–38 V</td>
<td>225 A at 29 VDC, 60% duty cycle</td>
<td>52.4</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XMT 350 CC/CV (Dinse) (#951 549) 208–575 V w/SuitCase X-TREME 12V* (#951 327) 208–575 V MIGRunner w/22A* (#951 314) 208–575 V MIGRunner w/S-74D*</td>
<td>3-phase</td>
<td>5–425 A 10–38 V</td>
<td>300 A at 32 VDC, 60% duty cycle**</td>
<td>60.8</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XMT 350 CC/CV (Dinse except where noted) (#907 360) 208–575 V</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XMT 450 CC/CV (1/2 in. stud) (#907 481) 230/460 V</td>
<td>3-phase</td>
<td>15–600 A 10–38 V</td>
<td>450 A at 38 VDC, 100% duty cycle</td>
<td>—</td>
<td>122 lb. (55.3 kg)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XMT 450 CC/CV (1/2 in. stud) (#907 482) 575 V</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>XMT 450 MPa (1/2 in. stud) (#907 479) 230/460 V</td>
<td>3-phase</td>
<td>15–600 A 10–38 V</td>
<td>450 A at 38 VDC, 100% duty cycle</td>
<td>—</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XMT 450 MPa (1/2 in. stud) (#907 480) 575 V</td>
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</tr>
<tr>
<td>XMT 450 MPa (1/2 in. stud) (#907 480 001) 230/460 V w/auxiliary power</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>XMT 450 CC/CV (Dinse) (#907 481) 230/460 V</td>
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<tr>
<td>XMT 450 MPa (1/2 in. stud) (#907 480) 575 V</td>
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<tr>
<td>XMT 450 MPa (1/2 in. stud) (#907 480 001) 575 V w/auxiliary power</td>
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</tbody>
</table>

**Multiprocess**

**Heavy industrial**

XMT 450 is 3-phase only.

**Processes**

- MIG (GMAW) • Pulsed MIG (GMAW-P)*
- Stick (SMAW) • TIG (GTAW)
- Flux-cored (FCAW)
- Air carbon arc cutting and gouging (CAC-A) (carbons — 304: 1/4 in., 350: 1/4 in., 450: 5/16 in.)

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

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

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

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

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

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

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

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

---

Remote control of the power source without a cord. An ArcReach system allows you to change weld settings from your SuitCase wire feeder or Stick/TIG Remote, saving a trip to the power supply. No extra control cable to purchase, maintain, string or unstring — saving time and money. See page 43 for ArcReach wire feeders.

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

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

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

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

ArcReach technology uses the existing weld cable to communicate welding control information between the feeder and power source. This technology eliminates the need for control cords, and their associated problems and costs.

ArcReach Accessories

For MIG or flux-cored welding – SuitCase X-TREME 8VS/12VS ArcReach feeders
- Remote voltage control
- Polarity indication
- Auto-Process Select™

For stick or TIG welding – ArcReach Stick/TIG Remote (available first quarter 2016)
- Remote amperage control
- Arc control for stick
- Polarity indication
- Auto-Process Select™

*Duty cycle rating below achieved with 6-gauge input power cord (8-gauge cord supplied with unit.)
**PipeWorx 350 FieldPro™ System**

Simplicity-driven performance for your pipe construction site.

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

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

**Stick/TIG system includes**
- PipeWorx 350 FieldPro power source (#907 533)
- FieldPro Remote with work sense lead and clamp (#300 934)

**MIG/flux-cored system includes**
- PipeWorx 350 FieldPro power source (#907 533)
- FieldPro Feeder with drive rolls, work sense lead and clamp (#301 228)
- 15 ft. (4.6 m) PipeWorx 300 MIG gun (#195 400)

**RMD/pulse system includes**
- PipeWorx 350 FieldPro power source (#907 533)
- FieldPro Smart Feeder with drive rolls (#300 935)
- 15 ft. (4.6 m) PipeWorx 300 MIG gun (#195 400)

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

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

**Arc performance optimized for critical pipe welding**
- Industry-leading arc performance like the PipeWorx 400 welding system, but in a field-ready package
- True multiprocess system provides conventional stick, TIG, flux-cored and MIG welding, as well as the advanced technologies of RMD® and pulsed MIG
- Smart feeder delivers excellent RMD and pulsed MIG welding 200 feet from the power source with no control cables. RMD and pulse processes help reduce weld failures and eliminate backing gas on some stainless and chrome-moly applications

**New durability standard for field construction**
- Designed and built to withstand the harshest field environments

---

**PipeWorx 400 Welding System**

Optimized for pipe fabrication shops.

*PipeWorx 400 welding system (#951 381) shown with accessory kit (#300 568). Filler metal and shielding gas sold separately.*

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

**FREE! PipeWorx 400 welding system CD showcases the features and benefits of PipeWorx welding system and new pipe welding techniques. Visit MillerWelds.com to order your CD today.**

**Simple process setup**
- The front panel was designed by welders for welders
- Requires just a few basic steps to set up a new welding 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
**Advanced Technologies of PipeWorx Systems**

**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

**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

---

**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.

**PipeWorx Memory Card, Accu-Power #300 667**
Displays instantaneous power during welding to meet the new ASME requirement for calculating heat input on complex waveform processes (RMD and pulsed MIG).
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.
### Wire Feeders

Also see Advanced/Automated MIG and Multiprocess sections for wire feeding options.

For more detailed information, visit MillerWelds.com/wirefeeders

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**Product Guide**

<table>
<thead>
<tr>
<th>Product Key</th>
<th>Class:</th>
<th>Industrial</th>
<th>Heavy Industrial</th>
<th>Capability:</th>
<th>Designed for this process</th>
<th>Capable of this process</th>
</tr>
</thead>
<tbody>
<tr>
<td>SuitCase® X-TREME™ BVS/12VS</td>
<td>42</td>
<td>●</td>
<td>●/city</td>
<td>●/city</td>
<td>●/city</td>
<td>●/city</td>
</tr>
<tr>
<td>SuitCase® X-TREME™ BVS/12VS ArcReach</td>
<td>42</td>
<td>●</td>
<td>●/city</td>
<td>●/city</td>
<td>●/city</td>
<td>●/city</td>
</tr>
<tr>
<td>SuitCase® 12RC</td>
<td>42</td>
<td>●</td>
<td>●/city</td>
<td>●/city</td>
<td>●/city</td>
<td>●/city</td>
</tr>
</tbody>
</table>

**Wire Types**

- Flux-cored
- Dual-shld
- Self-shld
- Hard
- Alum.

**Wire Diameters**

- .023–5/64 in. (0.6–2.0 mm)
- .023–3/32 in. (0.6–2.4 mm)
- .023–1/8 in. (0.6–3.2 mm)
- .023–5/64 in. (0.6–2.0 mm)
- .023–5/64 in. (0.6–2.0 mm)
- .023–5/64 in. (0.6–2.0 mm)
- .023–5/64 in. (0.6–2.0 mm)
- .023–5/64 in. (0.6–2.0 mm)

**Special Features**

- 8 in. (BVS) or 12 in. (12VS) diameter spool capacity, lightweight, powered by arc voltage
- 8 in. (BVS) or 12 in. (12VS) diameter spool capacity, powered by arc voltage, remote voltage control without a control cord
- Standard remote voltage control, 12 in. diameter spool capacity, powered by 14-pin control cord
- Two quick-change drive rolls
- Four quick-change drive rolls
- Four drive roll, adjustable weld control
- Low-speed option recommended for 1/8 in. wires
- Aluma-Pro Plus or Pistol Plus guns for feeding soft wires
- 8, 12 and 16 ft. booms, four drive rolls, adjustable weld control
- Control box, cables and wire drive motor assemblies for generic booms or fixed automation

**Typical Applications**

- Construction, site fabrication, field maintenance
- Construction, site fabrication field maintenance
- Field maintenance, site fabrication
- Manufacturing, fabrication
- Manufacturing, fabrication
- Heavy and light manufacturing, fabrication
- Manufacturing requiring multiple wire types
- Heavy and light manufacturing, fabrication
- Heavy and light manufacturing, fabrication

**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.

***MPa models are designed for aluminum welding.
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

<table>
<thead>
<tr>
<th>Feature</th>
<th>8VS</th>
<th>12VS</th>
<th>8VS</th>
<th>12VS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available with BTB Gun 300 A</td>
<td>●</td>
<td>□</td>
<td>●</td>
<td>□</td>
</tr>
<tr>
<td>Available w/Dura-Flux gun</td>
<td>●</td>
<td>□</td>
<td>●</td>
<td>□</td>
</tr>
<tr>
<td>Remote voltage control</td>
<td>●</td>
<td>□</td>
<td>●</td>
<td>□</td>
</tr>
<tr>
<td>Remote voltage control (control cord required)</td>
<td>●</td>
<td>□</td>
<td>●</td>
<td>□</td>
</tr>
<tr>
<td>Remote voltage control without a cord</td>
<td>●</td>
<td>□</td>
<td>●</td>
<td>□</td>
</tr>
<tr>
<td>Digital meters</td>
<td>●</td>
<td>□</td>
<td>●</td>
<td>□</td>
</tr>
<tr>
<td>Impact-resistant case</td>
<td>●</td>
<td>□</td>
<td>●</td>
<td>□</td>
</tr>
<tr>
<td>Gas purge</td>
<td>●</td>
<td>□</td>
<td>●</td>
<td>□</td>
</tr>
<tr>
<td>Wire jog</td>
<td>●</td>
<td>□</td>
<td>●</td>
<td>□</td>
</tr>
</tbody>
</table>

Portables

SuitCase X-TREME 8VS
SuitCase X-TREME 12VS
SuitCase X-TREME 12VS ArcReach
SuitCase 12RC

Models include male Tweco® connector installed on weld cable and Bernard™ BTB Gun 300 A with reversible dual size (.045 and 1/16 in.) VK drive rolls. 12VS model is also available with Dura-Flux™ flux-cored gun with reversible dual size (.068/.072 and 5/64 in.) VK drive rolls. ArcReach™ models are also available with Bernard S-Gun™ with reversible dual size (.045 and 1/16 in.) VK drive rolls. For more options, visit MillerWelds.com/equiptoweld.

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 to change wire while feeder is standing upright or laying down.

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

Extreme reliability

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

Gun locking tab works with guns 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 no. M/6.42

Voltage-sensing feeders designed to run off of arc voltage from almost any welding power source. 8VS model is sized for an 8-inch spool of wire, can be carried to remote welding sites and fits through a 14-inch manhole/manway. 12VS model is sized for an 8- or 12-inch spool of wire. 12-inch spools are the most common in structural steel and fabrication.

SuitCase® X-TREME™ 8VS and 12VS ArcReach™ | See literature no. M/6.42

Remote control of the power source without a cord. With a SuitCase® ArcReach feeder and ArcReach power source you can change output voltage at the feeder, and save a trip to the power supply. No extra control cable to purchase, maintain, string or unstring — saving time and money. See page 33 and 36 for ArcReach power sources.

SuitCase® 12RC | See literature no. M/6.5

Standard remote voltage control with a control cord. For applications where the feeder is within 100 feet of the power source and control cords are acceptable.

*Additional packages are available — visit MillerWelds.com or your distributor.

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**Model**

<table>
<thead>
<tr>
<th>Model</th>
<th>Stock Number*</th>
<th>Input Power</th>
<th>Input Welding Circuit Rating</th>
<th>Wire Feed Speed</th>
<th>Wire Type and Diameter Capacity</th>
<th>Maximum Spool Size Capacity</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>SuitCase X-TREME 8VS</td>
<td>(#951 583) w/Bernard BTB Gun 300 A (without meters)</td>
<td>Operates on open-circuit voltage and arc voltage: 14–48 VDC/110 max. OCV</td>
<td>330 A at 60% duty cycle</td>
<td>50–780 lpm (1.3–19.8 m/min.) Actual range in CC mode is dependent on arc voltage applied</td>
<td>Solid wire Flux-cored: .023–.052 in. (0.6–1.4 mm) .030–.064 in. (0.8–2.0 mm)</td>
<td>8 in. (203 mm), 14 lb. (6.4 kg)</td>
<td>H: 12.75 in. (324 mm) W: 7.25 in. (184 mm) D: 18 in. (457 mm)</td>
<td>28 lb. (13 kg)</td>
</tr>
<tr>
<td>SuitCase X-TREME 12VS</td>
<td>(#951 543) w/Bernard BTB Gun 300 A (#951 544) w/Bernard Dura-Flux gun</td>
<td>Operates on open-circuit voltage and arc voltage: 14–48 VDC/110 max. OCV</td>
<td>425 A at 60% duty cycle</td>
<td>50–780 lpm (1.3–19.8 m/min.) Actual range in CC mode is dependent on arc voltage applied</td>
<td>Solid wire Flux-cored: .023–.052 in. (0.6–1.4 mm) .030–.064 in. (0.8–2.0 mm)</td>
<td>12 in. (305 mm), 45 lb. (20 kg)</td>
<td>H: 15.5 in. (394 mm) W: 9 in. (229 mm) D: 21 in. (533 mm)</td>
<td>35 lb. (15.9 kg)</td>
</tr>
<tr>
<td>SuitCase X-TREME 8VS ArcReach</td>
<td>(#951 588) w/Bernard S-Gun</td>
<td>Operates on open-circuit voltage and arc voltage: 14–48 VDC/110 max. OCV</td>
<td>330 A at 60% duty cycle</td>
<td>50–780 lpm (1.3–19.8 m/min.) Actual range in CC mode is dependent on arc voltage applied</td>
<td>Solid wire Flux-cored: .023–.052 in. (0.6–1.4 mm) .030–.064 in. (0.8–2.0 mm)</td>
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<td>H: 12.75 in. (324 mm) W: 7.25 in. (184 mm) D: 18 in. (457 mm)</td>
<td>28 lb. (13 kg)</td>
</tr>
<tr>
<td>SuitCase X-TREME 12VS ArcReach</td>
<td>(#951 589) w/Bernard S-Gun</td>
<td>Operates on open-circuit voltage and arc voltage: 14–48 VDC/110 max. OCV</td>
<td>425 A at 60% duty cycle</td>
<td>50–780 lpm (1.3–19.8 m/min.) Actual range in CC mode is dependent on arc voltage applied</td>
<td>Solid wire Flux-cored: .023–.052 in. (0.6–1.4 mm) .030–.064 in. (0.8–2.0 mm)</td>
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<td>35 lb. (15.9 kg)</td>
</tr>
<tr>
<td>SuitCase 12RC</td>
<td>(#951 580) w/Bernard BTB Gun 300 A (#951 599) w/Bernard BTB Gun 300 A, lift eye, and flowmeter</td>
<td>24 VAC, 10 A, 50/60 Hz</td>
<td>425 A at 60% duty cycle</td>
<td>50–780 lpm (1.3–19.8 m/min.) Actual range in CC mode is dependent on arc voltage applied</td>
<td>Solid wire Flux-cored: .023–.052 in. (0.6–1.4 mm) .030–.064 in. (0.8–2.0 mm)</td>
<td>12 in. (305 mm), 45 lb. (20 kg)</td>
<td>H: 15.5 in. (394 mm) W: 9 in. (229 mm) D: 21 in. (533 mm)</td>
<td>31 lb. (14.1 kg)</td>
</tr>
</tbody>
</table>

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**ArcReach™**

Increase, Improve and Maximize

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

Increase productivity — No time-consuming trips to the power source.

Improve weld quality — Reduces costly “work arounds”.

Improve worker safety — Reduces operator hazards and injuries.

Maximize efficiency — Reduces costly cord set up, maintenance and repair.
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.

Models include Bernard™ BTB Gun 300 A (20 Series) or BTB Gun 400 A (70 Series, two with dual-wire models), .035/.045 in. drive rolls and Centerfire™ contact tips. For more options, visit MillerWelds.com/equiptoweld.

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.

Each feeder includes a 15-foot Bernard BTB Gun 300 A (20 Series) or BTB Gun 400 A (70 Series, two with dual-wire models), plus a 10-foot 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.

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.

Trigger dual schedule for easily changing weld parameters while welding. Achieves the best weld settings for different joint configurations. (DX and MPa models only.)

22A and 24A

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 no. 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 resetting 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.

74DX See literature no. M/3.0

Adds features for weld control and programs.

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

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

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

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

74 MPa Plus See literature no. M/3.0

Adds push-pull aluminum capabilities. Optimized with Invision® MPa or XMT® MPa power sources.

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.

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

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

Alumination™ gives you the ability to use the extended reach of a push-pull system for consistent, versatile and dependable aluminum wire feeding.

*Additional packages are available — visit MillerWelds.com or your distributor. ** Wire kit #230 708 required to run 1/16 in. (1.6 mm) wire.
Remote wire feeder control box and wire drive assembly for non-Miller boom applications.  

**Wire Feeders**

**70 Series Swingarc™**

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

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

Single- and dual-wire models with 8-, 12- or 16-foot booms are sized to accommodate a variety of weld cell layouts (16-, 24- or 32-foot diameter work area).

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.

Each feeder includes a 15-foot Bernard BTB Gun 400 A (two with dual-wire models), plus a 10-foot 14-pin interconnecting cord to connect power source to boom control.

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

### 70 Series Remote Configurations

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

- **Single-wire control box**
  - #300 881 S-74S
  - #300 882 S-74D
  - #300 883 S-74DX
  - #300 738 S-74 MPa Plus
- **Motor control cable**
  - Standard: 11 conductor
  - MPa Plus: 14 conductor
- **Motor Control Cable**
  - 11 conductor
  - D-74D shown.
  - Gun NOT included. Must be ordered separately.
- **Push-only wire drive motor assembly**
  - #300 741 001 Standard right-hand drive
  - #300 741 MPa Plus right-hand drive
- **Dual-wire control box**
  - #300 886 D-74S
  - #300 887 D-74D
  - #300 888 D-74DX
  - #300 739 D-74 MPa Plus
- **Motor control cable**
  - Standard: 11 conductor
  - MPa Plus: 14 conductor
- **Motor Control Cable**
  - 11 conductor
  - D-74D shown.
  - Gun NOT included. Must be ordered separately.
- **Wire drive motor assembly**
  - #300 904 Standard left-hand drive
  - #300 740 MPa Plus left-hand drive
  - MPa Plus drive can be used with push-only guns, or XR-AlumaPro® Plus and Pistol Plus push-pull guns.
- **Wire drive motor assembly**
  - #300 904 Standard left-hand drive
  - #300 740 MPa Plus left-hand drive
  - MPa Plus drive can be used with push-only guns, or XR-AlumaPro® Plus and Pistol Plus push-pull guns.

### Heavy Industrial

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

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

**Heavy Industrial**

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 (1 conductor)*
  - #254 905 010 10 ft. (3 m)
  - #254 905 025 25 ft. (7.6 m)
  - For push-only gun configurations.
- MPa Plus Motor Control Cable (14 conductor)*
  - #254 864 010 10 ft. (3 m)
  - #254 864 025 25 ft. (7.6 m)
  - For MPa Plus configurations only—single-wire or left side of dual-wire.
  - *For additional length go visit MillerWelds.com/equipitoweld.

**Suggested power sources/guns**
- Same as 70 Series

**Most popular accessories**
- Motor Control Cable (11 conductor)*
  - #254 935 010 10 ft. (3 m)
  - #254 935 025 25 ft. (7.6 m)
  - For push-only gun configurations.
- MPa Plus Motor Control Cable (14 conductor)*
  - #254 864 010 10 ft. (3 m)
  - #254 864 025 25 ft. (7.6 m)
  - For MPa Plus configurations only—single-wire or left side of dual-wire.
  - *For additional length go visit MillerWelds.com/equipitoweld.

**Feeder Base**
- #195 369 For use with spooled wire.

Visit MillerWelds.com or your distributor for more options and accessories.
Bernard™ Semi-Automatic Guns
Air-Cooled MIG and Flux-Cored Guns

Miller integrates industrial-duty Bernard semi-automatic MIG guns on various Miller® industrial wire feeders to bring customers one complete system for their welding applications.

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

From front to back, Bernard BTB guns are designed to withstand the rigors of industrial welding applications
• Compatible with three high-performance consumable lines — Centerfire™, Quik Tip™ and TOUGH LOCK™
• Compatible with Universal Conventional or front-loading QUICK LOAD™ liners which are ideal for boom-mounted equipment or where uptime is critical
• Fixed or rotatable aluminum armored necks in various lengths and angles
• Choice of six different handles ensures a comfortable, ergonomic fit
• Front and rear internal cable connections are compression fit (instead of cramped) to optimize conductivity, reduce heat and increase gun life
• Optional ultra-heavy-duty steel monocoil cable provides extra reinforcement
• One year manufacturer’s warranty with lifetime warranty on rear strain relief

Fume Extraction MIG Guns
See Bernard literature no. SP-CLA (Clean Air) and SP-FFE (FILTAIR)

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.

Bernard Clean Air™ fume extraction MIG gun
• Available in 400-, 500- and 600-amp models
• Choice between Centerfire, Quik Tip or TOUGH LOCK consumables
• Ergonomic, lightweight straight handle improves operator comfort

Bernard FILTAIR™ fume extraction MIG gun
• Available in 300- and 400-amp models
• Choice between Centerfire or Quik Tip consumables
• Small lightweight curved handle for maximum maneuverability and comfort

Dura-Flux Self-Shielded Flux-Cored Guns
See Bernard literature no. SP-DF

For structural steel applications, bridge construction and heavy equipment repair, Bernard offers two lines of 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

Visit BernardWelds.com or your distributor for other Bernard consumable options.
**Thunderbolt® XL 225 AC and 225 AC/150 DC**

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

Economical stick machines with precise, dependable control.

Unit allows higher duty cycle when amperage decreases.

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

**Output selector switch on AC/DC units allows you to quickly select AC, DCEP or DCEN without adjusting the output leads. Certified by Canadian Standards Association to both the Canadian and U.S. Standards.**

---

**Dialarc® 250 AC/DC**

See literature no. AD/2.1

Superb performance and versatility in a flexible stick machine.

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

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

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

---

**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 XL 225 AC shown.**

---

**Light industrial**

**225 AC model is AC only.**

**Processes**

- Stick (SMAW)

**Comes complete with**

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

**Most popular accessories**

- Thunderbolt XL Running Gear #043 927 (pg 107)

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

---

**Dialarc® 250 AC/DC**

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

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

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

---

**Model**

**Stock Number**

**Welding Mode**

**Welding Amperage Range**

**Rated Output at 20% Duty Cycle, 60 Hz (15% Duty Cycle, 50 Hz)**

**Rated Output at 100% Duty Cycle**

**Amps Input at Rated Output**

**Max. Open-Circuit Voltage**

**Dimensions**

**Net Weight**

**Thunderbolt XL 225 AC (CSA)**

| (903 641) | 230 V, 50/60 Hz | AC | 30–235 | 225 A at 25 V | 100 A | 47.5 | 80 VAC | H: 18.75 in. (476 mm) | 85 lb. (39 kg) |

**Thunderbolt XL 225 AC/150 DC (CSA)**

| (903 642) | 230 V, 50/60 Hz | AC | 30–235 | 225 A at 25 V | 100 A | 47.5 | 80 VAC | H: 18.75 in. (476 mm) | 104 lb. (47 kg) |

**Dialarc® 250 AC/DC**

See literature no. AD/2.1

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

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

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

---

**Model**

**Stock Number**

**Welding Mode**

**Welding Amperage Range**

**Rated Output at 30% Duty Cycle**

**Amps Input at Rated Output 200 V 250 V 230 V 400 V 575 V**

**KVA KW**

**Max. Open-Circuit Voltage**

**Dimensions**

**Net Weight**

**Dialarc without Power Factor Correction**

| (907 017) | 200/208/230/460 V | AC | 35–300 | 225 A at 29 V | 84 | 73 | 36 | 29 | 16.8 | 9.8 | 70 VAC | H: 24.9 in. (636 mm) | 360 lb. (163 kg) |

**Dialarc with Power Factor Correction**

| (907 015) | 208/230/460/575 V | AC | 35–300 | 225 A at 29 V | 92 | 80 | 40 | 32 | 18.6 | 11.8 | 79 VDC | 365 lb. (166 kg) |
Maxstar® 150 S

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

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. Portable with adjustable shoulder strap. Easy to transport at only 13.2 pounds.

Maxstar 150 S with X-CASE (#907 134 012) shown.

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

Maxstar 150 S with X-CASE (#907 134 012) shown.

Note: See page 52 in the TIG section for Maxstar 150 STL and STH.

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Input Power</th>
<th>Welding Amperage Range</th>
<th>Rated Output</th>
<th>Amps Input at Rated Output, 50/60 Hz</th>
<th>KVA at Duty Cycle</th>
<th>KW</th>
<th>Max. Open-Circuit Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>(#907 134)</td>
<td>115 V</td>
<td>20-100</td>
<td>100 A at 24 V, 35% duty cycle</td>
<td>26.4</td>
<td>3.0</td>
<td>3.0</td>
<td>90 VDC (12-16 VDC*)</td>
</tr>
<tr>
<td></td>
<td>230 V</td>
<td>20-150</td>
<td>150 A at 26 V, 30% duty cycle</td>
<td>21.6</td>
<td>4.9</td>
<td>4.7</td>
<td></td>
</tr>
</tbody>
</table>

Gold Star® 452 shown.

Note: See page 54 in the TIG section for Maxstar 210 Series.

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

Maxstar® 210 STR

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

Auto-Line® Power Management Technology™

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

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

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

Adaptive Hot Start™ for stick arc starts reduces electrode sticking.

Remote amperage control and digital meter.

Portable with adjustable shoulder strap.

Gold Star® Series

Rugged, reliable performance and superior arc characteristics.

- Hot Start™ and built-in arc control
- Enclosed circuit board
- Thermal overload protection with light
- Fan-On-Demand™
- 15 A, 115 V duplex receptacle

**Power efficient**

- Remote control capability
- Optional digital volt and amp meters (#300 359 Field).

Easy to install, front-panel mount.

Note: For models AFTER serial number KG283595.

<table>
<thead>
<tr>
<th>Model</th>
<th>Stock Number</th>
<th>Ampereage Range in CC Mode</th>
<th>Rated Output</th>
<th>Amps Input at Rated Output, 60 Hz</th>
<th>KVA</th>
<th>KW</th>
<th>Max. Open-Circuit Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gold Star 452</td>
<td>(#903 374) / (#903 400)</td>
<td>200/208/230/ 240/575 V</td>
<td>50–590</td>
<td>450 A at 38 VDC, 60% duty cycle</td>
<td>102</td>
<td>89</td>
<td>45 36 35.5 23.3 72 VDC</td>
</tr>
<tr>
<td>Gold Star 652</td>
<td>(#903 402)</td>
<td>230/460/575 V</td>
<td>50–850</td>
<td>650 A at 44 VDC, 60% duty cycle</td>
<td>–</td>
<td>124</td>
<td>62 50 49.4 36 72 VDC</td>
</tr>
</tbody>
</table>

Gold Star 452 shown.

Note: See page 113

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Input Power</th>
<th>Welding Amperage Range</th>
<th>Rated Output</th>
<th>Phase</th>
<th>Amps Input at Rated Load Output, 50/60 Hz</th>
<th>120 V</th>
<th>208 V</th>
<th>240 V</th>
<th>400 V</th>
<th>480 V</th>
<th>KVA</th>
<th>KW</th>
</tr>
</thead>
<tbody>
<tr>
<td>(#907 682)</td>
<td>208–480 V</td>
<td>8–210</td>
<td>160 A at 26.4 V, 60% duty cycle</td>
<td>Three-phase</td>
<td>–</td>
<td>15</td>
<td>13</td>
<td>8</td>
<td>6</td>
<td>5.5</td>
<td>5.2</td>
<td></td>
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<tr>
<td></td>
<td>120 V</td>
<td>5–100</td>
<td>90 A at 23.6 V, 60% duty cycle</td>
<td>Single-phase</td>
<td>–</td>
<td>26</td>
<td>22</td>
<td>13</td>
<td>11</td>
<td>5.3</td>
<td>5.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>208–480 V</td>
<td>1–210</td>
<td>210 A at 18.4 V, 60% duty cycle</td>
<td>Three-phase</td>
<td>–</td>
<td>14</td>
<td>12</td>
<td>7</td>
<td>6</td>
<td>5.2</td>
<td>4.9</td>
<td></td>
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<tr>
<td></td>
<td>120 V</td>
<td>1–210</td>
<td>125 A at 15 V, 60% duty cycle</td>
<td>Single-phase</td>
<td>–</td>
<td>24</td>
<td>20</td>
<td>12</td>
<td>10</td>
<td>4.9</td>
<td>4.9</td>
<td></td>
</tr>
</tbody>
</table>

Lift-Arc™

Most popular accessories

- MVP Plugs (pg 110)
- Protective X-CASE™ #300 184

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

Heavy industrial

- Stick (SMAW) • TIG (GTAW)
- Air carbon arc cutting and gouging (CAC-A) (carbons — 452; 5/16 in., 652; 3/8 in.)
- Flux-cored (FCAW)
- MIG spray transfer (GMAW) with voltage-sensing feeder

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

<table>
<thead>
<tr>
<th>Model</th>
<th>Stock Number</th>
<th>Input Power</th>
<th>Welding Amperage Range</th>
<th>Rated Output</th>
<th>Amps Input at Rated Output, 60 Hz</th>
<th>90 VDC</th>
<th>115 VDC</th>
<th>120 V</th>
<th>208 V</th>
<th>240 V</th>
<th>400 V</th>
<th>480 V</th>
<th>KVA</th>
<th>KW</th>
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<tbody>
<tr>
<td>Gold Star 452</td>
<td>(#903 374) / (#903 400)</td>
<td>200/208/230/240/575 V</td>
<td>50–590</td>
<td>450 A at 38 VDC, 60% duty cycle</td>
<td>102</td>
<td>89</td>
<td>45 36 35.5 23.3 72 VDC</td>
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<td>62 50 49.4 36 72 VDC</td>
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</table>
**CST™ 280** See literature no. DC/29.55

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

**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.

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

**Portable** in the shop or at the jobsite — at 41 pounds (18.6 kg) 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.

