Every answer is different. And the same.

We asked why you weld. Thousands answered, telling unforgettable stories, sharing amazing images — and reminding us that although every welding project is different, we share the same bond.

We hope you’ll visit MillerWelds.com/webuild and explore the many projects created by people like you. Together, we share knowledge. Together, we celebrate achievements. Together, we build.

See page 95 for the winner of the #whyiweldcontest

For pricing or to find your local distributor, visit us on the Web or give us a call.

MillerWelds.com
1-800-4-A-Miller (1-800-426-4553)
## New from Blue

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**Shop with expert advice and attention**

Visit your local Miller distributor for in-depth knowledge and one-on-one assistance in product selection. [MillerWelds.com/wheretobuy](http://MillerWelds.com/wheretobuy)

**Shop with speed and convenience**

Visit [MillerWelds.com](http://MillerWelds.com) for a fast and easy way to buy welding products for your home or shop.
Benefits of Blue

Technologies and innovations

Miller is committed to bringing forward-thinking technologies and solutions to the welding industry. We listen to your challenges and constantly seek to improve our products and services to better address them.

Ease of use

Feature on inverter-based machines that allows for any input voltage hook-up with no manual linking. Provides convenience in any job setting and is ideal for dirty or unreliable power. Found on the following products:

**MVP™ plugs and adapters**

Allows connection to common 120-volt and 240-volt power receptacles without the use of tools — just choose the plug/adapter that fits the receptacle. Found on the following products:

- **MIG**
  - Millermatic 211 (pg 9)
- **TIG**
  - Diversion (pg 54)
  - Syncrowave 210 (pg 55)
- **Multiprocess**
  - Multimatic (pg 41)
- **Engine drives**
  - Fusion (pg 73)
- **Plasma cutters**
  - Thunderbolt 160 (pg 50)
  - Spectrum 375/625 (pg 92–94)

**Auto-Set™**

Provides speed, convenience and confidence of preset controls and eliminates guesswork when setting weld parameters. Variations of this technology include **Advanced Auto-Set** and **Auto-Set Elite**. Found on the following products:

- **MIG**
  - Millermatic 141/211/212 Auto-Set (pg 9–10)
- **Stick**
  - Maxstar (pg 50–51)
- **TIG**
  - Maxstar (pg 54/56–58)
  - Syncrowave 210 (pg 55)
  - Dynasty (pg 56–58)
- **Plasma cutters**
  - Spectrum (pg 92–94)

**ClearLight™ Lens Technology**

Optimizes contrast and clarity in welding and light states. 1/1/1/2 optical clarity rating allows for a lighter light state while not welding, providing versatility for varied applications. Found on the following products:

- **Welding helmets**
  - T94, Digital Infinity, Digital Elite and Digital Performance (pg 104/105)

**Pro-Set™**

Provides speed, convenience and confidence of preset controls and eliminates guesswork when setting TIG weld parameters. Found on the following products:

- **TIG**
  - Syncrowave 210 (pg 55), Dynasty (pg 56–58) and Maxstar (except 161) (pg 56–58)

**X-Mode™**

Electromagnetically senses the weld to eliminate sunlight interference and continuously detects the arc even if sensors are blocked. Found on the following products:

- **Welding helmets**
  - T94, Digital Infinity, Digital Elite and Classic VSi (pg 104/105)
Advanced welding processes

Versa-Pulse™ is a fast, low-heat, low-spatter process designed for materials up to 1/4 inch and is great for gap filling.

Accu-Pulse® is better for out-of-position welds, provides higher deposition rates and has the most adaptive arc on 16 gauge and thicker materials.

RMD® (Regulated Metal Deposition) is a modified-short-circuit welding process with the lowest heat process and limited travel speed. It is designed to fill gaps in thin-material applications and provides a higher quality root pass, calm stable arc and less spatter.

Advanced welding processes are found on the following products:

<table>
<thead>
<tr>
<th>MultiProcess</th>
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<td>Dimension 650 ArcReach (pg 43)</td>
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<td>Big Blue ArcReach models (pg 80–83)</td>
</tr>
<tr>
<td>PipeWorx 350 FieldPro (pg 48)</td>
<td></td>
</tr>
</tbody>
</table>

Auto-Speed™

Automatically adjusts engine speed to one of four rpm levels so the engine never works harder than necessary. Reduces fuel consumption, exhaust emissions and noise levels on the Trailblazer 325 engine-driven welder/generator (pg 78).

Optimization and performance

Excel™ power

Provides 2,400 watts (20 A) of 120-volt power at all engine speeds, including idle. Reduces fuel consumption, exhaust emissions and noise levels on the Trailblazer 325 engine-driven welder/generator (pg 78).

InfoTrack™

Data monitoring technology tracks arc time and features a clock. Version 2.0 adds arc count. Found on the following products:

Welding Helmets

T94 and Digital Infinity (pg 104/105)

Fan-On-Demand™

Fan only operates when needed to reduce noise, energy use and amount of contaminants pulled through the machine. Found on various MIG, multiprocess, stick, TIG and plasma cutter products.

Insight Welding Intelligence™

Insight Core™ is a simplified, Internet-based welding information solution that reports operator productivity and deposition, as well as weld parameter verification.

Insight Centerpoint™ is an advanced PC-based operator feedback solution designed to detect missed welds, verify proper weld sequence and provide weld defect detection — all in real time.

Insight Pipe and Vessel is a powerful pipe documentation solution that provides traceability by relating weld data to the specific contract/spool/joint.

Insight ArcAgent™ is a set of premium data acquisition tools that enable both Insight Core and Insight Centerpoint solutions to integrate with any brand of welding power source.

For more information on Insight Welding Intelligence, see pages 68–71. Insight Welding Intelligence is found on the following products:

<table>
<thead>
<tr>
<th>MIG (Core and Centerpoint)</th>
<th>Submerged Arc (Core with 14-pin module and adapter kit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuum (pg 18)</td>
<td>SubArc Digital Series (pg 84)</td>
</tr>
<tr>
<td>Auto-Continuum (pg 19)</td>
<td>NOTE: Insight Core is compatible with many other 14-pin compliant Miller® power sources. See list at MillerWelds.com/insight.</td>
</tr>
<tr>
<td>Multiprocess (Pipe and Vessel)</td>
<td>PipeWorx 400 (pg 48)</td>
</tr>
<tr>
<td>TIG (Core and Centerpoint)</td>
<td>Dynasty 280 DX with Insight (pg 56)</td>
</tr>
</tbody>
</table>
Help me choose

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

MIG (GMAW) ★ S SS Ni AL CB
- Easiest process to learn
- High welding speeds possible
- Provides better control on thinner metals
- Cleaner welds possible with no slag
- Same equipment can be used for flux-cored welding

Pulsed MIG (GMAW-P) ★ S SS Ni AL CB
- Flexibility and productivity — nearly all metals can be welded in all positions
- Larger diameter electrode wires for higher deposition rates
- Virtually no spatter
- Welds thin to thick metals

Flux-cored (FCAW) ★ S SS
- Can work as well as stick on dirty or rusty material
- Out-of-position welding
- Deep penetration for welding thick sections
- Increased metal deposition rate

Stick (SMAW) ★★ S SS Ni Cl
- Well suited for windy, outdoor conditions
- More forgiving when welding on dirty or rusty metal

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

Resistance Spot ★ S SS Ni
- Simple, easy-to-operate welder for light industrial applications

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

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

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

Air Carbon Arc (CAC-A) Cutting and Gouging ★★
- Wide variety of metals
- Removes discontinuities or inferior welds

Metal type
- S: Steel
- SS: Stainless steel
- Ni: Nickel alloys
- AL: Aluminum
- CI: Cast iron
- CB: Copper/brass
- Ti: Titanium
- Mg: Magnesium alloys
- EC: All electrically conductive

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

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

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

Finding the welding or cutting equipment that’s right for you doesn’t have to be complicated. Follow the steps below.
2 Evaluate your needs

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 an engine-driven welder/generator to supply power.
- For locations where AC power is available does it match your machine’s power and voltage requirements.
  - Single-phase power (120 or 240 V) is found in most homes and garages.
  - Three-phase power is common in industrial settings.

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.

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

4 Go to product page descriptions
Product page descriptions provide more in-depth information:
- Color-coded sections identified with a primary process icon and title. Colored bullets indicate output power classification and power icons indicate power supplied or required (see descriptions above).
- Listings for main features, recommended processes and most popular accessories.
- For additional information, 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.

Note: Specifications are subject to change without notice.
### Product Guide

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<th>Class</th>
<th>Capabilities</th>
<th>Weldable Metals</th>
<th>Welding Output Range</th>
<th>Special Features</th>
<th>Typical Applications</th>
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<td><strong>Millermatic® 141</strong></td>
<td>9</td>
<td></td>
<td></td>
<td>Steel, stainless aluminum</td>
<td>30-140 A</td>
<td>All-in-one, 120 V input, Auto-Set™ Smooth-Start™</td>
<td>Up to 3/16 in. using self-shielded wire maintenance/repair, auto body, hobby</td>
</tr>
<tr>
<td><strong>Millermatic® 211</strong></td>
<td>9</td>
<td></td>
<td></td>
<td>Steel, stainless aluminum</td>
<td>30-230 A</td>
<td>All-in-one, 120 or 240 V input, Auto-Set™ Smooth-Start™</td>
<td>Up to 3/8 in. maintenance/repair, auto body, hobby</td>
</tr>
<tr>
<td><strong>Millermatic® 212</strong></td>
<td>10</td>
<td></td>
<td></td>
<td>Steel, stainless aluminum</td>
<td>30-210 A</td>
<td>All-in-one, 230 V input, Fan-On-Demand™ Gun-On-Demand™</td>
<td>Up to 3/8 in. fabrication, farm, garage/body shops</td>
</tr>
<tr>
<td><strong>Millermatic® 252</strong></td>
<td>10</td>
<td></td>
<td></td>
<td>Steel, stainless aluminum</td>
<td>30-300 A</td>
<td>All-in-one, standard timers menu, Fan-On-Demand™ can connect MIG gun, push-pull gun or spool gun</td>
<td>Up to 1/2 in. industrial production/fabrication, farm</td>
</tr>
<tr>
<td><strong>Millermatic® 350P</strong></td>
<td>11</td>
<td></td>
<td></td>
<td>Steel, stainless aluminum</td>
<td>25-400 A</td>
<td>All-in-one, connects to standard MIG gun, push-pull gun or spool gun – auto body aluminum repair system available</td>
<td>Up to 1/2 in. industrial production/fabrication, pulsed MIG ideal for thin gauge aluminum</td>
</tr>
<tr>
<td><strong>Millermatic® 350P</strong></td>
<td>13</td>
<td></td>
<td></td>
<td>Aluminum</td>
<td>25-400 A</td>
<td>All-in-one, optimized for feeding aluminum wire only using a push-pull gun or spool gun</td>
<td>Up to 1/2 in. industrial aluminum production/fab, pulsed MIG ideal for thin gauge aluminum</td>
</tr>
<tr>
<td><strong>AlumaFeed® 350</strong></td>
<td>14</td>
<td></td>
<td></td>
<td>Aluminum</td>
<td>5-425 A</td>
<td>Profile Pulse™ lightweight feeder can be up to 100 feet from power source</td>
<td>Heavy industrial aluminum production/fabrication, truck trailer, shipbuilding</td>
</tr>
<tr>
<td><strong>Invision™ 352</strong></td>
<td>17</td>
<td></td>
<td></td>
<td>Most metals</td>
<td>5-425 A</td>
<td>Push/pull gun capability, optimized with 74 MPa Plus wire feeder</td>
<td>Manufacturing and production</td>
</tr>
<tr>
<td><strong>AlumaFeed® 450</strong></td>
<td>14</td>
<td></td>
<td></td>
<td>Aluminum</td>
<td>15-600 A</td>
<td>Profile Pulse™ lightweight feeder can be up to 100 feet from power source</td>
<td>Heavy industrial aluminum production/fabrication, truck trailer, shipbuilding</td>
</tr>
<tr>
<td><strong>Invision™ 450</strong></td>
<td>17</td>
<td></td>
<td></td>
<td>Most metals</td>
<td>15-600 A</td>
<td>Push/pull gun capability, optimized with 74 MPa Plus wire feeder</td>
<td>Manufacturing and production</td>
</tr>
<tr>
<td><strong>CP-302</strong></td>
<td>16</td>
<td></td>
<td></td>
<td>Most metals</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>Deltaweld® 302</strong></td>
<td>16</td>
<td></td>
<td></td>
<td>Most metals</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>Deltaweld® 452</strong></td>
<td>16</td>
<td></td>
<td></td>
<td>Most metals</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>Deltaweld® 652</strong></td>
<td>16</td>
<td></td>
<td></td>
<td>Most metals</td>
<td>10-44 V</td>
<td>Power efficient, material-specific output terminals</td>
<td>Equip/auto mfg, metal fab, construction, agri equipment</td>
</tr>
<tr>
<td><strong>Continuum™ 350</strong></td>
<td>18</td>
<td></td>
<td></td>
<td>Most metals</td>
<td>20-400 A</td>
<td>Advanced arc performance, Welding Intelligence™</td>
<td>Mid-to-high volume manufacturing</td>
</tr>
<tr>
<td><strong>Continuum™ 500</strong></td>
<td>18</td>
<td></td>
<td></td>
<td>Most metals</td>
<td>20-600 A</td>
<td>Advanced arc performance, Welding Intelligence™</td>
<td>Mid-to-high volume manufacturing</td>
</tr>
<tr>
<td><strong>Auto-Continuum™ 350</strong></td>
<td>19</td>
<td></td>
<td></td>
<td>Steel, stainless</td>
<td>20-400 A</td>
<td>Available for EtherNet/IP™ DeviceNet and analog protocol</td>
<td>Fixed and flexible automation</td>
</tr>
<tr>
<td><strong>Auto-Continuum™ 500</strong></td>
<td>19</td>
<td></td>
<td></td>
<td>Steel, stainless</td>
<td>20-600 A</td>
<td>Available for EtherNet/IP™ DeviceNet and analog protocol</td>
<td>Fixed and flexible automation</td>
</tr>
</tbody>
</table>