---

**CST™ 280 Racks** See literature no. DC/18.82

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

**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.

---

<table>
<thead>
<tr>
<th>Model</th>
<th>Stock Number</th>
<th>Rack Capacity</th>
<th>Input Power to Rack</th>
<th>Amps Input at Rated Load Output, 50/60 Hz</th>
<th>KVA</th>
<th>KW</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-Pack Rack</td>
<td>(907 245) Dinse</td>
<td>4 units</td>
<td>220–230/460–575 V, three-phase, 50/60 Hz. Note: CST 280 machines are factory-linked for 460–575 V. Dinse units include one set of male connectors; Tweco units do not. See above for information on CST 280.</td>
<td>137 134 79 72 70 57</td>
<td>58.4</td>
<td>40.8</td>
</tr>
<tr>
<td>8-Pack Rack</td>
<td>(907 365) Tweco®</td>
<td>8 units</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Empty Rack</td>
<td>(195 051)</td>
<td>4 units</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>(300 580)</td>
<td>8 units</td>
<td>–</td>
<td>–</td>
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<td>–</td>
</tr>
</tbody>
</table>

**CST 280 8-pack rack shown.**

See page 113

---

**Processes**

- Stick (SMAW)
- TIG (GTAW)

**CST 280 Rack (see below)**

**Most popular accessories**

- CST 280 Rack (see below)
- Remote Controls (pg 112/113)
- For TIG torches see literature no. DC/29.55

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

---

**Heavy industrial**

<table>
<thead>
<tr>
<th>Model</th>
<th>Stock Number</th>
<th>Rack Capacity</th>
<th>Input Power to Rack</th>
<th>KVA</th>
<th>KW</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-Pack Rack</td>
<td>(907 245) Dinse</td>
<td>4 units</td>
<td>220–230/460–575 V, three-phase, 50/60 Hz. Note: CST 280 machines are factory-linked for 460–575 V. Dinse units include one set of male connectors; Tweco units do not. See above for information on CST 280.</td>
<td>137 134 79 72 70 57</td>
<td>58.4</td>
<td>40.8</td>
<td>H: 50.75 in. (1,289 mm) W: 7.5 in. (191 mm) D: 28.5 in. (723 mm)</td>
</tr>
<tr>
<td>8-Pack Rack</td>
<td>(907 365) Tweco®</td>
<td>8 units</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Empty Rack</td>
<td>(195 051)</td>
<td>4 units</td>
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<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>(300 580)</td>
<td>8 units</td>
<td>–</td>
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Visit MillerWelds.com or your distributor for other Miller® options and accessories.
# Product Guide

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</thead>
<tbody>
<tr>
<td>Maxstar® 150</td>
<td>52</td>
<td>●/city●/city●/city●/city●</td>
<td>–</td>
<td>–</td>
<td>1/8 in.</td>
<td>1/8 in.</td>
<td>3/32 in.</td>
<td>.020–3/16 in.</td>
<td>5–150 A</td>
<td>0.5, 1, 2.5, 60 PPS (STH model)</td>
</tr>
<tr>
<td>Maxstar® 210</td>
<td>54</td>
<td>●/city●/city●/city●/city●</td>
<td>3/16 in.</td>
<td>3/16 in.</td>
<td>5/32 in.</td>
<td>5/32 in.</td>
<td>–</td>
<td>.002–1/4 in.</td>
<td>1–210 A</td>
<td>0.1–250 PPS (base model) 0.1–500 PPS (DX model)</td>
</tr>
<tr>
<td>Maxstar® 280</td>
<td>54</td>
<td>●/city●/city●/city●/city●</td>
<td>7/32 in.</td>
<td>3/16 in.</td>
<td>3/16 in.</td>
<td>3/16 in.</td>
<td>3/16 in.</td>
<td>.004–3/8 in.</td>
<td>1–280 A</td>
<td>0.1–250 PPS (base model) 0.1–500 PPS (DX model)</td>
</tr>
<tr>
<td>Maxstar® 350</td>
<td>56</td>
<td>●/city●/city●/city●/city●</td>
<td>5/16 in.</td>
<td>5/16 in.</td>
<td>1/4 in.</td>
<td>1/4 in.</td>
<td>1/4 in.</td>
<td>.012–5/8 in.</td>
<td>3–350 A</td>
<td>0.1–5,000 PPS</td>
</tr>
<tr>
<td>Maxstar® 700</td>
<td>56</td>
<td>●/city●/city●/city●/city●</td>
<td>5/16 in.</td>
<td>5/16 in.</td>
<td>5/16 in.</td>
<td>5/16 in.</td>
<td>5/16 in.</td>
<td>.020–1 in.</td>
<td>5–700 A</td>
<td>0.1–5,000 PPS</td>
</tr>
<tr>
<td>Diversion™ 165/180</td>
<td>52</td>
<td>●/city●/city●/city●/city●</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Syncrowave® 210</td>
<td>53</td>
<td>●/city●/city●/city●/city●</td>
<td>5/32 in.</td>
<td>1/8 in.</td>
<td>1/8 in.</td>
<td>3/32 in.</td>
<td>–</td>
<td>.020–1/4 in. (aluminum/steel)</td>
<td>5–210 A</td>
<td>0.1–50 PPS (expandable)</td>
</tr>
<tr>
<td>Dynasty® 210</td>
<td>54</td>
<td>●/city●/city●/city●/city●</td>
<td>3/16 in.</td>
<td>3/16 in.</td>
<td>5/32 in.</td>
<td>5/32 in.</td>
<td>–</td>
<td>.012–1/4 in. (alum.) .002–1/4 in. (steel)</td>
<td>2–210 A (AC) 1–210 A (DC)</td>
<td>0.1–250 PPS (base model) 0.1–500 PPS (DX model)</td>
</tr>
<tr>
<td>Dynasty® 280</td>
<td>54</td>
<td>●/city●/city●/city●/city●</td>
<td>7/32 in.</td>
<td>3/16 in.</td>
<td>3/16 in.</td>
<td>3/16 in.</td>
<td>3/16 in.</td>
<td>.012–3/8 in. (alum.) .004–3/8 in. (steel)</td>
<td>2–280 A (AC) 1–280 A (DC)</td>
<td>0.1–250 PPS (base, DC) 0.1–500 PPS (DX model)</td>
</tr>
<tr>
<td>Dynasty® 350</td>
<td>56</td>
<td>●/city●/city●/city●/city●</td>
<td>5/16 in.</td>
<td>5/16 in.</td>
<td>1/4 in.</td>
<td>1/4 in.</td>
<td>1/4 in.</td>
<td>.015–5/8 in. (alum.) .012–5/8 in. (steel)</td>
<td>3–350 A</td>
<td>0.1–5,000 PPS (AC) 0.1–5,000 PPS (DC)</td>
</tr>
<tr>
<td>Dynasty® 700</td>
<td>56</td>
<td>●/city●/city●/city●/city●</td>
<td>5/16 in.</td>
<td>5/16 in.</td>
<td>5/16 in.</td>
<td>5/16 in.</td>
<td>5/16 in.</td>
<td>.020–1 in. (aluminum/steel)</td>
<td>5–700 A</td>
<td>0.1–5,000 PPS (AC) 0.1–5,000 PPS (DC)</td>
</tr>
<tr>
<td>Syncrowave® 250 DX</td>
<td>57</td>
<td>●/city●/city●/city●/city●</td>
<td>1/4 in.</td>
<td>1/4 in.</td>
<td>1/4 in.</td>
<td>1/4 in.</td>
<td>1/4 in.</td>
<td>.015–3/8 in. (alum.) .012–1/2 in. (steel)</td>
<td>3–310 A</td>
<td>0.25–10 PPS (optional)</td>
</tr>
<tr>
<td>Syncrowave® 350 LX</td>
<td>57</td>
<td>●/city●/city●/city●/city●</td>
<td>5/16 in.</td>
<td>5/16 in.</td>
<td>1/4 in.</td>
<td>1/4 in.</td>
<td>1/4 in.</td>
<td>.015–1/2 in. (alum.) .012–5/8 in. (steel)</td>
<td>3–400 A</td>
<td>0.25–10 PPS</td>
</tr>
</tbody>
</table>

**Product Key**

- **All models**: ●
- **Some models**: ●
- **New! or Improved! products appear in blue type.**

Also see Multiprocess section for machines that can TIG weld.
Diversion™ 165 and 180 AC/DC TIG See literature no. AD/1.5

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

**Maxstar**

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

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

**TIG Welding Capability**

<table>
<thead>
<tr>
<th>Material Type</th>
<th>Steel</th>
<th>Aluminum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min. 0.025 in. (0.6 mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max. 3/16 in. (4.8 mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max. 3/16 in. (4.8 mm)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

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

**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** reduces tungsten and material contamination.

**Portable.** Easy to transport at 50 pounds.

*While idling.

**AC/DC**

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Input Power</th>
<th>Welding Amp Range</th>
<th>Rated Output</th>
<th>Amps Input at Rated Output</th>
<th>KVA</th>
<th>KW</th>
<th>Max. Open-Circuit Voltage</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diversion 165 (#907 626)</td>
<td>230 V</td>
<td>10-165</td>
<td>150 A at 16 V, 20% duty cycle</td>
<td>23 (20*)</td>
<td>5.3 (04*)</td>
<td>3.7 (02*)</td>
<td>80 VDC</td>
<td>H: 17 in. (433 mm) W: 9.875 in. (251 mm) D: 23.875 in. (608 mm)</td>
<td>50 lb. (23 kg)</td>
</tr>
<tr>
<td>Diversion 180 (#907 627)</td>
<td>115 V</td>
<td>10-125</td>
<td>125 A at 15 V, 35% duty cycle</td>
<td>26.5 (88*)</td>
<td>3.1 (1.*)</td>
<td>3.0 (0.03*)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>230 V</td>
<td>10-180</td>
<td>180 A at 17.2 V, 10% duty cycle</td>
<td>20.5 (4.4*)</td>
<td>4.7 (1.*)</td>
<td>4.6 (0.03*)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Process • TIG (GTAW)**

**Comes with**

- Power cord with 50 A, 240 V plug (165 model) or MVP plugs for 120 V and 240 V (180 model)
- 12 ft. (3.8 m) Weldcraft® A-150 TIG torch
- 12 ft. (3.7 m) work cable with clamp
- RFCS-R145 remote foot control
- Flow gauge regulator with hose

**Most popular accessories**

- Running Gear/Cylinder Rack #301 239 (pg 106)
- Protective Cover #300 579 (pg 112)
- RCCS-R145 Remote Finger-tip Control #301 146 (pg 112)
- R4/5 to 14-Pin Adapter Cord #300 888

**Weldcraft® Flexible Torch Body Kits (requires handle #105Z55R)**

- A-125F (#WP-9F) A-150F (#WP-17F)

**TIG Torch Accessory Kit #AK2C**

(see pg 53 for contents list)

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

***Maxstar® 150 STL and STH DC TIG and Stick***

See literature no. DC/27.1 (STL) and DC/27.2 (STH)

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

**Two models available.** See page 49 in the Stick section for Maxstar 150 S.

**STL:** DC TIG/stick with Lift-Arc® starting without the use of high frequency.

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

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

**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.** See photo above.

**Portable with adjustable shoulder strap. Easy to transport at 13.7 pounds.**

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

**AC/DC**

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Input Power</th>
<th>Welding Amp Range</th>
<th>Rated Output</th>
<th>Amps Input at Rated Output</th>
<th>KVA</th>
<th>KW</th>
<th>Max. Open-Circuit Voltage</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maxstar 150 STL (#907 135) Machine only</td>
<td>115 V</td>
<td>5-150</td>
<td>150 A at 16 V, 30% duty cycle</td>
<td>28.0</td>
<td>3.4</td>
<td>3.1</td>
<td>90 VDC (12-16 VDC*)</td>
<td>H: 9 in. (229 mm) W: 5.6 in. (140 mm) D: 13.25 in. (337 mm)</td>
<td>13.7 lb. (6.2 kg)</td>
</tr>
<tr>
<td>Maxstar 150 STL (#907 136) Machine only</td>
<td>230 V</td>
<td>5-150</td>
<td>150 A at 16 V, 30% duty cycle</td>
<td>14.2</td>
<td>3.2</td>
<td>3.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maxstar 150 STL (#907 136 017) TIG/stick package with remote fingertip control</td>
<td>210 V</td>
<td>5-100</td>
<td>100 A at 24 V, 35% duty cycle</td>
<td>26.4</td>
<td>3.0</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maxstar 150 STL (#907 136 017 020) TIG/stick package with remote fingertip control</td>
<td>230 V</td>
<td>20-150</td>
<td>150 A at 26 V, 30% duty cycle</td>
<td>21.6</td>
<td>4.9</td>
<td>4.7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

Maxstar 150 STL TIG/stick package with remote fingertip control and X-CASE (#907 136 017) shown.

Visit MillerWelds.com or your distributor for other Miller® options and accessories.
Syncrowave® 210 Series
AC/DC TIG and Stick See literature no. AD/4.6
Continuing the tradition of innovation through advanced inverter technology for light-industrial and personal users.

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.

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

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.

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. Expandable feature.

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.)

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

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Stock Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>(#907 596)</td>
<td>(#951 616)</td>
</tr>
</tbody>
</table>

**Input Power**

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Stock Number</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

**Welding Process**

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Stock Number</th>
</tr>
</thead>
<tbody>
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<td>(#907 596)</td>
<td>(#951 616)</td>
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</tbody>
</table>

**Welding Amperage Range**

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Stock Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>(#907 596)</td>
<td>(#951 616)</td>
</tr>
</tbody>
</table>

**Rated Output (R.M.S.)**

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Stock Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>(#907 596)</td>
<td>(#951 616)</td>
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</tbody>
</table>

**Amps Input at Rated Output**

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Stock Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>(#907 596)</td>
<td>(#951 616)</td>
</tr>
</tbody>
</table>

**Max. Open-Circuit Voltage**

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Stock Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>(#907 596)</td>
<td>(#951 616)</td>
</tr>
</tbody>
</table>

**Dimensions**

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Stock Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>(#907 596)</td>
<td>(#951 616)</td>
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</tbody>
</table>

**Net Weight**

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Stock Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>(#907 596)</td>
<td>(#951 616)</td>
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</table>

**Syncrowave® 210 Series**

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

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

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.

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

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.

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. Expandable feature.

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.)

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

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Stock Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>(#907 596)</td>
<td>(#951 616)</td>
</tr>
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</table>

**Input Power**

<table>
<thead>
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<th>Stock Number</th>
<th>Stock Number</th>
</tr>
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<tbody>
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<td>(#907 596)</td>
<td>(#951 616)</td>
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</table>

**Welding Process**

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Stock Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>(#907 596)</td>
<td>(#951 616)</td>
</tr>
</tbody>
</table>

**Welding Amperage Range**

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Stock Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>(#907 596)</td>
<td>(#951 616)</td>
</tr>
</tbody>
</table>

**Rated Output (R.M.S.)**

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Stock Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>(#907 596)</td>
<td>(#951 616)</td>
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</tbody>
</table>

**Amps Input at Rated Output**

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Stock Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>(#907 596)</td>
<td>(#951 616)</td>
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</table>

**Max. Open-Circuit Voltage**

<table>
<thead>
<tr>
<th>Stock Number</th>
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<tbody>
<tr>
<td>(#907 596)</td>
<td>(#951 616)</td>
</tr>
</tbody>
</table>

**Dimensions**

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Stock Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>(#907 596)</td>
<td>(#951 616)</td>
</tr>
</tbody>
</table>

**Net Weight**

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Stock Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>(#907 596)</td>
<td>(#951 616)</td>
</tr>
</tbody>
</table>
**Maxstar® 210/280 Series**

**DC TIG and Stick**

See literature no. DC/32.1 (210) and DC/35.0 (280)

**Dynasty® 210/280 Series**

**AC/DC TIG and Stick**

See literature no. AD/4.81 (210) and AD/4.9 (280)

---

**Maxstar and Dynasty 210 Series (Maxstar 210 shown).**

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

**Note:** See page 49 in the Stick section for Maxstar 210 STR.

**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. Simply select the feature and adjust until Pro-Set appears on the display.

**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.

**Optional cooler power supply (CPS) is an integrated 120-volt dedicated-use receptacle for the Coolmate™ 1.3. Not available on Maxstar 210 Series.**

**Optional 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 CPS models.**

---

**Maxstar® 210/280 Series TIG Welding Capability**

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Welding Process</th>
<th>Input Power</th>
<th>Welding Amp Range</th>
<th>Rated Output at 60% Duty Cycle</th>
<th>Amps Input at Rated Load Output, 50/60 Hz</th>
<th>Max. Open-Circuit Voltage</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC Maxstar 210</td>
<td>TIG</td>
<td>3-phase</td>
<td>1-210</td>
<td>210 A at 18.4 V</td>
<td>14 – 12 7 6 – 5.2 4.9</td>
<td>80 VDC (11 VDC)</td>
<td>H: 13.6 in. (346 mm)</td>
<td>38 lb. (17.2 kg)</td>
</tr>
<tr>
<td>(#907 683) Maxstar 210 DX</td>
<td>Stick</td>
<td>3-phase</td>
<td>5-210</td>
<td>160 A at 26.4 V</td>
<td>22 – 15 8 6 – 5.5 5.2</td>
<td></td>
<td>W: 8.6 in. (219 mm)</td>
<td></td>
</tr>
<tr>
<td>(#907 684)</td>
<td></td>
<td>1-phase</td>
<td>1-150</td>
<td>125 A at 15 V</td>
<td>22 – 20 12 10 – 4.9 4.9</td>
<td></td>
<td>D: 19.5 in. (495 mm)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-phase</td>
<td>1-210</td>
<td>210 A at 18.4 V</td>
<td>24 – 20 12 10 – 4.9 4.9</td>
<td></td>
<td>Wood: 2.6</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-phase</td>
<td>1-150</td>
<td>125 A at 15 V</td>
<td>22 – 20 12 10 – 4.9 4.9</td>
<td></td>
<td>Diameter: 5.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-phase</td>
<td>5-210</td>
<td>160 A at 26.4 V</td>
<td>22 – 20 12 10 – 4.9 4.9</td>
<td></td>
<td>Weight: 5.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-phase</td>
<td>5-100</td>
<td>90 A at 23.6 V</td>
<td>23 – 15 8 6 – 2.8 2.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-phase</td>
<td>5-280</td>
<td>200 A at 28 V</td>
<td>23 – 15 8 6 – 2.8 2.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-phase</td>
<td>5-280</td>
<td>180 A at 27.2 V</td>
<td>30 – 27 15 13 – 6.2 6.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-phase</td>
<td>1-210</td>
<td>210 A at 18.4 V</td>
<td>24 – 20 12 10 – 4.9 4.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-phase</td>
<td>1-150</td>
<td>125 A at 15 V</td>
<td>22 – 20 12 10 – 4.9 4.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-phase</td>
<td>5-210</td>
<td>160 A at 26.4 V</td>
<td>22 – 20 12 10 – 4.9 4.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-phase</td>
<td>5-100</td>
<td>90 A at 23.6 V</td>
<td>23 – 15 8 6 – 2.8 2.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-phase</td>
<td>5-280</td>
<td>200 A at 28 V</td>
<td>23 – 15 8 6 – 2.8 2.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-phase</td>
<td>5-280</td>
<td>180 A at 27.2 V</td>
<td>30 – 27 15 13 – 6.2 6.2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

*Refer to owner’s manual for 208-volt output ratings and duty cycle.

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

---

**Dynasty 280 DX**

See page 113
Designed to deliver Welding Intelligence.

Dynasty 280 DX with Insight

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. DX models provide extended ranges.

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™ welding information management systems into its capabilities. These systems help welding operations improve quality, retain weld records, increase productivity and manage costs. See pages 24 and 25 for more information.

Dynasty Water-Cooled Complete Packages

(Additional packages are available — visit MillerWelds.com or your distributor)

<table>
<thead>
<tr>
<th>Model</th>
<th>Packages with Foot Control and CPS</th>
<th>Packages with Wireless Foot Control and CPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dynasty 210</td>
<td>(#951 666)</td>
<td>(#951 667)</td>
</tr>
<tr>
<td>Dynasty 210 DX</td>
<td>(#951 668)</td>
<td>(#951 669)</td>
</tr>
<tr>
<td>Dynasty 280</td>
<td>(#951 466)</td>
<td></td>
</tr>
<tr>
<td>Dynasty 280 DX</td>
<td>(#951 468)</td>
<td>(#951 469)</td>
</tr>
</tbody>
</table>

*Refer to owner’s manual for 208-volt output ratings and duty cycle.

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

<table>
<thead>
<tr>
<th>Process</th>
<th>Model/Stock Number</th>
<th>Input Power</th>
<th>Welding Amp Range</th>
<th>Rated Output at 60% Duty Cycle</th>
<th>Amps Input at Rated Lead Output, 50/60 Hz</th>
<th>Max. Open-Circuit Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIG</td>
<td>#907 685</td>
<td>3-phase</td>
<td>1-210</td>
<td>210 A at 18.4 V</td>
<td>14 – 12 7 – 6 – 5.2 4.9</td>
<td>H: 13.6 in. (346 mm) W: 8.6 in. (219 mm) D: 22.5 in. (569 mm) 47 lb. (21.3 kg) 50 lb. (22.7 kg) with CPS</td>
</tr>
<tr>
<td></td>
<td>(#907 685 002)</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>#907 686</td>
<td>1-phase</td>
<td>1-210</td>
<td>210 A at 18.4 V</td>
<td>24 – 20 12 – 10 – 4.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(#907 686 002)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>#907 550</td>
<td>3-phase</td>
<td>1-150</td>
<td>125 A at 15 V</td>
<td>22 – – – – – 2.6 2.6</td>
<td></td>
</tr>
<tr>
<td>Stick</td>
<td>(#907 527)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(#907 551)</td>
<td>2-phase</td>
<td>1-210</td>
<td>160 A at 26.4 V</td>
<td>26 – 22 13 – 11 – 5.3 5.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>With CPS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>#907 514</td>
<td>3-phase</td>
<td>1-210</td>
<td>160 A at 26.4 V</td>
<td>26 – 22 13 – 11 – 5.3 5.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(#907 514 003)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>#907 514</td>
<td>1-phase</td>
<td>1-210</td>
<td>90 A at 23.6 V</td>
<td>23 – – – – – – 2.8 2.8</td>
<td></td>
</tr>
</tbody>
</table>

GTAW | TIG

Industrial

<table>
<thead>
<tr>
<th>Process</th>
<th>Model/Stock Number</th>
<th>Input Power</th>
<th>Welding Amp Range</th>
<th>Rated Output at 60% Duty Cycle</th>
<th>Amps Input at Rated Lead Output, 50/60 Hz</th>
<th>Max. Open-Circuit Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIG</td>
<td>#907 685</td>
<td>3-phase</td>
<td>1-280 (DC)</td>
<td>235 A at 19.4 V</td>
<td>19 17 9 7 7.0 6.7</td>
<td>H: 13.6 in. (346 mm) W: 8.6 in. (219 mm) D: 22.5 in. (569 mm) 52 lb. (23.6 kg) 55 lb. (25 kg) with CPS</td>
</tr>
<tr>
<td></td>
<td>(#907 685 002)</td>
<td></td>
<td>2-280 (AC)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>#907 686</td>
<td>1-phase</td>
<td>1-280 (DC)</td>
<td>235 A at 19.4 V</td>
<td>33 30 17 15 12 6.9 6.8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(#907 686 002)</td>
<td></td>
<td>2-280 (AC)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>#907 550</td>
<td>3-phase</td>
<td>5-280</td>
<td>200 A at 28 V</td>
<td>22 20 10 8 8.2 7.9</td>
<td></td>
</tr>
<tr>
<td>Stick</td>
<td>(#907 527)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(#907 551)</td>
<td>2-phase</td>
<td>5-280</td>
<td>200 A at 28 V</td>
<td>22 20 10 8 8.2 7.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>With CPS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>#907 514</td>
<td>3-phase</td>
<td>5-280</td>
<td>180 A at 27.2 V*</td>
<td>34 31 17 15 12 7.1 7.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(#907 514 003)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>#907 514</td>
<td>1-phase</td>
<td>5-280</td>
<td>180 A at 27.2 V*</td>
<td>34 31 17 15 12 7.1 7.0</td>
<td></td>
</tr>
</tbody>
</table>
Maxstar® and Dynasty® 350 and 700
DC (Maxstar) and AC/DC (Dynasty) TIG and Stick

See literature no. DC/24.0 (Maxstar) and AD/5.0 (Dynasty)

**TIG Welding Capability**

<table>
<thead>
<tr>
<th>Amperage</th>
<th>Voltage</th>
<th>Current</th>
</tr>
</thead>
<tbody>
<tr>
<td>300 A</td>
<td>24 V</td>
<td>12.5 A</td>
</tr>
<tr>
<td>400 A</td>
<td>30 V</td>
<td>13.3 A</td>
</tr>
<tr>
<td>500 A</td>
<td>38 V</td>
<td>13.5 A</td>
</tr>
<tr>
<td>600 A</td>
<td>48 V</td>
<td>15.5 A</td>
</tr>
</tbody>
</table>

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.

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

### Heavy Industrial

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

**350 models come with**
- 8 ft. (2.4 m) power cord (no plug)
- Two 50 mm Dinse-style connectors (350)
- Setup video and reference guide

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

Note: Power cord is NOT included with 700 models.

**Most popular accessories**
- Runner™ cart
- Coolmate™ 3.5
- Coolant (4 one-gallon bottles)
- Remote control (foot or wireless foot)
- Weldcraft™ water-cooled torch kit (350: W-375, 700: W-400)

**Complete packages come with above plus**
- Runner™ cart #300 244 (pg 107)
- Coolmate™ 3.5 #300 245 (pg 107)
- Coolant #043 810 (pg 107)

**Weldcraft™ Water-Cooled Torch Kits** (pg 112)
- #300 185 W-250 (WP-20)
- #300 990 W-280 (WP-280)
- #301 268 W-375
- #300 186 W-400 (WP-185C)
- Remote Controls (pg 112/113)
- #043 688 RCS-14 fingertip control
- #300 744 RCS-14 HD foot control
- #300 429 Wireless foot control

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

### DC Masstar

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Welding Process</th>
<th>Input Power</th>
<th>Welding Amp Range</th>
<th>Rated Output</th>
<th>Max. Open-Circuit Voltage</th>
<th>Dimensions**</th>
<th>Net Weight**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masstar 350 (#907 334) Machine only (#951 624) Complete w/foot (#951 625) Complete w/3wireless foot</td>
<td>TIG / stick</td>
<td>3-phase</td>
<td>3-350</td>
<td>300 A at 24 V, 60% duty cycle</td>
<td>75 VDC (10-15 VDC)</td>
<td>H: 24.75 in. (629 mm) W: 13.75 in. (349 mm) D: 22 in. (559 mm)</td>
<td>135 lb. (61 kg)</td>
</tr>
<tr>
<td>Masstar 700 (#907 103) Machine only</td>
<td>TIG / stick</td>
<td>3-phase</td>
<td>5-700</td>
<td>600 A at 29 V, 60% duty cycle</td>
<td>75 VDC (10-15 VDC)</td>
<td>H: 24.75 in. (629 mm) W: 13.75 in. (349 mm) D: 22 in. (559 mm)</td>
<td>196 lb. (90 kg)</td>
</tr>
</tbody>
</table>

### AC/DC Dynasty

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Welding Process</th>
<th>Input Power</th>
<th>Welding Amp Range</th>
<th>Rated Output</th>
<th>Max. Open-Circuit Voltage</th>
<th>Dimensions**</th>
<th>Net Weight**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dynasty 350 (#907 204) Machine only (#951 626) Complete w/foot (#951 627) Complete w/3wireless foot</td>
<td>TIG / stick</td>
<td>3-phase</td>
<td>3-350</td>
<td>300 A at 32 V, 60% duty cycle</td>
<td>60 VDC (11 VDC)</td>
<td>H: 24.75 in. (629 mm) W: 13.75 in. (349 mm) D: 22 in. (559 mm)</td>
<td>135 lb. (61 kg)</td>
</tr>
<tr>
<td>Dynasty 700 (#907 101) Machine only (#951 403) Complete w/foot (#951 404) Complete w/3wireless foot</td>
<td>TIG / stick</td>
<td>3-phase</td>
<td>5-700</td>
<td>600 A at 44 V, 60% duty cycle</td>
<td>75 VDC (10-15 VDC)</td>
<td>H: 24.75 in. (629 mm) W: 13.75 in. (349 mm) D: 22 in. (559 mm)</td>
<td>198 lb. (90 kg)</td>
</tr>
</tbody>
</table>
Syncrowave® 250 DX and 350 LX
AC/DC TIG and Stick See literature no. AD/4.2

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

**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.

**Complete packages come with**
- No. 37 running gear
- Coolmate™ 3CS cooler
- Coolant (four gallons)
- 25 ft. (7.6 m) water-cooled torch with Dinse-style connector (Syncrowave 250: Weldcraft™ W-250) (Syncrowave 350: Weldcraft™ W-375)
- 15 ft. (4.6 m) work cable with clamp and Dinse-style connector
- RFCS-14 remote foot control
- Flowmeter regulator with hose
- Torch accessory kit with tungsten
- Cable cover

Note: Power cord is NOT included.

**Most popular accessories**
- Wireless Remote Foot Control #300 429 (pg 113)
- Pulser Module #300 548 (250 DX ONLY, standard on 350 LX)

For welding thin materials. Provides a heating and cooling effect of the weld puddle to reduce heat input and control distortion of the material. Provides 0.25 to 10 pulses per second.

- Sequencer Module #300 547 (250 DX/350 LX)

Provides a starting current higher or lower than the welding current. Provides final slope and final current for trailing the weld. Provides a spot timer for TIG spot application.

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

---

**Syncrowave 250 DX and 350 LX**

**AC/DC**

<table>
<thead>
<tr>
<th>Model / Stock Number</th>
<th>Welding Amperage Range</th>
<th>Rated Output</th>
<th>Amps Input at Rated Output, 50/60 Hz</th>
<th>Max. Open-Circuit Voltage</th>
<th>Max. Output</th>
<th>Dimensions*</th>
<th>Net Weight*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Syncrowave 250 DX</strong></td>
<td>3-310</td>
<td>200 A at 28 V, 60% duty cycle</td>
<td>—</td>
<td>200 V 230 V 460 V 575 V</td>
<td>80 VDC</td>
<td>H: 36.25 in (921 mm) W: 22.5 in (572 mm) D: 25 in (635 mm)</td>
<td>378 lb. (172 kg)</td>
</tr>
<tr>
<td>(#907 194) 200/230/460 V, 50/60 Hz, Machine only</td>
<td>250 A at 30 V, 40% duty cycle</td>
<td>110 96 48 38 22 11.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(#907 195) 230/460/575 V, 50/60 Hz, Machine only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(#951 117) 200/230/460 V, 50/60 Hz, Complete</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(#951 118) 230/460/575 V, 50/60 Hz, Complete</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

| **Syncrowave 350 LX** | 3-400                   | 300 A at 32 V, 60% duty cycle | — | 200 V 230 V 460 V 575 V | 80 VDC | H: 36.25 in (921 mm) W: 22.5 in (572 mm) D: 25 in (635 mm) | 496 lb. (225 kg) |
| (#907 199) 200/230/460 V, 50/60 Hz, Machine only | 350 A at 34 V, 40% duty cycle | 146 128 65 50 29.5 13.7 | | |
| (#907 622) 230/460/575 V, 50/60 Hz, Machine only | | | | |
| (#951 623) 230/460/575 V, 50/60 Hz, Complete | | | | |

---

**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.

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*See literature no. AD/4.2 for Complete package dimensions and weight.
Weldcraft™ A-80 Series
Formerly known as WP-24 Series
See literature no. AY/21.0

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.

Easy gas-flow adjustment using the fingertip gas valve (A-80 Flex Valve).

Flexible neck can be adjusted in any direction to facilitate welding in difficult joints (A-80 Flex).

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

Weldcraft™ A-125 Series
Formerly known as WP-9 Series
See literature no. AY/22.0

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.

Perfected control. The gas valve in the A-125 Valve offers improved shielding gas control.

Flexibility. Using the A-125 Flex, the flexible neck easily adjusts to any angle for improved torch control.

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.

Most popular consumables

<table>
<thead>
<tr>
<th>Model</th>
<th>Rubber</th>
<th>25 ft. (7.6 m)</th>
<th>Type</th>
<th>Rated Output</th>
<th>Electrode Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>13N22</td>
<td>WP-9-12-R</td>
<td>—</td>
<td>Air-cooled</td>
<td>DC: 125 A at 60% duty cycle</td>
<td>.020–1/32 in. (0.5–2.4 mm)</td>
</tr>
<tr>
<td>13N23</td>
<td>WP-9V-12-R</td>
<td>WP-9V-25-R</td>
<td></td>
<td>AC: 100 A at 60% duty cycle</td>
<td></td>
</tr>
<tr>
<td>13N24</td>
<td>WP-9F-12-R</td>
<td>WP-9F-25-R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13N25</td>
<td>WP-9-12-R</td>
<td>WP-9-25-R</td>
<td></td>
<td></td>
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<tr>
<td>13N26</td>
<td>WP-9V-12-R</td>
<td>WP-9V-25-R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13N27</td>
<td>WP-9F-12-R</td>
<td>WP-9F-25-R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13N28</td>
<td>WP-9-12-R</td>
<td>WP-9-25-R</td>
<td></td>
<td></td>
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<tr>
<td>13N29</td>
<td>WP-9V-12-R</td>
<td>WP-9V-25-R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13N30</td>
<td>WP-9F-12-R</td>
<td>WP-9F-25-R</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>13N31</td>
<td>WP-9-12-R</td>
<td>WP-9-25-R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13N32</td>
<td>WP-9V-12-R</td>
<td>WP-9V-25-R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13N33</td>
<td>WP-9F-12-R</td>
<td>WP-9F-25-R</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Most popular accessories

• Collet Body Wrench 53N20

Visit MillerWelds.com or your distributor for other Miller® options and accessories.
**Weldcraft™ A-150 Series**
Formerly known as WP-17 Series  See literature no. AY/23.0

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.

Ribbed handle and torch design provide cool operation and maximum operator comfort while reducing downtime caused by operator fatigue.

Available with 12.5- or 25-foot, single- or heavy-duty two-piece cable assembly determined by the compatibility of the power source. Heavy-duty cable assembly allows use of a larger conductor for the power cable which simplifies repair and replacement making it ideal for field applications.

<table>
<thead>
<tr>
<th>Model</th>
<th>Rubber</th>
<th>Mono-Flex</th>
<th>2-Piece Rubber</th>
<th>Type</th>
<th>Rated Output</th>
<th>Electrode Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-150</td>
<td>WP-17-12-R</td>
<td>WP-17-12-MF</td>
<td>WP-17-12-MF</td>
<td>DC: 150 A at 60% duty cycle</td>
<td>.020-1/8 in. (0.5-3.2 mm)</td>
<td></td>
</tr>
<tr>
<td>A-150 Valve</td>
<td>WP-17V-12-R</td>
<td>WP-17V-25-MF</td>
<td>WP-17-12-MF</td>
<td>AC: 115 A at 60% duty cycle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-150 Flex</td>
<td>WP-17F-12-R</td>
<td>WP-17F-25-R</td>
<td>WP-17-12-MF</td>
<td>DC: 150 A at 60% duty cycle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-150 Flex Valve Redhead</td>
<td>WP-R17FV-12-R</td>
<td>WP-R17FV-25-R</td>
<td>WP-17-12-MF</td>
<td>DC: 150 A at 60% duty cycle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-150 PSH*</td>
<td>WP-17V-12-R</td>
<td>WP-17V-25-R</td>
<td>WP-17-12-MF</td>
<td>DC: 150 A at 60% duty cycle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-150 Valve PSH*</td>
<td>WP-17V-12-R</td>
<td>WP-17V-25-R</td>
<td>WP-17-12-MF</td>
<td>DC: 150 A at 60% duty cycle</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Weldcraft™ A-200 Series**
Formerly known as WP-26 Series  See literature no. AY/24.0

**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.

**Robust performance.** The heavy copper construction delivers maximum welding capacity for rugged fieldwork.

**Effortless adjustments.** The A-200 Valve provides a gas control valve to ensure a quick, easy adjustment of shielding gas flow.

**Flexibility.** Using the A-200 Flex, the flexible neck easily adjusts to any angle for better torch control in limited-access joints.

**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.

<table>
<thead>
<tr>
<th>Model</th>
<th>Rubber</th>
<th>Mono-Flex</th>
<th>2-Piece Rubber</th>
<th>Type</th>
<th>Rated Output</th>
<th>Electrode Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-200</td>
<td>WP-26-12-R</td>
<td>WP-26-25-R</td>
<td>WP-26-25-2</td>
<td>DC: 200 A at 60% duty cycle</td>
<td>.020-5/32 in. (0.5-4.0 mm)</td>
<td></td>
</tr>
<tr>
<td>A-200 Valve</td>
<td>WP-20V-12-R</td>
<td>WP-20V-25-R</td>
<td>WP-20V-25-2</td>
<td>DC: 200 A at 60% duty cycle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-200 Flex</td>
<td>WP-26F-12-R</td>
<td>WP-26F-25-R</td>
<td>WP-26F-25-2</td>
<td>DC: 200 A at 60% duty cycle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-200 Flex Valve Redhead</td>
<td>WP-R26FV-12-R</td>
<td>WP-R26FV-25-R</td>
<td>WP-R26FV-25-2</td>
<td>DC: 200 A at 60% duty cycle</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Most popular consumables**

<table>
<thead>
<tr>
<th>Collets</th>
<th>1/16 in. (1.6 mm)</th>
<th>3/32 in. (2.4 mm)</th>
<th>1/8 in. (3.2 mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10N23</td>
<td></td>
<td></td>
<td>1/16 in. (1.6 mm)</td>
</tr>
<tr>
<td>10N24</td>
<td></td>
<td></td>
<td>3/32 in. (2.4 mm)</td>
</tr>
<tr>
<td>10N25</td>
<td></td>
<td></td>
<td>1/8 in. (3.2 mm)</td>
</tr>
</tbody>
</table>

**Most popular accessories**

| Accessory Kit | #4K-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. Visit MillerWelds.com or your distributor for other Miller® options and accessories. |

<table>
<thead>
<tr>
<th>Alumina Nozzles</th>
<th>1/16 in. (1.6 mm)</th>
<th>3/32 in. (2.4 mm)</th>
<th>1/8 in. (3.2 mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>#10N23</td>
<td></td>
<td></td>
<td>1/16 in. (1.6 mm)</td>
</tr>
<tr>
<td>#10N24</td>
<td></td>
<td></td>
<td>3/32 in. (2.4 mm)</td>
</tr>
<tr>
<td>#10N25</td>
<td></td>
<td></td>
<td>1/8 in. (3.2 mm)</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Alumina Nozzles</th>
<th>1/16 in. (1.6 mm)</th>
<th>3/32 in. (2.4 mm)</th>
<th>1/8 in. (3.2 mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>#10N23</td>
<td></td>
<td></td>
<td>1/16 in. (1.6 mm)</td>
</tr>
<tr>
<td>#10N24</td>
<td></td>
<td></td>
<td>3/32 in. (2.4 mm)</td>
</tr>
<tr>
<td>#10N25</td>
<td></td>
<td></td>
<td>1/8 in. (3.2 mm)</td>
</tr>
</tbody>
</table>

Visit MillerWelds.com or your distributor for other Miller® options and accessories.
### Weldcraft™ W-125 Micro Series
Formerly known as WP-125 Series

See literature no. AY/25.0

Water-cooled MicroTig® torches designed for limited-access joints.

Low-profile nozzle fits into holes as small as 5/8-inch 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.

### Weldcraft™ W-180
Formerly known as WP-24W

See literature no. AY/26.0

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.

Comfort and control are increased with the light, well-balanced body design.

### Weldcraft™ W-200 Pencil Flex
Formerly known as WP-25

See literature no. AY/27.0

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 light, well-balanced body design.
Weldcraft® W-225 Pencil
Formerly known as WP-20P  See literature no. AY/28.0

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 | Vinyl – 25 ft. (7.6 m) | Type | Rated Output | Electrode Range
--- | --- | --- | --- | ---
W-225 Pencil | WP-20P-25 | Water-cooled DC: 225 A at 100% duty cycle, AC: 160 A at 100% duty cycle | .020-1/8 in. (0.5-3.2 mm)

Weldcraft® W-250 Series
Formerly known as WP-20 Series  See literature no. AY/29.0

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.

Comfort and control are increased with the lightweight, compact body 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 | Braided Rubber 12.5 ft. (3.8 m) | Vinyl – 25 ft. (7.6 m) | Type | Rated Output | Electrode Range
--- | --- | --- | --- | --- | ---
W-250 | WP-20-12-R | WP-20-25 | Water-cooled DC: 250 A at 100% duty cycle, AC: 180 A at 100% duty cycle | .020-1/8 in. (0.5-3.2 mm)
Weldcraft™ W-280 Super Cool™
Formerly known as WP-280  See literature no. AY/30.0

Most popular consumables

- Insulator (non-gas lens and gas lens)
  - 598882 Required
- Collets (non-gas lens and gas lens)
  - 13N20 .020 (0.5 mm)
  - 13N21 .040 in. (1.0 mm)
  - 13N22 1/16 in. (1.6 mm)
  - 13N23 3/32 in. (2.4 mm)
  - 13N24 1/8 in. (3.2 mm)
- Collet Bodies
  - 13N25 .020 in. (0.5 mm)
  - 13N26 .040 in. (1.0 mm)
  - 13N27 1/16 in. (1.6 mm)
  - 13N28 3/32 in. (2.4 mm)
  - 13N29 1/8 in. (3.2 mm)
- Gas Lens
  - 45V41 .020 in. (0.5 mm)
  - 45V42 .040 in. (1.0 mm)
  - 45V43 1/16 in. (1.6 mm)
  - 45V44 3/32 in. (2.4 mm)
  - 45V45 1/8 in. (3.2 mm)
- 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)

Most popular accessories

- • Cable Covers
  #WC0183  11.75 ft. (3.6 m)
  #WC0182  24.25 ft. (7.4 m)
- • Accessory Kit #AK4C
  Includes one long back cap, one of each size (#5, #6, #7) alumina nozzle, and one of each size (1/16, 3/32, 1/8 in.) of the following: collet, collet body, and 7-inch 2% ceriated tungsten electrode. Visit MillerWelds.com or your distributor for other Miller® options and accessories.

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.

Extend torch life with dependable water-cooled technology.

Reduce leakage of gas and water through secure mechanical fittings and connections.

---

Model  | Braided Rubber 12.5 ft. (3.8 m) 25 ft. (7.6 m) 50 ft. (15.2 m) | Braided Rubber with 50 mm Dinse 25 ft. (7.6 m) | Type  | Rated Output  | Electrode Range
---  | ---  | ---  | ---  | ---  | ---
W-280 Super Cool  | #301 251 012  | #301 251 025  | #301 251 050  | #301 251 001  | Water-cooled DC: 280 A at 100% duty cycle AC: 195 A at 100% duty cycle 0.020–1/8 in. (0.5–3.2 mm)

Model  | Braided Rubber 12.5 ft. (3.8 m) 25 ft. (7.6 m) 50 ft. (15.2 m) | Braided Rubber with 50 mm Dinse 25 ft. (7.6 m) | Type  | Rated Output  | Electrode Range
---  | ---  | ---  | ---  | ---  | ---
W-375 Super Cool  | #301 253 012  | #301 253 025  | #301 253 001  | Water-cooled DC: 375 A at 100% duty cycle AC: 265 A at 100% duty cycle 0.020–1/8 in. (0.5–3.2 mm)
**Weldcraft™ W-350 Series**  
**Formerly known as WP-18 Series**  
See literature no. AY/32.0

![W-350](Image)

**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).

<table>
<thead>
<tr>
<th>Model</th>
<th>Rubber 12.5 ft. (3.8 m)</th>
<th>25 ft. (7.6 m)</th>
<th>12.5 ft. (3.8 m)</th>
<th>25 ft. (7.6 m)</th>
<th>Type</th>
<th>Rated Output</th>
<th>Electrode Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>W-350</td>
<td>WP-18-12-R</td>
<td>WP-18-25-R</td>
<td>WP-18-12</td>
<td>WP-18-25</td>
<td>Water-cooled</td>
<td>DC: 350 A at 100% duty cycle, AC: 250 A at 100% duty cycle</td>
<td>0.020–0.05/32 in. (0.5–4.0 mm)</td>
</tr>
<tr>
<td>W-350 Valve</td>
<td>WP-18V-25-R</td>
<td>—</td>
<td>WP-18V-25-R</td>
<td>WP-18V-25-R</td>
<td>Water-cooled</td>
<td>DC: 350 A at 100% duty cycle, AC: 250 A at 100% duty cycle</td>
<td>0.020–0.05/32 in. (0.5–4.0 mm)</td>
</tr>
</tbody>
</table>

**Weldcraft™ W-400 Super Cool™**  
**Formerly known as WP-18SC**  
See literature no. AY/33.0

![W-400](Image)

**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.

**Comfort and maximum torch control** with the textured handle.

<table>
<thead>
<tr>
<th>Model</th>
<th>Rubber 12.5 ft. (3.8 m)</th>
<th>25 ft. (7.6 m)</th>
<th>Vinyl 12.5 ft. (3.8 m)</th>
<th>25 ft. (7.6 m)</th>
<th>Type</th>
<th>Rated Output</th>
<th>Electrode Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>W-400 Super Cool</td>
<td>WP-18SC-12-R</td>
<td>WP-18SC-25-R</td>
<td>WP-18SC-25</td>
<td>WP-18SC-25</td>
<td>Water-cooled</td>
<td>DC: 400 A at 100% duty cycle, AC: 280 A at 100% duty cycle</td>
<td>0.020–0.03/16 in. (0.5–4.8 mm)</td>
</tr>
</tbody>
</table>

**Weldcraft™ W-410**  
**Formerly known as CS410**  
See literature no. AY/34.0

![W-410](Image)

**Water-cooled torch that increases amperage output without increasing torch size. Designed for demanding applications.**

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

**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.

<table>
<thead>
<tr>
<th>Model</th>
<th>Type</th>
<th>Rated Output</th>
<th>Electrode Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>W-410</td>
<td>Braided Rubber - 25 ft. (7.6 m)</td>
<td>Water-cooled DC: 410 A at 100% duty cycle, AC: 310 A at 100% duty cycle</td>
<td>0.020–0.05/32 in. (0.5–4.0 mm)</td>
</tr>
</tbody>
</table>

---

**Most popular consumables**

<table>
<thead>
<tr>
<th>Collets</th>
<th>10N24</th>
<th>10N25</th>
<th>54N20</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3/32 in. (2.4 mm)</td>
<td>1/8 in. (3.2 mm)</td>
<td>5/32 in. (4.0 mm)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Collet Bodies</th>
<th>10N22</th>
<th>10N28</th>
<th>406488</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3/32 in. (2.4 mm)</td>
<td>1/8 in. (3.2 mm)</td>
<td>5/32 in. (4.0 mm)</td>
</tr>
</tbody>
</table>

**Alumina Nozzles**

<table>
<thead>
<tr>
<th>10N48</th>
<th>10N47</th>
<th>10N46</th>
<th>10N45</th>
<th>10N44</th>
</tr>
</thead>
<tbody>
<tr>
<td>#6, 3/8 in.</td>
<td>#7, 7/16 in.</td>
<td>#8, 1/2 in.</td>
<td>#10, 5/8 in.</td>
<td>#12, 3/4 in.</td>
</tr>
</tbody>
</table>

**Most popular accessories**

- Accessory Kit #MAK-2S
- Visit MillerWelds.com or your distributor for other Miller® options and accessories.

---

**Most popular consumables**

<table>
<thead>
<tr>
<th>Heavy-Duty Collets</th>
<th>10N20HD</th>
<th>54N20HD</th>
<th>18C36</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1/8 in. (3.2 mm)</td>
<td>5/32 in. (4.0 mm)</td>
<td>3/16 in. (4.8 mm)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NCB-36</th>
<th>NCB-35</th>
<th>NCB-34</th>
<th>NCB-33</th>
</tr>
</thead>
<tbody>
<tr>
<td>All sizes</td>
<td>All sizes</td>
<td>All sizes</td>
<td>All sizes</td>
</tr>
</tbody>
</table>

**Alumina Nozzles**

<table>
<thead>
<tr>
<th>54N16</th>
<th>54N15</th>
<th>54N14</th>
</tr>
</thead>
<tbody>
<tr>
<td>#6, 3/8 in.</td>
<td>#7, 7/16 in.</td>
<td>#8, 1/2 in.</td>
</tr>
</tbody>
</table>

**Back Caps**

<table>
<thead>
<tr>
<th>57Y04</th>
<th>300M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short</td>
<td>Medium</td>
</tr>
</tbody>
</table>

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

---

**Most popular consumables**

<table>
<thead>
<tr>
<th>Heavy-Duty Nose Collet Body</th>
<th>NCB-36</th>
</tr>
</thead>
<tbody>
<tr>
<td>All sizes</td>
<td></td>
</tr>
</tbody>
</table>

**Alumina Nozzles**

<table>
<thead>
<tr>
<th>54N16</th>
<th>54N15</th>
<th>54N14</th>
</tr>
</thead>
<tbody>
<tr>
<td>#6, 3/8 in.</td>
<td>#7, 7/16 in.</td>
<td>#8, 1/2 in.</td>
</tr>
</tbody>
</table>

**Back Caps**

<table>
<thead>
<tr>
<th>57Y04</th>
<th>300M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short</td>
<td>Medium</td>
</tr>
</tbody>
</table>

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

---

**Most popular consumables**

<table>
<thead>
<tr>
<th>Heavy-Duty Collets</th>
<th>10N24</th>
<th>10N25</th>
<th>54N20</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3/32 in. (2.4 mm)</td>
<td>1/8 in. (3.2 mm)</td>
<td>5/32 in. (4.0 mm)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Collet Bodies</th>
<th>10N32</th>
<th>10N28</th>
<th>406488</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3/32 in. (2.4 mm)</td>
<td>1/8 in. (3.2 mm)</td>
<td>5/32 in. (4.0 mm)</td>
</tr>
</tbody>
</table>

**Alumina Nozzles**

<table>
<thead>
<tr>
<th>10N46</th>
<th>10N45</th>
<th>10N44</th>
</tr>
</thead>
<tbody>
<tr>
<td>#8, 1/2 in.</td>
<td>#10, 5/8 in.</td>
<td>#12, 3/4 in.</td>
</tr>
</tbody>
</table>

- Visit MillerWelds.com or your distributor for other Miller® options and accessories.
**Weldcraft™ W-500**

Formerly known as WP-12

See literature no. AY/35.0

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.

**Weldcraft™ Modular Series**

See literature no. AY/36.0

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).

**Most popular consumables**

<table>
<thead>
<tr>
<th>Insulator</th>
<th>12NG</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Collets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8S217</td>
<td>5/32 in. (4.0 mm)</td>
<td></td>
</tr>
<tr>
<td>8S218</td>
<td>3/16 in. (4.8 mm)</td>
<td></td>
</tr>
<tr>
<td>8S219</td>
<td>1/4 in. (6.4 mm)</td>
<td></td>
</tr>
<tr>
<td><strong>Collet Body</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11WP65</td>
<td>All sizes</td>
<td></td>
</tr>
<tr>
<td><strong>Alumina Nozzles</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14N59</td>
<td>#6, 3/8 in.</td>
<td></td>
</tr>
<tr>
<td>14N60</td>
<td>#7, 7/16 in.</td>
<td></td>
</tr>
<tr>
<td>14N61</td>
<td>#8, 1/2 in.</td>
<td></td>
</tr>
<tr>
<td>14N61-10</td>
<td>#10, 5/8 in.</td>
<td></td>
</tr>
<tr>
<td>14N61-12</td>
<td>#12, 3/4 in.</td>
<td></td>
</tr>
<tr>
<td><strong>Back Caps</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>56Y45</td>
<td>Short</td>
<td></td>
</tr>
<tr>
<td>56Y44</td>
<td>Long</td>
<td></td>
</tr>
</tbody>
</table>

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

**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.

- **Accessory Kit #AK-225MFC**
  Supplements W-225 torch packages. Includes five additional torch heads, collets, collet bodies, nozzles, handle and more.

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

See literature no. AY/37.0

Air-cooled and water-cooled torches designed for high- and low-amperage mechanized applications.

Minimize downtime associated with tungsten changeover by using the front or back tungsten loading areas.

Pencil-style model offers outstanding durability on mechanized applications (W-500 Pencil Automation).

Built-in gas lens improves gas coverage to minimize shielding gas turbulence and improve weld quality (W-500A Automation, W-500B Automation).

Handle the most demanding high-amperage applications with the W-900 Automation torch.

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

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 10 seven-inch (175 mm) tungsten electrodes.

Air-cooled and water-cooled torches designed for high- and low-amperage mechanized applications.

Minimize downtime associated with tungsten changeover by using the front or back tungsten loading areas.

Pencil-style model offers outstanding durability on mechanized applications (W-500 Pencil Automation).

Built-in gas lens improves gas coverage to minimize shielding gas turbulence and improve weld quality (W-500A Automation, W-500B Automation).

Handle the most demanding high-amperage applications with the W-900 Automation torch.

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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 10 seven-inch (175 mm) tungsten electrodes.

Most popular accessories

- Cable Covers
  - WC-3-10  10 ft. (3 m)
  - WC-3-22  22 ft. (6.7 m)
  - WC-4-10  10 ft. (3 m)
  - WC-4-22  22 ft. (6.7 m)

- Air-Cooled Torch 1-Piece Power Cable Connector (pg 113)
  - #195 378  50 mm Dinse-style
  - #225 028

- Water-Cooled Torch 1-Piece Power Cable Connectors (pg 113)
  - #195 377  50 mm Dinse-style
  - #225 028  50 mm thread-lock

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

Weldcraft Tungsten

Electronic 307

No. 400 Diameter in. (mm) Part Number
0.040 (1.0) W040X7
1/16 (1.6) W116X7
3/32 (2.4) W032X7
1/8 (3.2) W080X7
5/32 (4.0) W053X7

Electronic 308

No. 400 Diameter in. (mm) Part Number
0.040 (1.0) W040X8
1/16 (1.6) W116X8
3/32 (2.4) W032X8
1/8 (3.2) W080X8
5/32 (4.0) W053X8

Electrode Range

Part Number
WP018X7
WP332X7
WP116X7
WP040X7
WP211X7
WP032X7
WP080X7
WP053X7
WP116X7
WP032X7
WP080X7
WP053X7

Part Number
WC040X7
WC116X7
WC032X7
WC080X7
WC053X7

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  - WC-3-22  22 ft. (6.7 m)
  - WC-4-10  10 ft. (3 m)
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WC032X7
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WC053X7

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### Gasoline

<table>
<thead>
<tr>
<th>Product Guide</th>
<th>Page</th>
<th>Class</th>
<th>MIG</th>
<th>AC Tig</th>
<th>DC Tig</th>
<th>DCIG</th>
<th>Weldability</th>
<th>Welding Metals</th>
<th>Std. Generator Pwr. (watts)</th>
<th>Welding Amp Range</th>
<th>Engine Brand</th>
<th>Special Features</th>
<th>Typical Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue Star® 185</td>
<td>67</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>Lift eye, optional lift eye or running gear</td>
<td>Steel</td>
<td>8,500</td>
<td>60–185 DC</td>
<td>Kohler</td>
<td>Compact, portable</td>
<td>Maintenance, service trucks</td>
</tr>
<tr>
<td>Bobcat® 225</td>
<td>68</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>Lift eye, pickup mount, optional running gear</td>
<td>Steel, aluminum, stainless</td>
<td>11,000</td>
<td>70–150 AC 50–225 DC</td>
<td>Kohler</td>
<td>Cost-effective AC/DC stick</td>
<td>Maintenance, farm/ranch, construction</td>
</tr>
<tr>
<td>Bobcat® 3 Phase</td>
<td>68</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>Lift eye, pickup mount, optional running gear</td>
<td>Steel, aluminum, stainless</td>
<td>11,000</td>
<td>50–200 AC 50–210 DC</td>
<td>Kohler</td>
<td>Backup power for pivot, irrigation</td>
<td>Farm/ranch</td>
</tr>
<tr>
<td>Trailblazer® 325</td>
<td>70</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>Lift eye, pickup mount, optional running gear</td>
<td>Steel</td>
<td>12,000</td>
<td>10–325 DC</td>
<td>Kohler</td>
<td>Auto-Speed™, optional EFI, Excel™ power and battery charge/jump start</td>
<td>Fab, structural, maintenance, repair, pipe</td>
</tr>
<tr>
<td>Trailblazer® 302 Air Pak™</td>
<td>72</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>Lift eye, pickup mount, optional running gear</td>
<td>Steel, stainless</td>
<td>13,000</td>
<td>10–225 AC 10–350 DC</td>
<td>Kohler</td>
<td>AC/DC, CC/CV, 31 cm air, battery charge/jump start</td>
<td>Service/maintenance, construction</td>
</tr>
</tbody>
</table>

### Gas or LP

<table>
<thead>
<tr>
<th>Product Guide</th>
<th>Page</th>
<th>Class</th>
<th>MIG</th>
<th>AC Tig</th>
<th>DC Tig</th>
<th>DCIG</th>
<th>Weldability</th>
<th>Welding Metals</th>
<th>Std. Generator Pwr. (watts)</th>
<th>Welding Amp Range</th>
<th>Engine Brand</th>
<th>Special Features</th>
<th>Typical Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bobcat® 250</td>
<td>68</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>Lift eye, optional lift eye or running gear</td>
<td>Steel, aluminum, stainless</td>
<td>11,000</td>
<td>40–250 DC 40–275 DC w/EFI</td>
<td>Kohler</td>
<td>Most popular engine drive, AC/DC, optional EFI</td>
<td>Fab, maintenance, farm/ranch, construction</td>
</tr>
<tr>
<td>Trailblazer® 275</td>
<td>70</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>Lift eye, optional lift eye or running gear</td>
<td>Steel, stainless</td>
<td>12,000</td>
<td>10–275 DC</td>
<td>Kohler</td>
<td>Auto-Speed™</td>
<td>Fab, structural, maintenance, repair, pipe</td>
</tr>
</tbody>
</table>

### Diesel

<table>
<thead>
<tr>
<th>Product Guide</th>
<th>Page</th>
<th>Class</th>
<th>MIG</th>
<th>AC Tig</th>
<th>DC Tig</th>
<th>DCIG</th>
<th>Weldability</th>
<th>Welding Metals</th>
<th>Std. Generator Pwr. (watts)</th>
<th>Welding Amp Range</th>
<th>Engine Brand</th>
<th>Special Features</th>
<th>Typical Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bobcat® 250 Diesel</td>
<td>68</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>Lift eye, optional lift eye or running gear</td>
<td>Steel, aluminum, stainless</td>
<td>11,000</td>
<td>40–275 DC</td>
<td>Kubota</td>
<td>Contractor’s choice, AC/DC stick, strong FCAW</td>
<td>Fab, maintenance, farm/ranch, construction</td>
</tr>
<tr>
<td>Trailblazer® 325 Diesel</td>
<td>70</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>Lift eye, generally mounted on optional trailer</td>
<td>Steel, stainless</td>
<td>12,000</td>
<td>10–325 DC</td>
<td>Kubota</td>
<td>Auto-Speed™, optional Excel™ power</td>
<td>Fab, structural, maintenance, repair, pipe</td>
</tr>
<tr>
<td>Big Blue® 350 PipePro®</td>
<td>73</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>Lift eye, generally mounted on optional trailer</td>
<td>Steel, stainless</td>
<td>12,000</td>
<td>20–400 DC</td>
<td>CAT, Mitsubishi</td>
<td>Premium pipe arc, LNE-X™ cover</td>
<td>Pipeline</td>
</tr>
<tr>
<td>Big Blue® 400 Pro</td>
<td>73</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>Lift eye, generally mounted on optional trailer</td>
<td>Steel, stainless</td>
<td>12,000</td>
<td>20–400 DC</td>
<td>Kubota, Mitsubishi</td>
<td>Quiet, compact, fuel efficient</td>
<td>Construction, rental, repair</td>
</tr>
<tr>
<td>Big Blue® 500 Pro</td>
<td>74</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>Lift eye, generally mounted on optional trailer</td>
<td>Steel, stainless</td>
<td>21,000</td>
<td>20–500 DC</td>
<td>Deutz, Perkins</td>
<td>Quiet, powerful, fuel efficient</td>
<td>Construction, rental, repair</td>
</tr>
<tr>
<td>Big Blue® 600 Pro</td>
<td>74</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>Lift eye, generally mounted on optional trailer</td>
<td>Steel, stainless</td>
<td>27,000</td>
<td>20–600 DC</td>
<td>Kubota</td>
<td>Quiet, powerful, fuel efficient</td>
<td>Construction, rental, repair</td>
</tr>
<tr>
<td>Big Blue® 450 Duo CST™</td>
<td>75</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>Lift eye, optionally mounted on optional trailer</td>
<td>Steel, stainless</td>
<td>10,000</td>
<td>5–450 DC</td>
<td>Mitsubishi</td>
<td>Dual operator in a compact package</td>
<td>Construction, fabrication, pipe</td>
</tr>
<tr>
<td>Big Blue® 700 Duo Pro</td>
<td>75</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>Lift eye, optionally mounted on optional trailer</td>
<td>Steel, stainless</td>
<td>20,000</td>
<td>20–800 DC</td>
<td>Deutz</td>
<td>Premium pipe arc, dual operator</td>
<td>Pipeline, construction, mining</td>
</tr>
<tr>
<td>Big Blue® 800 Duo Pro</td>
<td>76</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>Lift eye, optionally mounted on optional trailer</td>
<td>Steel, stainless</td>
<td>27,000</td>
<td>20–800 DC</td>
<td>Deutz</td>
<td>Heavy duty, dual operator</td>
<td>Mining, construction, pipeline</td>
</tr>
<tr>
<td>Big Blue® 800 Duo Pro SF</td>
<td>76</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>Lift eye, optionally mounted on optional trailer</td>
<td>Steel, stainless</td>
<td>27,000</td>
<td>20–800 DC</td>
<td>Deutz</td>
<td>Smart feeder compatible</td>
<td>Mining, construction, pipe</td>
</tr>
</tbody>
</table>

### EFI advantages (vs. carburetor models)
- Up to 42 percent more fuel efficient
- Faster, more reliable starts in any weather — no choke adjustment needed
- Less refueling time
- Fewer emissions

### Gasoline advantages (vs. diesel)
- Lower product cost (by 50 to 70 percent)
- Smaller size and less weight
- Less expensive repairs
- Easier cold weather starting

### Diesel advantages (vs. gas)
- 1.5 to 2.5 times the engine life
- Required on some job sites for safety
- Typically have longer maintenance intervals
- Convenient if other equipment is diesel

**Product Key**
- Class: ☑ Light industrial ☑ Industrial ☑ Heavy industrial
- Capability: ☑ Designed for this process ☑ Capable of this process

*New! or improved! products appear in blue type. *If using self-shielded wire, use CV weld output. **With appropriate Spectrum plasma cutter.
Blue Star® 185  See literature no. 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, 6.25-gallon fuel capacity, auto-idle and engine hour meter.

Bobcat™/Trailblazer®: Which is Right for You?

### Gas Model Comparison

*Based on typical usage – 150 amps welding 60% of the time; 20 amps generator power 30% of the time; and idling without load 30% of the time.

<table>
<thead>
<tr>
<th>Bobcat (page 68)</th>
<th>Trailblazer (page 70)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The most popular welder/generator:</strong></td>
<td><strong>The best performer in the industry:</strong></td>
</tr>
<tr>
<td>• Dependable power and weld output</td>
<td>• Unbeatable arc performance</td>
</tr>
<tr>
<td>• Cost-effective multiprocess welder/generator</td>
<td>• Independent welder and generator power system</td>
</tr>
<tr>
<td>• Easy to maintain</td>
<td>• Exclusive technologies – Auto-Speed™ and Excel™ power</td>
</tr>
<tr>
<td>• Quietest in its class</td>
<td>• Most fuel efficient and quietest in its class</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bobcat 225</th>
<th>UPGRADE</th>
<th>Bobcat 250</th>
<th>UPGRADE</th>
<th>Trailblazer 275</th>
<th>UPGRADE</th>
<th>Trailblazer 325</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sound Quality</td>
<td>Good</td>
<td>Good</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Excel power available</td>
<td></td>
</tr>
<tr>
<td>Fuel System</td>
<td>Good/Very good</td>
<td>Good/Very good</td>
<td>Excellent</td>
<td>Excellent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Typical Runtime per 12-Gallon Tank*</td>
<td>13 hours</td>
<td>13/15 hours with EFI</td>
<td>15 hours</td>
<td>Up to 21 hours with options</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Efficiency</td>
<td>Good</td>
<td>Good/Very good with EFI</td>
<td>Good</td>
<td>Good/Very good with EFI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type</td>
<td>Gasoline</td>
<td>Gasoline or LP</td>
<td>Gasoline</td>
<td>Gasoline</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery</td>
<td>Carburetor</td>
<td>Carburetor or EFI available</td>
<td>Carburetor</td>
<td>Carburetor or EFI available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generator</td>
<td>11,000</td>
<td>11,000/12,000 with EFI</td>
<td>12,000</td>
<td>12,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watts</td>
<td>Very good/Excellent</td>
<td>Very good/Excellent</td>
<td>Independent weld and generator power with no interaction between tools and welding arc</td>
<td>Independent weld and generator power with no interaction between tools and welding arc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clean Power Quality</td>
<td>Fair/Good/Excellent</td>
<td>Fair/Good/Excellent</td>
<td>Excellent</td>
<td>Excellent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power White Welding</td>
<td>With voltage control set near maximum</td>
<td>Easier to line set with arc voltage control near maximum</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excel™ Power Generator (120 V, 60 Hz at all engine speeds)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
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<tr>
<td>Weld Performance</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Stick</td>
<td>Good/Very good</td>
<td>Very good</td>
<td>Good/Very good</td>
<td>Excellent</td>
<td>Excellent</td>
<td></td>
</tr>
<tr>
<td>MIG — Wire (solid/FCAW), Steel</td>
<td>Good (0.035 in.)</td>
<td>Good (0.035-0.16 in.)</td>
<td>Excellent (0.023-0.16 in.)</td>
<td>Excellent (0.023-0.16 in.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MIG — Wire, Aluminum w/Spool Gun</td>
<td>Fair/Good (add WC-115A with contactor)</td>
<td>Very good (add WC-115A with contactor)</td>
<td>Excellent (add WC-24)</td>
<td>Excellent (add WC-24)</td>
<td></td>
<td></td>
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<tr>
<td>DC TIG (steel)</td>
<td>Good</td>
<td>Very good</td>
<td>Excellent</td>
<td>Excellent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pulsed DC TIG (thin metal, out of position)</td>
<td>N/A</td>
<td>N/A</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC Weld</td>
<td>70-150amps (TIG: add HF-251D-1 and contactor kit)</td>
<td>40-250amps (TIG: add HF-251D-1 and contactor kit)</td>
<td>Add Dynasty®</td>
<td>Add Dynasty®</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Key Features

<table>
<thead>
<tr>
<th>Bobcat 225</th>
<th>UPGRADE</th>
<th>Bobcat 250</th>
<th>UPGRADE</th>
<th>Trailblazer 275</th>
<th>UPGRADE</th>
<th>Trailblazer 325</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Meters with SunVision™</td>
<td>N/A</td>
<td>N/A</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Maintenance Displays</td>
<td>Hours/Oil change</td>
<td>Hours/Oil change/Fuel</td>
<td>Hours/Oil change/Fuel/RPMs</td>
<td>Hours/Oil change/Fuel/RPMs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Battery Charge / Jump Start</td>
<td>N/A</td>
<td>N/A</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>14-pin Receptacle</td>
<td>N/A</td>
<td>N/A</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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</table>

### Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Continuous Output</th>
<th>Peak Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bobcat 225</td>
<td>6,200 watts</td>
<td>6,500 watts</td>
</tr>
<tr>
<td>Bobcat 250</td>
<td>6,200 watts</td>
<td>6,500 watts</td>
</tr>
<tr>
<td>Trailblazer 275</td>
<td>6,200 watts</td>
<td>6,500 watts</td>
</tr>
<tr>
<td>Trailblazer 325</td>
<td>6,200 watts</td>
<td>6,500 watts</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bobcat 225</td>
<td>D: 31.25 in. (794 mm)</td>
</tr>
<tr>
<td>Bobcat 250</td>
<td>W: 20.625 in. (524 mm)</td>
</tr>
<tr>
<td>Trailblazer 275</td>
<td>H: 24.75 in. (629 mm)</td>
</tr>
<tr>
<td>Trailblazer 325</td>
<td>W: 20.625 in. (524 mm)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bobcat 225</td>
<td>296 lb. (134 kg)</td>
</tr>
<tr>
<td>Bobcat 250</td>
<td>296 lb. (134 kg)</td>
</tr>
<tr>
<td>Trailblazer 275</td>
<td>296 lb. (134 kg)</td>
</tr>
<tr>
<td>Trailblazer 325</td>
<td>296 lb. (134 kg)</td>
</tr>
</tbody>
</table>
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.

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.

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

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.

Engine-Driven
Bobcat® 225 (Gas)  See literature no. 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 3/32, 1/8 and 5/32 inch. Very easy to set.

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

Designed for farm and ranch owners in need of single- and three-phase power to run 480-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 no. ED/4.4 (Gas/LP) and ED/4.34 (Diesel)

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 3/32, 1/8, 5/32 and 3/16 inch. 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.