### Product Key

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

See aluminum MIG solutions chart (page 12) and Industrial MIG solutions chart (page 15) for additional information.
### Millermatic® 141 and 211

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

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

**Comes complete with**
- 10 ft. (3 m) M-100 MIG gun and cable assembly (248282)
- 10 ft. (3 m) work cable with clamp
- 6.5 ft. (2 m) power cord with plug (Millermatic 141) OR 6.5 ft. (2 m) power cord with MVP plugs for 120 V and 240 V (Millermatic 211)
- 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

**Most popular accessories**
- Spoolmate™ 100 300371 (pg 30)
- Spoolmate™ 150 301272 (pg 30) (Millermatic 211 only)

**Running Gear/Cylinder Rack**
- 301239 (pg 118)
- Protective Cover 301262 (pg 121)
- V-Knurled Drive Roll 202926

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

---

#### Mild Steel Welding Capability

<table>
<thead>
<tr>
<th>Model</th>
<th>Max.</th>
<th>3/16 in. (4.8 mm)</th>
<th>3/8 in. (9.5 mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>141</td>
<td>24 ga. (0.6 mm)</td>
<td>24 ga. (0.6 mm)</td>
<td></td>
</tr>
<tr>
<td>211</td>
<td>18 ga. (1.2 mm)</td>
<td>18 ga. (1.2 mm)</td>
<td></td>
</tr>
</tbody>
</table>

**Aluminum Welding Capability**

<table>
<thead>
<tr>
<th>Model</th>
<th>Max.</th>
<th>14 ga. (1.9 mm)</th>
<th>3/8 in. (9.5 mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>141</td>
<td>16.6</td>
<td>6.5 ft. (2 m)</td>
<td></td>
</tr>
<tr>
<td>211</td>
<td>3.0</td>
<td>5.1 ft. (1.5 m)</td>
<td></td>
</tr>
</tbody>
</table>

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

**Recommended aluminum solution**

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

---

#### Millermatic 211 model additional features

**Advanced Auto-Set** includes five different wire/gas combinations and .024-, .030- and .035-inch wire capabilities.

**Inverter technology** combines best-in-class arc characteristics with the portability of a 38-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.

---

#### Auto-Set

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

- Set the wire diameter (141: .024/.030 in.) (211: .024/.030/.035 in.), a blue light shows Auto-Set is activated
- Dial in the thickness of material you are welding
- Start welding with the exact parameters you need!

**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 27).

**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.**

---

#### Wire Type and Diameter Capacity

<table>
<thead>
<tr>
<th>Wire Type and Diameter Capacity</th>
<th>120 V</th>
<th>240 V</th>
<th>KVA</th>
<th>KW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid steel</td>
<td>.023–.030 in. (0.6–0.8 mm)</td>
<td>.023–.030 in. (0.6–0.8 mm)</td>
<td>.030–.035 in. (0.8–0.9 mm)</td>
<td></td>
</tr>
<tr>
<td>Stainless</td>
<td>.023–.030 in. (0.6–0.8 mm)</td>
<td>.023–.030 in. (0.6–0.8 mm)</td>
<td>.030–.035 in. (0.8–0.9 mm)</td>
<td></td>
</tr>
<tr>
<td>Flux-cored</td>
<td>.023–.035 in. (0.8–1.2 mm)</td>
<td>.023–.035 in. (0.8–1.2 mm)</td>
<td>.030–.045 in. (0.8–1.2 mm)</td>
<td></td>
</tr>
</tbody>
</table>

---

#### Power Source Dimensions and Net Weight

<table>
<thead>
<tr>
<th>Power Source Dimensions</th>
<th>Power Source Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>H: 12.5 in. (318 mm)</td>
<td>51 lb. (23.1 kg)</td>
</tr>
<tr>
<td>W: 11.25 in. (286 mm)</td>
<td></td>
</tr>
<tr>
<td>D: 10.5 in. (267 mm)</td>
<td>38 lb. (17.2 kg)</td>
</tr>
</tbody>
</table>

---

#### Equipment Dimensions

- H: 12.5 in. (318 mm)
- W: 11.25 in. (286 mm)
- D: 10.5 in. (267 mm)

**Net Weight**

- 30 lb. (13.6 kg)
- 38 lb. (17.2 kg)
Millermatic® 212 Auto-Set™ See literature DC/12.46

**Welding Capability**

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Model/Stock Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>(907405)</td>
<td>200/208/230 V</td>
</tr>
<tr>
<td>(951177)</td>
<td>200/208/230 V</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 9 for more information).

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

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

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

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

**Aluminum MIG welding** with optional Spoolmate® 200 spool gun.

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

**Recommended aluminum solution**

| Spoolmate 200 (300497). |

---

Millermatic® 252 See literature DC/12.49

**Welding Capability**

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Model/Stock Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>(907321)</td>
<td>200/208/230 V</td>
</tr>
<tr>
<td>(951066*)</td>
<td>200/208/230 V</td>
</tr>
<tr>
<td>(907222)</td>
<td>230/460/575 V</td>
</tr>
<tr>
<td>(951065*)</td>
<td>230/460/575 V</td>
</tr>
</tbody>
</table>

**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, bumpback, 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.

**Recommended aluminum solution**

| Spoolmatic 15A (195156) or 30A (130831). |

---

**Processes**

- MIG (GMAW) • Flux-cored (FCAW)

**Comes complete with**

- 15 ft. (4.5 m), 250-amp M-25 gun
- 10 ft. (3 m) work cable with clamp
- 7 ft. (2.1 m) power cord with plug
- Flow gauge regulator and gas hose for argon or AR/CO2 mix
- Factory-installed lowered running gear/cylinder rack
- .030/.035 in. reversible dual-groove drive rolls
- Extra contact tips and material thickness gauge (229885)

**Most popular accessories**

- Spoolmate® 200 300497 (pg 30)
- Dual EZ-Change™ Low Cylinder Rack 300335 (pg 118)
- Elevated Gun and Cable Rack 300335 (pg 118)
- Protective Cover 195142 (pg 121)
- Full KVA Adapter Cord 300517 (pg 122)
- 230-Volt Extension Cord 770994

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

**Processes**

- MIG (GMAW) • Flux-cored (FCAW)

**Comes complete with**

- 15 ft. (4.5 m), 250-amp M-25 gun
- 10 ft. (3 m) work cable with clamp
- 10 ft. (3 m) industrial power cord (and plug on 200/230 V model)
- Factory-installed gas solenoid
- Flow gauge regulator and gas hose for argon or AR/CO2 mix
- Factory-installed lowered running gear/cylinder rack
- .030/.035 in. reversible dual-groove drive rolls
- Extra contact tips

**Most popular accessories**

- Spoolmate® 200 and Spoolmatic® Spool Guns (pg 30/31)
- XR® Air-Cooled Push-Pull Guns (pg 32)
- Dual EZ-Change™ Low Cylinder Rack 300337 (pg 118)
- Elevated Gun and Cable Rack 300335 (pg 118)
- Protective Cover 195142 (pg 121)
- 230-Volt Extension Cord 770994

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

**Weight**

- Net Weight: 183 lb. (83 kg)

**Dimensions**

- H: 30 in. (762 mm)
- W: 19 in. (483 mm)
- D: 40 in. (1,016 mm)

---

*With Spoolmatic 30A, regulator and dual cylinder rack.
**Millermatic® 350P** See literature DC/12.51

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

**Welding Capability**

<table>
<thead>
<tr>
<th>Mild Steel</th>
<th>Aluminum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min. 24 ga. (0.6 mm)</td>
<td>Min. 18 ga. (1.2 mm)</td>
</tr>
</tbody>
</table>

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

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

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

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

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

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

---

**Millermatic 350P Auto Body Aluminum Repair System**

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

**Welding Capability**

<table>
<thead>
<tr>
<th>Mild Steel</th>
<th>Aluminum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min. 24 ga. (0.6 mm)</td>
<td>Min. 22 ga. (0.8 mm)</td>
</tr>
</tbody>
</table>

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

Optimized low-end aluminum pulse program. Reduces heat input to prevent warping and burn-through on thin 18-gauge aluminum auto body panels.

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

Hobart® 5554 aluminum wire specified by Ford. Includes one eight-inch, five-pound spool of .047-inch aluminum wire.

---

**Recommended aluminum solution**

XR-Aluma-Pro™ push-pull gun (see page 32).

---

**Processes**

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

**Millermatic 350P comes complete with**

- 15 ft. (4.5 m) Bernard™ BTB Gun 300 A with Centerfire™ consumables
- 10 ft. (3 m) work cable with clamp
- 10 ft. (3 m) industrial power cord (without plug) for single- or three-phase
- Factory-installed gas solenoid
- Flow gauge regulator and gas hose for argon or AR/CO2 mix
- Factory-installed, low-mounted running gear/cylinder rack
- .035/ .045 in. reversible V-groove drive rolls (order U-groove drive rolls for aluminum welding)
- Extra contact tips

**Millermatic 350P Auto Body Aluminum Repair System comes complete with**

- 12 ft. (3.7 m) Bernard™ BTB Gun 200 A aluminum MIG gun
- 10 ft. (3 m) work cable with clamp
- 10 ft. (3 m) industrial power cord (without plug) for single- or three-phase
- Factory-installed gas solenoid
- Flow gauge regulator and gas hose for argon or AR/CO2 mix
- Factory-installed, low-mounted running gear/cylinder rack
- .047 in. (1.2 mm) U-groove drive rolls
- .047 in. (1.2 mm) aluminum Centerfire™ contact tips (T-047AL)
- 8 in. (203 mm), 6 lb. (2.7 kg) spool of Hobart .047 in (1.2 mm) 5554 aluminum wire

**Most popular accessories**

- Spoolmatic® Spool Guns (pg 31)
- XR™ Air-Cooled Push-Pull Guns (pg 32)
- Dual Cylinder Rack  195299 (pg 118)
- Protective Cover  195142 (pg 121)
- 230-Volt Extension Cord  770994

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

---

**Model/Stock Number**

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Input Power</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>Millermatic 350P (907300) 200/230/460 V</td>
<td>25–400</td>
<td>Three-phase 300 A at 32 VDC, 60% duty cycle</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>H: 34 in. (863 mm)</td>
<td>181 lb. (82 kg)</td>
<td></td>
</tr>
<tr>
<td>Millermatic 350P Auto Body Aluminum Repair System (907300002) 200/230/460 V</td>
<td>Single-phase 69 61 30 13.1 11.2</td>
<td>Optional spool gun/push-pull gun 50–800 ipm (1.3–20 m/min.)</td>
<td>.035–.045 in. (0.9–1.2 mm)</td>
<td>Metal-cored Flux-cored .035–.052 in. (0.8–1.3 mm)</td>
<td>Stainless .030–.045 in. (0.8–1.2 mm)</td>
<td>W: 19 in. (483 mm)</td>
<td>D: 41 in. (1,041 mm)</td>
<td>118 lb. (53 kg)</td>
</tr>
</tbody>
</table>
## Choose the Right Industrial Aluminum MIG Solution

For additional aluminum MIG solutions, see spool guns, push-pull guns and controls on pages 30–33.

### Millermatic® 350P Aluminum Push-Pull Gun System (page 13)

- **Power Source**: Millermatic 350P Aluminum (all-in-one)
- **Feeder**: All-in-one — built-in running gear with cylinder rack is easily maneuverable from area to area
- **Input Voltage**: Single- or three-phase
- **Rated Output**: 300 A at 60% duty cycle
- **Primary Connection**: Auto-Link™ — Automatically links the power source to primary voltage being applied. Auto-link is used to link to 208 or 230 V and manually moving a link board is required to link to 460 V
- **Aluminum Wire Diameters**: .035–.047 in. (0.9–1.2 mm)
- **Gun Capacity**: XR-Aluma-Pro*; XR-Aluma-Pro* Lite, or XR™-Pistol
- **MIG Modes**: Profile Pulse™
  - Synergic Pulsed MIG
  - Conventional MIG — modes for aluminum, steel and other wires
- **Features**: Portability, Trigger Hold, Trigger Schedule Select, Program Locks, Flow Meter

### AlumaFeed* Synergic Aluminum Welding System (page 14)

- **Power Source**: AlumaPower® 450 MPa and XR-AlumaFeed with XR-Aluma-Pro gun shown.
- **Feeder**: Single-wire XR-AlumaFeed — portable feeder can be carried up to 100 feet from power source
- **Input Voltage**: Single- or three-phase (450 MPa is three-phase only)
- **Rated Output**: 350 MPa: 350 A at 60% duty cycle
  - 450 MPa: 450 A at 100% duty cycle
- **Primary Connection**: 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.
  - 450 MPa: 230/460 V manual linking or 575 V
- **Aluminum Wire Diameters**: .035–1/16 in. (0.9–1.6 mm)
- **Gun Capability**: XR-Aluma-Pro*; XR-Aluma-Pro* Lite, or XR™-Pistol
- **MIG Modes**: Profile Pulse™
  - Synergic Pulsed MIG
  - Conventional MIG — modes for aluminum, steel and other wires
- **Features**: Built-In Pulsed Programs, Portability, Trigger Hold, Trigger Schedule Select, Program Locks, Flow Meter

### Invision™ MPa Plus System (page 17)

- **Power Source**: Invision 352 MPa or 450 MPa
- **Feeder**: Single- or dual-wire 74 MPa Plus — stationary feeders can be mounted up to 100 feet from power source
- **Input Voltage**: Single- or three-phase (450 MPa is three-phase only)
- **Rated Output**: 352 MPa: 350 A at 60% duty cycle
  - 450 MPa: 450 A at 100% duty cycle
- **Primary Connection**: 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
- **Aluminum Wire Diameters**: .035–1/16 in. (0.9–1.6 mm)
- **Gun Capability**: XR-Aluma-Pro Plus, XR™-Pistol Plus or standard MIG gun
- **MIG Modes**: Profile Pulse™
  - Synergic Pulsed MIG
  - Conventional MIG — modes for aluminum, steel and other wires
- **Features**: Built-In Pulsed Programs, Portability, Trigger Hold, Trigger Schedule Select, Program Locks, Flow Meter
Millermatic® 350P Aluminum

Welding Capability

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

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

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

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

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

Trigger hold reduces operator fatigue on extended welds.

Standard jog and purge.

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

Note: See aluminum solutions comparison chart on page 12.
AlumaFeed® Synergic Aluminum Welding System

See literature DC/34.0

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

AlumaPower® 350 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.

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.

Models/Packages

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

<table>
<thead>
<tr>
<th>Power Source Only Stock Number</th>
<th>Model Stock Number</th>
<th>XR-AlumaFeed Feeder</th>
<th>XR-Aluma-Pro® Push-Pull MIG Gun</th>
<th>XR^®-Pistol Grip Push-Pull MIG Gun</th>
<th>Industrial MIG 4/0 Kit</th>
<th>Coolmate® with Coolant</th>
<th>Cart</th>
</tr>
</thead>
<tbody>
<tr>
<td>AlumaPower 350 MPa (907420) 208–575 V (90742001) 208–575 V with auxiliary power</td>
<td>(951147) w/350 model (907420) (951149) w/350 model (907420) (951151) w/350 model (907420)</td>
<td>25 ft. air-cooled</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>(951140) w/450 model (907483) (951459) w/450 model (907483) (951558) w/450 model (907483) (951559) w/450 model (907483)</td>
<td>25 ft. water-cooled</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</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 to run 3/64-inch wire. 1/16-inch consumables not included — order separately above. See aluminum solutions comparison chart on page 12.

Heavy industrial

Phases

AlumaPower 450 is 3-phase only.

Processes

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

Most popular accessories

- XR^® Push-Pull Guns (pg 32)
- MIGRunner® Cart 195445 (pg 119)
- Coolmate® 3 043007 (pg 119)
- Coolant 043810 (pg 119)
- Industrial MIG 4/0 Kits (pg 121)
- 300405 With Dine connectors (350 MPa only)
- 300390 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 126)
- 247831025 25 ft. (7.6 m)
- 247831050 50 ft. (15 m)
- 247831080 80 ft. (24.4 m)
- 1/16-Inch (1.6 mm) Liner and Wire Kit for Gun 230708
- 1/16-Inch (1.6 mm) Drive Roll Kit for Control Box 195591
- For gun and feeder remote options, see literature DC/34.0 or visit MillerWelds.com.

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

14
Choose the Right Industrial MIG Solution

<table>
<thead>
<tr>
<th>Feature</th>
<th>Basic</th>
<th>Advanced MIG</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Weldable Metals</td>
<td>Steels</td>
<td>Steels and aluminum</td>
</tr>
<tr>
<td>* MIG Processes</td>
<td>Short arc, Spray</td>
<td>Short arc, Spray, Spray, Pulsed MIG</td>
</tr>
<tr>
<td></td>
<td><strong>Continuum™ System (page 18)</strong></td>
<td><strong>Standard Insight Core™ and optional Insight Centerpoint™</strong></td>
</tr>
<tr>
<td>* Bernard™ Gun Included with Feeder</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Choose the Right Industrial MIG Solution**

<table>
<thead>
<tr>
<th>CP with 22A Feeder (page 16)</th>
<th>Deltaweld® with 74 S/D Feeder (page 16)</th>
<th>Millermatic® 350P All-In-One (page 11)</th>
<th>Invision® with 74 MPa Plus Feeder (page 17)</th>
<th>Continuum™ System (page 18)</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="CP with 22A Feeder" /></td>
<td><img src="image" alt="Deltaweld® with 74 S/D Feeder" /></td>
<td><img src="image" alt="Millermatic® 350P All-In-One" /></td>
<td><img src="image" alt="Invision® with 74 MPa Plus Feeder" /></td>
<td><img src="image" alt="Continuum™ System" /></td>
</tr>
</tbody>
</table>

**Features**

- **Cost effective, simple and easy to use**
- **Digital meters on power source provide accurate weld parameter indication**
- **74D feeder adds voltage control and digital meters on feeder for point-of-use control**
- **More advanced system with optimized weld programs for steel and aluminum**
- **Push-pull gun for aluminum (optional)**
- **Next generation advanced welding solution**
- **Improves productivity through weld quality, ease of use and system flexibility**

**Weldable Metals**

- Steels
- Steels and aluminum
- Steels

**MIG Processes**

- Short arc
- Spray
- Short arc
- Spray
- Pulsed MIG
- Short arc
- Spray
- Pulsed MIG

**Special Models**

- Dedicated aluminum model available (see Millermatic 350P Aluminum, page 13)
- Standard Insight Core™ and optional Insight Centerpoint™
- **Semi-auto and automation packages available (see pages 18 and 19)**

**Welding Intelligence™ (see page 68)**

- Optional Insight Core™
- **Optional Insight Core™**

**Input Power**

- 200/230/460 V, 3-phase
- 200/230/460/575 V, 3-phase
- 200/230/460 V, 1- and 3-phase
- 352: 208–575 V, 1- and 3-phase
- 352: 208–575 V, 1- and 3-phase
- 450: 230/460 V or 575 V, 3-phase
- **Auto-Line™ 230–575 V, 3-phase**

**Recommended Wire Diameters**

- .023–1/16 in.
- .023–1/16 in.
- .023–.045 in.
- .352–.023–1/16 in.
- .023–5/64 in.
- .053–.023–5/64 in.

**Bernard™ Gun Included with Feeder**

- Yes
- Yes
- Yes
- Yes
- Yes
**CP-302** See literature DC/13.0

Cost-effective, simple MIG power source designed for manufacturing.

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.

---

**Deltaweld® Series** See literature DC/16.2

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

**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 with 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><strong>CP-302</strong></td>
<td>(903786) 200/230/460 V</td>
<td>(951231)</td>
<td>(951230)</td>
</tr>
<tr>
<td><strong>Deltaweld 302</strong></td>
<td>(903376) 200/230/460 V</td>
<td>(951235)</td>
<td>(951234)</td>
</tr>
<tr>
<td><strong>Deltaweld 452</strong></td>
<td>(903392) 230/460/575 V</td>
<td>(951237)</td>
<td>(951300)</td>
</tr>
<tr>
<td><strong>Deltaweld 652</strong></td>
<td>(903397) 200/230/460 V</td>
<td>(951301)</td>
<td>(951302)</td>
</tr>
</tbody>
</table>

---

**Processes**

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

**Stationary packages include**

- 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™ packages include above plus**

- Factory-installed running gear and standard cylinder rack

**Most popular accessories**

- 20 Series Feeders (pg 24)  
- 70 Series Feeders (pg 24)  
- Bernard™ MIG Guns (pg 28/29)  
- Standard Running Gear  042886 (pg 119)  
- Standard Cylinder Rack  042887 (pg 119)  
- Industrial MIG 4/0 Kit (with lug connectors)  300390 (pg 121)  
- Extension Cables (pg 126)  
  - 242208025  25 ft. (7.6 m)  
  - 242208050  50 ft. (15 m)  
  - 242208080  80 ft. (24.4 m)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.
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™ provides air carbon arc gouging (CAC-A) for any input voltage hookup. As wire speed increases/decreases, air flow increases/decreases, pulse parameters also increases/decreases, pulse parameters also automatically set the optimal parameters for a wide variety of wires making it easy to set up and use.