### Table: Bobcat® 250 (Gas, LP or Diesel)

<table>
<thead>
<tr>
<th>Model</th>
<th>Stock Number</th>
<th>Welding Mode</th>
<th>Process</th>
<th>Amp/Volt Ranges</th>
<th>Rated Output at 104°F (40°C)</th>
<th>Generator Power at 104°F (40°C)</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bobcat 225</td>
<td>(#907 498 001) Kohler</td>
<td>CC/AC Stick/TIG</td>
<td>70–150 A</td>
<td>150 A at 25 V, 100% duty cycle</td>
<td>Single-phase: 11,000 watts Continuous: 9,500 watts</td>
<td>H: 28 in. (711 mm)</td>
<td>485 lb. (220 kg)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(#907 498) Kohler with GFCI</td>
<td>CC/DC Stick/TIG</td>
<td>50–225 A</td>
<td>225 A at 25 V, 100% duty cycle</td>
<td>E: 27 in. (686 mm)</td>
<td>475 lb. (215 kg)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bobcat 3 Phase</td>
<td>(#907 505) Kohler with GFCI</td>
<td>CC/DC Stick/TIG</td>
<td>19–28 V</td>
<td>200 A at 20 V, 100% duty cycle</td>
<td>Single-phase/three-phase: 11,000 watts Continuous: 9,500 watts</td>
<td>D: 40.5 in. (1,029 mm)</td>
<td>495 lb. (225 kg)</td>
<td></td>
</tr>
<tr>
<td>Bobcat 250</td>
<td>(#907 500 001) Kohler</td>
<td>CC/AC Stick/TIG</td>
<td>40–250 A</td>
<td>250 A at 25 V, 60% duty cycle</td>
<td>Single-phase: 11,000 watts Continuous: 9,500 watts</td>
<td>H: 28 in. (711 mm)</td>
<td>501 lb. (227 kg)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(#907 506) Kohler with GFCI</td>
<td>CC/DC Stick/TIG</td>
<td>40–275 A</td>
<td>225 A at 25 V, 100% duty cycle</td>
<td>EFi model: 9,500 watts</td>
<td>EFi model: Peak: 12,000 watts Continuous: 10,500 watts</td>
<td>D: 40.5 in. (1,029 mm)</td>
<td>638 lb. (289 kg)</td>
</tr>
<tr>
<td></td>
<td>(#907 500 002) Kohler with electric fuel pump</td>
<td>CC/DC Stick/TIG</td>
<td>40–275 A</td>
<td>225 A at 25 V, 100% duty cycle</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(#907 502) EFI Kohler</td>
<td>CC/DC Stick/TIG</td>
<td>17–28 V</td>
<td>275 A at 25 V, 60% duty cycle</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(#907 504) LP Kohler with GFCI</td>
<td>CC/DC Stick/TIG</td>
<td>17–28 V</td>
<td>275 A at 25 V, 60% duty cycle</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Processes
- AC/DC stick (SMAW)
- MIG (GMAW)*
- Flux-cored (FCAW)*
- AC/DC TIG (GTAW)
- Air carbon arc cutting and gouging (CAC)* (rated 3/16 in. carbons)
- With voltage-sensing feeder only.
- With Dynasty® 210 Series or HF-251 (non-critical).
- Bobcat 250 models only.

### Engines
- Gas: Kohler CH730
- 23.5 hp at 3,600 rpm
- EFI gas: Kohler ECH730
- 23 hp at 3,600 rpm
- LP: Kohler CH730
- Liquid withdrawal LP system
- 21.5 hp at 3,600 rpm
- V-twin-cylinder, four-cycle, overhead valve, industrial, air-cooled
- EPA Tier 4 Final Diesel: Kubota D722
- 19 hp at 3,600 rpm
- Three-cylinder, industrial, liquid-cooled

### Most popular accessories
- Suicase® X-TREME® Feeders (pg 42)
- Dynasty® 210 Series (pg 54)
- Spectrum® 625 X-TREME® (pg 82)
- Multi-Terrain Running Gear (pg 108)
- Off-Road Running Gear (pg 108)
- Protective Cage with Cable Holders (pg 108)
- Hose and LP Tank Mounting Assembly (pg 108)
- Remote Oil Drain/Filter Kit (pg 108)
- All-Purpose Running Gear (pg 108)
- Full KV Adapter Cord #300 517 (pg 108)
- Protective Cover (pg 108)
- HWY-1000 Trailer #195 013 (pg 109)
- GFCI Panel Mount 120 VAC Duplex Kit #300 975
- Electric Fuel Pump Kit* (gas models only) #300 976
- Spark Arrestor Kit (gas models only) #300 924
- Dynasty® 210 Series or
- Suitcase® X-TREME™ Feeders (pg 42)
- Miller® Options and Accessories
- Spark Arrestor Kit (gas models only)
- Dynasty® 210 Series or
- Miller® Options and Accessories
- Spark Arrestor Kit (gas models only)

### Engine Specifications

**Gasoline**
- 3 Bobcat 250 models only.
- With Dynasty
- 1 With voltage-sensing feeder only.
- V-twin-cylinder, four-cycle, overhead valve, industrial, air-cooled
- With voltage-sensing feeder only.
- 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

**Gas or LP**
- Three-cylinder, industrial, liquid-cooled
- With Dynasty
- 1 With voltage-sensing feeder only.
- 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

**Diesel**
- Three-cylinder, industrial, liquid-cooled
- With Dynasty
- 1 With voltage-sensing feeder only.
- 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

### Weight

<table>
<thead>
<tr>
<th>Model</th>
<th>Stock Number</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bobcat 225</td>
<td>(#907 498 001) Kohler</td>
<td>485 lb. (220 kg)</td>
</tr>
<tr>
<td></td>
<td>(#907 498) Kohler with GFCI</td>
<td>495 lb. (225 kg)</td>
</tr>
<tr>
<td>Bobcat 3 Phase</td>
<td>(#907 505) Kohler with GFCI</td>
<td>501 lb. (227 kg)</td>
</tr>
<tr>
<td>Bobcat 250</td>
<td>(#907 500 001) Kohler</td>
<td>501 lb. (227 kg)</td>
</tr>
<tr>
<td></td>
<td>(#907 506) Kohler with GFCI</td>
<td>638 lb. (289 kg)</td>
</tr>
<tr>
<td></td>
<td>(#907 500 002) Kohler with electric fuel pump</td>
<td>638 lb. (289 kg)</td>
</tr>
<tr>
<td></td>
<td>(#907 502) EFI Kohler</td>
<td>638 lb. (289 kg)</td>
</tr>
<tr>
<td></td>
<td>(#907 504) LP Kohler with GFCI</td>
<td>638 lb. (289 kg)</td>
</tr>
<tr>
<td>Bobcat 250 Diesel</td>
<td>(#907 565) Kubota with GFCI</td>
<td>638 lb. (289 kg)</td>
</tr>
</tbody>
</table>
Trailblazer® Series
Gas, LP and Diesel

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.

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.

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 job sites
Quieter job sites 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™ in XX18 mode

Welding below 150 A
2,400 RPM

Welding between 151–210 A
2,800 RPM

Welding between 211–250 A
3,200 RPM

Welding above 250 A
3,600 RPM

Welding at idle speed
3,200 RPM

Fewer refueling trips
Spend more time working and less time refueling. Only Trailblazer welder/generators provide Auto-Speed technology, plus Excel power and electronic fuel injection (EFI) options, to deliver maximum runtime.

More portable, uses less truck space
Smaller and lighter — 17 percent less cubic space and 10 percent less machine weight than the competition — means moving Trailblazer welder/generators is faster and easier, for maximum productivity.

17% LESS CUBIC SPACE THAN THE COMPETITION
Options to Maximize Your Trailblazer 325 Performance

Excel™ power

Unlike competitive machines that provide auxiliary power only at 3,600 rpm (max), Excel power delivers a full 2,400 watts (20 A) of 120-volt inverter-based, pure sine wave power at all speeds, including idle. With Excel power you can operate jobsite tools like grinders at quiet, fuel-saving speeds.

Refueling time and operating costs are reduced with Excel power, which means more productivity and profitability. Plus everyone on the jobsite gets a better working environment because noise levels and exhaust emissions are lowered. Excel power — available only from Miller.

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 40 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.

Battery charge/jump start (gas models)

Reduce downtime with battery charge/jump start capability. Designed and recommended for mechanics or anyone else responsible for a fleet of trucks or equipment. By using your Trailblazer to charge dead batteries or jump a stubborn engine, you’ll keep your crew working and the fleet up and running.

Note: Battery charge/jump cables (#300 422) must be ordered separately.

*Recommended for operation at altitudes above 5,000 feet.
**Trailblazer® 302 Air Pak**

See literature no. ED/4.78

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

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

**Strongest combined generator/compressor power.** Delivers an industry-leading 13,000 watts of peak generator power independent of weld settings — can power a Spectrum® 875 plasma cutter, and provide air for plasma cutting at the same time (rated 5/8-inch mild steel).

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

**Battery charge/jump start.** Provides selectable 12- or 24-volt battery charging capability with up to 450 amps of battery jump-starting capability. Convenient front panel battery charger/jumper starter access.

*Note: Battery charge/jump cables (#300 422) must be ordered separately.*

---

**EPA Tier 4 Final**

**Cleaner Equipment, Cleaner Air**

**Tier 4 Final (T4F)** is the U.S. Environmental Protection Agency’s (EPA’s) latest step in a series of increasingly strict emission standards for diesel engines. It has resulted in diesel engines that not only operate more cleanly, but also produce power more efficiently. As the world becomes more environmentally conscious to care for future generations; Miller has redesigned its diesel engine-driven welder/generator product line.

For every job, there’s a Miller® welder/generator to get the job done right.

Selecting the right size of welder/generator helps maximize your resource efficiency and reduce your emissions footprint. Demanding tasks such as welding thick metals and gouging large-diameter carbs may require amperage that only a higher-horsepower machine can provide. Jobs requiring less amperage often can be handled by machines having less than 25 hp, which are not subject to the same T4F regulations.

See page 113

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**Stock Number**

- (#907 549 001) Kohler
- (#907 549) Kohler with GFCI and electric fuel pump*
- (#907 549 003) Kohler with GFCI, cooler/separator and electric fuel pump*

**Process**

- **CC/DC** Stick/TIG
- **CV/DC** MIG/GMAW
- **CC/AC** TIG/stick

**Rangings**

- **10–225 A**
- **300–1,000 A**
- **20–150 V**
- **350–600 A**
- **80–160 V**

**Rated Weld Output at 104°F (40°C)**

- **CC/DC Stick/TIG:** 280 A at 32 V, 100% duty cycle
- **CV/DC MIG/GMAW:** 300 A at 32 V, 100% duty cycle
- **CC/AC TIG/stick:** 200 A at 25 V, 60% duty cycle

**Continuous:** 11,000 watts

**Peak:** 13,000 watts

**Working Pressure Constant:** 5 psi

**Working Pressure:**

- **Continuous:** 80–160 psig
- **Peak:** 100

**Capacity**

- **Net:** 1.75 qt. (1.7 L)
- **Oil:** 1.75 qt. (1.7 L)

**Dimensions**

- **H:** 28 in. (711 mm)
- **W:** 20 in. (508 mm)
- **D:** 59.625 in. (1,514 mm)

**Heavy industrial**

- **AC/DC stick (SMAW)**
- **MIG (GMAW)**
- **Flux-cored (FCAW)**
- **AC/DC** TIG (GTAW)
- **Air carbon arc cutting and gouging (CAC-A) (rated 3/16 in. carbons, capable 1/4 in. carbons)**
- **Lift-Arc™ TIG modes for most DC TIG applications**

**Most popular accessories**

- **Spoolmatic® 30A Aluminum Spool Gun / WC-24 Control**
- **SuitCase® X-TREME 12VS (pg 42)**
- **25 ft. Battery Charge/Jump Cables with Plug #300 422**

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

For every job, there’s a Miller® welder/generator to get the job done right.

Selecting the right size of welder/generator helps maximize your resource efficiency and reduce your emissions footprint. Demanding tasks such as welding thick metals and gouging large-diameter carbs may require amperage that only a higher-horsepower machine can provide. Jobs requiring less amperage often can be handled by machines having less than 25 hp, which are not subject to the same T4F regulations.
Big Blue® 350 PipePro®

See literature no. ED/5.4

Designed for transmission pipeline work, this system offers a complete welding solution. With stick as well as MIG/FCAW welding capabilities it is ideal for the most demanding pipeline jobs.

- Easy arc starts and better arc control provide improved performance to produce more consistent welds.
- Enhanced MIG/FCAW arc control for best in class performance.
- The vault — ultimate control board reliability. A sealed aluminum case protects the circuit board from dust, dirt, moisture and heat.
- Low OCV stick (VRD) for improved operator safety without compromising arc starts.
- Auto Remote Sense™ (ARS) eliminates confusion of a remote/panel switch.
- Compact size and weight optimizes truck space.
- LINE-X® cover provides superior impact, corrosion and abrasion protection.
- Quiet operation. Only 70.7 decibels (95.5 Lwa) under full load. Improves jobsite communication and safety.
- EPA, CSA, IEC and NEMA compliant.
- Standard features include digital preset weld meters, auto idle, 120-volt block heater and output contactor control.
- Optional stainless steel package available.

Big Blue® 400 Pro

See literature no. ED/5.7

Clean, quiet and reliable low-speed EPA-compliant diesel is more efficient than ever before. Ideal for construction, piping and fleet use.

- 400-amp output now available in a compact package. Provides up to 400 amps at 100 percent duty cycle.
- The vault — ultimate control board reliability. A sealed aluminum case protects the circuit board from dust, dirt, moisture and heat.
- Low OCV stick (VRD) for improved operator safety without compromising arc starts.
- Tailored arc control (DIG) allows arc characteristics to be changed for specific applications and electrodes. Smooth running 7018 or stiffer, more penetrating 6010.
- Quiet operation. Only 71.6 decibels (96 Lwa) under full load. Improves jobsite communication and safety.
- EPA, CSA, IEC and NEMA compliant.
- Standard features include digital weld meters, auto idle, 120-volt block heater and output contactor control.

System components (order items separately)
- Miller® Big Blue 350 PipePro engine drive
- Miller SuitCase® X-TREME™ wire feeder
- Bernard™ PipePro Dura-Flux™ gun
- Miller® Big Blue 350 PipePro engine drive

Diesel engines
- EPA Tier 4 Final choices
  - CAT C1.5: 24.7 hp at 1,800 rpm
  - Mitsubishi 4L2: 24.7 hp at 1,800 rpm
  - Note: Engines are warranted separately by engine manufacturer.

Big Blue 350 PipePro System
- (order items separately)
  - Big Blue 350 PipePro engine drive
  - SuitCase® X-TREME feeder with Bernard PipePro Dura-Flux gun
  - High torque, air-cooled, four-cylinder engines
  - Mitsubishi S4L2: 24.7 hp at 1,800 rpm
  - Two-stroke, liquid-cooled, single-cylinder engines
  - Kubota V1505: 20.2 hp at 1,800 rpm

Most popular accessories
- Spectrum® 875 (pg 82)
- Dynasty® 210 Series (pg 54)
- DynaMax® 8100 (pg 55)
- DynaMax® 8100 (pg 55)

Processes
- Stick (SMAW) • MIG (GMAW) • Flux-cored (FCAW) • TIG (GTAW)
- Air carbon arc cutting and gouging (CAC-A) (rated 1/4 in. carbons)
## Processes
- Stick (SMAW) • MIG (GMAW)
- Flux-cored (FCAW) • DC TIG (GTAW)
- Air carbon arc cutting and gouging (CAC-A) (500: rated 5/16 in. carbons; 600: rated 3/8 in. carbons)

### Diesel engines
#### EPA Tier 4 Final choices
- **500 Pro — Deutz D2.9 L4**
  - 34.8 hp at 1,800 rpm
  - Four-cylinder, industrial, liquid-cooled
- **500 Pro — Perkins 404D.22**
  - 32.6 hp at 1,800 rpm
  - Four-cylinder, industrial, liquid-cooled
- **600 Pro — Kubota V2403**
  - 48.9 hp at 1,800 rpm
  - Four-cylinder, industrial, liquid-cooled
- **EPA Tier 4i CA model**
  - **500 Pro — Deutz D2011L03**
    - 32 hp at 1,800 rpm
    - Three-cylinder, industrial, air/oil-cooled

Note: Engines are warranted separately by engine manufacturer.

### EPA Tier 4i CA model
- **500 Pro — Deutz D2011L03**
  - 32 hp at 1,800 rpm
  - Three-cylinder, industrial, air/oil-cooled

#### Note:
- Engines are warranted separately by engine manufacturer.

#### Most popular accessories
- **SuitCase® X-TREME™ 8VS/12VS** (pg 42)
- **Full KVA Adapter Cord  #300 517** (pg 108)
- **Full KVA Plug Kit (pg 108)**
  - #119 172  Single-phase
  - #254 140  Three-phase
- **Protective Covers (pg 108)**
  - #301 113  Deutz/Kubota T4F models
  - #194 683  Perkins/Deutz CA models
- **Wireless Remote Hand Control/Wireless Antenna Kit**
  - #300 430/#300 749 (pg 113)
- **Spark Arrestor Kit  #195 012**

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

### Rated Output at 104°F (40°C)
- **Deutz T4F models**
  - **500 A at 36 V, 100% duty cycle**
  - **500 A at 38 V, 60% duty cycle**
  - **500 A at 38 V, 40% duty cycle**
- **Perkins/Deutz CA models**
  - **500 A at 36 V, 100% duty cycle**
  - **500 A at 33 V, 60% duty cycle**
  - **500 A at 30 V, 40% duty cycle**
  - **500 A at 40 V, 100% duty cycle**
  - **550 A at 42 V, 60% duty cycle**
  - **600 A at 42 V, 40% duty cycle**

### Model
<table>
<thead>
<tr>
<th>Model</th>
<th>Stock Number</th>
<th>Welding Mode/Process</th>
<th>Amp/Volt Ranges</th>
<th>Rated Output at 104°F (40°C)</th>
<th>Generator Power at 104°F (40°C)</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
</table>
| **Big Blue 500 Pro** | **Tier 4 Final** (#907 561) Deutz Deluxe model (#907 667) Perkins Deluxe model Tier 4i CA model (NOT available for sale in the USA) (#907 635) Deutz Deluxe model | CC/DC (Stick/TIG) | 20–500 A | Deutz T4F models | Three-phase  
Peak: 21,000 watts  
Continuous: 15,000 watts  
Single-phase  
Peak: 15,000 watts  
Continuous: 12,000 watts | Deutz T4F models  
H: 46 in. (1,168 mm)  
W: 28.5 in. (724 mm)  
D: 69.5 in. (1,765 mm) | 1,800 lb. (816.5 kg) |
| **Big Blue 600 Pro** | **Tier 4 Final** (#907 695) Kubota Deluxe model | CC/DC (Stick/TIG) | 20–600 A | 500 A at 40 V, 100% duty cycle  
550 A at 42 V, 60% duty cycle  
600 A at 42 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: 46 in. (1,168 mm)  
W: 28.5 in. (724 mm)  
D: 69.5 in. (1,765 mm) | 1,750 lb. (794 kg) |
Big Blue® 450 Duo CST™ See literature no. ED/5.5

Durable dual-operator welder/generator delivers proven CST 280 stick/TIG performance for maximum productivity and efficiency. Two separate outputs powered by one low-speed diesel engine delivers up to 280 amps of output per operator.

Two superior arcs in one compact package. See CST 280 (page 50) for additional details.

Save fuel, reduce maintenance costs and increase productivity.

Quiet operation. At 72.2 decibels (97 Lwa) under full load, it’s quieter than most single-operator models. Improves jobsite communication and safety.

Vandalism lockout kit (not shown). Lockable hinged steel panel protects front control and ignition switch.

Simple-to-operate process selector knob automatically sets proper DIG setting on E6010 and E7018 electrodes providing superior stick performance.

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

Remote amperage control permits the use of standard and wireless amperage control devices.

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.

See page 113. Wireless Antenna Kit (#300 749) recommended.

<table>
<thead>
<tr>
<th>Stock Number (#907 477)</th>
<th>Process</th>
<th>Output Mode</th>
<th>Amperage Range</th>
<th>Rated Output at 122°F (50°C)</th>
<th>Single-Phase Generator Power at 122°F (50°C)</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diesel Mitsubishi</td>
<td>DC stick/TIG</td>
<td>Separate (dual outputs) 5–225 A (each side) 5–280 A (one side only)</td>
<td>175 A at 27 V, 100% duty cycle</td>
<td>Continuous: 10,000 watts</td>
<td>H: 32 in. (813 mm) W: 26.25 in. (667 mm) D: 56 in. (1,422 mm)</td>
<td>1,064 lb. (483 kg)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Paralleled (combined) 10–450 A</td>
<td>350 A at 27 V, 100% duty cycle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Big Blue® 700 Duo Pro See literature no. ED/5.6

Complete multiprocess and multioperator welder/generator in one rugged package. Up to 400 amps of output per operator can be paralleled with a single switch to provide up to 800 amps of power.

Two independent pipe quality arcs in one compact package.

Multiprocess CC/CV provides independent operator controls and the best stick, flux-cored and TIG performance available with no interaction.

Easy arc starts and better arc control for best-in-class performance.

Quiet operation. At 74.7 decibels (99.5 Lwa) under full load, it’s quieter than many single-operator models. Improves jobsite communication and safety.

Independent remote control connections allow the use of standard and wireless volt/amperage control devices for each operator.

Compatible with Big Blue® 350 PipePro® system components (see page 73).

Standard features include oil pan heater, intake manifold heater, output paralleling switch and automatic idle.

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.

See page 113. Wireless Antenna Kit (#300 749) recommended.

<table>
<thead>
<tr>
<th>Stock Number (#907 461)</th>
<th>Process</th>
<th>Output Mode</th>
<th>Amp/Volt Ranges</th>
<th>Rated Output at 104°F (40°C)</th>
<th>Generator Power at 104°F (40°C)</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diesel Deutz</td>
<td>DC stick/TIG/MIG/FCAW</td>
<td>Separate (dual outputs) 20–400 A 14–40 V</td>
<td>300 A at 28 V, 100% duty cycle 400 A at 36 V, 40% duty cycle</td>
<td>Single-phase: 4,000 watts continuous Additional generator power Three-phase: 20,000 watts continuous or Single-phase: 12,000 watts continuous</td>
<td>H: 43 in. (1,092 mm) W: 28.5 in. (724 mm) D: 65.125 in. (1,654 mm)</td>
<td>1,729 lb. (784 kg)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Paralleled (combined) 40–800 A 14–40 V</td>
<td>500 A at 34 V, 100% duty cycle 700 A at 24 V, 60% duty cycle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Big Blue® 800 Series**

The most powerful lineup of diesel welder/generators in the industry. All offer robust output for welding and power generation, and are ideal for dual-operator applications on labor intensive jobsites, or jobsites with limited space.

Multi-arc welding. One dependable engine — two independent arcs with up to 400 amps each. Or plug in additional inverters for a true multioperator work platform! Example: Two additional XMT machines equals four operators, up to 200 amps each. Premium quality arcs allow operators to work independently with no arc interaction. Multioperator welding has never been easier or more versatile.

Ingersoll Rand ultra-reliable industrial rotary screw compressor (Air Pak model only). 30,000-hour life expectancy. Independent on/off control for applications not requiring compressed air — allows greater fuel savings and longer compressor service intervals.

**Smart feeder compatible (SF model only).** Advanced RMD® and pulsed MIG processes are now available in an engine-driven welder/generator. Discover increased productivity, quality, and improved efficiency in field welding with the new Big Blue 800 Duo Pro SF with FieldPro™ Smart Feeder.

**Low OCV stick (VRD)** reduces the open-circuit voltage to 15 volts when the welding power source is not in use, increasing operator safety without compromising arc starts.

**Auto Remote Sense** (ARS) detects if a remote control is plugged into the 14-pin receptacle and eliminates confusion of a remote/panel switch.

**Electronic engine display** simultaneously displays fuel level, engine hours, coolant temperature, oil pressure, battery volts and engine rpm. Also tracks oil change intervals and displays engine diagnostics for easier servicing. Air Pak model adds air pressure and compressor hours displays.

**Increased efficiency.** More arcs and better fuel economy equal increased profits for your business. Estimated savings are 34 percent with a dual-operator unit versus two single-operator units.

**Infinite arc control** allows the arc characteristics to be changed for specific applications in stick, MIG and flux-cored welding.

**Thermal overload protection** prevents machine damage if the duty cycle is exceeded or airflow is blocked.

**Standard features** include digital weld meters, automatic idle, 120-volt block heater, lockout/tagout battery disconnect switch and vandalism lockout (protects control panel and receptacles, see photo at right).

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### Diesel

<table>
<thead>
<tr>
<th>Model/Stock Number*</th>
<th>Tier 4 Final</th>
<th>Big Blue 800 Duo Pro (#907 587) Deutz</th>
<th>Big Blue 800 Duo Pro SF (#907 587 002) Deutz</th>
<th>Big Blue 800 Duo Pro SF (#951 655) Deutz</th>
<th>Deutz with FieldPro smart feeder and MIG gun</th>
<th>Big Blue 800 Duo Air Pak (#907 535) Deutz</th>
<th>Tier 4i Big Blue 800 Duo Air Pak CA model (NOT available for sale in the USA) (#907 634) Deutz</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Welding Mode/Process</strong></td>
<td><strong>Output Mode</strong></td>
<td><strong>Amp/Volt Ranges</strong></td>
<td><strong>Rated Output at 100% Duty Cycle at 104°F (40°C)</strong></td>
<td><strong>Generator Power at 104°F (40°C)</strong></td>
<td><strong>Dimensions</strong></td>
<td><strong>Net Weight</strong></td>
<td></td>
</tr>
<tr>
<td>CC/DC (Stick/TIG)</td>
<td>Separate (dual outputs)</td>
<td>20–400 A</td>
<td>400 A at 36 V (each side)</td>
<td>Three-phase Peak: 27,000 watts Continuous: 20,000 watts Single-phase Peak: 15,000 watts Continuous: 12,000 watts</td>
<td>H: 46 in. (1,168 mm) W: 28.5 in. (724 mm) D: 69.5 in. (1,765 mm)</td>
<td>2,095 lb. (968 kg)</td>
<td></td>
</tr>
<tr>
<td>Paralleled (combined)</td>
<td>40–800 A</td>
<td>700 A at 44 V, 800 A at 38 V</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CV/DC (MIG/FCAW)</td>
<td>Separate (dual outputs)</td>
<td>14–40 V</td>
<td>400 A at 34 V (each side)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paralleled (combined)</td>
<td>14–40 V</td>
<td>750 A at 40 V, 800 A at 38 V</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Ingersoll Rand CESS G1 Air Compressor

- **Features:** Rotary screw with electric clutch for on/off, oil change intervals of 500 hours, life expectancy of 30,000 hours
- **Free Air Delivery:** Idle: 40 cfm (1.13 m³/min.) Web: 60 cfm (1.70 m³/min.)
- **Working Pressure Constant:** 100 psi (7 bar)
- **Duty Cycle:** 100%
- **Capacity:** 4 qt. (3.71 L)
- **Automatic Compressor Shutdowns:** Oil temperature

---

EPA Tier 4 Final models

- Deutz TD2.9 L4
- 65.7 hp at 1,800 rpm Turbo-charged, four-cylinder, industrial, liquid-cooled
- EPA Tier 4i CA model
- 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**

- FieldPro™ Smart Feeder (Duo Pro SF model only) #300 935 (pg 38)
- SuitCase® X-TREME® SVS/12VS (pg 42)
- Full KVA Adapter Cord #300 517 (pg 108)
- Full KVA Plug Kit (pg 108) #119 172 Single-phase #254 140 Three-phase
- Protective Cover #301 113 (pg 108)
- Wireless Remote Hand Control/ Wireless Antenna Kit #300 430/#300 749 (pg 113)

- Desiccant Air Dry System (Air Pak only)
- #195 117 Side mount #195 117 001 Rear mount
- Eliminates moisture in the air stream and prevents air line freeze-ups in cold climates.
- Spark Arrestor Kit #195 012

Visit MillerWelds.com or your distributor for other Miller® options and accessories.
Air-Cooled Spot Welders

MSW and LMSW Series lightweight, air-cooled units are portable, easy to operate, and provide a quick and effective means for spot welding mild, galvanized or stainless materials.

“T” models include timer panel with a 0 to 5 second weld timer and power on/off switch. Timer panel can be mounted on the optional SWP-2 pedestal or any other convenient location. Includes 10-foot (3 m) input power and interconnecting cords.

Hand lever locks tongs firmly on material, ensuring positive, accurate fit-up. Accommodates a wide variety of tongs and tips (ordered separately). Quick and easy adjustment for material thickness. Reversible for left- or right-hand operation.

*Tongs and tips must be ordered separately – see literature no. SW/1.0 for full range of tongs and tips.

<table>
<thead>
<tr>
<th>Model/Stock Number*</th>
<th>Input Power</th>
<th>Work Capacity (Combined thickness uncoated mild steel using 6 in. [152 mm] tongs)</th>
<th>Rated Output</th>
<th>Rated Output Calibrated with Standard-Type Tongs</th>
<th>Max Open-Circuit Voltage</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSW-41 (#900 371)</td>
<td>110 V, 30 A, 50/60 Hz</td>
<td>1/8 in. (3.2 mm) or two pieces of 20 ga. (1.8 mm) galvanized steel</td>
<td>1.5 kW at 50% duty cycle</td>
<td>5,550 A 4,500 A 3,600 A</td>
<td>1.6 VAC</td>
<td>H: 6 in. (152 mm) W: 3.75 in. (95 mm) D: 13 in. (330 mm)</td>
<td>22 lb. (10 kg)</td>
</tr>
<tr>
<td>MSW-41T (#901 345)</td>
<td>with timer</td>
<td>3/16 in. (4.7 mm) or two pieces of 16 ga. (3.0 mm) galvanized steel</td>
<td>2.5 kW at 50% duty cycle</td>
<td>6,750 A 5,800 A 4,850 A</td>
<td>2.5 VAC</td>
<td>H: 6 in. (152 mm) W: 3.75 in. (95 mm) D: 16 in. (406 mm)</td>
<td>30 lb. (14 kg)</td>
</tr>
<tr>
<td>MSW-52 (#900 377)</td>
<td>220 V, 30 A, 50/60 Hz</td>
<td>3/16 in. (4.7 mm) or two pieces of 16 ga. (3.0 mm) galvanized steel</td>
<td>2.5 kW at 50% duty cycle</td>
<td>6,750 A 5,800 A 4,850 A</td>
<td>2.5 VAC</td>
<td>H: 6 in. (152 mm) W: 3.75 in. (95 mm) D: 13 in. (330 mm)</td>
<td>34 lb. (15 kg)</td>
</tr>
<tr>
<td>LMSW-52T (#901 357)</td>
<td>with timer</td>
<td>3/16 in. (4.7 mm) or two pieces of 16 ga. (3.0 mm) galvanized steel</td>
<td>2.5 kW at 50% duty cycle</td>
<td>6,750 A 5,800 A 4,850 A</td>
<td>2.5 VAC</td>
<td>H: 6 in. (152 mm) W: 3.75 in. (95 mm) D: 16 in. (406 mm)</td>
<td>42 lb. (19 kg)</td>
</tr>
</tbody>
</table>

For more detailed information, visit MillerWelds.com/spotwelders
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

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.

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 IP-23 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.*

SubArc Interface Controls

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.

SubArc Interface Digital

SubArc Interface Analog

Heavy Industrial

Processes
• Submerged arc (SAW)
• Electroslag (ESW)
• Air carbon arc cutting and gouging (CAC-A)

Most popular accessories
• 15 ft. (4.6 m) SubArc Parallel Cable #260 775 015 (pg 111)
• 15 ft. (4.6 m) SubArc Tandem Cable #260 878 015 (pg 111)
• 14-pin Insight Core Module #301 072 (requires Insight Core to SubArc Digital Series Adapter Kit #301 295)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.
SubArc Flux Hopper Digital Low Voltage is a heavy-duty, right-angle drive assembly designed for automated strip cladding applications.

SubArc Wire Drive 400 and 780 Digital Low Voltage are right-angle wire drive assemblies. The 400 model is standard speed and the 780 is high speed.

**Most popular accessories**

- Motor Extension Cables (pg 111)
  - #254 232 005  5 ft. (1.5 m)
  - #254 232 010  10 ft. (3 m)
  - #254 232 025  25 ft. (7.6 m)
  - #254 232 065  65 ft. (19.8 m)
- Single-Wire Straightener #199 733 (pg 111)
- Twin-Wire Straighteners (for Twin-Wire torches only) (pg 111)
  - #301 160  Single adjustment
  - #301 162  Double/separate adjustment
- Drive Rolls (pg 111)
  - #301 137  Single slide
  - #301 138  Cross slide

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

**SubArc Torches**

See literature no. AD/7.3

**OBT 600 (#043 923)** is a 600-amp, 100 percent duty cycle torch with concentric flux flow nozzle. Can be used with 1/16–3/16 inch (1.6–4.8 mm) wire.

**OBT 1200 (#043 900)** is a 1,200-amp, 100 percent duty cycle torch with concentric flux flow nozzle. Can be used with 1/16–3/16 inch (1.6–4.8 mm) wire. OBT 1200 features a replaceable breakaway adapter end to prevent costly damage should torch run into an obstruction.

1200-Amp Single-Wire Torch (#301 141 short)

1200-Amp Twin-Wire Torch (#301 143 short, #301 144 long)

Both of the short torches are 11.3 inches (288 mm) in length and the long torch is 16.8 inches (427 mm). The single-wire torch uses 1/16–5/32 inch (1.6–4.0 mm) consumables and the twin-wire torches use 3/64–3/32 inch (1.2–2.4 mm) consumables.

**Most popular accessories**

- OBT 600 Torch Body Extensions (pg 111)
  - #043 967  1 inch (25.4 mm)
  - #043 969  2 inch (50.8 mm)
  - #043 973  4 inch (101.6 mm)
  - #043 975  6 inch (152.4 mm)
- OBT 1200 Torch Body Extension #043 981 (pg 111)
- Contact Tips (pg 111)

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

**SubArc Flux Hopper**

See literature no. 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.
Submerged Arc

SubArc Tractor

See literature no. AD/7.5

Designed and built to provide maximum reliability in the toughest conditions. This simple-to-use self-propelled submerged arc welding tractor can easily connect to SubArc DC or AC/DC Digital power supplies.

Vertical, horizontal and rotary torch adjustment allows for greater access to hard-to-reach spots.

Heavy-duty, four-wheel, chain-driven trackless operation with rubber wheels provides superior and reliable mobility.

Manual clutch enables freewheeling movement of the tractor.

Travel speed is precisely controlled by a closed-loop microprocessor control with tach feedback.

Packages include

- SubArc Tractor with remote start/stop control and guide rolls
- SubArc Interface weld controller (analog or digital)
- SubArc Wire Drive 400 for Tractor
- 25 lb. (11.3 kg) capacity flux hopper with valve
- 60 lb. (27 kg) wire reel
- OBT 600 torch
- Wire straightener

Most popular accessories

- SubArc Control Cables (pg 111)
- Contact Tips (pg 111)
- Drive Rolls (pg 111)

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

SubArc Portable Welding System

See literature no. AD/7.6

Self-contained system for pressure vessel, pipe and general welding applications. Houses a power source, column and boom on a mobile platform.

Built-in fork pockets and caster wheels allows welding system to be brought to the joint.

Ease of positioning the weld head through use of integrated motorized column, manual telescoping boom, cross slides and 360-degree column rotation.

Motorized column with pendant control and manual telescoping boom provide 44 inches (1,117 mm) of vertical travel and 31 inches (787 mm) of horizontal travel respectively.

Manual cross slides provide 7.87 inches (200 mm) of fine vertical and horizontal torch adjustment.

Systems include

- Portable column and boom
- SubArc Digital power source
- SubArc Interface Digital and control cable
- SubArc Wire Drive 400 Digital Low Voltage
- 25 lb. (11.3 kg) capacity flux hopper with valve
- 60 lb. (27 kg) wire reel and support assembly
- OBT 600 torch (650 system) or OBT 1200 torch (both 1000 systems)
- Wire straightener
- Manual cross slides

Most popular accessories

- Contact Tips (pg 111)
- Drive Rolls (pg 111)

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

Miller recommends

Customers count on Hobart® to provide an exceptional level of expertise and commitment in developing unique filler metal and flux solutions with them to meet current and future challenges.

Rely on Hobart for submerged arc applications and all your welding needs.

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

Questions? Hobart is here to help.
Plasma Cutters

Plasma Product Guide

<table>
<thead>
<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Spectrum® 625 X-TREME™</td>
<td>82</td>
<td>40 A at 50%</td>
<td>5/8 in.</td>
<td>1/2 in.</td>
<td>3/8 in.</td>
<td>7/8 in.</td>
<td>Auto-Line™: 120–240 V, MVP™ adapters, Auto-Refire™ automatic air regulation, only 21 lb., XT40 or XT40M torch</td>
<td>Maintenance, light construction, body shops, prototyping</td>
</tr>
<tr>
<td>Spectrum® 875 Auto-Line™</td>
<td>82</td>
<td>60 A at 50%</td>
<td>7/8 in.</td>
<td>7/8 in.</td>
<td>5/8 in.</td>
<td>1-1/4 in.</td>
<td>Auto-Refire™ automatic air regulation, only 49 lb., XT60 or XT60M torch</td>
<td>Construction, maintenance/repair, fabrication</td>
</tr>
</tbody>
</table>

| Spectrum® 875 Auto-Line™ | 82 | 208: 60 A at 40% | 230–380 V: 60 A at 50% | 380–575 V: 60 A at 60% | 7/8 in. | 7/8 in. | 5/8 in. | 1-1/4 in. | Auto-Line™: 208–575 V, Auto-Refire™ automatic air regulation, only 54 lb., XT60 or XT60M torch | Construction, maintenance/repair, fabrication |

<table>
<thead>
<tr>
<th>Engine-Driven Welder/Generator</th>
<th>Continuous Generator Power</th>
<th>Spectrum 375 X-TREME Steel Cut / Output Amp Setting**</th>
<th>Spectrum 625 X-TREME Steel Cut / Output Amp Setting**</th>
<th>Spectrum 875 / 875 Auto-Line Steel Cut / Output Amp Setting**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue Star® 185</td>
<td>8.2 kW</td>
<td>3/8 in. / 30 A</td>
<td>Not recommended</td>
<td>Not recommended</td>
</tr>
<tr>
<td>Bobcat® and Trailblazer®</td>
<td>9.5/10.5 kW</td>
<td>3/8 in. / 30 A</td>
<td>5/8 in. / 40 A</td>
<td>1/2 in. / 45 A</td>
</tr>
<tr>
<td>Big Blue® 350 PipePro®, 400 Pro and 450 Duo CST™</td>
<td>10 kW</td>
<td>3/8 in. / 30 A</td>
<td>5/8 in. / 40 A</td>
<td>1/2 in. / 45 A</td>
</tr>
<tr>
<td>Big Blue® 500 Pro</td>
<td>1-ph: 12 kW, 3-ph: 15 kW</td>
<td>3/8 in. / 30 A</td>
<td>5/8 in. / 40 A</td>
<td>5/8 in. / 50 A</td>
</tr>
<tr>
<td>Big Blue® 600 Pro, 800 Duo Pro and 800 Duo Air Pak™</td>
<td>1-ph: 12 kW, 3-ph: 20 kW</td>
<td>3/8 in. / 30 A</td>
<td>5/8 in. / 40 A</td>
<td>7/8 in. / 50 A</td>
</tr>
</tbody>
</table>

*Note on cut capacity ratings: The Spectrum Series rating system is designed to provide a guide to help our customers choose the right machine for their application. Rated cut capacity is based on traveling approximately 15 inches per minute to achieve a steady, precise cut. This is the key rating that should meet or exceed your typical cutting thickness requirements. Sever cut is the maximum cut achieved in ideal conditions. Some factors that dictate 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 aluminum and other metals with high thermal conductivity, cutting capacities may be derated as much as 30 percent.

For more detailed information, visit MillerWelds.com/plasmacutters
Cut capacity ratings are based on traveling speed of approximately 15 inches per minute to achieve a precise cut. This is the key rating that should meet or exceed your typical cutting thickness requirements. Factors that can affect actual cut speeds, thickness capacity and duty cycles are: types of thermally conductive material being cut, available input power, output power settings and operator technique. For highly thermal conductive metals such as aluminum, cutting capacities may be reduced up to 30 percent compared to mild steel.

**Cutting Capacities:**

- **Aluminum:** 5/8 in. (15.9 mm) for Spectrum 625 X-TREME.
- **Stainless:** 1/2 in. (12.7 mm) for Spectrum 625 X-TREME.
- **Steel/Stainless/Aluminum:** 3/8 in. (9.5 mm) for Spectrum 375 X-TREME, 5/8 in. (15.9 mm) for Spectrum 625 X-TREME, 7/8 in. (22.2 mm) for Spectrum 875 and 875 Auto-Line.

**Features:**

- **Ultra-Quick Connect** 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**.

**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.

**Machine Torch Capable:**
- Spectrum 625 X-TREME and both 875 models can be ordered with a machine torch or can be converted to use a machine torch with optional automation kits (page 110).
- **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 25- or 50-foot cable lengths.

**Cutting Capacities:**

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

---

**Spectrum Features**

<table>
<thead>
<tr>
<th>Feature</th>
<th>375 X-TREME</th>
<th>625 X-TREME</th>
<th>875 Auto-Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto-Line (120–240 V)</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Auto-Line (208–575 V)</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>MVP™ Plugs/Adapters</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Ultra-Quick Connect Torch with Flexible Cable</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Quick Connect Flexible Work Cable with Clamp</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Built-in Gas/Air Filter and Regulator</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Auto-Refire</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Auto Postflow</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Auto Air Regulation</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>X-CASE™</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>extended cable with clamp</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Auto-Line (120–240 V)</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Auto-Line (208–575 V)</td>
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<tr>
<td>MVP™ Plugs/Adapters</td>
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<tr>
<td>Ultra-Quick Connect Torch with Flexible Cable</td>
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<tr>
<td>Quick Connect Flexible Work Cable with Clamp</td>
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<tr>
<td>Built-in Gas/Air Filter and Regulator</td>
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<tr>
<td>Auto-Refire</td>
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<tr>
<td>Auto Postflow</td>
<td>●</td>
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<tr>
<td>Auto Air Regulation</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>X-CASE™</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

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**Steel/Stainless/Aluminum Rated Capacity**

- **Steel/Aluminum:**
  - 3/8 in. (9.5 mm)
  - 5/8 in. (15.9 mm)
  - 7/8 in. (22.2 mm)
- **Steel/Stainless:**
  - 3/8 in. (9.5 mm)
  - 5/8 in. (15.9 mm)
- **Stainless:**
  - 5/8 in. (15.9 mm)

---

**Models/ Packages**

**Hand-Held Torch Packages**

<table>
<thead>
<tr>
<th>Model</th>
<th>12 ft. (3.7 m)</th>
<th>20 ft. (6.1 m)</th>
<th>50 ft. (15.2 m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spectrum 375 X-TREME</td>
<td>(907 529)</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Spectrum 625 X-TREME</td>
<td>(907 579)</td>
<td>(907 579 001)</td>
<td>(907 579 002)</td>
</tr>
<tr>
<td>Spectrum 625 X-TREME</td>
<td>(907 579 001)</td>
<td>(907 579 002)</td>
<td>(907 579 003)</td>
</tr>
<tr>
<td>Spectrum 875</td>
<td>–</td>
<td>(907 583)</td>
<td>(907 583 001)</td>
</tr>
<tr>
<td>Spectrum 875</td>
<td>(907 583)</td>
<td>(907 583 001)</td>
<td>(907 584)</td>
</tr>
<tr>
<td>Spectrum 875 Auto-Line</td>
<td>–</td>
<td>(907 584)</td>
<td>(907 584 001)</td>
</tr>
</tbody>
</table>

**Machine Torch Packages**

<table>
<thead>
<tr>
<th>Model</th>
<th>25 ft. (7.6 m)</th>
<th>50 ft. (15.2 m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spectrum 375 X-TREME</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Spectrum 625 X-TREME</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Spectrum 875</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Spectrum 875 Auto-Line</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>
Spectrum® 375 X-TREME™/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® 875/875 Auto-Line™

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.

<table>
<thead>
<tr>
<th>Model</th>
<th>Input Power</th>
<th>Rated Output at 104°F (40°C)</th>
<th>Amps Input at Rated Output</th>
<th>KVA</th>
<th>KW</th>
<th>Compressor Requirement</th>
<th>Dimensions</th>
<th>Net Weight with Torch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spectrum 375</td>
<td>120–240 V, 50/60 Hz</td>
<td>120 V (15 A): 20 A at 88 VDC, 35% duty cycle</td>
<td>18.1</td>
<td>2.2</td>
<td>2.1</td>
<td>5.0 cfm (142 L/min.) at 90 psi (621 kPa)</td>
<td>H: 9 in. (229 mm) W: 5.5 in. (140 mm) D: 13.25 in. (337 mm)</td>
<td>19 lb. (8.6 kg)</td>
</tr>
<tr>
<td>X-TREME</td>
<td></td>
<td>120 V (20 A): 27 A at 91 VDC, 20% duty cycle</td>
<td>25.6</td>
<td>3.1</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>240 V: 30 A at 92 VDC, 35% duty cycle</td>
<td>13.6</td>
<td>3.3</td>
<td>3.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spectrum 625</td>
<td>120–240 V, 60 Hz</td>
<td>120 V (15 A): 20 A at 88 VDC, 35% duty cycle</td>
<td>18.1</td>
<td>2.2</td>
<td>2.1</td>
<td>6.0 cfm (170 L/min.) at 90 psi (621 kPa)</td>
<td>H: 9 in. (229 mm) W: 5.5 in. (140 mm) D: 13.25 in. (337 mm)</td>
<td>12 ft. 21 lb. (9.5 kg)</td>
</tr>
<tr>
<td>X-TREME</td>
<td></td>
<td>120 V (20 A): 27 A at 91 VDC, 20% duty cycle</td>
<td>25.6</td>
<td>3.0</td>
<td>2.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>240 V: 40 A at 140 VDC, 50% duty cycle</td>
<td>13.6</td>
<td>6.4</td>
<td>6.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spectrum 875</td>
<td>208/230 V, 50/60 Hz</td>
<td>208 V: 60 A at 140 VDC, 40% duty cycle</td>
<td>208 V: 47 cfm (1343 L/min.) at 90 psi (621 kPa)</td>
<td>13.5 in. (337 mm)</td>
<td>20 lb. 49 lb. (22.2 kg)</td>
<td></td>
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</tr>
<tr>
<td>Auto-Line</td>
<td></td>
<td>230 V: 60 A at 140 VDC, 50% duty cycle</td>
<td>230 V: 42 cfm (1519 L/min.) at 90 psi (621 kPa)</td>
<td>18.5 in. (470 mm)</td>
<td>25 lb. 58 lb. (26.3 kg)</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>380–575 V: 60 A at 140 VDC, 60% duty cycle</td>
<td>380–575 V: 40 A at 140 VDC, 100% duty cycle</td>
<td>460 V: 12.4 cfm (352 L/min.) at 90 psi (621 kPa)</td>
<td>575 V: 8.8 cfm (251 L/min.)</td>
<td>20 ft. 54 lb. (24.5 kg)</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>380–380 V: 60 A at 140 VDC, 50% duty cycle</td>
<td>380–380 V: 30 A at 140 VDC, 100% duty cycle</td>
<td>380 V: 15 cfm (428 L/min.)</td>
<td>25 ft. 56 lb. (25.4 kg)</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>230 V: 60 A at 140 VDC, 40% duty cycle</td>
<td>230 V: 42 cfm (1519 L/min.) at 90 psi (621 kPa)</td>
<td>20 ft. 54 lb. (24.5 kg)</td>
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</tr>
</tbody>
</table>

Includes Ultra-Quick Connect™ XT60 hand-held torch with ergonomic design and flexible cable; or XT60M long body or short body machine torch.

Plasma Cutters

Spectrum 875 shown.

Light industrial. Only 875 Auto-Line has 3-phase capabilities.

**Processes**
- Air plasma cutting
- Air plasma gouging (625/875 models)

**375 X-TREME comes complete with**
- XT30 hand-held torch with 12 ft. (3.7 m) cable
- 10 ft. (3 m) 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 40 A tips and one 30 A tip, 30 A drag shield, deflector and air fitting

**625 X-TREME comes complete with**
- XT40 hand-held torch with 12 ft. (3.7 m) or 20 ft. (6.1 m) cable;
- XT60/XT60M long body or short body machine torch with 25 ft. (7.6 m) cable
- Heavy-duty work clamp and flexible cable with quick connect
- 10 ft. (3 m) power cord
- Extra consumables
- Machine torch packages include corresponding automation kit

**875 and 875 Auto-Line come complete with**
- XT60/XT60M long body or short body machine torch with 25 ft. (7.6 m) or 50 ft. (15.2 m) cable
- Heavy-duty work clamp and flexible cable with quick connect
- 10 ft. (3 m) power cord
- Extra consumables
- Machine torch packages include corresponding automation kit

**Most popular accessories**
- Automation Kits (pg 110)
- Cables and Cable Covers (pg 110)
- Cutting Guides (pg 110)
- Filters (pg 110)
- Plugs and Cords (pg 110)
- Protective Covers/Cases (pg 110)
- Torches (pg 110)
- Torch Consumables (pg 110)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.
Are you a professional fabricator, or do you like to repair everyday items in your home garage? Sign up for the Miller PRO and DIY eNewsletters to receive new product updates, success stories, how-to and technical articles and videos, special offers, project ideas and other information tailored to your interests.

If you are an occupational health and safety professional, sign up for the Welding Safety eNewsletter to receive information on regulatory updates, industry news and solutions that can elevate productivity and compliance within the workplace.
### Heavy-duty and medium-duty single-stage pressure regulators

Our Series 40" and Series 30" industrial-grade pressure regulators provide accurate pressure readings for welding, cutting, heating, and other applications. Extremely durable construction and simplified design provide consistent gas flow and longer trouble-free operation. Covered by a three-year warranty. See page 87 for optional Hard Hat™ regulator guards designed to help prevent broken gauges.

### Two-stage regulators

Series 30 two-stage regulators drop cylinder pressure to working pressure in two stages for consistent and accurate outlet pressure and flow regardless of inlet pressure. Recommended where outlet pressure and flow must be maintained without variation. Covered by a three-year warranty.

<table>
<thead>
<tr>
<th>Model</th>
<th>Stock Number</th>
<th>Gas</th>
<th>Max. Delivery Pressure</th>
<th>Max. Inlet Pressure</th>
<th>Outlet Connection</th>
<th>Inlet Connection</th>
</tr>
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<tbody>
<tr>
<td>Heavy-Duty Series 40</td>
<td>40-175-540</td>
<td>Oxygen</td>
<td>175 psig (12 bar)</td>
<td>3000 psig (207 bar)</td>
<td>9/16&quot;-18 RH</td>
<td>CGA 540</td>
</tr>
<tr>
<td></td>
<td>40-275-540</td>
<td>Oxygen</td>
<td>275 psig (19 bar)</td>
<td>3000 psig (207 bar)</td>
<td>9/16&quot;-18 RH</td>
<td>CGA 540</td>
</tr>
<tr>
<td></td>
<td>40-15-510</td>
<td>Acetylene</td>
<td>15 psig (1 bar)</td>
<td>400 psig (28 bar)</td>
<td>9/16&quot;-18 LH</td>
<td>CGA 510</td>
</tr>
<tr>
<td></td>
<td>40-50-510</td>
<td>Acetylene</td>
<td>15 psig (1 bar)</td>
<td>400 psig (28 bar)</td>
<td>9/16&quot;-18 LH</td>
<td>CGA 510</td>
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<tr>
<td></td>
<td>40-275-580</td>
<td>Inert gas</td>
<td>275 psig (19 bar)</td>
<td>3000 psig (207 bar)</td>
<td>5/8&quot;-18 RH internal</td>
<td>CGA 580</td>
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<tr>
<td>Medium-Duty Series 30</td>
<td>30-100-540</td>
<td>Oxygen</td>
<td>100 psig (7 bar)</td>
<td>3000 psig (207 bar)</td>
<td>9/16&quot;-18 RH</td>
<td>CGA 540</td>
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<td>30-28-540</td>
<td>Oxygen</td>
<td>20 psig (1.4 bar)</td>
<td>3000 psig (207 bar)</td>
<td>9/16&quot;-18 RH</td>
<td>CGA 540</td>
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<tr>
<td></td>
<td>30-15-510</td>
<td>Acetylene</td>
<td>15 psig (1 bar)</td>
<td>400 psig (28 bar)</td>
<td>9/16&quot;-18 LH</td>
<td>CGA 510</td>
</tr>
<tr>
<td></td>
<td>30-15-520</td>
<td>Acetylene</td>
<td>15 psig (1 bar)</td>
<td>400 psig (28 bar)</td>
<td>9/16&quot;-18 LH</td>
<td>CGA 510</td>
</tr>
<tr>
<td></td>
<td>30-15-200</td>
<td>Acetylene</td>
<td>15 psig (1 bar)</td>
<td>400 psig (28 bar)</td>
<td>9/16&quot;-18 LH</td>
<td>CGA 510</td>
</tr>
<tr>
<td></td>
<td>30-50-510</td>
<td>LP gas</td>
<td>50 psig (3 bar)</td>
<td>400 psig (28 bar)</td>
<td>9/16&quot;-18 LH</td>
<td>CGA 510</td>
</tr>
<tr>
<td></td>
<td>30-150-580</td>
<td>Argon/nitrogen</td>
<td>150 psig (10 bar)</td>
<td>3000 psig (207 bar)</td>
<td>5/8&quot;-18 RH internal</td>
<td>CGA 580</td>
</tr>
<tr>
<td></td>
<td>30-150-320</td>
<td>CO₂</td>
<td>150 psig (10 bar)</td>
<td>3000 psig (207 bar)</td>
<td>5/8&quot;-18 RH internal</td>
<td>CGA 580</td>
</tr>
<tr>
<td></td>
<td>30-100-350</td>
<td>Hydrogen/methane</td>
<td>100 psig (7 bar)</td>
<td>3000 psig (207 bar)</td>
<td>9/16&quot;-18 LH</td>
<td>CGA 350</td>
</tr>
<tr>
<td>Heavy-Duty Series 46</td>
<td>46-17S</td>
<td>Oxygen</td>
<td>175 psig (12 bar)</td>
<td>200 psig (14 bar)</td>
<td>9/16&quot;-18 RH &quot;B&quot;</td>
<td>CGA 024*</td>
</tr>
<tr>
<td></td>
<td>46-15-Single</td>
<td>Acetylene</td>
<td>15 psig (1 bar)</td>
<td>200 psig (14 bar)</td>
<td>9/16&quot;-18 RH &quot;B&quot;</td>
<td>CGA 025*</td>
</tr>
<tr>
<td></td>
<td>46-50-Single</td>
<td>LP gas</td>
<td>50 psig (3 bar)</td>
<td>200 psig (14 bar)</td>
<td>9/16&quot;-18 LH &quot;B&quot;</td>
<td>CGA 025*</td>
</tr>
<tr>
<td>Medium-Duty Series 36</td>
<td>36-150-Single</td>
<td>Oxygen</td>
<td>150 psig (10 bar)</td>
<td>200 psig (14 bar)</td>
<td>9/16&quot;-18 RH &quot;B&quot;</td>
<td>CGA 024*</td>
</tr>
<tr>
<td></td>
<td>36-15-Single</td>
<td>Acetylene</td>
<td>15 psig (1 bar)</td>
<td>200 psig (14 bar)</td>
<td>9/16&quot;-18 RH &quot;B&quot;</td>
<td>CGA 025*</td>
</tr>
<tr>
<td></td>
<td>36-50-Single</td>
<td>LP gas</td>
<td>50 psig (3 bar)</td>
<td>200 psig (14 bar)</td>
<td>9/16&quot;-18 LH &quot;B&quot;</td>
<td>CGA 025*</td>
</tr>
<tr>
<td>Series 30</td>
<td>35-125-540</td>
<td>Oxygen</td>
<td>125 psig (9 bar)</td>
<td>3000 psig (207 bar)</td>
<td>9/16&quot;-18 RH &quot;B&quot;</td>
<td>CGA 540</td>
</tr>
<tr>
<td></td>
<td>35-15-510</td>
<td>Acetylene</td>
<td>15 psig (1 bar)</td>
<td>400 psig (28 bar)</td>
<td>9/16&quot;-18 LH &quot;B&quot;</td>
<td>CGA 510</td>
</tr>
<tr>
<td></td>
<td>35-50-580</td>
<td>Inert gas</td>
<td>50 psig (3 bar)</td>
<td>3000 psig (207 bar)</td>
<td>5/8&quot;-18 RH internal</td>
<td>CGA 580</td>
</tr>
</tbody>
</table>
Our Series 30™ heavy-duty flowmeter regulators and flowmeters feature an exclusive self-centering ball guide which provides accurate readings even if tipped. This ensures optimum weld quality and gas savings. Others use a non-self-centering flow tube ball that tends to float off center causing actual gas flow to be up to two times greater than indicated. Covered by a three-year warranty.

Heavy-duty model features
1. Protective housing
   - Protects flow tubes from damage while offering unobstructed view of flow reading.
2. Extra-long flow tube
   - Expanded scales are easy to read and accurate within 5 percent of full reading. Can be attached to regulators or pipeline installations.
3. Shatter-resistant multi-scale flow tube
   - Made of shatter-resistant polycarbonate resin and features multiple scales. Select-O-Gas™ model provides four separate, easy-to-read scales for CO2, argon, argon/CO2 mix, helium and a general scale for other non-corrosive gases. Rotate outer tube to desired scale.
4. Auto-reset pressure-relief valve
   - Protects regulator from damage due to high-pressure surge. Relief valve will release excessive pressure and automatically reset.
5. Sure Seat™ dual-filtered seat assembly
   - Protects high-pressure seat from debris for reliable operation and long service life.

Economy model features
6. Built-in rupture disc
   - Reduces possibility of flow tube damage due to high-pressure surge. Must be replaced if ruptured — not auto-resetting.
7. Shatter-resistant triple-scale flow tube
   - Made of shatter-resistant polycarbonate resin and can be rotated to position desired scale for easy reading. Scaled for CO2, argon and argon/CO2 mix, and helium.
8. Precision flow-adjustment valve
   - Allows easy adjustment to desired setting.

<table>
<thead>
<tr>
<th>Model</th>
<th>Stock Number</th>
<th>Gas</th>
<th>Flow Range</th>
<th>Max. Inlet Pressure</th>
<th>Outlet Connection</th>
<th>Inlet Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>32-80-320</td>
<td>Single-stage</td>
<td>CO2</td>
<td>10–80 scfh (5–38 lpm)</td>
<td>3000 psig (207 bar)</td>
<td>5/8”-18 RH internal</td>
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<tr>
<td></td>
<td>32-30-580</td>
<td>Single-stage</td>
<td>Argon/CO2</td>
<td>10–60 scfh (5–28 lpm)</td>
<td>3000 psig (207 bar)</td>
<td>5/8”-18 RH internal</td>
</tr>
<tr>
<td></td>
<td>32-30-580-6</td>
<td>Single-stage w/gas hose</td>
<td>CO2</td>
<td>10–60 scfh (5–28 lpm)</td>
<td>3000 psig (207 bar)</td>
<td>5/8”-18 RH internal</td>
</tr>
<tr>
<td></td>
<td>35-30-320</td>
<td>Two-stage high-flow CO2</td>
<td>CO2</td>
<td>10–80 scfh (5–38 lpm)</td>
<td>3000 psig (207 bar)</td>
<td>5/8”-18 RH internal</td>
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Heavy-Duty Flowmeters

<table>
<thead>
<tr>
<th>Model</th>
<th>Stock Number</th>
<th>Gas</th>
<th>Flow Range</th>
<th>Max. Inlet Pressure</th>
<th>Outlet Connection</th>
<th>Inlet Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1105 Argon, CO2</td>
<td>5/8”-18 RH internal</td>
<td>1/4” NPT male</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H1240 Multi-scale (Select-O-Gas™)</td>
<td>Depends on gas</td>
<td>30 psig (2 bar) recommended</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H2051 Series Economy Flowmeter Regulators</td>
<td>5/8”-18 RH internal</td>
<td>CGA 580</td>
<td></td>
<td></td>
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</table>

H2051 Series Economy Flowmeter Regulators

<table>
<thead>
<tr>
<th>Model</th>
<th>Stock Number</th>
<th>Gas</th>
<th>Flow Range</th>
<th>Max. Inlet Pressure</th>
<th>Outlet Connection</th>
<th>Inlet Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2051B-580</td>
<td>Single-stage</td>
<td>Argon</td>
<td>0–60 scfh (0–28 lpm)</td>
<td>3000 psig (207 bar)</td>
<td>5/8”-18 RH internal</td>
<td>CGA 580</td>
</tr>
<tr>
<td>H2051B-580H</td>
<td>Single-stage w/gas hose</td>
<td>CO2</td>
<td>0–50 scfh (0–24 lpm)</td>
<td>3000 psig (207 bar)</td>
<td>5/8”-18 RH internal</td>
<td>CGA 580</td>
</tr>
<tr>
<td>33A-50-580</td>
<td>Single-stage</td>
<td>Argon/CO2</td>
<td>0–160 scfh (7–68 lpm)</td>
<td>3000 psig (207 bar)</td>
<td>5/8”-18 RH internal</td>
<td>CGA 580</td>
</tr>
<tr>
<td>33A-50-320</td>
<td>Single-stage</td>
<td>Helium</td>
<td>0–160 scfh (7–68 lpm)</td>
<td>3000 psig (207 bar)</td>
<td>5/8”-18 RH internal</td>
<td>CGA 580</td>
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</tbody>
</table>

Economy Flowmeters

<table>
<thead>
<tr>
<th>Model</th>
<th>Stock Number</th>
<th>Gas</th>
<th>Flow Range</th>
<th>Max. Inlet Pressure</th>
<th>Outlet Connection</th>
<th>Inlet Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2230A Argon, helium, CO2</td>
<td>5/8”-18 RH internal</td>
<td>1/4” NPT male</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H2231A Argon, helium, CO2</td>
<td>Depends on gas</td>
<td>30 psig (2 bar) recommended</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H2233A Argon, helium, CO2</td>
<td>Depends on gas</td>
<td>30 psig (2 bar) recommended</td>
<td></td>
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</table>

Economy model features

<table>
<thead>
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<th>Model</th>
<th>Stock Number</th>
<th>Gas</th>
<th>Flow Range</th>
<th>Max. Inlet Pressure</th>
<th>Outlet Connection</th>
<th>Inlet Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series 30 Flow Gauge Regulators</td>
<td>31-50-580</td>
<td>Single-stage</td>
<td>Argon</td>
<td>0–50 scfh (0–24 lpm)</td>
<td>3000 psig (207 bar)</td>
<td>5/8”-18 RH internal</td>
</tr>
<tr>
<td></td>
<td>31-50-580-6</td>
<td>Single-stage w/gas hose</td>
<td>CO2</td>
<td>0–50 scfh (0–24 lpm)</td>
<td>3000 psig (207 bar)</td>
<td>5/8”-18 RH internal</td>
</tr>
<tr>
<td></td>
<td>31-50-320</td>
<td>Single-stage</td>
<td>Argon/CO2</td>
<td>0–60 scfh (0–28 lpm)</td>
<td>3000 psig (207 bar)</td>
<td>5/8”-18 RH internal</td>
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</tbody>
</table>

Series 30 Flow Gauge Regulators

<table>
<thead>
<tr>
<th>Model</th>
<th>Stock Number</th>
<th>Gas</th>
<th>Flow Range</th>
<th>Max. Inlet Pressure</th>
<th>Outlet Connection</th>
<th>Inlet Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2230R Argon, CO2, and helium</td>
<td>5/8”-18 RH internal</td>
<td>1/4” NPT male</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H2231R Argon, CO2, and helium</td>
<td>Depends on gas</td>
<td>30 psig (2 bar) recommended</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H2233R Argon, CO2, and helium</td>
<td>Depends on gas</td>
<td>30 psig (2 bar) recommended</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Regulators

HVAC/refrigeration purge/leak test regulator

Our single-stage nitrogen regulator is specially designed to meet the specifications of HVAC refrigerant purging applications. This regulator is used with nitrogen to test HVAC systems to locate leaks and to purge an area for installation and repair. It is economical and accurate and its compact size is useful where space is limited. Covered by a one-year warranty.

- 2-inch (51 mm) gauges with shatter-resistant lenses and solid brass body for durability
- Large durable nylon knob for easy pressure adjustment

Pressure switch setting: Adjustable from 70–300 psig (ships preset at 250 psig), 3/32-inch Allen head screw switch.

Heavy-duty high-pressure regulator

820 Series regulators are for use on cylinders with a wide variety of non-corrosive inert gases. Typical applications include high-pressure testing, purging/charging, calibration kits, airline charging carts, chemical plants, manufacturing processes, research/development and laboratories. Covered by a two-year warranty.

- Piston-sensor design gives structural reliability in high-pressure use
- Low-torque-control adjusting screw for easy pressure adjustments in closed/dead end systems
- Due to specific configurations, we cannot accept returns of 820 Series regulators

Model Series | Max. Delivery Pressure | Max. Inlet Pressure | Option 1 | Option 2 | Option 3 | Model Configuration
--- | --- | --- | --- | --- | --- | ---
823 | 500 psig | 6000 psig | 0–500 psig | 00 | 1/4” FNPT | 26
824 | 1000 psig | | 0–1000 psig | 00 | 1/4” FNPT | 26
825 | 2000 psig | | 0–2000 psig | 66 | Stainless steel needle valve with 1/4” NPT | 26
826 | 4000 psig | | 0–4000 psig | 08 | CGA 540 (oxygen) | 26
827 | 6000 psig | | 0–6000 psig | 09 | CGA 580 (inert) | 26

Rear-entry liquid cylinder regulator

250 Series regulators are ideal for non-corrosive high-purity applications and have a rear-entry connection that provides clearance of the liquid cylinder ring for easier gauge reading. Covered by a two-year warranty.

- Easy-to-read single-scale 2.5-inch (64 mm) gauge with shatter-resistant lens
- Nickel-plated brass body for corrosion resistance
- Large 1-7/8-inch stainless steel diaphragm for precise control of pressure
- Large durable nylon knob for easy pressure adjustment
- Due to specific configurations, we cannot accept returns of 250 Series regulators

Model Series | Max. Delivery Pressure | Max. Inlet Pressure | Option 1 | Option 2 | Option 3 | Model Configuration
--- | --- | --- | --- | --- | --- | ---
252 | 100 psig | 3500 psig | 0–100 psig | 00 | 1/4” FNPT | 25
254 | 200 psig | | 0–200 psig | 00 | 1/4” FNPT | 20
255 | 350 psig | | 0–350 psig | 08 | CGA 540 (oxygen) | 20
256 | 500 psig | | 0–500 psig | 09 | CGA 580 (inert) | 20

Three-stage nitrogen low-pressure regulator

These preset regulators are specially designed to deliver a highly accurate and consistent 0.50 psig supply of nitrogen to the head space of oil-filled power transformers. Available with or without electronic pressure switch. Covered by a one-year warranty.