Optimized wire feeding options

- 70 Series MPa Plus feeders (pg 24)
- XR-Aluma-Pro™ Plus and XR™-Pistol push-pull guns (pg 25)
- 70 Series SwingArc™ with MPa Plus control box (pg 26)
- Single- and dual-remote configurations (pg 26, for more information see literature DC/23.6)

Most popular accessories

- MIGRunner™ Cart (single feeders only) 195445 (pg 119)
- Running Gear Cylinder Rack 300408 (pg 119)
- Coolmate™ 3 043007 (pg 119)
- Industrial MIG 4/0 kits (pg 121) 300405 With Dinse connectors (352 MPa only)
- 300390 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 126)
- 247831025 25 ft. (7.6 m)
- 247831050 50 ft. (15 m)
- 247831080 80 ft. (24.4 m)

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

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 25 for stock numbers.

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 25 for stock numbers.

Models/Packages

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

--- | --- | --- | --- | --- | ---
Invision 352 MPa (907431) 208–575 V with auxiliary power (907431001) 208–575 V with auxiliary power | (951287) w/352 model (907431) | S-74 (single-wire feeder with one gun) | S-74 (single-wire feeder with one gun) | — | —
(951501) w/352 model (907431) | S-74 (single-wire feeder with two guns) | — | — | — | —
(951411) w/352 model (907431) | S-74 (single-wire feeder with one gun) | 25 ft. air-cooled | — | — | —
(951500) w/352 model (907431) | S-74 (single-wire feeder with two guns) | 25 ft. air-cooled | — | — | —
Invision 450 MPa (907485) 230/460 V with auxiliary power (907486) 575 V with auxiliary power | (951499) w/450 model (907485) | S-74 (single-wire feeder with one gun) | — | — | —
(951457) w/450 model (907485) | S-74 (single-wire feeder with two guns) | — | — | — | —

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

See literature DC/36.0

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

More power — better reliability

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

Power source design

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

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

Welding Intelligence*: Increase productivity, improve quality and manage costs with Insight Core™ (standard) and Insight Centerpoint® (optional) welding information management systems (see pages 69 and 70).

Feeder design

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

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

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

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

### Continuum Processes

<table>
<thead>
<tr>
<th>Best For</th>
<th>Standard Spray</th>
<th>High-Deposition MIG</th>
<th>Accu-Pulse</th>
<th>Versa-Pulse</th>
<th>Short Circuit</th>
<th>RMD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deposition</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>B</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td>Gap Filing</td>
<td>D</td>
<td>D</td>
<td>B</td>
<td>B</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Low Heat Input</td>
<td>D</td>
<td>C</td>
<td>B</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Out-of-Position Welds</td>
<td>A</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Spatter</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>B</td>
</tr>
<tr>
<td>Thick Metals</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>C</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td>Thin Metals</td>
<td>B</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increased Travel Speed</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

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

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

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

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

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

### Heavy Industrial

**Processes**

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

**MIGRunner® packages include**

- 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. (.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 C-clamp.

**Wire feeding options**

- Continuum Feeder 951631 Single-wire 951673 Dual-wire Includes Bernard BTB Gun 400 A (two with dual-wire models) and .035/.045 in. V-groove drive rolls.
- Continuum Swingarc® Boom-Mounted Feeders 951634 8 ft. (2.4 m) single-wire 951635 12 ft. (3.7 m) single-wire 951636 16 ft. (4.9 m) single-wire 951725 12 ft. (3.7 m) dual-wire Includes Bernard BTB Gun 400 A and .035/.045 in. V-groove drive rolls.
- See literature DC/36.0 for additional boom options and accessories.

**Most popular accessories**

- Bernard™ MIG Guns (pg 28/29)
- Insight Centerpoint® Software (pg 70)
- Continuum Running Gear/Cylinder Rack 301264 (pg 119)
- Industrial MIG 4/0 Kit (with lug connectors) 300390 (pg 121)
- Continuum Integrated Cooler 301214 Mounts to bottom of Continuum power source. Does not require external power.
- Continuum Control/Motor Cables 263368003 3 ft. (.9 m) 263368015 15 ft. (4.6 m) 263368020 20 ft. (6.1 m) 263368025 25 ft. (7.6 m) 263368035 35 ft. (10.7 m) 263368050 50 ft. (15 m) 263368080 80 ft. (24.4 m) 263368100 100 ft. (30.5 m)

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

### Continuum Feeder

**Model/Stock Number**

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Input Power</th>
<th>Input Welding Circuit Rating</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>Continuum Feeder (951631) Single-wire model (951673) Dual-wire model</td>
<td>50 VDC</td>
<td>500 A at 100% duty cycle</td>
<td>Standard: 50-1,000 ipm (1.3-25.4 m/min.)</td>
<td>.035/.5-64 in. (0.9-2.0 mm)</td>
<td>18 in. (457 mm), 60 lb. (27 kg)</td>
<td>H: 13.821 in. (351 mm) Single W: 16.312 in. (414 mm) Dual W: 17 in. (432 mm) D: 29.687 in. (754 mm)</td>
<td>43 lb. (19.5 kg) Dual 61.5 lb. (27.9 kg)</td>
</tr>
</tbody>
</table>
Auto-Continuum™ Systems

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

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

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

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

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

• Versa-Pulse is a fast, low heat, low-spatter process for high-speed automation on thin materials and is great for gap filling

• Accu-Pulse is better for out-of-position welds, provides higher deposition rates and is designed for thicker materials than Versa-Pulse

Easy communication from robot to power source.

Designed for easy integration with fixed and flexible automation.

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

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

• Insight Core™ (standard) is a simplified, Internet-based welding information solution that reports cell productivity and weld parameter verification (see page 69)

• Insight Centerpoint™ (optional) is an advanced, real-time feedback solution to ensure consistent weld quality and actively detects a bad weld when it happens, reducing rework costs and improving quality (see page 70)

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

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

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

For more information see pages 28/29, or contact your local welding distributor or Bernard directly.

BernardWelds.com

1-855-MIGWELD (644-9353)

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.
<table>
<thead>
<tr>
<th>Product Guide</th>
<th>Page</th>
<th>Class</th>
<th>MIG</th>
<th>Pulling MIG</th>
<th>Remote</th>
<th>Wire Source</th>
<th>Hard Flux-Cored</th>
<th>Dual-shld Self-shld</th>
<th>Alum</th>
<th>Wire Diameter Capacity</th>
<th>Special Features</th>
<th>Typical Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>SuitCase® X-TREME™ 8VS/12VS</td>
<td>22</td>
<td></td>
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<tr>
<td>ArcReach® SuitCase® 8/12</td>
<td>22</td>
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<tr>
<td>ArcReach® Smart Feeder</td>
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<td>SuitCase® 12RC</td>
<td>22</td>
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</table>

**Wire Feeder**

For more detailed information, visit [MillerWelds.com/wirefeeders](http://MillerWelds.com/wirefeeders)

---

**Product Key**

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

*Smart Feeder requires an XMT® 350 FieldPro™ or PipeWorx 350 FieldPro™ connected to three-phase power or an ArcReach-equipped engine drive. All other feeders require an MPa inverter power source.

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

*74S and 74D models are capable of aluminum welding. 74 MPa Plus 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.

<table>
<thead>
<tr>
<th>SuitCase Series Features</th>
<th>X-TREME</th>
<th>ArcReach</th>
<th>8VS</th>
<th>12VS</th>
<th>8</th>
<th>12</th>
<th>Smart</th>
<th>12RC</th>
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</thead>
<tbody>
<tr>
<td>Available with Bernard gun:</td>
<td>●</td>
<td>●</td>
<td>●</td>
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<tr>
<td>BTB Gun 300 A</td>
<td>●</td>
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<tr>
<td>S-Gun</td>
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<tr>
<td>Dura-Flux gun</td>
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<tr>
<td>PipeWorx gun</td>
<td>●</td>
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<tr>
<td>Remote voltage control (control cable required)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
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<tr>
<td>Remote voltage control (without a cord)</td>
<td>●</td>
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<td>●</td>
<td>●</td>
<td>●</td>
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<tr>
<td>Digital meters</td>
<td>●</td>
<td>●</td>
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<td>●</td>
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<tr>
<td>Impact-resistant case</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
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<td></td>
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<tr>
<td>Gas purge</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
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<tr>
<td>Wire jog</td>
<td>●</td>
<td>●</td>
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<td>●</td>
<td>●</td>
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</tbody>
</table>

- Standard ● Optional ●

Setting the standard for performance

Heavy-duty drive motor with tachometer control provides wire feed speed that is accurate and consistent from the start of the weld to the finish and from one weld to the next. Consistent wire feed speed is very important with large-diameter cored wire, because small changes in wire feed speed make large changes in deposition rates.

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

Extreme reliability

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

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

Gas inlet recessed into back of case is protected from incidental contact by the weld cable, ensuring consistent and contaminant-free shielding gas delivery to the gun. Double-filtered gas valve helps keep dirt from clogging and affecting gas flow.
**SuitCase® X-TREME™ 8VS and 12VS** See literature M/6.42

Voltage-sensing feeders designed to run off of arc voltage from almost any welding power source. 8VS model is sized for 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.

---

**ArcReach SuitCase® 8 and 12 and ArcReach Smart Feeder**

See literature M/6.55

**ArcReach** Remote control of the power source without a cord. With an ArcReach SuitCase feeder and ArcReach power source you can change output voltage at the feeder, and save a trip to the power supply. No extra control cable to purchase, maintain, string or unstring — saving time and money. See pages 43, 46–48 and 78–83 for ArcReach power sources and engine drives.

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

**Additional features of ArcReach Smart Feeder**

Delivers excellent synergic RMD™ and pulsed MIG welding up to 200 feet away from the power source with no control cords — twice the distance previously possible. RMD and pulsed MIG welding permits procedures with one wire and one gas to eliminate process switch-over time. RMD and pulsed MIG processes also help reduce weld failures and eliminate backing gas on some stainless and chrome-moly applications. The ArcReach Smart Feeder requires an XMT® 350 FieldPro® (page 46) or PipeWorx 350 FieldPro® (page 48) connected to three-phase power or an ArcReach-equipped engine drive (pages 78–83).