- Built-in self-relieving valve set at 8 psig protects the system from over-pressurization due to temperature variation
- Rapid-fill bypass pressure valve allows rapid filling of the transformer with 6 psig of pressure

Stock Number | 1st Stage (delivery pressure) | 2nd Stage | 3rd Stage (delivery pressure) | Bypass Rapid Fill/Pressure | Max. Inlet Pressure | Outlet Connection | Inlet Connection
--- | --- | --- | --- | --- | --- | --- | ---
16391 without pressure switch | 0.4–0.6 psig (0.03–0.04 bar) into outlet | 8 psig (0.6 bar) into 2nd stage | 6 psig (0.4 bar) | 1/2” FNPT | CGA 580
16317-3 with pressure switch | 0.4–0.6 psig (0.03–0.04 bar) into outlet | 8 psig (0.6 bar) into 2nd stage | 6 psig (0.4 bar) | 1/2” FNPT | CGA 580

Most popular accessories

- **Hard Hat** Regulator Guards
  - HB190 For Series 40
  - H195 For Series 30
- **Reverse-Flow Check Valve Set** (oxy and fuel)
  - H697 Torch mount
  - H698 Regulator mount
- **Flashback Arrestor Set** (oxy and fuel)
  - H743 Torch mount
  - H753 Regulator mount
- **GASAVERTM**
  - WDW100 Propylene/oxygen
  - WDW101 Acetylene/oxygen
  - WDW104 Propane or natural gas/oxygen (4 psi and above)
- **Fixed-Flow Adaptors and Surge Protectors**
  - H1400 Series fixed-flow adaptors are for welding operations requiring fixed-flow gases. 15001 Series surge protectors are for MIG welding applications to eliminate sudden surges of shielding gas in the wire feeder.
  - Visit MillerWelds.com for more information.

Visit MillerWelds.com or your distributor for Miller® options and accessories.
Heavy-Duty Outfits

Combination Torch Outfits (Acetylene or LP)
Oxy-fuel outfits include just about everything needed for your cutting, welding, brazing or heating project.
- Heavy-duty Series 40° or medium-duty Series 30° regulators with three-year warranty
- Heavy-duty torches with lifetime warranty
- Torch-mount flashback arrestors for added safety (acetylene outfits only)
- Exclusive long-lasting Graf-Tite® soft-seat cutting tips with in-tip gas mixing for added resistance to flashbacks
- Both HBA-40510 and HBA-40300 outfits cut up to 5/8 inch (16 mm)
- All outfits cut up to 8 inches (203 mm) with optional tips

Combination Torch and Tip Kits (Acetylene or LP)
Combination kits are available with cutting, welding and heating tips or with multiple cutting tips.
- Heavy-duty torches with lifetime warranty
- Torch-mount flashback arrestors for added safety
- Exclusive long-lasting Graf-Tite® soft-seat cutting tips with in-tip gas mixing for added resistance to flashbacks
- Cuts up to 5/8 inch (16 mm) with tip included
- Cuts up to 8 inches (203 mm) with optional tips

Cutting Torch Outfits (Acetylene)
Hand cutting torch outfits are built for the toughest jobs.
- Corrosion-resistant regulators feature shatter-resistant polycarbonate gauge lenses
- 21-inch nickel-plated torch with lifetime warranty has reversible (top or bottom) mount cutting lever and an ease-on oxygen feature that reduces slag blowback when piercing
- Exclusive long-lasting Graf-Tite® soft-seat cutting tips with in-tip gas mixing for added resistance to flashbacks
- HBS outfits include heavy-duty Series 40° regulators with three-year warranty and Hard Hat® gauge/regulator guards
- HBS outfits include medium-duty Series 30° regulators with three-year warranty, torch-mount flashlight arrestors for added safety, plus hose, lighter, safety glasses and tip cleaner
- HBS outfits cut up to 1-1/4 inch (32 mm) with tip included, HBAS outfits cut up to 5/8 inch (16 mm)
- All outfits cut up to 12 inches (305 mm) with optional tips

Heavy-duty torch tips

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Max. Metal Thickness (inches)</th>
<th>Cutting Jet Drill Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC12-00</td>
<td>3/16 (5)</td>
<td>68</td>
</tr>
<tr>
<td>SC12-0</td>
<td>3/8 (10)</td>
<td>62</td>
</tr>
<tr>
<td>SC12-1</td>
<td>5/8 (16)</td>
<td>56</td>
</tr>
<tr>
<td>SC12-2</td>
<td>1-1/4 (32)</td>
<td>54</td>
</tr>
<tr>
<td>SC12-3</td>
<td>2 (51)</td>
<td>51</td>
</tr>
<tr>
<td>SC12-4</td>
<td>4 (102)</td>
<td>45</td>
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<tr>
<td>SC12-5</td>
<td>8 (203)</td>
<td>41</td>
</tr>
<tr>
<td>SC12-6</td>
<td>12 (305)</td>
<td>32</td>
</tr>
<tr>
<td>SC50-0</td>
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<td>SC50-0</td>
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<td>62</td>
</tr>
<tr>
<td>SC50-1</td>
<td>5/8 (16)</td>
<td>56</td>
</tr>
<tr>
<td>SC50-2</td>
<td>1-1/4 (32)</td>
<td>54</td>
</tr>
<tr>
<td>SC50-3</td>
<td>2 (51)</td>
<td>51</td>
</tr>
<tr>
<td>SC50-4</td>
<td>4 (102)</td>
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</tr>
<tr>
<td>SC50-5</td>
<td>8 (203)</td>
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</tr>
<tr>
<td>SC50-6</td>
<td>12 (305)</td>
<td>32</td>
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<td>SC50-7</td>
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<td>18 (457)</td>
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<td>SC50-9</td>
<td>20 (505)</td>
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<tr>
<td>SC60-0</td>
<td>1/4 (6)</td>
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</tr>
<tr>
<td>SC60-1</td>
<td>5/8 (16)</td>
<td>56</td>
</tr>
<tr>
<td>SC60-2</td>
<td>1-1/4 (32)</td>
<td>54</td>
</tr>
<tr>
<td>SC60-3</td>
<td>2 (51)</td>
<td>51</td>
</tr>
<tr>
<td>SC60-4</td>
<td>4 (102)</td>
<td>45</td>
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<tr>
<td>SC60-5</td>
<td>8 (203)</td>
<td>41</td>
</tr>
<tr>
<td>SC60-6</td>
<td>12 (305)</td>
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<tr>
<td>SC13-3</td>
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</tr>
<tr>
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<tr>
<td>SC23-3M</td>
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<tr>
<td>ST602</td>
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<tr>
<td>ST603</td>
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<tr>
<td>ST605</td>
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</tr>
<tr>
<td>ST610</td>
<td>195,000 Btu</td>
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</table>

See Gas Equipment catalog (#264 059), or visit MillerWelds.com or your distributor for additional tips, options and accessories.

Outfit Stock Number Fuel Cut Tip Weld Tip Heat Tip Description Typical Applications
Combination Torch Complete Outfits
HBA-40510 HBA-40300* Acetylene SC12-1 SC12-2 SW205 ST602 Heavy-duty combination torch, heavy-duty regulators, 25 ft. (7.6 m) hose, lighter, safety glasses, tip cleaner and flashback arrestors Heavy fabrication, construction, pipeline, maintenance/repair, rail and truck repair
HBA-30510 HBA-30300* Acetylene SC12-1 SC12-2 SW205 ST602 Heavy-duty combination torch, medium-duty regulators, 25 ft. (7.6 m) hose, lighter, safety glasses, tip cleaner and flashback arrestors
HBA-30510LP Propane SC40-1 -- ST615 Heavy-duty combination torch, medium-duty regulators, 20 ft. (7.6 m) "T"-grade hose, lighter, safety glasses, tip cleaner and check valves
HBA-30510MP Propane SC60-1 -- ST615
Combination Torch and Tip Kits
16206 Acetylene SC12-1 SC12-2 SW203 ST602 Heavy-duty combination torch and flashback arrestors Heavy fabrication, construction, pipeline, maintenance/repair, rail and truck repair
16280 Acetylene SC12-0, SC12-1 -- --
16280LP Propane SC40-0, SC40-1 -- --
Cutting Torch Outfits
HBS-H510S HBS-H300S* Acetylene SC12-2 -- -- Heavy-duty SC229 hand cutting torch and heavy-duty regulators with Hard Hat™ gauge guards Heavy fabrication, construction, shipyard, rail car, rail and truck repair
HBS-30510 HBS-30300* Acetylene SC12-1 -- -- Heavy-duty SC229 hand cutting torch, medium-duty regulators, 20 ft. (7.6 m) hose, lighter, safety glasses, tip cleaner and flashback arrestors

*Acetylene regulator has CGA 300 inlet fitting.
Medium-Duty Outfits

Combination torch outfits (acetylene or LP)
Oxy-fuel outfits include just about everything needed for your cutting, welding, brazeing or heating project.
- Medium-duty Series 30™ regulators with three-year warranty
- Medium-duty torches with lifetime warranty
- Torch-mount flashback arrestors for added safety (acetylene outfits only)
- Exclusive long-lasting Graf-Tite® soft-seat cutting tips with in-tip gas mixing for added resistance to flashback
- Cuts up to 5/8 inch (16 mm) with tip included
- Cuts up to 6 inches (153 mm) with optional tips

Combination torch and tip kits (acetylene or LP)
Combination kits are available with cutting, welding and heating tips or with multiple cutting tips.
- Medium-duty torches with lifetime warranty
- Torch-mount flashback arrestors for added safety
- Exclusive long-lasting Graf-Tite® soft-seat cutting tips with in-tip gas mixing for added resistance to flashbacks
- Cuts up to 5/8 inch (16 mm) with tip included
- Cuts up to 6 inches (153 mm) with optional tips

Toughcut® combination torch outfits (acetylene or LP)
Economy outfits include many features found on more expensive outfits.
- Medium-duty Series 30™ regulators and medium-duty torches with three-year warranty
- Check valves for added safety and torch life
- Exclusive long-lasting Graf-Tite® soft-seat cutting tips with in-tip gas mixing for added resistance to flashbacks
- Cuts up to 5/8 inch (16 mm) with tip included
- Cuts up to 6 inches (153 mm) with optional tips

Tag-A-Long® and Versa-Torch® portable outfits (acetylene)
Complete, portable outfits housed in carriers designed for mobility and ease of storage, plus long-lasting Graf-Tite® soft-seat cutting tips and check valves for added safety and torch life.
- Tag-A-Long includes medium-duty Series 30™ regulators and medium-duty torch with three-year warranties
- Versa-Torch includes Series 30™ regulators with three-year warranty and standard-duty torch with lifetime warranty

Medium-duty torch tips

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Max. Metal Thickness (mm)</th>
<th>Cutting Jet Drill Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC12-0</td>
<td>3/16 (5)</td>
<td>68</td>
</tr>
<tr>
<td>MC12-1</td>
<td>5/32 (4)</td>
<td>55</td>
</tr>
<tr>
<td>MC12-2</td>
<td>1/8 (3)</td>
<td>54</td>
</tr>
<tr>
<td>MC12-3</td>
<td>1/4 (6)</td>
<td>51</td>
</tr>
<tr>
<td>MC12-4</td>
<td>3/16 (5)</td>
<td>45</td>
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<tr>
<td>MC12-5</td>
<td>6 (152)</td>
<td>41</td>
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<tr>
<td>MC40-0</td>
<td>3/16 (5)</td>
<td>68</td>
</tr>
<tr>
<td>MC40-1</td>
<td>5/32 (4)</td>
<td>55</td>
</tr>
<tr>
<td>MC40-2</td>
<td>1/8 (3)</td>
<td>54</td>
</tr>
<tr>
<td>MC40-3</td>
<td>1/4 (6)</td>
<td>51</td>
</tr>
<tr>
<td>MC40-4</td>
<td>3/16 (5)</td>
<td>45</td>
</tr>
</tbody>
</table>

Propylene Cutting
- MC60-1 5/8 (16) 55
- MC60-2 1-1/4 (32) 54
- MC60-3 2 (51) 51
- MC60-4 4 (102) 45

Acetylene Gouging
- MC13-3 3/8 (10) wide, 1/4 (6) deep

Note: Tips above fit medium- and standard-duty torches.

Acetylene Heating
- MT603 40,000 Btu
- MT605 73,000 Btu
- MT610 129,000 Btu

See Gas Equipment catalog (#264 059), or visit MillerWelds.com or your distributor for additional tips, options and accessories.

Outfit Stock Number Fuel Cut Tip Weld Tip Heat Tip Description

**Medium-Duty Outfits**

**Combination Torch Complete Outfits**
- MBA-30510 Acetylene MC12-0 MC12-1 MW205 MT603 Medium-duty combination torch, medium-duty regulators, 25 ft. (7.6 m) hose, lighter, safety glasses, tip cleaner and flashback arrestors
- MBA-30510 Acetylene MC12-0 MC12-1 MW205 MT603 Medium-duty combination torch, medium-duty regulators, 20 ft. (6.1 m) “T”-grade hose, lighter, safety glasses, tip cleaner and flashback arrestors

**Combination Torch and Tip Kits**
- 16205 Acetylene MC12-0 MC12-1 MW205 MT603 Medium-duty combination torch and flashback arrestors
- 16281 Acetylene MC12-0 MC12-1 MW205 MT603 Medium-duty combination torch and flashback arrestors

**Toughcut Economy Combination Torch Outfits**
- MBA-541-510 Acetylene MC12-0 MW205 MT603 Medium-duty combination torch, medium-duty regulators, 20 ft. (6.1 m) “T”-grade hose, lighter, safety glasses and check valves

**Combination Torch Portable Outfits**
- TL-500 Acetylene MC12-0 MW205 LT103, 104, 106 Medium-duty (TL500/TL550) or standard-duty (VT-4T) combination torch, medium-duty regulators, 12.5 ft. (3.8 m) hose, carrier, lighter, safety glasses, check valves and cylinders (cylinders NOT included with TL-500)
- TL-550 Acetylene MC12-0 MW205 LT103, 104, 106 Medium-duty (TL500/TL550) or standard-duty (VT-4T) combination torch, medium-duty regulators, 12.5 ft. (3.8 m) hose, carrier, lighter, safety glasses, check valves and cylinders (cylinders NOT included with TL-500)

Typical Applications
- Fabrication, farm and ranch, pipe, truck and auto, refrigeration, maintenance/repair
- Fabrication, farm and ranch, pipe, truck and auto, refrigeration, maintenance/repair
- Fabrication, farm and ranch, pipe, hobby, auto, refrigeration, maintenance/repair
- Farm and ranch, hobby, DIY, auto, refrigeration, maintenance/repair
Cutting torches (acetylene, natural gas or propane/propylene-based fuels)

**Gas Axe™ extra-heavy-duty cutting torches** are ideal for scrap and salvage.
- Covered by one-year warranty
- Reversible (top or bottom) mount cutting lever
- Available in four lengths and three different head angles
- Uses our exclusive long-lasting Graf-Tite® soft-seat cutting tips with in-tip gas mixing for added resistance to flashbacks
- Cuts up to 24 inches (610 mm)

**Heavy-duty cutting torches** feature solid construction and ease of operation for industries such as construction, fabrication, shipyards and salvage.
- Covered by lifetime warranty
- Nickel-plated finish for added corrosion resistance and to reflect residual heat
- Reversible (top or bottom) mount cutting lever
- Available in three lengths and three different head angles
- Uses our exclusive long-lasting Graf-Tite® soft-seat cutting tips with in-tip gas mixing for added resistance to flashbacks
- Cuts up to 12 inches (305 mm)

Combination torches (acetylene, natural gas or propane/propylene-based fuels)

Constructed to last a lifetime for safe performance under rugged conditions.
- Covered by lifetime warranty
- Ease-on cutting oxygen valve to reduce slag blowback when piercing
- Thick-wall brass head forgings resist warping and distortion
- Heavy- and medium-duty models are available with 75 or 90 degree head angles
- Uses our exclusive long-lasting Graf-Tite® soft-seat cutting tips with in-tip gas mixing for added resistance to flashbacks
- Heavy-duty torches cut up to 8 inches (203 mm), medium-duty up to 6 inches (152 mm) and standard-duty up to 3 inches (76 mm)

Machine torches (acetylene, LP or natural gas)

Superior performance with solid construction.
- Covered by lifetime warranty
- Torch barrels are adjustable to four positions at 90-degree increments and barrel diameters are 1-3/8 inches (9.5 mm) to fit most machines
- Rack pitch is 32-8 teeth per inch
- Uses our exclusive long-lasting Graf-Tite® soft-seat cutting tips with in-tip gas mixing for added resistance to flashbacks
- SC781A high-capacity three-hose torch cuts up to 24 inches (610 mm) with acetylene and 20 inches (508 mm) with LP or natural gas
- SC770 and SC772A two-hose torches cut up to 12 inches (305 mm) with acetylene, LP or natural gas
Proportional Gas Mixers

Our line of proportional gas mixers can help your operation save money, work more efficiently and produce better-quality welds by providing proper shielding gas mixtures for frequently used welding processes.

Accurate, on-site shield gas mixing. Various welding processes require different gas mixes for the best results. Our proportional gas mixers are accurate and allow custom mixtures for optimal welds.

No stocking or handling of premixed gases saves time, money and reduces the number of cylinders that need to be stored.

Reduces setup time. No need to change cylinders, regulators, flow control devices or hoses when switching from one range of mixed gas to another.

Ideal for education and training. Operators can quickly see the effect of various gas mixtures on weld appearance, quality and penetration.

Easy operation. Simply set the dials for the desired mix and flow. Mixers are mechanical, no electricity is required.

Serves from one to five welding stations with a single mixer. Delivers accurate mixtures at flows ranging from 10 to 180 scfh.

Covered by a one-year warranty.

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Gases</th>
<th>Adjustment % Range</th>
<th>Flow Range</th>
<th>Outlet Pressure</th>
<th>Required Inlet Pressure</th>
<th>Outlet Connection</th>
<th>Inlet Connection</th>
<th>Conversion Tables</th>
</tr>
</thead>
<tbody>
<tr>
<td>299-006-1C</td>
<td>Argon</td>
<td>0-100%</td>
<td>10-180 scfh</td>
<td>50 psig (3.5 bar)</td>
<td>105-115 psig (7.3-7.9 bar)</td>
<td>5/8&quot;-18 RH internal</td>
<td>5/8&quot;-18 RH internal</td>
<td>Argon/helium Argon/oxygen CO2/argon</td>
</tr>
<tr>
<td>299-006-3C</td>
<td>Argon</td>
<td>0-100%</td>
<td>10-180 scfh</td>
<td>50 psig (3.5 bar)</td>
<td>105-115 psig (7.3-7.9 bar)</td>
<td>5/8&quot;-18 RH internal</td>
<td>5/8&quot;-18 RH internal</td>
<td>Argon/CO2 Argon/oxygen CO2/argon</td>
</tr>
<tr>
<td>299-011-1C</td>
<td>Argon</td>
<td>50-100%</td>
<td>10-180 scfh</td>
<td>50 psig (3.5 bar)</td>
<td>105-115 psig (7.3-7.9 bar)</td>
<td>5/8&quot;-18 RH internal</td>
<td>5/8&quot;-18 RH internal</td>
<td>Argon/helium Nitrogen/hydrogen Argon/oxygen Argon/CO2</td>
</tr>
<tr>
<td>299-014-1C</td>
<td>Argon</td>
<td>80-100%</td>
<td>10-180 scfh</td>
<td>50 psig (3.5 bar)</td>
<td>105-115 psig (7.3-7.9 bar)</td>
<td>5/8&quot;-18 RH internal</td>
<td>5/8&quot;-18 RH internal</td>
<td>Argon/CO2 Argon/hydrogen Argon/helium Nitrogen/hydrogen</td>
</tr>
</tbody>
</table>

Stay Connected with Miller®

Join the Miller community to keep up to date with the welding industry, ask and get answers to your questions and share your welding experiences.

Our YouTube channel is the welder’s destination for helpful tips and welding instruction, product overviews and demonstrations, welding process information and engaging stories and applications.

The Miller LinkedIn page is the best source for company news, industry news and solutions that help customers make informed business decisions that better their bottom line.
Training Solutions

LiveArc™
Welding Performance Management System

The LiveArc system is built to deliver a real-world, arc-on welding experience. Advanced motion-tracking technology provides feedback on technique parameters during initial simulation (practice) mode as well as live arc training mode.

- Builds higher skill levels
- Produces faster results
- Provides a cost-effective solution

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

The LiveArc welding performance management system is a new and innovative reality-based training system that utilizes a live welding arc, unlike other virtual training solutions. It's designed to recruit, screen, train, re-qualify and manage the performance of weld operators — better, faster and more cost-effectively than traditional methods.

Advanced motion-tracking technology provides the critical feedback required for improvement of baseline welding skills. Guided by an easy-to-understand interface with graphical icons and instructional pop-ups, users will find navigation intuitive with a quick learning curve. Scoring and performance feedback engage and foster independent self-improvement through repetition. Users can guide themselves through assignment selection and simulated welding runs to acquire desired techniques before moving to actual live arc training experiences.

The system also gives welding instructors the ability to configure assignments and technique parameters. It stores the detailed performance history of each operator. LiveArc is a powerful teaching tool that allows instructors to better manage their time, reduces the cost of teaching materials and accelerates student progress.

Check out MillerWelds.com/livearc for videos, product information and more!

For more detailed information, visit MillerWelds.com/livearc
LiveArc™ System

**Powerful industrial computer** at the heart of the system features solid-state technology and filterless, fanless cooling. The system is compatible with Miller® wire feed power sources and is capable of MIG and flux-cored applications. **Touch screen monitor** works with a gloved hand and features a 21.5-inch widescreen HD display.

**NEW! Multi-pass groove and fillet** assignments designed by Miller and the capability to develop customized assignments based on user applications. **NEW! LiveArc PC software** is available for free installation on a separate PC. Data can be transferred to and from PC for reviewing student progress and managing assignments/users. **NEW! English and Spanish translations** are available on all LiveArc systems.

Motion-tracking cameras provide feedback on gun parameters.

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.

**Rugged ArcStation™ base** features a 1/2-inch reversible steel table top and ships complete with drawers, gun holder, quick-release clamps and heavy-duty casters for mobility.

**Calibration tool** is easy to use and enables flexible coupon placement by making the system aware of the exact joint location.

**Optional welding positioning arm** is available for training in out-of-position welding applications.

**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

---

**LiveArc system** comes complete with
- SmartGun with 15 ft. (4.6 m) cable (#270 698)
- Calibration tool (#266 768)
- Two table clamps (#257 285)
- Extra Tregaskiss consumables

**LiveArc system with welding positioning arm** includes above plus
- Arm assembly (#270 727)
- C-clamp assembly (#270 725)
- Removable arm extension for right- and left-hand applications (#270 728)
- Software update for welding positioning arm

---

**Process**

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Process</th>
<th>Position</th>
<th>Multi-Pass</th>
<th>Input Power</th>
<th>Rated Output</th>
<th>Computer</th>
<th>Monitor</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>(#301 233)</td>
<td>GMAW/GMAW-S/GMAW-P/FCAW-G</td>
<td>2F/3F/4F/1G/2G/3G/4G</td>
<td>Groove and fillet up to 1 in. (25 mm) plate</td>
<td>120 V, 60 Hz Compatible with Miller wire feed power sources</td>
<td>400 A at 60% duty cycle (mixed gases)</td>
<td>Intel core i7, 128 GB SSD, fanless cooling, HDMI port supports secondary monitor (not included)</td>
<td>21.5 HD LCD touch screen display</td>
<td>Ht: 77.5 in. (1,969 mm) Wt: 41.5 in. (1,054 mm) Wf: 46 in. (1,168 mm) with welding positioning arm D: 31 in. (787 mm)</td>
<td>93 lb. (42 kg)</td>
</tr>
<tr>
<td>(#301 233 001)</td>
<td>GMAW/GMAW-S/GMAW-P/FCAW-G</td>
<td>2F/3F/4F/1G/2G/3G/4G</td>
<td>Groove and fillet up to 1 in. (25 mm) plate</td>
<td>120 V, 60 Hz Compatible with Miller wire feed power sources</td>
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</tr>
<tr>
<td>(#301 234)</td>
<td>GMAW/GMAW-S/GMAW-P/FCAW-G</td>
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<td>400 A at 60% duty cycle (mixed gases)</td>
<td>Intel core i7, 128 GB SSD, fanless cooling, HDMI port supports secondary monitor (not included)</td>
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<td>Ht: 77.5 in. (1,969 mm) Wt: 41.5 in. (1,054 mm) Wf: 46 in. (1,168 mm) with welding positioning arm D: 31 in. (787 mm)</td>
<td>93 lb. (42 kg)</td>
</tr>
</tbody>
</table>

**LiveArc system only**
- SmartGun with 15 ft. (4.6 m) cable (#270 698)
- Calibration tool (#266 768)
- Two table clamps (#257 285)

**LiveArc system with welding positioning arm**
- Arm assembly (#270 727)
- C-clamp assembly (#270 725)
- Removable arm extension for right- and left-hand applications (#270 728)
- Software update for welding positioning arm

**LiveArc system only**
- SmartGun with 15 ft. (4.6 m) cable (#270 698)
- Calibration tool (#266 768)
- Two table clamps (#257 285)

**LiveArc system with welding positioning arm only**
- Arm assembly (#270 727)
- C-clamp assembly (#270 725)
- Removable arm extension for right- and left-hand applications (#270 728)
- Software update for welding positioning arm

---

**Input Power**

- 120 V, 60 Hz Compatible with Miller wire feed power sources

**Computer**

- Intel core i7, 128 GB SSD, fanless cooling, HDMI port supports secondary monitor (not included)

**Monitor**

- 21.5 HD LCD touch screen display

**Dimensions**

- Ht: 77.5 in. (1,969 mm)
- Wt: 41.5 in. (1,054 mm)
- Wf: 46 in. (1,168 mm) with welding positioning arm
- D: 31 in. (787 mm)

**Net Weight**

- System only: 93 lb. (42 kg)
- System with arm: 93 lb. (42 kg)
- Arm only: 93 lb. (42 kg)
Welding Helmets

See page 96 for helmet accessories and packages.

<table>
<thead>
<tr>
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<tr>
<td>Viewing Area</td>
<td>9.2 sq. in.</td>
<td>9.2 sq. in.</td>
<td>7.2 sq. in.</td>
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<td>Integrated Grind Shield</td>
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<td>Prem. Headgear</td>
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<td>Weight</td>
<td>24 oz. (680 g)</td>
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<td>19 oz. (539 g)</td>
<td>22.5 oz. (638 g)</td>
<td>17 oz. (482 g)</td>
<td>23 oz. (652 g)</td>
<td>18 oz. (510 g)</td>
<td>17 oz. (482 g)</td>
<td>23 oz. (652 g)</td>
<td>16 oz. (454 g)</td>
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<td>Warranty</td>
<td>3 years</td>
<td>3 years</td>
<td>3 years</td>
<td>30 days</td>
<td>30 days</td>
<td>3 years</td>
<td>3 years</td>
<td>3 years</td>
<td>2 years</td>
<td>2 years</td>
<td>2 years</td>
</tr>
</tbody>
</table>

See chart above for feature availability.

**Titanium Series™** Designed to perform in the most intense industrial applications. See literature no. AY/41.0

- Four operating modes: weld, cut, grind and X-Mode® (not available on 1600/1600i models)
- Silver shell reflects heat to keep helmet and user cool
- Aluminum heat shield protects auto-darkening lens in high-amperage applications

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

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

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

**InfoTrack™ arc tracking technology** features arc time, time and timer functions, and a multi-language help menu.
Digital Infinity™ Series  
Largest-view helmets for demanding applications. See literature no. AY/42.0

- Largest viewing area in the industry at 13.4 square inches
- Four arc sensors and four modes: weld, cut, grind and X-Mode™

Digital Elite™ Series  
Versatile helmets for demanding applications. See literature no. AY/43.0

- 9.2 square inch viewing area
- Four arc sensors and four modes: weld, cut, grind and X-Mode™

Digital Performance™ Series  
Mid-range helmets for most welding applications. See literature no. AY/44.0

- 7.2 square inch viewing area
- Three arc sensors and three modes: weld, cut, and grind

Classic Series  
Helmets for the value-minded welder. See literature no. AY/45.0

MP-10™ Series  
Passive, non-auto-darkening helmets.

- Passive shade 10 lens
- Upgradable to auto-darkening lens with kit #236 052

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Helmet Accessories and Packages

Weld-Mask™
Auto-Darkening
Goggles
#267 370
See literature no. AY/40.0

- Compact design allows users to weld in spaces where access with traditional welding helmets is limited
- Ideal for maintenance, repair, and installation or as an alternative for plasma cutting glasses
- Lightweight design virtually eliminates neck strain and eye covering fits tightly to face to block out light for precision welding in bright areas
- Face shield and head cover provide coverage for UV/IR rays and applications with limited spatter
- Goggles feature shades 5, 7, 9, 11 and 13 (light state shade 3)

Protection Paks
- Starter Pak
  Includes #251 292 Classic VS helmet and Classic Cloth jacket
  #255 848 Large
  #255 850 X-Large
- Performance Pak
  Includes #256 159 Performance helmet and Indura® Cloth jacket
  #240 886 Large
  #240 887 X-Large
  #240 888 2X-Large

Safety Glasses

- Anti-fog coating and high-quality optics
- Form-fitting orbital eye coverage
- Shatterproof polycarbonate lenses
- Wrap-around designs meet ANSI side shield requirements
- 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
- ANSI Z87.1+ compliant

Head Thread Size Chart

- Caps have a sewn-in sweatband
- Caps are reversible with a low, soft bill

Goggles Safety Glasses

NEW!

Head Threads

- Caps are reversible with a low, soft bill
- Bandannas have a sewn-in sweatband

Helmet Hook #251 018
- Holds welding helmets, grinding shields or other helmets with a headgear
- Silicone strap secures the helmet in place

Helmet Bib #253 882
- Attaches to bottom of the helmet with hook-and-loop fasteners for added neck coverage

Jobsite Tool Bag #228 028
- Over twenty separate pockets
- Opening of 12 x 18.5 inches (305 x 470 mm)

Helmet Accessories and Packages

Helmet Bib #253 882
- Attaches to bottom of the helmet with hook-and-loop fasteners for added neck coverage

Jobsite Tool Bag #228 028
- Over twenty separate pockets
- Opening of 12 x 18.5 inches (305 x 470 mm)

Helmet Accessories and Packages

Helmet Hook #251 018
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- Opening of 12 x 18.5 inches (305 x 470 mm)
## Welding Apparel

### Leather Jacket
- Top grain leather
- Expandable leather strategically placed for optimal mobility
- Flame-resistant inside cuff
- Satin lined
- Tapered, athletic cut

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

### Combo Jacket
- Indura® flame-resistant cotton (flame resistance guaranteed for life of jacket)
- Top grain leather
- Allows for patented bib/apron attachment

### Indura® Cloth Jacket
- 9-ounce flame-resistant navy cotton
- Pre-shrunk fabric
- Fold-in sleeve snaps
- Finished hems and reinforced stitching

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

### WeldX Cape Sleeves
- 7-ounce WeldX front and flame-resistant navy cotton back
- Fold-in sleeve snaps
- Allows for bib attachment (sold separately)

### Classic Cloth Cape Sleeves
- 9-ounce flame-resistant navy cotton
- Fold-in sleeve snaps
- Allows for bib attachment (sold separately)

### WeldX Apron
- Indura® flame-resistant cotton (flame resistance guaranteed for life of jacket)
- Top grain leather
- Allows for patented bib/apron attachment

### Classic Cloth Apron
- 9-ounce flame-resistant navy cotton
- Fold-in sleeve snaps
- Allows for bib attachment (sold separately)

### Bib/Apron
- Attaches to Indura® combo jacket with snaps across the chest as a bib or along the bottom as an apron

### Welding Apparel Size Chart

<table>
<thead>
<tr>
<th>Apparel</th>
<th>Small</th>
<th>Medium</th>
<th>Large</th>
<th>X-Large</th>
<th>2X-Large</th>
<th>3X-Large</th>
<th>4X-Large</th>
<th>5X-Large</th>
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<tbody>
<tr>
<td>Leather Jacket</td>
<td>#231 088</td>
<td>#231 089</td>
<td>#231 090</td>
<td>#231 091</td>
<td>#231 092</td>
<td>#231 093</td>
<td>#231 094</td>
<td>#231 095</td>
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<tr>
<td>WeldX Jacket</td>
<td>#247 114</td>
<td>#247 115</td>
<td>#247 116</td>
<td>#247 117</td>
<td>#247 118</td>
<td>#247 119</td>
<td>#247 120</td>
<td>#247 121</td>
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<tr>
<td>Combo Jacket</td>
<td>#231 080</td>
<td>#231 081</td>
<td>#231 082</td>
<td>#231 083</td>
<td>#231 084</td>
<td>#231 085</td>
<td>#231 086</td>
<td>#231 087</td>
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<tr>
<td>Indura Cloth Jacket (Men’s)</td>
<td>#258 095</td>
<td>#258 097</td>
<td>#258 098</td>
<td>#258 099</td>
<td>#258 100</td>
<td>#258 101</td>
<td>#258 102</td>
<td>#258 104</td>
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<tr>
<td>Indura Cloth Jacket (Women’s)</td>
<td>#264 379</td>
<td>#264 380</td>
<td>#264 381</td>
<td>#264 382</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Classic Cloth Jacket</td>
<td>#244 749</td>
<td>#244 750</td>
<td>#244 751</td>
<td>#244 752</td>
<td>#244 754</td>
<td>#244 755</td>
<td>#244 756</td>
<td>#244 758</td>
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<tr>
<td>WeldX Cape Sleeves</td>
<td>#247 122</td>
<td>#247 123</td>
<td>#247 124</td>
<td>#247 126</td>
<td>#247 127</td>
<td>#247 128</td>
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<td>#247 131</td>
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<tr>
<td>Classic Cloth Cape Sleeves</td>
<td>#247 138</td>
<td>#247 139</td>
<td>#247 140</td>
<td>#247 142</td>
<td>#247 143</td>
<td>#247 144</td>
<td>#247 145</td>
<td>#247 146</td>
</tr>
<tr>
<td>Classic Cloth Lab Coat</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Notes:**
- WeldX™ Bib #247 133
  - 19-inch length
  - Attaches to cape sleeves

- WeldX™ Sleeves #247 137
  - 18-inch length
  - Fold-in sleeve snaps
  - One-handed cinch closure

- WeldX™ Apron #247 134
  - 35-inch length with accessible front pocket
  - Adjustable drawstring ensures a good fit

- Classic Cloth Apron #247 149
  - 35-inch length with accessible front pocket
  - Adjustable drawstring ensures a good fit

- WeldX™ Cape Sleeves #247 133
  - 19-inch length
  - Attaches to cape sleeves

- Classic Cloth Cape Sleeves #247 147
  - 19-inch length
  - Attaches to cape sleeves

- WeldX™ Lab Coat #247 138
  - 40-inch length
  - 9-ounce flame-resistant navy cotton
  - Fold-in sleeve snaps
  - Finished hems and reinforced stitching

- Classic Cloth Lab Coat #247 148
  - 40-inch length
  - 9-ounce flame-resistant navy cotton
  - Fold-in sleeve snaps
  - One-handed cinch closure

- WeldX™ Apron #231 125
  - Attaches to WeldX combo jacket with snaps across the chest as a bib or along the bottom as an apron

- Classic Cloth Bib #247 134
  - 19-inch length
  - Attaches to cape sleeves

- Classic Cloth Bib #247 135
  - 19-inch length
  - Attaches to cape sleeves

- Classic Cloth Bib #247 136
  - 19-inch length
  - Attaches to cape sleeves

- Classic Cloth Bib #247 137
  - 18-inch length
  - Fold-in sleeve snaps
  - One-handed cinch closure

- Classic Cloth Bib #247 138
  - 18-inch length
  - Fold-in sleeve snaps
  - One-handed cinch closure

- Classic Cloth Lab Coat #247 139
  - 40-inch length
  - 9-ounce flame-resistant navy cotton
  - Fold-in sleeve snaps
  - One-handed cinch closure

- Classic Cloth Lab Coat #247 140
  - 40-inch length
  - 9-ounce flame-resistant navy cotton
  - Fold-in sleeve snaps
  - One-handed cinch closure
Welding Gloves

Performance — unprecedented comfort and performance, redefining the welding glove industry. Three-dimensional pattern, select-grade leather and precision craftsmanship with unique design features for specific welding applications. Exceptional dexterity and flexibility.

Extra Heavy-Duty MIG/Stick
#263 350 Large
#263 351 X-Large
- An industry first! Silicone patches on back for heat and spatter protection
- Multi-layered insulated palm and back
- Dual-padded, pig grain palm for added comfort

Heavy-Duty MIG/Stick
#263 339 Large
#263 340 X-Large
#269 615 2X-Large
- 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)
#263 330 X-Small (Women’s)
#263 331 Small (Women’s)
#263 332 Medium
#263 333 Large
#263 334 X-Large
#269 618 2X-Large
- Dual-padded palm
- Fleece insulated palm, foam insulated back
- Cow grain palm, pig split back and goat grain inner fingers provide exceptional dexterity and comfort

MIG (Unlined)
#263 335 Medium
#263 336 Large
#263 337 X-Large
#269 619 2X-Large
- Unlined palm for heightened feel and dexterity
- Double-layer insulated back and dual-padded palm for added comfort
- Cow grain palm, cow split back and goat grain inner fingers provide exceptional dexterity and comfort

TIG
#263 345 X-Small (Women’s)
#263 346 Small (Women’s)
#263 347 Medium
#263 348 Large
#263 349 X-Large
- Completely unlined for heightened feel and dexterity
- Triple-padded palm for added comfort
- Goat grain leather offers superior flexibility and dexterity

Work
#266 041 Medium
#266 042 Large
#266 043 X-Large
- Dual-padded palm for added durability
- Fleece back provides ultimate insulation
- Cow grain leather offers superior durability and abrasion resistance

Metalworker
#251 066 Medium
#251 067 Large
#251 068 X-Large
- Durable top grain leather and spandex back for enhanced durability and dexterity
- Neoprene wrist with hook-and-loop closure increases fit and support
- Padded, reinforced palm and thumb saddle for extended wear

Heavy-Duty MIG/Stick (Long Cuff)
#263 342 X-Large
- Padded forearm for additional protection and comfort
- Triple-layered insulated back
- Strategically placed patches on pig grain palm and cow split back for extended glove life

MIG/Stick
#263 343 Large
#263 344 X-Large
#269 616 2X-Large
- Dual-padded palm for added comfort
- Wool back provides ultimate insulation
- Cow split leather provides extreme durability and protection

TIG/Multitask
#263 352 Small
#263 353 Medium
#263 354 Large
#263 355 X-Large
- Dual-padded palm for added comfort
- Wool back provides ultimate insulation
- Goat grain leather offers superior flexibility and dexterity

Metalworker
#251 066 Medium
#251 067 Large
#251 068 X-Large
- Durable top grain leather and spandex back for enhanced durability and dexterity
- Neoprene wrist with hook-and-loop closure increases fit and support
- Padded, reinforced palm and thumb saddle for extended wear

TIG
#271 877 Large
#271 887 X-Large
- Reflective insulation on back reduces heat impact
- Moisture-wicking fleece and foam insulation
- Pig grain palm, pig split back and cuff

Heavy-Duty MIG/Stick
#271 890 Large
#271 891 X-Large
- Reinforcement patches enhance durability
- Moisture-wicking fleece and foam insulation
- Goat split palm, pig split back and cuff

TIG
#271 892 Medium
#271 893 Large
#271 894 X-Large
- Thin internal padding for added comfort
- Unlined palm for precise dexterity
- Sheep grain palm, goat split back, pig split cuff

MIG
#271 888 Large
#271 889 X-Large
- Reinforcement patches enhance durability
- Moisture-wicking fleece and foam insulation
- Pig split leather palm, back and cuff

Classic – traditional design for the value-minded welder.
Respiratory

N95 Disposable Mask Respirator  See literature no. AY/4.8
#267 334  Respirator, 10 pack
#267 334-2  Respirator, 2 pack
#267 335  Respirator with nuisance level OV relief, 10 pack
#267 335-2  Respirator with nuisance level OV relief, 2 pack
• Flame-retardant outer layer designed for welding applications
• Exhaust valve reduces heat build-up and user fatigue
• Ergonomic design and adjustable nose clip for customized fit
• Full inside foam seal enhances fit and overall protection
• Fit testing is required for mandatory use
• 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

CoolBand™ II Integrated Headgear Cooling System  #261 970
• Up to 8 degrees Fahrenheit cooler under the hood
• Strategically placed air vents reduce foggging
• Constant air movement removes stagnant air
• Comes with headgear (#256 174)

LPR-100™ Half Mask Respirator  See literature no. AY/4.5
#ML00894  Respirator with P100 filters, small/medium
#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
#261 086  Quantitative fit-test kit adapter
• Low-profile design fits under most welding helmets and provides maximum field of vision
• Wrap-around spark guard protects filters from spatter and other debris
• Large exhaust valve eases breathing
• Odor-free, non-allergenic, latex and silicone free, made from medical-grade materials
• Exclusive pleated filter design provides additional surface area for extended filter life
• Fit testing is required for mandatory use
• P100 filters provide 99.97-percent filtration of airborne particles and oil aerosols, specifically: hexavalent chromium, zinc oxide, manganese, aluminum, cadmium and lead
• NIOSH 42 CFR 84 certified, assigned protection factor of 10

PAPR Powered Air-Purifying Respirator  See literature no. AY/4.0
Available packages:
With hard hat
#261 659  With Titanium 9400™ helmet
#259 385  With Titanium 9400™ helmet
#259 386  With hard hat only
With Titanium 9400i™ helmet
#264 877  With auto-darkening lens assembly
#264 878  Without auto-darkening lens assembly
With Titanium 9400™ helmet (external grind button)
#264 879  With auto-darkening lens assembly
#264 882  Without auto-darkening lens assembly
• Lightweight, low-profile blower design provides enhanced comfort and unrestricted movement
• Comfortable load-bearing shoulder straps reduce back strain
• Dual air speeds for maximized comfort in varied conditions
• Audible and vibrating alarms notify users in noisy environments
• HEPA filter provides 99.97-percent filtration of airborne particles and oil aerosols, specifically: hexavalent chromium, zinc oxide, manganese, aluminum, cadmium and lead
• NIOSH 42 CFR 84 certified, assigned protection factor of 25

Heat Stress

CoolBelt™ Belt-Mounted Cooling System  #245 230
• Up to 17 degrees Fahrenheit cooler under the hood
• Provides all-day comfort through maximized airflow power
• Multiple airflow speeds eliminate stagnant air and reduce foggging
• Lightweight design extends wearability

Note: Not compatible with XL Series™ helmets.
Choose the Right Fume Extractor

Miller's complete line of FILTAIR® fume extractors are designed specifically for welding — drawing weld fumes away from the user's breathing zone and keeping your facility clean. We offer many types of fume extraction equipment to best fit your environment and fume control needs.

**FILTAIR 130 and 400**
Portable (130 model) and stationary (400 model) high-vacuum weld fume extractors designed for use with accessories like nozzles and fume guns to collect weld fume particles at the source.

### Features common to all models

**Designed to capture weld fume.** The MERV 15 rating of FilTek XL filters provides superior filtering of up to 95 percent of weld fume particulate.

**FILTAIR 130 features**
- **Unrivaled filtering performance.** Designed to capture weld fume particles with a cleanable filter and safely deposit them in an integrated particle bin.
- **Less noise.** Up to 70 percent quieter than some other extractors. Only 68.5 decibels at five feet.
- **Portable and compact.** At only 46 pounds (21 kg) the vertical-shaped machine is easy to move around.

**FILTAIR 400 features**
- **Extraction flexibility.** Capable of utilizing more than 60 feet of collection hose to extend accessories for fume extraction. Rigid ducting can be used to extend overall reach.
- **User flexibility.** With four-port access, the unit can remain centrally located while providing mobility of source capture accessories.
- **Extract at the source.** Designed for solid and flux-cored wires for most welding applications. MIG fume guns are available in models ranging from 300 to 600 amps.

### Processes
- **Stick (SMAW) • Flux-cored (FCAW)**
- **MIG (GMAW) • TIG (GTAW)**
- **Comes with**
  - FilTek® XL filter
  - 8 ft. collection hose (130 model only)
  - 20 ft. power cord (130 model only)

### Most popular consumables
- **Replacement Filters**
  - #301 267 For 130 model (cleanable)
  - #300 925 For 400 model
- **Most popular accessories**
  - **Collection Hose**
    - #300 672 17 ft. (5.2 m)
    - #300 673 34 ft. (10.4 m)
  - **Magnetic Nozzles**
    - #300 669 11.8 in. (300 mm) width
    - #300 670 23.6 in. (600 mm) width (400 model only)
  - **Flexible Funnel Magnetic Nozzle**
    - #300 668
  - **Dual Hose Inlet to Duct Adapter**
    - (400 model only)
    - #301 070 Y-shaped adapter connects duct to one or two hose attachments.
- **Bernard® FILTAIR Fume Extraction MIG Gun** (pg 47)
  - Ideally suited for almost any solid-wire welding application. Available in 300 and 400 A models.
- **Bernard® Clean Air™ Fume Extraction MIG Gun** (pg 47)
  - Suited for use with solid and flux-cored wires. Available in 400, 500 and 600 A models.

### Models and Specifications

#### FILTAIR 130

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Accu-Rated™ Airflow</th>
<th>Sound Level</th>
<th>Motor</th>
<th>Input Power</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>130 (300 595)</td>
<td>132 cfm (62 L/sec.)</td>
<td>68.5 dBA at 5 ft. (1.5 m)</td>
<td>1 hp</td>
<td>115 V, 1-phase, 60 Hz at 11 A</td>
<td>H: 23 in. (584 mm) W: 12 in. (305 mm) D: 12 in. (305 mm)</td>
<td>46 lb. (21 kg)</td>
</tr>
</tbody>
</table>

#### FILTAIR 400

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Accu-Rated™ Airflow</th>
<th>Sound Level</th>
<th>Motor</th>
<th>Input Power</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>400 (300 894)</td>
<td>400 cfm (189 L/sec.)</td>
<td>74 dBA at 5 ft. (1.5 m)</td>
<td>8.85 hp</td>
<td>460 V, 3-phase, 60 Hz</td>
<td>H: 54 in. (1372 mm) W: 26 in. (660 mm) D: 48 in. (1,219 mm)</td>
<td>551 lb. (250 kg)</td>
</tr>
</tbody>
</table>
**FILTAIR® SWX and MWX Series**

Powerful systems mounted next to the weld area or easily positioned near the weld area. Disposable or cleanable filter models for multiple applications.

**Features common to all models**
- Designed to capture weld fume. The MERV 15 rating of FilTek XL filters provides superior filtering of up to 95 percent of weld fume particulate.
- Class-leading suction power of 875 cfm is Accu-Rated™ at the hood to better capture weld fumes and provide a cleaner environment.
- Superior filters. Our FilTek XL filters are specifically designed for welding with a MERV 15 rating to outlast, out-filter, and outperform all the rest.
- Durable aluminum pre-assembled extraction arm with external adjustments for better airflow and longer life.

**Self-cleaning models additional features**
- Unrivalled filtering performance. Designed to capture weld fume particles with a cleanable filter and safely deposit them in an integrated particle bin.
- Quick and efficient cleaning cycle operates with a push of a button on the control panel.
- Disposal drawer provides easy and convenient access to empty out collected particles. Handle releases drawer allowing it to slide out.
- Upgrade to self-cleaning models for high arc-on time, extracting from heavy fume processes, or when welding aluminum or galvanized materials.

---

### SWX models are available with telescoping arm which can extend from 3 to 4.5 feet, making them ideal for smaller spaces.

### MWX mobile fume extraction systems designed specifically for welding.

---

### Model/Stock Number | Filter Media | Accu-Rated™ Airflow | Extraction Arm Diameter | Sound Level | Motor | Input Power | Dimensions | Net Weight without Arm
---|---|---|---|---|---|---|---|---
**SWX** (Self-Cleaning Model) Pkg  
([#951 620](#951 620)) Telescoping arm  
([#951 619](#951 619)) 7 ft. standard arm  
([#951 517](#951 517)) 10 ft. standard arm  
([#951 518](#951 518)) 12 ft. standard arm  
**SWX-D (Disposable Filter) Pkg**  
([#951 513](#951 513)) Telescoping arm  
([#951 514](#951 514)) 7 ft. standard arm  
([#951 515](#951 515)) 10 ft. standard arm  
([#951 516](#951 516)) 12 ft. standard arm  | 490 sq. ft.  
(45.52 sq. m) | 875 cfm  
(413 L/sec.) | 8 in.  
(203 mm) | Approximately 74 dBA at 5 ft. (1.5 m) | 1 hp, 3,450 rpm | 115 V, 1-phase, 60 Hz at approximately 11.9 A | **SWX-S** H: 33 in. (838 mm)  
W: 27.25 in. (692 mm)  
D: 33 in. (838 mm)  
**SWX-D** H: 27.25 in. (692 mm)  
W: 31.75 in. (806 mm)  
D: 48 in. (1,219 mm) | **SWX-S** 195 lb. (88 kg)  
**SWX-D** 130 lb. (59 kg)  
Blower/Bracket 95 lb. (43 kg) |

**MWX** (Self-Cleaning Model) Pkg  
([#951 510](#951 510)) 7 ft. standard arm  
([#951 511](#951 511)) 10 ft. standard arm  
([#951 512](#951 512)) 12 ft. standard arm  
**MWX-D (Disposable Filter) Pkg**  
([#951 507](#951 507)) 7 ft. standard arm  
([#951 508](#951 508)) 10 ft. standard arm  
([#951 509](#951 509)) 12 ft. standard arm  | 490 sq. ft.  
(45.52 sq. m) | 875 cfm  
(413 L/sec.) | 8 in.  
(203 mm) | Approximately 70 dBA at 5 ft. (1.5 m) | 1 hp, 3,450 rpm | 115 V, 1-phase, 60 Hz at approximately 11.9 A | **MWX-S** H: 30 in. (762 mm)  
W: 31.75 in. (806 mm)  
D: 48 in. (1,219 mm)  
**MWX-D** H: 30 in. (762 mm)  
W: 31.75 in. (806 mm)  
D: 48 in. (1,219 mm) | **MWX-S** 300 lb. (136 kg)  
**MWX-D** 238 lb. (108 kg) |
FILTAIR® Capture 5
See literature no. AY/3.5

The capture zone redefined. Innovative, extended-capture fume extraction system designed specifically for welding.

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

Comes with
• FilTek® XL filter
• Durable, easy-to-move, pre-assembled, aluminum extraction arm with toolless external adjustments for higher airflows and longer filter life

Most popular consumable
• Replacement FilTek XL Filter #301 106

Filter is designed for the Capture 5 automatic self-cleaning system.

ZoneFlow™ technology. Extends the capture area up to five feet versus 12 to 18 inches with conventional source capture arms. See illustration above.

Minimizes downtime with fewer fume extractor adjustments. With increased capture area, arm interactions are dramatically minimized.

Designed to capture weld fume. The MERV 15 rating of FilTek XL filters provides superior filtering of up to 95 percent of weld fume particulate.

Source capture is designed to draw weld fume away from the welder’s breathing zone and keep the facility clean.

Stock Number
With 10 ft. Extraction Arm (951 639) 208/230 V (951 574) 460 V (951 594) 575 V
With 12 ft. Extraction Arm (951 640) 208/230 V (951 575) 460 V (951 595) 575 V

Filter Media
Accu-Rated™Airflow
ExtractionArm Diameter
Sound Level
Motor
Input Power
Dimensions
Net Weight

With 10 ft. Extraction Arm
452 sq. ft. (42 sq. m)
900 cfm (425 L/sec.)
10 in. (254 mm)
Approximately 77 dBA at 5 ft. (1.5 m)
3 hp, 3,450 rpm
208/230 V, 1-phase, 60 Hz at 13.5 A
260 lb. (118 kg)
H: 45 in. (1,144 mm)
W: 36 in. (914 mm)
D: 48 in. (1,219 mm)

With 12 ft. Extraction Arm
452 sq. ft. (42 sq. m)
900 cfm (425 L/sec.)
10 in. (254 mm)
Approximately 77 dBA at 5 ft. (1.5 m)
3 hp, 3,450 rpm
208/230 V, 1-phase, 60 Hz at 13.5 A
460 V, 3-phase, 60 Hz at 3.7 A
260 lb. (118 kg)
H: 45 in. (1,144 mm)
W: 36 in. (914 mm)
D: 48 in. (1,219 mm)

Weld Fume Management

We are committed to providing exclusive technologies designed specifically around your weld fume challenges. Find out how our portfolio of solutions fulfills each tier of OSHA’s Hierarchy of Controls at MillerWelds.com/fumesolutions.
Welding Safety & Health

FILTAIR® 2000–12000

The industrial centralized weld fume extractors are custom engineered solutions designed for multiple capture sources which require ducting and accessories to complete the system.

FILTAIR engineering resources. Design and engineering resources recommend, develop and support custom-engineered solutions.

Improves operating efficiency. Creates a cleaner shop with less downtime spent cleaning equipment. Raises productivity with more motivated employees and fewer absences and helps meet OSHA and EPA compliance.

Stand-alone space saver. Our fully assembled fume extractor provides up to a 65 percent smaller footprint versus traditional cartridge-style extractors. It provides all the necessary extraction tools, while offering customizable options.

Less noise. Up to 75 percent quieter than cartridge-style extractors. High-efficiency motors and integrated silencer housing create a quieter, more productive work area.

Integrated electrical controls. Control panel manages all of the collector functions, including the fan, the filter differential, and the pulse cleaning system.

24 VDC motor start/stop feedback relay allows an external signal to automate the remote start of collector fan from other equipment.

FilTek XL filters

Easy-clean filter with surface-loaded filter technology allows for more effective weld fume pulse cleaning without penetration into the filter. This provides an easier filter cleaning process, while outlasting conventional cartridge filters.

Smaller size and fewer filters. One FilTek XL filter replaces up to three cartridge-style filters increasing efficiency, reducing extractor size, and lowering operational costs.

Call us toll-free at 855-FILTAIR (855-345-8247) for information and requests for quotes on custom engineered solutions to fit your needs.

*Based on clean filters.  **Dimensions for base models without factory options.
FILTAIR® Industrial Centralized Systems Accessories

Miller offers a full line of accessories for complete system solutions and turnkey installation.

Spark Cooler®
- Cools sparks using the fume extractor’s airflow
- Very efficient — maximizes the extractor’s power
- Simple design is easy to install

Easy-to-operate, pre-assembled extraction arms and mounting equipment
- **Telescoping arms** are designed to fit small booth spaces used in training centers and educational booths. Telescopes from 3 to 4.5 feet with a wide range of motion to cover all positions
- **Standard arms** are designed to cover larger spaces, the standard extraction arms are available in 7-, 10-, and 12-foot versions. External brackets and adjustments allow air to pass through with less resistance giving you stronger cfm (airflow)
- **Arm mounting bracket and ducting kit** includes a supporting bracket and collar for connecting an extraction arm to ductwork

<table>
<thead>
<tr>
<th>Model</th>
<th>6-Inch Diameter</th>
<th>8-Inch Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telescoping Arm</td>
<td>(#301 242)</td>
<td>(#301 237)</td>
</tr>
<tr>
<td>Standard Arm</td>
<td>(#300 953)</td>
<td>(#300 950)</td>
</tr>
<tr>
<td></td>
<td>7 ft. arm</td>
<td>7 ft. arm</td>
</tr>
<tr>
<td></td>
<td>(#300 954)</td>
<td>(#300 951)</td>
</tr>
<tr>
<td></td>
<td>10 ft. arm</td>
<td>10 ft. arm</td>
</tr>
<tr>
<td></td>
<td>(#300 955)</td>
<td>(#300 952)</td>
</tr>
<tr>
<td></td>
<td>12 ft. arm</td>
<td>12 ft. arm</td>
</tr>
<tr>
<td>Arm Mounting Bracket and Ducting Kit</td>
<td>(#300 952)</td>
<td>(#300 771)</td>
</tr>
</tbody>
</table>

More FILTAIR accessories are available to build your system. Call us toll-free at 855-FILTAIR (855-345-8247) for information.

Cleaner air with FilTek® XL filters

The FilTek XL filter’s higher MERV rating means unrivaled filtering performance.

<table>
<thead>
<tr>
<th>Applicable Weld Fume MERV Rating Categories</th>
<th>Particle Size Range Efficiency %</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Not Rated</td>
</tr>
<tr>
<td>11</td>
<td>Not Rated</td>
</tr>
<tr>
<td>12</td>
<td>Not Rated</td>
</tr>
<tr>
<td>13</td>
<td>&lt;75%</td>
</tr>
<tr>
<td>14</td>
<td>75-85%</td>
</tr>
<tr>
<td>15 FilTek XL</td>
<td>85-95%</td>
</tr>
<tr>
<td>16 FilTek XL</td>
<td>≥95%</td>
</tr>
</tbody>
</table>

Filters are rated on a MERV scale, which measures filter efficiency based on particle count. MERV ratings range from 1-16, with 16 being the best at filtering small particles — such as those found in weld fumes. The vast majority of weld fumes are less than one micron in diameter, or roughly 1/100th the width of a human hair.

Filters in common air filtration systems often have MERV ratings between 7-11. FilTek XL filters are rated at class-leading MERV 15-16 to capture up to 95 percent of weld fume particulates including those found in hexavalent chromium.

1American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) 52.2
2National Air Filtration Association (NAFA) Guide
3HEPA filters are depth loading and have high restrictions to air flow, reducing system performance versus FilTek XL filters.
4Jenkins, Pierce, Edgar. Particle Size Distribution of GMAW and FCAW
The S-Series is perfect for the welder who needs a tough workbench for the fab shop or the home garage.

Four S-Series models available, depending on your needs:
• 30S (30 x 30 inch with solid tabletop)
• 30SX (30 x 30 inch with X-pattern tabletop)
• 60S (30 x 60 inch with solid tabletop)
• 60SX (30 x 60 inch with X-pattern and solid tabletop combo)

SX model includes X-pattern tabletop for trouble-free clamping!

Durable 1/8-inch steel frame with cross bar and heavy-duty tabletops provide a sturdy area for welding or metalworking.

Lower shelf provides a convenient place to store equipment, tools and raw materials.

Adjustable leveling feet keep bench rock-steady.

Customize with a wide range of handy accessories to make this the ultimate workbench (see at right).

When portability or space-savings is a concern, the F-Series ArcStation is your solution.

Wheels, handle, and fold-up design make unit easy to take to the jobsite or move around the shop.

Compact size makes storing unit a breeze. Unit folds down to 6 x 29 x 48 inches (152 x 737 x 1219 mm).

30 x 30 inch size tabletop provides plenty of work surface.

3/16-inch X-pattern steel tabletop allows trouble-free clamping.

1.5-inch diameter steel tube frame provides strength and durability.

Includes removable gun holder.

Add the optional 5-inch X-clamps (#300 850) to make this the ultimate portable workbench.
Automated MIG
For adapters and drive motors, visit MillerWelds.com.

Coolant Systems
Coolant Flow Switch
#195 461
For Auto-Access. To ensure coolant is flowing in the system. Lack of coolant flow may cause damage to water-cooled guns. Module allows wiring to the peripheral connector port. 50-foot (15.2 m) cable with connector and separate shell connector for simple modification to desired length in the field. It can be mounted on Auto-Access or as desired elsewhere. Quarter-turn quick connection.

MCS-2 Motorized Cross Slide
#098 380 Control
#045 623 Adapter Plate*
Provides accurate weld head adjustment with convenient motorized control. Used to align the welding head (gun) to the weld joint, by providing vertical or horizontal adjustments, based on mounting preferences. *Required when using two slides.

Cable Connectors and Adapters
Also see Torch and Weld Cable Connectors in TIG Accessories on page 113.

For Invision 352 MPa, AlumaFeed System, XMT 304/350, CST 280, Maxstar, Dynasty, and Syncrowave. These power sources are equipped with Dinse- or Tweco-style connectors for secondary connections. Power sources are shipped with two male plugs for use with #4 to #1/0 AWG cable.

Dinse-Style Connector Kits
#042 418 Accepts #4 to #1/0 AWG cable
#042 533 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
#042 419 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
#134 460 Male Dinse-style plug
#136 600 Female Dinse-style receptacle
Used to adapt or extend weld and/or work cables. Accepts #1/0 to #2/0 AWG cable.

MIG Accessories
Gun and Machine Accessory Kits
Protective Covers
Plasma Cutter Accessories
Automation Kit
Cables and Cable Covers
Cutting Guides
Filters
Plugs and Cords
Protective Covers
Torches
Polarity Switches/Controls
Remote Controls and Wireless Remote Controls
Stick Accessory Kits

Submerged Arc Accessories
Cables
Wire Drive Assembly Accessories
TIG Accessories
High-Frequency Arc Starters and Stabilizers
Kits
Protective Covers
Remote Controls
Torches and Weld Cable Connectors
Wire Feeder Accessories
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.

Accessories

Also see Torch and Weld Cable Connectors in TIG Accessories on page 113.

For Invision 352 MPa, AlumaFeed System, XMT 304/350, CST 280, Maxstar, Dynasty, and Syncrowave. These power sources are equipped with Dinse- or Tweco-style connectors for secondary connections. Power sources are shipped with two male plugs for use with #4 to #1/0 AWG cable.

Dinse/Style Connector
#191 981
Accepts #1/0 to #2/0 AWG cable. Kit includes one Tweco-style male plug which attaches to the work and/or weld cables and plugs into the Tweco-style receptacles on the power source.

Dinse/Tweco® Adapter
#042 465
Dinse/Cam-Lok Adapter
#042 466
One-piece adapter with Dinse-style male plug (to power source) on one end and Tweco or Cam-Lok female receptacle (for weld cable connection) on other end.

Tweco®/Dinse Adapter
#210 061
One-piece adapter with Tweco-style male plug (to power source) on one end and Dinse-style female receptacle (for weld cable connection) on other end.

Carts, Cylinder Racks and Running Gear
Also see Engine Drive Accessories on page 108 and Plasma Accessories on page 110.

Carrying Cart
#056 301
For XMT, CST 280, smaller Maxstar, Dynasty, and wire feeders. Cart is 34 inches high x 30 inches wide x 17 inches deep (864 x 762 x 432 mm).

Cylinder Cart
#042 537
For Invision, XMT, and CST 280. Has adjustable handles and is slanted for convenient access to power source front panel controls. Carries two 160-pound (72.6 kg) gas cylinders with feeder mounted to tray above power source. Accommodates Coolmate 3 or 4 coolant system.

Universal Cart and Cylinder Rack
#042 933
For Invision 352 MPa, XMT 304/350, CST 280, Diversion, Maxstar 210/280, and Dynasty 210/280. Also accommodates a single gas cylinder up to 56 inches (142.2 cm) high measuring 6 to 9 inches (15.2 to 22.8 cm) in diameter. Provides storage for auxiliary items such as electrodes, helmets and gloves.

Elevated Gun and Cable Rack
#300 335
For Millermatic 212 Auto-Set and 252, and Syncrowave 210. Allows operators to easily roll cylinders on and off the rack with no lifting. Gun and cable rack keeps cables off the floor and tangle free.

Dual EZ-Change® Low Cylinder Rack with Elevated Gun and Cable Rack
#301 239
For Millermatic 212 Auto-Set and 252, and Syncrowave 210. Allows operators to easily roll cylinders on and off the rack with no lifting. Gun and cable rack keeps cables off the floor and tangle free.

Dual Cylinder Rack
#195 299
For Millermatic 350P and 350P Aluminum. Replaces single-cylinder rack.

Standard Running Gear and Cylinder Rack
#042 886
Running gear
#042 887 Cylinder rack
For CP-302, Deltaweld, Dimension 302/452, and Gold Star. Running gear has 10-inch (254 mm) rear wheels and 5-inch (127 mm) front casters for excellent mobility on the shop floor. Very easy to install. Handles double as a cable holder. Cylinder rack only installs on Standard Running Gear;

For More Detailed Information, visit MillerWelds.com/accessories
Coolant Systems

**Coolmate 1.3**  #300 972  115 V
For Maxstar 210/280 and Dynasty 210/280. Light industrial, 1.3-gallon cooler designed for water-cooled torches on power sources rated up to 280 amps.*

**Coolmate 3**  #043 007  115 V  #043 008  230 V
Economical, 3-gallon cooler designed for water-cooled torches rated up to 500 amps.*

**Coolmate 3.5**  #300 245  115 V
For Maxstar 350/700 and Dynasty 350/700. Industrial, 3.5-gallon cooler designed for water-cooled torches rated up to 600 amps.*

**Coolmate 4**  #042 288  115 V
Best performer in its class — industrial, 4-gallon 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

- **Low-Conductivity Coolant** (clear, pre-mixed)  #043 810
  - For TIG and MIG applications. NOT for use where aluminum is in coolant path/circuit.
  - Provides excellent mobility and easy to install.

- **Aluminum-Protecting Coolant**
  - For use with or without Coolmate 1.3.
  - May contain aluminum in coolant path/circuit.

- **High-Conductivity Coolant**
  - Designed for comfort.
  - Small footprint and easily maneuverable, with cylinder rack low enough that you do not have to lift bottles.