---

**SuitCase® 12RC** See literature 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.*

---

**Model** | **Stock Number** | **Input Power** | **Input Welding Circuit Rating** | **Wire Feed Speed** | **Wire Type and Diameter Capacity** | **Maximum Spool Size Capacity** | **Dimensions** | **Net Weight** |
<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SuitCase</td>
<td>X-TREME</td>
<td>8VS</td>
<td>(951582) w/Bernard BTB Gun 300 A (951583) w/Bernard BTB Gun 300 A (no meters) (300877) Feeder only (95187001) Feeder only (no meters)</td>
<td>330 A at 60% duty cycle</td>
<td>Solid wire .023-.052 in. (0.6-1.4 mm) Flux-cored .030-.5/64 in. (0.8-2.0 mm)</td>
<td>8 in. (203 mm), 14 lb. (6.4 kg)</td>
<td>12 in. (305 mm), H: 10 in. (254 mm)</td>
<td>28 lb. (13 kg)</td>
</tr>
<tr>
<td>SuitCase</td>
<td>X-TREME</td>
<td>12VS</td>
<td>(951543) w/Bernard BTB Gun 300 A (951544) w/Bernard Dura-Flux gun (300876) Feeder only</td>
<td>425 A at 60% duty cycle</td>
<td>Solid wire .023-.052 in. (0.6-1.4 mm) Flux-cored .030-.5/64 in. (0.8-2.0 mm)</td>
<td>12 in. (305 mm), 20 lb. (9 kg)</td>
<td>15 in. (381 mm), H: 10 in. (254 mm)</td>
<td>35 lb. (15.9 kg)</td>
</tr>
<tr>
<td>ArcReach</td>
<td>SuitCase</td>
<td>8</td>
<td>(951726) w/Bernard BTB Gun 300 A (951727) w/Bernard S-Gun (951728) w/Bernard Dura-Flux gun (301745) Feeder only</td>
<td>330 A at 60% duty cycle</td>
<td>Solid wire .023-.052 in. (0.6-1.4 mm) Flux-cored .030-.5/64 in. (0.8-2.0 mm)</td>
<td>8 in. (203 mm), 14 lb. (6.4 kg)</td>
<td>12 in. (305 mm), H: 10 in. (254 mm)</td>
<td>28 lb. (13 kg)</td>
</tr>
<tr>
<td>ArcReach</td>
<td>SuitCase</td>
<td>12</td>
<td>(951729) w/Bernard BTB Gun 300 A (951730) w/Bernard S-Gun (951731) w/Bernard Dura-Flux gun (951732) w/Bernard PipeWorx gun (301745) Feeder only</td>
<td>425 A at 60% duty cycle</td>
<td>Solid wire .023-.052 in. (0.6-1.4 mm) Flux-cored .030-.5/64 in. (0.8-2.0 mm)</td>
<td>12 in. (305 mm), 20 lb. (9 kg)</td>
<td>15 in. (381 mm), H: 10 in. (254 mm)</td>
<td>35 lb. (15.9 kg)</td>
</tr>
<tr>
<td>ArcReach</td>
<td>Smart Feeder</td>
<td></td>
<td>(951733) w/Bernard PipeWorx gun</td>
<td>275 A at 60% duty cycle</td>
<td>Solid wire .023-.052 in. (0.6-1.4 mm) Flux-cored .030-.5/64 in. (0.8-2.0 mm)</td>
<td>12 in. (305 mm), 33 lb. (15 kg)</td>
<td>18 in. (457 mm), H: 11 in. (280 mm)</td>
<td>50 lb. (23 kg)</td>
</tr>
<tr>
<td>SuitCase</td>
<td>12RC</td>
<td></td>
<td>(951580) w/Bernard BTB Gun 300 A (951599) w/Bernard BTB Gun 300 A and lift eye</td>
<td>425 A at 60% duty cycle</td>
<td>Solid wire .023-.052 in. (0.6-1.4 mm) Flux-cored .030-.5/64 in. (0.8-2.0 mm)</td>
<td>12 in. (305 mm), 20 lb. (9 kg)</td>
<td>15 in. (381 mm), H: 10 in. (254 mm)</td>
<td>31 lb. (14.1 kg)</td>
</tr>
</tbody>
</table>

Heavy industrial • Flux-cored (FCAW) • RMD and pulsed MIG (GMAW-P) with ArcReach Smart Feeder

**Suggested power sources**

• Dynasty® 280 DX with CV (pg 42) • Dimension® Series (pg 44-47) • XMT® Series (pg 44–47) • PipeWorx 350 FieldPro® (pg 48) • Bobcat® Series (pg 76) • Trailblazer® Series (pg 78–80) • Big Blue® Series (pg 80–83)

**Note:** Full functionality of ArcReach is only available with ArcReach power sources. RC feeder requires power source with 14-pin connector.

**Suggested guns**

• Bernard™ Guns (pg 28/29)

**Most popular accessories**

• Extension Cables (12RC only, 1 required) (pg 126) • Flowmeter Kit 300343 • Shielding Gas Filter 195189

Visit MillerWelds.com or your distributor for other Miller® options and accessories.
20 Series
Industrial Bench Feeders

70 Series
Heavy-Industrial
Bench Feeders

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

### 20 and 70 Series Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>20 Series</th>
<th>70 Series</th>
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<th>70 Series</th>
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<tr>
<td>Available w/Bernard gun:</td>
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<tr>
<td>BTB Gun 300 A</td>
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<td>BTB Gun 400 A</td>
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<td>Trigger hold</td>
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<tr>
<td>Adjustable run-in control</td>
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<tr>
<td>Automatic run-in control</td>
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<td>Remote voltage control</td>
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<td>Spot control</td>
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<td>Dual-wire models</td>
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<tr>
<td>Rotatable drive assembly</td>
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<tr>
<td>Accu-Mate®</td>
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<tr>
<td>Dual schedule control</td>
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<tr>
<td>Trigger program select</td>
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<tr>
<td>Trigger dual schedule</td>
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<td>Sequence control</td>
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<td>Locks and limits</td>
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<td>Weld programs</td>
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<tr>
<td>Trigger schedule select</td>
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<tr>
<td>Push-pull capability</td>
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<tr>
<td>Synergic pulsed MIG</td>
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<tr>
<td>Profile Puls®</td>
<td></td>
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</tbody>
</table>

- Standard
- Optional
- Field option.

- Trigger hold allows the operator to make long welds without having to hold the trigger continuously. Reduces operator fatigue.
- Miller® standard, quick-change drive rolls save time.
- 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.
- Feeder include a 10-ft. interconnecting cord and are available with a Bernard™ gun and drive rolls (see chart on page 25). BTB Gun 300 A (20 Series) and BTB Gun 400 A (70 Series, two with dual-wire models) come with .035/.045 in. drive rolls and Centerfire™ contact tips.

Additional features for 70 Series feeders

- Available in dual-wire models which allows two different wire types to be available on one feeder, avoiding downtime from changing spools and drive rolls.
- Four gear-driven drive rolls provide more consistent feeding on larger wire diameters.
- Toolless rotatable drive assembly allows operator to rotate the drive housing, allowing a straight path for wire flow.
- High-torque permanent-magnet motor, sealed ball bearing gear drive and solid-state speed and brake control are maintenance free for long life.

### 22A and 24A

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

- Ideal for most high-duty-cycle applications requiring day-in/day-out trouble-free operation.
- On-board burnback and motor ramp control for excellent starting and stopping performance.
- Two gear-driven drive rolls on 22A and four gear-driven drive rolls on 24A provide smooth, positive wire feed.

Additional features for 24A feeder

- Remote voltage control at feeder for easier adjustments in the weld cell.
- Adjustable run-in control for better arc-starting performance on a variety of wires.
- Four gear-driven drive rolls provide more consistent feeding on larger wire diameters.
74S and 74D  See literature M/3.0

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

Digital meters (74D models only) ensure accuracy when presetting and reading actual voltage, amperage and wire feed speed. Remote voltage control (74D models only) allows you to set both voltage and wire feed speed at the feeder, saving time and increasing weld quality because optimal weld parameters are easy to set.

74 MPa Plus   See literature M/3.0

Adds features for weld control and programs, plus push-pull aluminum capabilities.

Optimized with Invision™ MPa or XMT® MPa power sources.

Adjustable run-in control for improved arc starts. Dual schedule control allows the operator to switch between two preconfigured welding parameters without readjusting the machine, saving time and enhancing quality.

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

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

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

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

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

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

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

Recommended aluminum solution.

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

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

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

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

*Additional packages are available — visit MillerWelds.com or your distributor.  **Requires wire kit (230708) to run 1/16 in. (1.6 mm) wire.

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### Table: Wire Feeders

<table>
<thead>
<tr>
<th>Model</th>
<th>Stock Number*</th>
<th>Input Power</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>20 Series</td>
<td></td>
<td>24 VAC, 7 A, 50/60 Hz</td>
<td>75-780 ipm (1.9–19.8 m/min.)</td>
<td>.023–5/64 in. (0.6–2.0 mm)</td>
<td>60 lb. (27 kg) coil with optional wire reel assembly (108008)</td>
<td>H: 11 in. (279 mm) W: 10.75 in. (273 mm) D: 23.5 in. (597 mm)</td>
<td>36 lb. (15.4 kg)</td>
</tr>
</tbody>
</table>

| 24A (951193) w/Bernard BTB Gun 300 A | 24A (300615) Feeder only | .023–3/32 in. (0.6–2.4 mm) | 60 lb. (27 kg) coil with optional wire reel assembly (108008) | H: 14 in. (356 mm) W: 12.5 in. (318 mm) D: 28 in. (711 mm) | 58 lb. (26 kg) |

| 70 Series (Single-wire models) | S-74S (951196) w/Bernard BTB Gun 400 A | 24 VAC, 10 A, 50/60 Hz | 50–780 ipm (1.3–19.8 m/min.) | .023–1/8 in. (0.6–3.2 mm) Low-speed motor recommended for 3/32 and 1/8 in. wires (factory option) | 60 lb. (27 kg) coil with optional wire reel assembly (108008) | H: 14 in. (356 mm) W: 21 in. (533 mm) D: 35 in. (889 mm) | 87 lb. (39.5 kg) |

| 70 Series (Dual-wire models) | D-74S (951203) w/Bernard BTB Gun 400 A | D-74S (951204) w/Bernard BTB Gun 400 A | .023–5/64 in. (0.6–2.0 mm) Aluminum** .035–1/16 in. (0.9–1.6 mm) | .025–5/64 in. (0.6–2.0 mm) Aluminum** .035–1/16 in. (0.9–1.6 mm) | D-74S MPa Plus (951292) w/Bernard BTB Gun 400 A | 70-900 ipm (1.8–23 m/min.) | 70-900 ipm (1.8–23 m/min.) | H: 7.375 in. (187 mm) W: 1.875 in. (48 mm) L: 10.625 in. (270 mm) | 2.2 lb. (1 kg) |

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<table>
<thead>
<tr>
<th>Optional Push-Pull Guns (For MPa Plus feeders only)</th>
<th>15 ft. (4.6 m)</th>
<th>25 ft. (7.6 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>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>XR-Aluma-Pro Plus (Air-cooled)</td>
<td></td>
<td></td>
<td></td>
<td>300 A at 100% duty cycle</td>
<td>70-900 ipm (1.8–23 m/min.)</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-Aluma-Pro Plus (Water-cooled)</td>
<td></td>
<td></td>
<td></td>
<td>400 A at 100% duty cycle</td>
<td>70-900 ipm (1.8–23 m/min.)</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>2.9 lb. (1.3 kg)</td>
</tr>
<tr>
<td>XR-Pistol Plus (Air-cooled)</td>
<td>(200753)</td>
<td>(200754)</td>
<td>(200755)</td>
<td>200 A at 100% duty cycle</td>
<td>70-900 ipm (1.8–23 m/min.)</td>
<td>Aluminum** .030–1/16 in. (0.8–1.6 mm)</td>
<td>H: 7.375 in. (187 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 Plus (Water-cooled)</td>
<td>(300757)</td>
<td></td>
<td></td>
<td>400 A at 100% duty cycle</td>
<td>70-900 ipm (1.8–23 m/min.)</td>
<td>Aluminum** .030–1/16 in. (0.8–1.6 mm)</td>
<td>H: 7.375 in. (187 mm) W: 1.875 in. (48 mm) L: 10.625 in. (270 mm)</td>
<td>2.4 lb. (1.1 kg)</td>
</tr>
</tbody>
</table>
Wire Feeders

70 Series Swingarc™ See literature M/13.11

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

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 Invisi™ MPa and XMT™ MPa power sources and available with single- or dual-wire feeders and three boom lengths.

70 Series Remote Configurations See literature M/3.0

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

<table>
<thead>
<tr>
<th>Model</th>
<th>Stock Number with Single-Wire Feeders</th>
<th>Stock Number with Dual-Wire Feeders</th>
<th>Input Power</th>
<th>Wire Feed Speed</th>
<th>Wire Diameter Capacity</th>
<th>Maximum Spool Size Capacity</th>
<th>Net Weight with Feeder</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 ft.</td>
<td>SS-7458, SS-7408, SS-74 MPa Plus</td>
<td>DS-7458, DS-7408, DS-74 MPa Plus</td>
<td>24 V, 10 A</td>
<td>50-780 ipm</td>
<td>.023-.5/64 in. (0.6-.2 mm)</td>
<td>60 lb. (27 kg) with optional wire reel assembly (10808)</td>
<td>110 lb. (50 kg)</td>
</tr>
<tr>
<td>12 ft.</td>
<td>SS-74512, SS-74012, SS-74 MPa Plus-12</td>
<td>DS-74512, DS-74012, DS-74 MPa Plus-12</td>
<td>25 V, 10 A</td>
<td>50-780 ipm</td>
<td>.023-.5/64 in. (0.6-.2 mm)</td>
<td>60 lb. (27 kg) with optional wire reel assembly (10808)</td>
<td>110 lb. (50 kg)</td>
</tr>
<tr>
<td>16 ft.</td>
<td>SS-74516, SS-74016, SS-74 MPa Plus-16</td>
<td>DS-74516, DS-74016, DS-74 MPa Plus-16</td>
<td>25 V, 10 A</td>
<td>50-780 ipm</td>
<td>.023-.5/64 in. (0.6-.2 mm)</td>
<td>60 lb. (27 kg) with optional wire reel assembly (10808)</td>
<td>110 lb. (50 kg)</td>
</tr>
</tbody>
</table>

Models Include Bernard™ BTB Gun
400 A (two with dual-wire models), .035/.045 in. drive rolls and Centerfire™ contact tips.

Pipe post (required, order separately)

Power source (required, order separately)

Heave industrial • CV DC

Use with CV, DC power sources.

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

Suggested power sources/guns
• Same as 70 Series

Most popular accessories
• Swingpak™ Base 183997
• Pipe Post with 18 in. Base 149838 4 ft.
149839 6 ft.
• Single/Dual Spool Carrier (pipe post not included) 300353 For 4 ft. post 300352 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.

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

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

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

Wire drive motor assembly 300904 Standard left-hand drive
300740 MPa Plus left-hand drive
MPa Plus drive can be used with push-only guns, OR XR-Aluma-Pro™ Plus and XR™-Pistol Plus push-pull guns.

Heavy industrial • CV DC

Use with CV, DC power sources.

70 Series Swingarc™

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

Click to view diagram.

Softline 74-S70000

Most popular accessories
• Motor Control Cable (11 conductor) 254934010 10 ft. (3 m)
254934025 25 ft. (7.6 m)
For push-only gun configurations.
• MPa Plus Motor Control Cable (14 conductor) 254864010 10 ft. (3 m)
254864025 25 ft. (7.6 m)
For MPa Plus configurations only — single-wire or left side of dual-wire.

Suggested power sources/guns
• Same as 70 Series

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

280 lb. (127 kg)
210 lb. (95 kg)
160 lb. (73 kg)
134 lb. (61 kg)
107 lb. (49 kg)
100 lb. (45 kg)
77 lb. (35 kg)
57 lb. (26 kg)
43 lb. (20 kg)
33 lb. (15 kg)
30 lb. (14 kg)
28 lb. (13 kg)
22 lb. (10 kg)
18 lb. (8 kg)
14 lb. (7 kg)
12 lb. (6 kg)
9 lb. (5 kg)
8 lb. (4 kg)
3 lb. (1.5 kg)
2 lb. (1 kg)
1 lb. (0.5 kg)

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

Wire drive motor assembly 300904 Standard left-hand drive
300740 MPa Plus left-hand drive
MPa Plus drive can be used with push-only guns, OR XR-Aluma-Pro™ Plus and XR™-Pistol Plus push-pull guns.
### 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 monocoil 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.

#### Model, Stock Number, and Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Stock Number</th>
<th>Cable Length</th>
<th>Rated Output</th>
<th>Rated Duty Cycle</th>
<th>Wire Diameter Capacity</th>
<th>Gun Only Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>M-100</td>
<td>(248282)</td>
<td>10 ft. (3 m)</td>
<td>100 A</td>
<td>100% with CO₂ gas, 60% with mixed gas</td>
<td>.023–.045 in. (0.6–1.2 mm)</td>
<td>3.2 lb. (1.5 kg)</td>
</tr>
<tr>
<td>M-150</td>
<td>(249569)</td>
<td>10 ft. (3 m)</td>
<td>150 A</td>
<td>100% with CO₂ gas, 60% with mixed gas</td>
<td>.023–.045 in. (0.6–1.2 mm)</td>
<td>4.4 lb. (2.0 kg)</td>
</tr>
<tr>
<td></td>
<td>(249400)</td>
<td>12 ft. (3.7 m)</td>
<td>150 A</td>
<td>100% with CO₂ gas, 60% with mixed gas</td>
<td>.023–.045 in. (0.6–1.2 mm)</td>
<td>7.2 lb. (3.3 kg)</td>
</tr>
<tr>
<td></td>
<td>(249401)</td>
<td>15 ft. (4.6 m)</td>
<td>250 A</td>
<td>100% with CO₂ gas, 60% with mixed gas</td>
<td>.023–.045 in. (0.6–1.2 mm)</td>
<td>7.2 lb. (3.3 kg)</td>
</tr>
</tbody>
</table>
**Bernard™ Semi-Automatic Guns**

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

**BTB Air-Cooled MIG Guns**

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

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

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

- Three high-performance consumable lines – Centerfire™, Quik Tip™ or TOUGH LOCK™ (see page 29 for more information)
- Universal Conventional or front-loading QUICK LOAD™ liners
- Fixed or rotatable aluminum armored necks in various lengths and angles to optimize weld access
- Choice of seven different handles with various trigger options for a comfortable, ergonomic fit
- Internal cable connections are compression fit (instead of crimped) to optimize conductivity, reduce heat and increase gun life
- Optional ultra-heavy-duty steel monocoil cable provides extra reinforcement and high pinch/kink resistance
- One year manufacturer’s warranty with lifetime warranty on rear strain relief

For more detailed information, visit BernardWelds.com

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### Heavy industrial

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

**Duty cycle ratings**
- 100% with CO₂
- 60% with mixed gases

**Suggested feeders**
- Continuum™ Feeder (pg 18)
- SuikCase® Series (pg 22)
- 20 and 70 Series Feeders (pg 24-26)

**Suggested power source**
- Millermatic® 350P (pg 11)

#### Most popular consumables

<table>
<thead>
<tr>
<th>Centerfire Consumable Series</th>
<th>Diffusers (amps)</th>
<th>Contact Tips (inches)</th>
<th>Copper Nozzles (inches)</th>
<th>TOUGH LOCK Consumable Series</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Brass Nozzles</td>
<td>D-1 200, 300, small</td>
<td>N-3418C 5/8 ID, 1/4 rec., large</td>
<td>Diffusers (amps)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D-1 400, 500, large</td>
<td>N-1518C 5/8 ID, 1/8 rec., small</td>
<td>404-18-25 200, 300, 400 SD</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N-1514C 3/4 ID, 1/4 rec., large</td>
<td>404-25-25 300, 400, 500, 600 HD</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N-1418C 3/8 ID, SD</td>
<td>T-035 300</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N-1414C 3/8 ID, HD</td>
<td>T-045 1/16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N-1404C 3/8 ID</td>
<td>1/16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N-1414C 3/8 ID</td>
<td>1/16</td>
</tr>
</tbody>
</table>

**Diffusers**
- D-1 200, 300, small
- D-1 400, 500, large

**Contact Tips**
- T-035 .035
- T-045 .045
- T-052 .052
- T-062 1/16

**Copper Nozzles**
- N-3418C 5/8 ID, 1/4 rec., large
- N-1518C 5/8 ID, 1/8 rec., small
- N-1514C 3/4 ID, 1/4 rec., large

**TOUGH LOCK**
- Diffusers (amps)
- 404-18-25 200, 300, 400 SD
- 404-25-25 300, 400, 500, 600 HD

**Contact Tips**
- 403-14-35-25 .035 SD
- 403-20-35-25 .045 SD
- 403-14-45-25 .045 SD
- 403-20-45-25 .045 SD
- 403-20-52-25 .052 SD
- 403-20-116-25 .1/16 HD

All guns in chart come with a Miller® power pin and a Universal Conventional liner except as noted below.

*Comes with a Miller power pin and a QUICK LOAD liner AutoLength™ system.*
Bernard™ Semi-Automatic Guns

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

Fume Extraction MIG Guns
See Bernard literature SP-CLA (straight handle) and SP-PFE (curved handle)

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

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

Clean Air® curved handle gun
• Available in 300- and 400-amp models
• Compatible with Centerfire and Quik Tip consumables
• Small lightweight handle maximizes maneuverability and comfort

Dura-Flux™ Self-Shielded Flux-Cored Guns
See Bernard literature SP-DF

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

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

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

Most popular consumables

Centerfire Consumable Series
Diffusers (amps)
DS-1 200, 300, small
D-1 400, 500, 600, large

Brass Nozzles (inches)
NS-1218B 1/2 ID, 1/8 rec., small

Copper Nozzles (inches)
NS-5818C 5/8 ID, 1/8 rec., small
N-5814C 5/8 ID, 1/4 rec., large
N-3414C 3/4 ID, 1/4 rec., large

Contact Tips (inches)
T-035 .035
T-045 .045
T-052 .052
T-062 1/16

Quik Tip Consumable Series
Diffusers (amps)
D118Q 200, 300, 400
D114Q 500, 600

Plated Copper Nozzles (inches)
N1C58Q 5/8 ID
N1C34HQ 3/4 ID, HD

Contact Tips (inches)
T1035 .035
T1045 .045

TOUGH LOCK Consumable Series
Diffusers (amps)
401-6-25 5/8 ID, 1/8 Rec., SD
401-8-25 5/8 ID, 1/8 Rec., HD
401-5-75 3/4 ID, 1/8 rec., HD

Contact Tips (inches)
403-20-35-25 .035 SD
403-20-35-25 .035 HD
403-20-45-25 .045 SD
403-20-45-25 .045 HD
403-20-52-25 .052 HD
403-20-116-25 1/16 HD

Visit BernardWelds.com or your distributor for additional Bernard consumable options.

For more detailed information, visit BernardWelds.com
## Spoolmate™ Spool Guns

**Spoolmate 100** See literature M/1.45

- **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** See literature M/1.46

- **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** See literature M/1.47

- **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** makes easy replacement. Comes standard with heavy-duty head tube. Three optional head tubes available.

**Spoolmate 3035** See literature M/1.5

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

### Wire Type and Diameter Capacity

<table>
<thead>
<tr>
<th>Spoolmate 100 (300371)</th>
<th>Spoolmate 150 (301272)</th>
<th>Spoolmate 200 (300497)</th>
<th>Spoolmate 3035 (195016)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aluminum</strong></td>
<td><strong>Aluminum</strong></td>
<td><strong>Aluminum</strong></td>
<td><strong>Aluminum</strong></td>
</tr>
<tr>
<td>.030 – .035 in. (0.8 – 0.9 mm)</td>
<td>.030 – .035 in. (0.8 – 0.9 mm)</td>
<td>.030 – .035 in. (0.8 – 0.9 mm)</td>
<td>.030 – .035 in. (0.8 – 0.9 mm)</td>
</tr>
<tr>
<td><strong>Solid steel</strong></td>
<td><strong>Solid steel</strong></td>
<td><strong>Solid steel</strong></td>
<td><strong>Solid steel</strong></td>
</tr>
<tr>
<td>.023 – .035 in. (0.6 – 0.9 mm)</td>
<td>.023 – .035 in. (0.6 – 0.9 mm)</td>
<td>.023 – .035 in. (0.6 – 0.9 mm)</td>
<td>.023 – .035 in. (0.6 – 0.9 mm)</td>
</tr>
<tr>
<td><strong>Stainless</strong></td>
<td><strong>Stainless</strong></td>
<td><strong>Stainless</strong></td>
<td><strong>Stainless</strong></td>
</tr>
<tr>
<td>.023 – .035 in. (0.6 – 0.9 mm)</td>
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<td>.023 – .035 in. (0.6 – 0.9 mm)</td>
<td>.023 – .035 in. (0.6 – 0.9 mm)</td>
</tr>
</tbody>
</table>

### Dimensions

<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 (300371)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>135 A at 30% duty cycle</td>
<td>5-625 ipm (1.7–15.9 m/min.)</td>
<td><strong>Aluminum</strong></td>
<td>.030 – .035 in. (0.8 – 0.9 mm)</td>
<td>4 in. (102 mm)</td>
<td>L: 11.5 in. (291 mm)</td>
<td>6 lb. (2.7 kg)</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Solid steel</strong></td>
<td>.023 – .035 in. (0.6 – 0.9 mm)</td>
<td></td>
<td>W: 3 in. (76 mm)</td>
<td>9 lb. (4.1 kg)</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Stainless</strong></td>
<td>.023 – .035 in. (0.6 – 0.9 mm)</td>
<td></td>
<td>H: 13 in. (330 mm)</td>
<td></td>
</tr>
</tbody>
</table>