###Cooling Capacity

<table>
<thead>
<tr>
<th>Model</th>
<th>Motor Input Voltage</th>
<th>Maximum Current Draw</th>
<th>Maximum Cooling Capacity</th>
<th>IEC Cooling Capacity</th>
<th>Tank Capacity</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coolmate 1.3</td>
<td>115 V, 60 Hz</td>
<td>4.7 A (60 Hz)</td>
<td>3.400 W (11,600 Btu/hr.)</td>
<td>3.8 qt./min. (3.6 L/min.)</td>
<td>1.3 gal. (4.9 L)</td>
<td>H: 11.25 in. (286 mm) W: 10.38 in. (264 mm) D: 24 in. (610 mm)</td>
<td>43 lb. (20 kg)</td>
</tr>
<tr>
<td>Coolmate 3</td>
<td>115 V, 50/60 Hz</td>
<td>5.9 A (50 Hz), 4.7 A (60 Hz)</td>
<td>3.820 W (13,000 Btu/hr.)</td>
<td>4.2 qt./min. (4.0 L/min.)</td>
<td>1.2 gal. (4.6 L)</td>
<td>H: 13.25 in. (337 mm) W: 12.25 in. (311 mm) D: 23.25 in. (594 mm)</td>
<td>40 lb. (18 kg)</td>
</tr>
<tr>
<td></td>
<td>230 V, 50/60 Hz</td>
<td>2.5 A (50 Hz), 3.0 A (60 Hz)</td>
<td>1.420 W (4,840 Btu/hr.)</td>
<td>1.1 qt./min. (1 L/min.)</td>
<td>3 gal. (11.4 L)</td>
<td>H: 11.75 in. (298 mm) W: 15.75 in. (400 mm) D: 26 in. (660 mm)</td>
<td>64 lb. (29 kg)</td>
</tr>
<tr>
<td>Coolmate 3.5</td>
<td>115 V, 50/60 Hz</td>
<td>5.9 A (50 Hz), 4.7 A (60 Hz)</td>
<td>4,140 W (14,000 Btu/hr.)</td>
<td>5.0 qt./min. (4.7 L/min.)</td>
<td>1.660 W (5,660 Btu/hr.)</td>
<td>1.1 qt./min. (1 L/min.)</td>
<td>3.5 gal. (13.2 L)</td>
</tr>
<tr>
<td>Coolmate 4</td>
<td>115 V, 50/60 Hz</td>
<td>5.9 A (50 Hz), 4.7 A (60 Hz)</td>
<td>5,500 W (18,000 Btu/hr.)</td>
<td>5.9 qt./min. (5.6 L/min.)</td>
<td>1.780 W (6,070 Btu/hr.)</td>
<td>1.1 qt./min. (1 L/min.)</td>
<td>4 gal. (15 L)</td>
</tr>
</tbody>
</table>

###Coolant Systems

**MIGRunner™ Cart**  #195 445
For Invision, AlumaFeed system, and XMT with single feeders. Small footprint and easily maneuverable, with a dual-cylinder rack low enough that you do not have to lift bottles. Durable, heavy-duty ergonomic handles are designed for comfort.

**Running Gear Cylinder Rack**  #300 408
For Invision, Access 300/450, Dimension 650, and XMT with single or dual feeders. Holds two large gas cylinders and has gun cable hangers and a consumable drawer in front. A convenient handle allows the cart to be pulled easily through doorways. Power source and single or dual feeders can be mounted to cart and secured.

**Continuum Running Gear/Cylinder Rack**  #301 264
For Continuum 350 and 500. Small footprint and easily maneuverable, with cylinder rack low enough that you do not have to lift bottles.

**Thunderbolt XL Running Gear**  #043 927
For Thunderbolt XL. Mounts easily to unit and provides convenient portability. Includes two wheels, two feet and a handle.

**2-Wheel Trolley Cart**  #300 971
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**  #301 318
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**  #300 244
For Maxstar 350/700 and Dynasty 350/700 with or without Coolmate 3.5. Cart features single-cylinder rack, foot pedal holder, three cable/torch holders and two TIG filler holders.

**No. 37 Running Gear**  #195 282
For Syncrowave 250 DX/350 LX. Includes two 10-inch (254 mm) wheels, two 5-inch (127 mm) casters, two-compartment rack for gas cylinders, and handles. Provides excellent mobility and easy to install.
**Bobcat and Trailblazer Accessories (Gas/LP)**

**Multi-Terrain Running Gear**  
#300 913 Inner tubes  
#300 914 Never Flat™ tires.  
For gas/LP Bobcat and Trailblazer. Includes two heavy-duty 15-inch tires, two 8-inch rubber swivel casters and a heavy-duty handle. Recommended for use with all surfaces and applications and is easy to move around the jobsite.

**Off-Road Running Gear**  
#300 909 Inner tubes.  
#300 910 Never Flat™ tires.  
For gas/LP Bobcat and Trailblazer. Includes four heavy-duty 15-inch tires and a rugged handle to provide maximum maneuverability.

**Off-Road Running Gear with Protective Cage and Never Flat™ Tires**  
#300 912  
For gas/LP Bobcat and Trailblazer. Running gear and rugged cage with cable holders protects your investment and is easy to move around the jobsite.

**Remote Oil Drain and Filter Kit**  
#300 923 Field  
For gas Bobcat and Trailblazer. Front mount for Kohler engines makes servicing easy when engine drive is mounted in tight spots.

**Bobcat and Trailblazer Accessories (Diesel)**

**All-Purpose Running Gear with Never Flat™ Tires**  
#300 477  
For diesel Bobcat and Trailblazer. Includes two heavy-duty 15-inch tires, two 8-inch rubber swivel casters and a heavy-duty handle. Recommended for use with all surfaces and applications and is easy to move around the jobsite.

**Protective Cage with Cable Holders**  
For diesel Bobcat and Trailblazer. Designed for use with Protective Cage or Running Gear.  
Gas Cylinder Mounting Assembly with trailer.

**Protective Cage with Cable Holders**  
For gas Bobcat and Trailblazer. Designed for use with Running Gear, Gas Cylinder Mounting Assembly or LP Tank Mounting Assembly.

**Protective Cage with Cable Holders**  
For gas Bobcat and Trailblazer. Designed for use with Running Gear, Protective Cage, or by itself. Includes base tray with bottle bracket, vertical support rack and safety chain. Note: Not recommended for use with Protective Cover.

**Gas Cylinder Mounting Assembly**  
#195 330  
For diesel Bobcat and Trailblazer. Designed for use with Protective Cage, or by itself. Includes base tray with bottle bracket, vertical support rack and safety chain. Note: Not recommended for use with Protective Cover.

**Generator Accessories**

**Full KVA Adapter Cord**  
#300 517  
For Bobcat, Trailblazer, and Big Blue models. NEMA 14-50P to NEMA 6-50R. Adapts engine drive 120/240-volt plug to common Millermatic and Spectrum 240-volt plug.

**Single-Phase Full KVA Plug Kit**  
#119 172  
For Bobcat, Trailblazer, and Big Blue models. Can be wired for 120- or 240-volt loads.

**Three-Phase Full KVA Plug Kit**  
#165 963  
For Bobcat 3 Phase.  
#254 140  
For Big Blue 500 and 600 Pro, 700 Duo Pro, and 800 Series.

**Protective Covers**

**Protective Covers**

Heavy-duty, water- and mildew-resistant covers protect and maintain the finish of the welder.  
#301 245  
For current model Blue Star 185.  
#300 919  
For current model Blue Star 185.  
For gas Bobcat and Trailblazer (except Air Pak) without Protective Cage or Running Gear.  
For gas Bobcat and Trailblazer (except Air Pak) with Protective Cage or Running Gear.  
#301 999  
For current model diesel Bobcat and Trailblazer without Protective Cage or Running Gear.  
For Big Blue 350 PipePro, 400 Pro, and 450 Duo CST.  
#194 683  
For Big Blue 500 Pro (T4F model) and 700 Duo Pro.  
For Big Blue 500 Pro (T4F model), 600 Pro, and 800 Series.
**Trailer accessories**

- **Dual Hitch** #300 831
  For HWY-1000, and HWY-224.
  Combination 2-inch (50 mm) ball and 3-inch (76 mm) lunette eye in one reversible assembly.

- **Cable Tree** #195 023 For HWY-1000. #043 826 For HWY-224.
  Provides an area to conveniently wrap weld cables and extension cords.

- **Fender Kit** #300 160
  Replacement fenders for HWY-224.

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**Load Banks**

- **LBP-350** #043 329
  Designed to provide an adjustable load for troubleshooting or calibrating welding power sources or generators. Standard equipment includes analog meters for both AC and DC output with jacks for external metering connections. It comes with a 13-foot (4 m) 115-volt power cord and has seven 50-amp load switches, providing a maximum capacity of 350 amps.

- **Welding Power Load Bank** #902 804
  Designed to load test the output of transformer-type, engine- or motor-driven generator welding power sources. This unit can be used to test AC or DC welder outputs, and to demonstrate welding equipment to customers.

---

**MIG Accessories**

**Gun and Machine Accessory Kits**

- **MIGmatic M-Series Gun Consumable Kits**
  - #234 607 0.023 in. (0.6 mm) wire For M-100/M-150.
  - #234 608 0.030 in. (0.8 mm) wire For M-100/M-150.
  - #234 609 0.035 in. (0.9 mm) wire For M-100/M-150.
  - #234 610 0.030 in. (0.8 mm) wire For M-25.
  - #234 611 0.035 in. (0.9 mm) wire For M-25.
  - #234 612 0.045 in. (1.2 mm) wire For M-25.

  M-100/M-150 kits contain 10 contact tips, 1 tip adapter and 1 standard nozzle. M-25 kits add 1 nozzle adapter.

- **Industrial MIG 4/0 Kit** #300 390 For single feeders.
  #300 957 For dual feeders.

  Consists of flowmeter regulator with 10-foot (3 m) gas hose, 10-foot (3 m) 4/0 feeder weld cable with lugs, and 15-foot (4.6 m) work cable with 600-amp C-clamp. Dual kit comes with two flowmeter regulators and gas hoses.

- **Industrial MIG 4/0 Kit with Dinse Connectors** #300 405
  For single feeders.
  #300 956 For dual feeders.

  Same as above except weld and work cables have Dinse-style connector on one end instead of lug.

- **Aluminum Conversion Kit** #172 136
  For M-25 gun. Allows 10-foot (3 m) guns to feed 3/4-inch (1.2 mm) aluminum wire.

- **Industrial MIG 4/0 Kit with Dinse Connectors** #300 405
  Kit shown.

- **Protective Covers**
  - **#301 333** For Millermatic 125 Hobby.
  - **#301 262** For Millermatic 141, 190, and 211.

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**Welding Power Load Bank**

- **W: 59.5 in. (1,511 mm)**
  - L: 105 in. (2,667 mm) W: 59.5 in. (1,511 mm)*
  - **L: 265 lb. (120 kg)**

  **L: 180 lb. (82 kg)**
  - **L: 105 in. (2,667 mm)**

  **W: 61.25 in. (1,556 mm)**
  - L: 98 in. (2,499 mm)
  - W: 57.5 in. (1,460 mm)*

  **W: 61.25 in. (1,556 mm)**
  - **L: 320 lb. (145 kg)**

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**Fender Kit** #300 160
Replacement fenders for HWY-224.
Plasma Cutter Accessories

Automation Kits

Automation Kit for Spectrum 625 X-TREME
#301 158
Upgrades new quick-connect hand-held torch packages to add machine torch capabilities. Includes new front panel with built-in remote control cable receptacle. Machine torches are NOT included in kits and must be ordered separately.

Automation Kits for Spectrum 875 and 875 Auto-Line
#301 156
For 875.
#301 157
For 875 Auto-Line.
Automation kits upgrade hand-held torch packages to add machine torch capabilities. Automation kit for Spectrum 875 Auto-Line (#301 157) includes a remote pendant control for manual on/off. Machine torches are NOT included in kits and must be ordered separately.

Flexible Work Cable
#234 838
20 ft. (6.1 m)
#234 930
50 ft. (15.2 m)
Work cable with quick connect and heavy-duty clamp.

Cable Covers
#239 642
20 ft. (6.1 m)
#231 867
25 ft. (7.6 m)
#231 868
50 ft. (15.2 m)

Cutting Guides

Plasma Circle-Cutting Guides
#253 055
For XT30C, XT30, XT40 and XT60. Cut straight lines or circles up to 12 inches in diameter.

Suction/Magnetic Pivot Base
#195 979
Add this to your cutting guide for convenient attachment to all flat surfaces. The extended arm accommodates holes up to 30 inches in diameter.

Plasma Standoff Roller Guide
#253 054
Helps maintain recommended standoff distance to maximize cutting performance and improve tip life.

Filters

In-Line Air Filter Kit
#228 926
For 375 X-TREME, 625 X-TREME, 875, and 875 Auto-Line. Mounts to back of the plasma cutter. Includes male and female 1/4-inch NPT quick-disconnect fittings and hose for easy on/off connection. The replaceable filter element (#228 928) filters to .85 microns for removal of 99.9 percent of water, dirt and oil.

RTI Filter and Bracket
#300 491
For 875 and 875 Auto-Line. Dryer will remove water, dirt and oil as small as one micron with 99.9 percent efficiency. Can be mounted on plasma cutter or on wall. Install as close as possible to point of air consumption. Replaceable filter element (#212 771).

Plugs and Cords

MVP® Plugs
#219 258
For power cable 6-50P (230/240 V, 50 A).
#219 261
For power cable 5-15P (115/120 V, 15 A).
#219 259
For power cable 5-20P (115/120 V, 20 A).

For Spectrum 375 X-TREME, Millermatic 211, Maxstar 150 models, Diversion 180, and Multimatic 200. Allows connection of machine to 115/120-volt or 230/240-volt receptacles without tools — just choose the plug that fits the receptacle.

MVP® Adapters

#254 328
For connection to 6-50P receptacle (240 V, 50 A).
#254 330
For connection to 5-15P receptacle (120 V, 15 A).
#254 331
For connection to 5-20P receptacle (120 V, 20 A).

RTI Filter and Bracket
#300 491
For Spectrum 875 and 875 Auto-Line.
#249 953
20 ft. (6.1 m) XT60
#249 954
50 ft. (15.2 m) XT60

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.

Protective Covers

#300 388
For Spectrum 875.

#300 184
X-CASE for Spectrum 375 X-TREME and 625 X-TREME, and Maxstar 150 models.

Torches

Spectrum Plasma Cutter Hand-Held Torches
For Spectrum 375 X-TREME
#248 949
12 ft. (3.7 m) XT30
For Spectrum 625 X-TREME
#260 633
12 ft. (3.7 m) XT40
#260 635
20 ft. (6.1 m) XT40
For Spectrum 875 and 875 Auto-Line
#249 953
20 ft. (6.1 m) XT60
#249 954
50 ft. (15.2 m) XT60

For XT40M, XT40 and XT60M. Full KVA Adapter Cord: #300 517.

Spectrum Plasma Cutter Machine Torches
For Spectrum 625 X-TREME
#259 305
25 ft. (7.6 m) long body XT40M
#257 462
25 ft. (7.6 m) short body XT40M
For Spectrum 875 and 875 Auto-Line
#249 955
25 ft. (7.6 m) long body XT60M
#249 956
50 ft. (15.2 m) short body XT60M
#257 464
25 ft. (7.6 m) short body XT60M
#263 952
50 ft. (15.2 m) short body XT60M

For XT30. Plasma Torch Consumable Kits
#253 520
For XT30.
#253 521
For XT40.
#256 033
For XT60.
#127 493
Empty consumable box.
Polarity Switches/Controls

Polarity Control  #042 871
This dual-function control is designed for use with dual wire feeders or any application where electrical isolation and/or polarity reversing of weld current is required. Both functions can be used at the same time.

Process Selector Control  #042 872
For CC, CV or CC/CV welding power source. Provides easy way to change welding process. Also includes features of Polarity Control.

Remote Controls

Also see Remote Controls in TIG Accessories on pages 112 and 113.

Stick Accessory Kits

No. 2 Stick Cable Sets
#195 196  15 ft. (4.6 m)
#300 836  50 ft. (15 m)
Consists of either 15- or 50-foot electrode cable with holder and work cable with clamp. 200 A, 100% duty cycle.

2/0 Stick Cable Set
#173 851  50 ft. (15 m), 350 A
#043 952  100/50 ft. (30/15 m), 300 A
Consists of either 50- or 100-foot 2/0 electrode cable with holder and 50-foot work cable with clamp. 100% duty cycle.

Weld Cables
#195 457  Cable with electrode holder
#195 458  Cable with work clamp
Consists of a stud/Tweco® adapter and 10-foot (3 m) 2/0 weld cable with a Tweco male connector and either an electrode holder or work clamp. Rated up to 400 A.

Submerged Arc Accessories

Cables

2/0 Weld Cable Extensions
#195 456  50 ft. (15 m)
#195 455  100 ft. (30 m)
(195 457) and (195 458).

Flux Hopper Extension Cables
#250 232 010  10 ft. (3 m)
#250 232 025  25 ft. (7.6 m)
#250 232 065  65 ft. (19.8 m)
Cable between SubArc Interface and flux hopper.

Motor Extension Cables
#254 232 030  5 ft. (1.5 m)
#254 232 010  10 ft. (3 m)
#254 232 025  25 ft. (7.6 m)
#254 232 065  65 ft. (19.8 m)
Cable between SubArc Interface and drive motor.

SubArc Control Cables
#260 623 030  30 ft. (9.1 m)
#260 622 050  50 ft. (15 m)
#260 622 080  80 ft. (24.4 m)
#260 622 100  100 ft. (30.5 m)
#260 622 120  120 ft. (36.6 m)
#260 622 200  200 ft. (61.0 m)
Cable between SubArc Interface and power source.

SubArc Parallel Cable
#260 775 015  15 ft. (4.6 m)

SubArc Tandem Cable
#260 878 015  15 ft. (4.6 m)

Torch Accessories

OBT 600 Torch Body Extensions
#043 967  1 inch (25.4 mm)
#043 969  2 inch (50.8 mm)
#043 973  4 inch (101.6 mm)
#043 975  6 inch (152.4 mm)

OBT 1200 Torch Body Extension  #043 981
Overall length with extension is 9 inches (228.6 mm). Actual length of extension is 8.5 inches (215.9 mm).

OBT Torch Contact Tips
OBT 600  OBT 1200
#192 700  #192 141  1/16 in. (1.6 mm)
#192 701  #199 026  5/64 in. (2.0 mm)
#192 702  #192 142  3/32 in. (2.4 mm)
#192 703  #200 771  7/64 in. (2.8 mm)
#192 704  #192 143  1/8 in. (3.2 mm)
#192 705  #192 144  5/32 in. (4.0 mm)
#192 706  #192 136  3/16 in. (4.8 mm)
#192 707  #192 138  5/32 in. (4.0 mm)

1200-Amp Torch Contact Tips
Single-Wire  Twin-Wire
#264 590  #264 595  3/64 in. (1.2 mm)
#264 591  #264 596  1/16 in. (1.6 mm)
#264 597  #264 598  5/64 in. (2.0 mm)
#264 487  #264 588  3/32 in. (2.4 mm)
#264 593  —  1/8 in. (3.2 mm)
#264 594  —  5/32 in. (4.0 mm)

Wire Drive Assembly Accessories

Drive Rolls
#132 955  1/16 in. (1.6 mm)
#132 960  5/64 in. (2.0 mm)
#132 961  3/32 in. (2.4 mm)
#132 962  7/64 in. (2.8 mm)
#132 963  1/8 in. (3.2 mm)
#193 700  5/32 in. (4.0 mm)
#193 701  3/16 in. (4.8 mm)

V-knurled drive rolls for use with hard-shelled cored wires.

Manual Slides
#301 137  Single slide, 7.87 in. (200 mm)
#301 138  Cross slide, 7.87 x 7.87 in. (200 x 200 mm)
Provides smooth and accurate movement of the welding heads. Single slide allows for 7.87 inch (200 mm) travel adjustment and cross slide allows for 7.87 x 7.87 inch (200 x 200 mm) with load capacity of 220 pounds (100 kg) at 1.64 feet (500 mm). Not recommended for tandem.

Single-Wire Straightener  #199 733
For SubArc Wire Drive 400 Digital Low Voltage and SubArc Wire Drive 780 Digital Low Voltage. For 1/16–3/16 inch (1.6–4.8 mm) wire.

Twin-Wire Straighteners
(for Twin-Wire torches only)
#301 160  Single adjustment
#301 162  Double/separate adjustment

Wire Reel  #108 008
Supports 60-pound (27 kg) coil of wire. Requires Spool Support Assembly (#119 438).
TIG Accessories

High-Frequency Arc Starters and Stabilizers

HF251D-1
#042 388 115 V
HF251-2
#042 387 230 V

These portable 250-amp, 60 percent duty cycle units add high-frequency to the welding circuit to help start arc when using the TIG process.

Secondary Contactor Kit
#041 999 Field For HF-251D-1.
#041 906 Field For HF-251-2.
For power sources without a contactor. Mounts inside HF-251 cabinet.

Kits

Contractor Kit
#301 311 TIG/stick pkg with RFCS-14 fingertip
#301 309 TIG/stick pkg with RCCS-14 fingertip
#300 185 Torch with Dinse-style connector, RFCS-6M foot control,
112-amp stick electrode holder with 15-foot (4.6 m) cable, 300-amp work clamp with 15-foot (4.6 m) cable, flow gauge regulator with 12-foot (3.7 m) gas hose, gas hose coupler, AK2C torch accessory kit, and TIG torch connector.

For Maxstar (except 150 models), Dynasty, and Syncrowave 250 DX/350 LX.

#301 268 #300 186 #300 990

TIG/stick pkg with RFCS-14 HD foot pedal
#301 309
#300 185
#300 990

For Maxstar 210/280 and Dynasty 210/280.

#300 375 A, W-375
#300 400 A, W-400 (WP-18SC)

Weldcraft™ Water-Cooled Torch Kits
#300 185 250 A, W-250 (WP-20)
#300 990 280 A, W-280 (WP-280)
#301 268 375 A, W-375
#300 186 400 A, W-400 (WP-18SC)
For Maxstar (except 150 models), Dynasty, and Syncrowave 250 DX/350 LX. Kit comes with 25-foot (7.6 m) TIG torch with Dinse-style connector (thread-lock on 400-amp kit), torch cable cover, work clamp with 15-foot (4.6 m) cable [12-foot (3.7 m) cable on 400-amp kit], flowmeter regulator with gas hose, and torch accessory kit.

Remote Controls

14-Pin to 6-Pin Adapter Cord
#300 507
For Maxstar 150 STL and STH, and Multimatic 200. 12-inch (305 mm) cord adapts Miller® 14-pin foot control or fingertip control to a 6-pin plug.

RFCS-RJ45    #300 432
For Diversion 165 and 180. Foot pedal current/contactor control. Includes 14-foot (4.3 m) cord with plug.

RMS-6M (6-pin plug)  #194 744
Heavy-duty foot pedal current/contactor control provides increased stability and durability from larger base and heavier cord. Reconfigurable cord can exit front, back or either side of the pedal for flexibility. Includes 20-foot (6 m) cord with plug.

RFCS-14 (14-pin plug)  #300 381
For Maxstar 150 STL and STH, and Multimatic 200. 12-inch (305 mm) cord adapts Miller® 14-pin foot control or fingertip control to a 6-pin plug.

Weldcraft™ A-150 TIG
375 A, W-375
400 A, W-400 (WP-18SC)
280 A, W-280 (WP-280)

RFCS-6M (6-pin plug)
#195 184 13.25 ft. (4 m) cord
#195 503 26.5 ft. (8 m) cord
For Maxstar 150 STL and STH, and Multimatic 200.

RFCS-RJ45
#301 146 13.25 ft. (4 m) cord
#195 507 For Diversion 165 and 180.

RMS-6M (6-pin plug)
#194 744
For Maxstar 150 STL and STH.

Remote Controls

RFCS-6M (6-pin plug)
#195 183 13.25 ft. (4 m) cord
#195 504 20 ft. (6 m) cord
For Maxstar 150 STL and STH, and Multimatic 200.

RFCS-5 (5-pin plug)
#043 716 20 ft. (6 m) cord
RFCS-14 (14-pin plug)
#043 554 20 ft. (6 m) cord
Foot pedal current/contactor control. Includes cord with plug.

RRLS-14 (14-pin plug)  #195 269
For Maxstar 150 STL and STH.

RPBS-14 (14-pin plug)  #300 666
Attaches to the TIG torch to remotely start and stop the TIG welding process. Includes 25-foot (7.6 m) cord with plug.

#042 388
#042 387
#300 379 and #195 478 covers shown.
#300 579
For Diversion 165 and 180.
#195 187
For Maxstar 210.
#195 142
For Syncrowave 210.
#195 320
For Syncrowave 250 DX/350 LX.
#195 478 For XMT 304 and 350.

Protective Covers

#300 381
For Maxstar 210.
#301 382
For Maxstar 280 and Dynasty 210/280.

#195 184
For Maxstar 150 STL and STH, and Multimatic 200.
#195 185
For Syncrowave 210.
#195 320
For Syncrowave 250 DX/350 LX.
#195 478 For XMT 304 and 350.

Foot pedal current/contactor control. Includes cord with plug.

Weldcraft™ A-150 TIG
375 A, W-375
400 A, W-400 (WP-18SC)
280 A, W-280 (WP-280)

RFCS-5 (5-pin plug)
#043 688 26.5 ft. (8 m) cord
North/south rotary-motion fingertip current/contactor control. Dimensions: 4 x 4 x 3.25 inches (102 x 102 x 82 mm). Includes cord with plug.

RFCS-RJ45
#300 432
For Diversion 165 and 180. Foot pedal current/contactor control. Includes 14-foot (4.3 m) cord with plug.

RFCS-14 HD (14-pin plug)
#194 744
Heavy-duty foot pedal current/contactor control provides increased stability and durability from larger base and heavier cord. Reconfigurable cord can exit front, back or either side of the pedal for flexibility. Includes 20-foot (6 m) cord with plug.

RFCS-14 (14-pin plug)
#301 382
For Maxstar 280 and Dynasty 210/280.

#195 185
For Maxstar 150 STL and STH, and Multimatic 200.
#195 186
For Syncrowave 210.
#195 320
For Syncrowave 250 DX/350 LX.
#195 478 For XMT 304 and 350.

13.25 ft. (4 m) cord
26.5 ft. (8 m) cord
20 ft. (6 m) cord

For additional lengths visit MillerWelds.com/equiptoweld.

#195 387
For Multimatic 200. Kit comes with Weldcraft™ A-150 TIG torch with Dinse-style connector, RFCS-6M foot control, flow gauge regulator with 12-foot (3.7 m) gas hose, and AK2C torch accessory kit.

All-in-one TIG/stick welding kit comes with Weldcraft™ A-150 TIG torch, 200-amp stick electrode holder with 15-foot (4.6 m) cable, 300-amp work clamp with 15-foot (4.6 m) cable, flow gauge regulator with 12-foot (3.7 m) gas hose, gas hose coupler, AK2C torch accessory kit, and TIG torch connector.

#195 504
For Maxstar 210/280 and Dynasty 210/280.
#195 320
For Syncrowave 250 DX/350 LX.
#195 478 For XMT 304 and 350.

For Maxstar 150 STL and STH, and Multimatic 200. 12-inch (305 mm) cord adapts Miller® 14-pin foot control or fingertip control to a 6-pin plug.

Foot pedal current/contactor control. Push forward for maintained contact and backward for momentary contact. Includes 20-foot (6 m) cord with plug.

Momentary- and maintained-contact rocker switch for contactor control. Includes 26.5-foot (8 m) cord with plug.

Momentary-contact switch for contactor control. Rubber-covered pushbutton dome switch ideal for repetitive on-off applications. Includes 26.5-foot (8 m) cord with plug.

RPBS-14 (14-pin plug)
#300 381
For Maxstar 150 STL and STH, and Multimatic 200. 12-inch (305 mm) cord adapts Miller® 14-pin foot control or fingertip control to a 6-pin plug.

#300 381
For Maxstar 150 STL and STH, and Multimatic 200. 12-inch (305 mm) cord adapts Miller® 14-pin foot control or fingertip control to a 6-pin plug.

*For additional lengths visit MillerWelds.com/equiptoweld.
Wireless Remote Foot and Hand Controls

See literature no. AY/6.5 (Foot) and AY/6.6 (Hand)

Increases productivity, saves money, improves safety and easy to use.

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.

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 300 feet away from welder without returning to machine.

Improves weld quality. Operators can adjust their machines to optimize the parameters for different joint configurations, electrodes, and wire types and sizes.

Smart Touch™ buttons allow quick and accurate machine parameter adjustments.

Digital meter display allows presetting percentage of machine output before welding, and viewing amperage and voltage while welding.

Improves productivity and maneuverability by eliminating cord tangles. Reduces clean up time and work area cord clutter.

Improves safety by eliminating control cord and reducing potential trip hazard.

Improves reliability by eliminating control cord failure.

Multiple frequency sharing allows up to 20 systems to operate in a 90-foot (27.4 m) radius with accuracy and precision — and without delay, system interference, or crosstalk.

Easy-to-install receiver plugs directly into the 14-pin receptacle of Miller® machines.

Easily programmable. Control can be quickly and easily paired with any other Miller 14-pin wireless receiver. (Control is preprogrammed when purchased with the receiver.)

*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.

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Wireless Foot Control System (#300 429)

- Wireless 14-pin receiver (included with both systems)
- Wireless hand control
- Wireless foot control

Wireless Hand Control System (#300 430)

- Wireless 14-pin receiver
- Wireless hand control (transmitter)
- Wireless foot control (transmitter)

TIG Accessories (continued)

Torch and Weld Cable Connectors

**Air-Cooled TIG (GTAW) Torch Connectors**

- **#195 234**
  - For Maxstar 150 and Multimatic 200.
  - 25 mm (small) Dinse-style gas thru for one-piece air-cooled torches.

- **#194 723**
  - A-200 (WP26)

- **#194 722**
  - All others
  - For Syncrowave 210.
  - 50 mm Dinse-style gas thru for one-piece air-cooled torch.

- **#195 379**
  - A-200 (WP26)

- **#195 378**
  - All others
  - For CST 280, Maxstar 210/280/350, Dynasty 210/280/350, and Syncrowave 250 DX/350 LX.
  - 50 mm Dinse-style for one-piece air-cooled torch.

**Water-Cooled TIG (GTAW) Torch Connectors**

- **50 mm Dinse-Style Flow Thru #195 380**
  - For Syncrowave 210.
  - Used with all Weldcraft™ water-cooled torches.

- **50 mm Dinse-Style with Water Return Line #195 377**
  - For Maxstar 210/280/350, Dynasty 210/280/350, and Syncrowave 250 DX/350 LX.
  - Used with all Weldcraft™ water-cooled torches.

**50 mm Thread-Lock-Style #225 028**

For Maxstar/Dynasty 700.

Used with all Weldcraft™ water-cooled torches.

**Thread-Lock-Style Weld Cable Connectors #225 029**

For Maxstar/Dynasty 700.

Contains two male connectors that accept #1/0 to #4/0 AWG size cable.

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To view the complete list of accessories, visit MillerWelds.com/wireless.
Wire Feeder Accessories

Extension Cables (14-Pin)

8-Conductor Cables*  
#242 208 025  25 ft. (7.6 m)  
#242 208 050  50 ft. (15 m)  
#242 208 080  80 ft. (24.4 m)  
For XR-Control, SuitCase 12RC feeder, 20 Series feeders, and 70 Series (S/D/DX model) feeders. For 14-pin remote controls/24 VAC wire feeders. 14-pin plug to a 14-pin socket. (Not for 115-volt XR or 50 Series feeders.)

11-Conductor Cables*  
#247 831 025  25 ft. (7.6 m)  
#247 831 050  50 ft. (15 m)  
#247 831 080  80 ft. (24.4 m)  
For XR-AlumaFeed, MPa Plus feeders, and 60M feeders. 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 control of contactor control, and 14-conductor control on all Miller® electronic CV 14-pin power sources. Can also be used with competitive power sources requiring a contact closure for contactor control.

14-Conductor Cables*  
#242 205 025  25 ft. (7.6 m)  
#242 205 050  50 ft. (15 m)  
#242 205 080  80 ft. (24.4 m)  
For HDC and WC-115 weld controls, XR-Control prior to serial number KK309906, and 50 Series feeders. Fully-loaded 14-pin extension cables for remote controls, and 24-volt and 115-volt feeders.

*For additional lengths visit MillerWelds.com/equiptoweld.

Power Supply Adapter

PSA-2 Control  #141 604  
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 10-foot interconnecting cable with Hubbell connections for older-style power sources. Can also be used with competitive power sources requiring a contact closure for contactor control.

PSA-2 Extension Cord  #047 813  
25-foot (7.6 m) cord extends 10-foot (3 m) cord supplied with PSA-2 control (4-pin to 4-pin connection).

Spool Adapter

#047 141  
For use with 14-pound (6.4 kg) spool of Hobart or Lincoln self-shielding wire.

Spool Gun Controls and Kits

For more information see literature no. M/1.5, M/1.73 and M/1.76.

SGA 100  #043 856  
Required to connect Spoolmate 3035 spool gun to any Millermatic 141, 190, or 211. Also allows connection to virtually any similar MIG welder — Miller or other brands. Includes 10-foot (3 m) 115-volt power cable with plug, 6-foot (1.8 m) interconnecting cable, and 5-foot (1.5 m) gas hose.

SGA 100C  #043 857  
SGA with contactor required to connect Spoolmate 3035 spool gun to CV engine drives like the Miller Bobcat. Includes 10-foot (3 m) 115-volt power cable with plug, 6-foot (1.8 m) interconnecting cable, and 5-foot (1.5 m) gas hose.

WC-115A Weld Control  
#137 546  
Without contactor  
#137 546-01-1  
With contactor  
Operates on 115-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  #137 549  
For Spoolmate 200 and Spoolmatic/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  
#132 228  25 ft. (7.6 m)  
#132 229  50 ft. (15 m)  
For Spoolmatic/Spoolmatic Pro. Extends leads, etc. between spool gun and power source.

Turntable Assembly  
#146 236  
Allows feeder to rotate as operator changes work position. Reduces strain and bending of gun cable.

Wire Straightener

#141 580  For .035–.045 inch (0.9–1.1 mm) wire.  
#141 581  For 1/16–1/8 inch (1.6–3.2 mm) wire.
Finding the right filler metal solution for your welding needs is critical in an industry that is about getting the job done right. Every day, every project, every weld is another opportunity for Hobart to help you find the right filler metal solution—or create a new one.

To request a product catalog—visit HobartBrothers.com or call 1-800-424-1543.

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