## Light industrial Gun

**Spoolmatic Adapter Cable 195287**

- **For Spoolmate 200**
- **Most popular accessories**
  - SGA 100C 043857 (pg 126)
  - SGA 100 043856 (pg 126)
  - 9-Inch Extension Head Tube 300591
  - 45-Degree Head Tube 300592
  - 5-Inch Head Tube 243385

**Process**

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

**Suggested power sources**

**For Spoolmate 100**
- Millermatic® 141 (pg 9)
- Millermatic® 211 (pg 9)
- Multimatic® 200 (pg 41)
- Millermatic® 215 (pg 41)
- Syncrowave® 210 (pg 55) — requires MIG accessory kit (301254)

**For Spoolmate 150**
- Millermatic® 211 (pg 9)
- Multimatic® 200 (pg 41) effective with serial number MF364047N (pg 126)
- Syncrowave® 210 (pg 55) — requires MIG accessory kit (301254)

**For Spoolmate 200**
- Millermatic® 212 Auto-Set (pg 10)
- Millermatic® 252 (pg 10)

**For Spoolmatic 3035**
- Direct connect to vintage Millermatic 210/212 tapped-voltage models
- Millermatic® 141/211 (pg 9) — requires SGA 100 control (043856)
- Bobcat® 225 (pg 76) — requires SGA 100C control (043857)

**Most popular accessories**

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

**For Spoolmatic 3035**
- SGA 100 043856 (pg 126)
- SGA 100C 043857 (pg 126)
- Heavy-Duty Head Tube 195375

Visit MillerWelds.com or your distributor for other Miller® options and accessories.
Spoolmatic® Spool Guns
Portable, aluminum wire feeder for industrial applications.

**Spoolmatic** see literature M/1.73

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) see literature M/1.76

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

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

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

Easy-to-rotate, self-seating head tube allows for better access into tight spots, preventing leaks and providing excellent current transfer.

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

*Spoolmatic Pro requires wire kit (230708) to run 1/16 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</td>
<td>200 A at 100% duty cycle</td>
<td>70–785 ipm (1.8–22.2 m/min.)</td>
<td>Aluminum* .030–.045 in. (0.8–1.1 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>(195156) 15 ft. (4.5 m) cable (130833) 30 ft. (9 m) cable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spoolmatic Pro</td>
<td>200 A at 100% duty cycle</td>
<td>70–950 ipm (1.8–23 m/min.)</td>
<td>Hard wire .030–.045 in. (0.8–1.1 mm)</td>
<td></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>
<tr>
<td>(301147) 15 ft. (4.5 m) cable (301148) 30 ft. (9 m) cable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Miller recommends**

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

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

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

Download the Filler Metal Selector and Calculator app today.
XR™ Push-Pull Guns

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

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

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

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

**XR-Aluma-Pro® Lite** See literature M/1.75
Lightest weight gooseneck-style gun features rear trigger that allows access to hard-to-reach welds.

**XR-Aluma-Pro™** See literature M/1.71
Robust professional-grade gun has the highest duty cycle rating in its class. Easy access to drive assembly and removable toolless head tube reduce service time, by allowing a means of changing drive rolls and head tube, or performing routine maintenance, without disassembly of gun.

**XR™-Pistol** See literature M/1.73
Reliable, cost-effective gun for light- to medium-industrial applications.

**XR™-Pistol-Pro** See literature M/1.74
Exceptional aluminum welding results for heavy-industrial applications.

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

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

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

**XR** Control

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.

---

**Feeding aluminum – choose the right gun solution**

**Push-only Guns**

27–29

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

- Low initial cost versus push-pull guns
- Work with many power sources
- Light and simple to use
- Limited deposition because of wire spool size

**Spool Guns**

30–31

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

- Built for longevity
- Great arc starts and performance
- Higher amp ratings
- Air- and water-cooled models
- Work in conjunction with designated wire feeders

Learn more at MillerWelds.com/aluminum
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 easy relocation and reconnection as production plans or layouts change.

Increased productivity. Operator can load and inspect parts while robot is welding.

A/B 180° Indexing Table
Single-station load/unload system

A/B 180° Indexing H-Frame
Single-station load/unload system

A/B 180° Indexing Ferris Wheel
Single-station load/unload system

Side-by-Side
Two-station load/unload system

Dual head and tailstock/ single- or dual-robot configuration.

Dual head and tailstock/ single- or dual-robot configuration.

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

Laser Welding/Cladding System

Integrated laser solution with fiber cable management.
• Autogenous, hotwire, coldwire or hybrid processes
• Class 1 laser-safe enclosure
• Available with fiber or diode laser configurations
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.

**Native language programming.** Same language and functions that the technician will see on the teaching pendent, making program generation off-line easier than competitive code-based systems.

**Simplified file transfer.** Transfer robot programs between robot types, sizes and controller generations.

Automation Components

- **Auto-Continuum™ power sources** (pg 19)
- **Insight Core™, Centerpoint™ and ArcAgent™ Welding Intelligence™** (pg 68–71)
- **Tregaskiss™ robotic MIG guns and reamers** (pg 38/39)
- **FILTAIR® weld fume extraction system with low profile hood** (pg 113/114)
- **Miller recommends Hobart® filler metals** (visit HobartBrothers.com)
Jetline® Fixed Automation

Jetline offers a partnership to ensure you find the right solution to improve your weld quality and productivity — from design to installation, our engineers will help you get the results you need to stay competitive. Learn more at MillerWelds.com/jetline

Longitudinal Seam Welding Systems

Jetline longitudinal seam welders deliver speed and precision. Features include linear welding, high-volume cylinder production, joining thin-gauge or coiled sheets and more.

- High-precision travel and positioning result in weld accuracy
- Complete solution, single source
- Bolt-on control modules provide adaptability
- Aluminum hold-down fingers with copper tips absorb and dissipate heat
- Toe-touch tapeswitch control activates finger clamping
- Range includes:
  - External: flat sheets, cylinders and more
  - Internal: flat sheets and internal welds on cylinders
  - Combination: internal and external welds
  - Elevating: seam welder raises and lowers to accommodate diameters up to 96-inch OD
  - Bench: small seam welder for welding shorter, smaller parts

Circumferential Welding Systems

Jetline precision lathes and light-, medium- and heavy-duty circumferential welders handle a wide variety of part sizes and dimensions: from less than one pound up to 10,000 pounds and from one inch up to 60 inches in diameter. Whatever the challenge, Jetline can work with you to find the perfect solution.

- Powered variable speed headstock
- Adjustable tailstock can be moved along the bed to accommodate differing part lengths
- Air-operated tailstocks apply a constant clamping pressure to the part throughout the welding cycle
- Range includes:
  - Precision: 500 lb. maximum part
  - Light duty: 500 lb. maximum part
  - Medium duty: 2,000 lb. maximum part
  - Heavy duty: 10,000 lb. maximum part

Weld Head Locators

Jetline precision weld head locators provide a universal solution to position weld heads for circumferential and linear welding applications. With a variety of control systems, bolt-on accessories and base options, we can design the solution to meet your GTAW, GMAW and PAW needs.

- Jetline manipulators allow for simplified torch positioning
- Linear rails provide high-precision movement of the boom for linear welding
- 360 degrees of column rotation allows the weld head to be positioned over multiple fixtures
- Remote pushbutton pendant for weld head locator operation
- Range includes:
  - 6 x 6 ft.
  - 9 x 9 ft.
  - 12 x 12 ft.
Jetline arc length control maintains a constant arc length by controlling arc voltage in TIG (GTAW) or plasma (PAW) welding applications.

- Regulation of welding voltage for precise, repeatable welds
- Provides consistent performance and results
- Touch retract allows starting gap to be automatically preset in TIG (GTAW) applications
- Simplified setup and operation requires minimal operator intervention

Jetline cold wire feeder is used for automated gas tungsten arc welding (TIG) and plasma arc welding (PAW) to add “fill” to a weld joint.

- Cold wire feeder system includes 9700W microprocessor control, four-roll feed assembly and wire guide positioner
- 9700W microprocessor controller offers a simple menu for setup and operation
- Four-roll feed assembly optimizes feeding of both hard and soft wires
- Wire guide positioner provides fine adjustment to position where the wire enters the weld puddle
- Optional clear spool cover protects the wire from the dust and dirt from the manufacturing environment

**9900 Controller**

The 9900 controller is a touch screen industrial computer with an intuitive graphical user interface.

- Large 15-inch touch screen panel with industrial PC
- User-friendly graphical interface and easy programming using industry-standard terms
- Graphical representation of the weld parameters during the weld and programming
- Standard configuration controls up to 15 channels
- Ethernet and fiber optic communication for flexibility and speed
- Software options

**Arc Length Control**

Jetline arc length control maintains a constant arc length by controlling arc voltage in TIG (GTAW) or plasma (PAW) welding applications.

- Regulation of welding voltage for precise, repeatable welds
- Provides consistent performance and results
- Touch retract allows starting gap to be automatically preset in TIG (GTAW) applications
- Simplified setup and operation requires minimal operator intervention
- Standard package includes 9790 arc length control and 6-inch arc length control actuator

**Cold Wire Feed**

Jetline cold wire feeder is used for automated gas tungsten arc welding (TIG) and plasma arc welding (PAW) to add “fill” to a weld joint.

- Cold wire feeder system includes 9700W microprocessor control, four-roll feed assembly and wire guide positioner
- 9700W microprocessor controller offers a simple menu for setup and operation
- Four-roll feed assembly optimizes feeding of both hard and soft wires
- Wire guide positioner provides fine adjustment to position where the wire enters the weld puddle
- Optional clear spool cover protects the wire from the dust and dirt from the manufacturing environment

**9700 Controller**

The 9700 controller is the standard Jetline control and sequencer used on our motor-driven equipment.

- Microprocessor-based control technology
- User-friendly front panel layout with large-screen graphic backlit display
- Closed-loop control for higher accuracy and stability
- Modbus® provides enhanced control of compatible Dynasty® and Maxstar® power sources for a single point of programming
- Processes include GTAW, GMAW, SAW and PAW
- Integrates with other optional Jetline components including arc length control, cold wire and hot wire feeders, and oscillators

The 9700 controller is the standard Jetline control and sequencer used on our motor-driven equipment.
Tregaskiss™ Robotic Guns

Available with all PerformArc® robotic welding systems, fully configurable Tregaskiss™ robotic MIG guns are engineered for accurate, reliable and repeatable performance that maximizes production uptime and throughput.

Air-Cooled MIG Guns

See Tregaskiss literature SP-TA3 and SP-CA3

Fully configurable Tregaskiss TOUGH GUN™ TA3 and CA3 robotic MIG guns are engineered to perform in high-volume production environments. Parts can be replaced with minimal downtime and little to no impact on Tool Center Point (TCP).

TA3 MIG gun
- Runs internal to the robot arm
- Available in 350-amp models at 100 percent duty cycle with mixed gases
- Available as a complete package from the power pin to the contact tip
- Durable neck clamp provides consistent clamping force for repeatability and TCP accuracy

CA3 MIG gun
- Runs external to the robot arm
- Available in 385-amp models at 100 percent duty cycle with mixed gases
- Replaceable unicable reduces downtime through faster repair and extended service life
- Cable guide minimizes stress on cable connection as the robot articulates
- Durable neck clamp provides consistent clamping force for repeatability and TCP accuracy

Water-Cooled MIG Guns

See Tregaskiss literature SP-TWD and SP-CWD

Engineered to deliver superior cooling power for longer gun and consumable life and zero gas loss, Tregaskiss by DINSE™ robotic MIG guns offer an unparalleled total cost of ownership.

TWD MIG gun
- Runs internal to the robot arm
- Available in 350-, 400-, 500- and 600-amp models at 100 percent duty cycle with mixed gases
- Available as a complete package from the power pin to the contact tip
- Zero gas loss due to dedicated line running from the back of the gun directly to the gas diffuser
- Unique dual-circuit cooling system achieves lower operating temperatures
- Air blast is standard — options include clutch or solid mount and wire brake

CWD MIG gun
- Runs external to the robot arm
- Available in 350-, 400-, 500- and 600-amp models at 100 percent duty cycle with mixed gases
- Zero gas loss due to dedicated line running from the back of the gun directly to the gas diffuser
- Unique dual-circuit cooling system achieves lower operating temperatures
- Air blast is standard — options include clutch or solid mount and wire brake

Packages

- PerformArc Robotic Welding Systems (pg 34)

Most popular accessories

- TOUGH GUN I.C.E.™ (Integrated Cooling Enhancer) Technology — adds water-cooling to air-cooled guns for a boost in duty cycle
- Neck Checking Fixture
- TOUGH GUN TT3E Ethernet Reamer Robotic Nozzle Cleaning Station (pg 39)
- TOUGH GUN TT3A Reamer Robotic Nozzle Cleaning Station (pg 39)

Most popular consumables

- TOUGH LOCK™ Consumables (pg 29)
- QUICK LOAD™ Liners (see Tregaskiss literature SP-QLL)
- QUICK LOAD Liner AutoLength™ System (see Tregaskiss literature SP-QLL)

Visit Tregaskiss.com or your distributor for other Tregaskiss options and accessories.
Tregaskiss™ TOUGH GUN™ TT3 Reamers

TOUGH GUN TT3 reamers provide automated spatter removal to help extend the life of your robotic MIG guns and consumables, increasing both production uptime and throughput while benefiting your bottom line.

Tough on spatter and designed to operate reliably in even the harshest welding environments.

**Two models available.** TT3A (analog) and TT3E (Ethernet) model enhanced with digital Ethernet communication for better integration.

**TT3E Ethernet model** is designed for durability, serviceability and repeatability. Provides greater control optimization, remote monitoring capability and faster troubleshooting to facilitate increased productivity.

**One-year warranty** on both TOUGH GUN TT3 reamer models. Extend your warranty from one year to two years with the addition of a factory-installed Lubricator, **OR** from one year to three years with the addition of a factory-installed Lubricator, plus exclusive use of Tregaskiss TOUGH GARD anti-spatter liquid.

Visit Tregaskiss.com or your distributor for other Tregaskiss options and accessories.

Maximizing throughput. Minimizing costs.

Automated welding applications require flexible, repeatable solutions that maximize production uptime and throughput while minimizing costs. This is why industrial manufacturers rely on Tregaskiss and its proven track record of delivering reliable and resilient robotic MIG welding guns and peripherals. See page 38 and above for more information.

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>Material</th>
<th>Wire Size</th>
<th>150 A</th>
<th>200 A</th>
<th>250 A</th>
<th>300 Amp</th>
<th>350 Amp</th>
<th>450 Amp</th>
<th>650 A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild Steel</td>
<td>.023 in.</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Stainless Steel</td>
<td>.030 in.</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Aluminum*</td>
<td>.035 in.</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Gauge (.020–.125 in.)</td>
<td>.045 in.</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Sheet (.125–.375 in.)</td>
<td>.052 in.</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Plate (.375–1 in.)</td>
<td>1/16 in.</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Plate (1+ in.)</td>
<td>5/64 in.</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>3/32 in.</td>
<td>3/16 in.</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Short Circuit</td>
<td>⭐⭐⭐⭐⭐</td>
<td>⭐⭐⭐⭐⭐</td>
<td>⭐⭐⭐⭐⭐</td>
<td>⭐⭐⭐⭐⭐</td>
<td>⭐⭐⭐⭐⭐</td>
<td>⭐⭐⭐⭐⭐</td>
<td>⭐⭐⭐⭐⭐</td>
<td>⭐⭐⭐⭐⭐</td>
</tr>
<tr>
<td>Pulsed Spray</td>
<td>⭐⭐⭐⭐⭐</td>
<td>⭐⭐⭐⭐⭐</td>
<td>⭐⭐⭐⭐⭐</td>
<td>⭐⭐⭐⭐⭐</td>
<td>⭐⭐⭐⭐⭐</td>
<td>⭐⭐⭐⭐⭐</td>
<td>⭐⭐⭐⭐⭐</td>
<td>⭐⭐⭐⭐⭐</td>
</tr>
<tr>
<td>Stick</td>
<td>⭐⭐⭐⭐⭐</td>
<td>⭐⭐⭐⭐⭐</td>
<td>⭐⭐⭐⭐⭐</td>
<td>⭐⭐⭐⭐⭐</td>
<td>⭐⭐⭐⭐⭐</td>
<td>⭐⭐⭐⭐⭐</td>
<td>⭐⭐⭐⭐⭐</td>
<td>⭐⭐⭐⭐⭐</td>
</tr>
<tr>
<td>TIG</td>
<td>⭐⭐⭐⭐⭐</td>
<td>⭐⭐⭐⭐⭐</td>
<td>⭐⭐⭐⭐⭐</td>
<td>⭐⭐⭐⭐⭐</td>
<td>⭐⭐⭐⭐⭐</td>
<td>⭐⭐⭐⭐⭐</td>
<td>⭐⭐⭐⭐⭐</td>
<td>⭐⭐⭐⭐⭐</td>
</tr>
<tr>
<td>CAC-A</td>
<td>⭐⭐⭐⭐⭐</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>
<td>5/16 in.</td>
</tr>
</tbody>
</table>

**Icon Key**
- Designed for
- Capable of
- New! or Improved! products appear in blue type.

**Process Quality:**
- Good
- Better
- Best
- Optimized

*XR push-pull system recommended for best results.

For more detailed information, visit [MillerWelds.com/multiprocess](http://MillerWelds.com/multiprocess).
Multimatic™ 200

See literature DC/12.57

Welding Capability

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Welding Mode/Process</th>
<th>Input Power</th>
<th>Amps Input at Rated Output, 50/60 Hz</th>
<th>Wire Feed Speed</th>
<th>Max. Open-Circuit Voltage</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multimatic 200</td>
<td>CV: MIG (GMAW)</td>
<td>120 V</td>
<td>24.6</td>
<td>58 VDC</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></td>
<td></td>
<td>30-125</td>
<td>(1.5-15.2 m/min.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CC: TIG</td>
<td>240 V</td>
<td>20.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>30-230</td>
<td>(58 VDC (22-25 VDC, sense voltage for stick and Lift-Arc™ TIG)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CC: Stick</td>
<td>240 V</td>
<td>20.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>30-200</td>
<td>(58 VDC)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multimatic 215</td>
<td>CV: MIG (GMAW)</td>
<td>120 V</td>
<td>22.7</td>
<td>58 VDC</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></td>
<td></td>
<td>30-125</td>
<td>(1.5-15.2 m/min.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CC: TIG</td>
<td>240 V</td>
<td>20.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>30-230</td>
<td>(58 VDC)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Multimatic™ 215

See literature DC/12.59

Welding Capability

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Welding Mode/Process</th>
<th>Input Power</th>
<th>Amps Input at Rated Output, 50/60 Hz</th>
<th>Wire Feed Speed</th>
<th>Max. Open-Circuit Voltage</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multimatic 215</td>
<td>CV: MIG (GMAW)</td>
<td>120 V</td>
<td>22.7</td>
<td>58 VDC</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></td>
<td></td>
<td>30-125</td>
<td>(1.5-15.2 m/min.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CC: TIG</td>
<td>240 V</td>
<td>20.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>30-230</td>
<td>(58 VDC)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Multimatic 200 (907518) (951649) with TIG contractor kit (see page 124 for kit contents)

Multimatic 215 (907693) (951674) with TIG contractor kit (see page 124 for kit contents)

Weighing only 29 lb., this light weight MIG, stick and TIG welder provides portability on the job.

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

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

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

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

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

Angled cast-aluminum drive system provides smooth feeding and the ability to use 10, 12 or 15 ft. guns.

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

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

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

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.

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.

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

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

Auto Spool Gun Detect™ automatically detects when a MIG gun or spool gun is connected eliminating the need for a switch.
**Dynasty® 280 DX with CV**  
See literature AD/4.95

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

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

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

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

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

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

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

---

**Dimension™ 452**  
See literature DC/19.2

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.

---

**Industrial**

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

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

**Complete package includes**
- Dynasty 280 DX with CV
- SuitCase™ X-TREME™ BVS feeder
- Bernard™ BTB gun 300 A

**Most popular accessories**
- SuitCase™ X-TREME™ Feeders (pg 22)
- Small Runner™ Cart 301318 (pg 119)
- Coolimate™ 1.3 300972 (pg 119)
- Contractor Kits (pg 124)
- 301311 w/RCCS-14 finger control 301309 w/RFC-14 HD foot control
- Weldcraft™ Water-Cooled Torch Kits (pg 124)
- 300185 W-250 (WP-20)
- 300990 W-280 (WP-280)
- 301268 W-375
- Remote Controls (pg 124/125)

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

---

**Heavy Industrial**

**Processes**
- MIG (GMAW) • Flux-cored (FCAW)
- Stick (SMAW) • TIG (GTAW)
- Air carbon arc cutting and gouging (CAC-A) (5/16 in. carbons)

**Stationary package includes**
- Power source
- S-74D 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

**Most popular accessories**
- SuitCase™ X-TREME™ Feeders (pg 22)
- 70 Series Feeders (pg 24)
- Standard Running Gear/Cylinder Rack 042885/042887 (pg 119)
- Industrial Mig 4/0 Kt (with lug connectors) 300390 (pg 121)
- Extension Cables (pg 126)

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

---

**Note:** Dimension 652 is still available, visit MillerWelds.com for more information.

---

**Stock Number** (907514007) Power source only (951753) Complete package

<table>
<thead>
<tr>
<th>Welding Process</th>
<th>Input Power</th>
<th>Welding Amp Range</th>
<th>Rated Output at 60% Duty Cycle</th>
<th>Max. Open-Circuit Voltage</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIG</td>
<td>3-phase</td>
<td>1–280 (DC)</td>
<td>235 A at 19.4 V</td>
<td>60 VDC</td>
<td>H: 13.6 in. (346 mm)</td>
<td>55 lb.</td>
</tr>
<tr>
<td></td>
<td>1-phase</td>
<td>2–280 (AC)</td>
<td>235 A at 19.4 V*</td>
<td></td>
<td>W: 8.6 in. (219 mm)</td>
<td></td>
</tr>
<tr>
<td>Stick</td>
<td>3-phase</td>
<td>5–280</td>
<td>200 A at 28 V</td>
<td></td>
<td>D: 22.5 in. (569 mm)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1-phase</td>
<td>280</td>
<td>180 A at 27.2 V*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Amperage/Voltage Ranges**

<table>
<thead>
<tr>
<th>CC mode: 20–565 A</th>
<th>CC mode: 10–38 V</th>
</tr>
</thead>
<tbody>
<tr>
<td>450 A at 38 VDC, 100% duty cycle</td>
<td>91 79 39 31 31.4 22</td>
</tr>
<tr>
<td>104 90 45 36 35.3 22.3</td>
<td></td>
</tr>
</tbody>
</table>

**Power Source Dimensions** (includes lift eye and strain relief)

<table>
<thead>
<tr>
<th>Power Source Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>424 lb. (192 kg)</td>
</tr>
</tbody>
</table>

---

**Stock Number** (903254) 200/208/230/460 V power source only (903255) 230/460/575 V power source only (951273) 230/460/575 V stationary pkg

<table>
<thead>
<tr>
<th>Amps Input at Rated Output, 60 Hz</th>
<th>Power Source Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC mode: 20–565 A</td>
<td>CC mode: 10–38 V</td>
</tr>
<tr>
<td>91 79 39 31 31.4 22</td>
<td>450 A at 38 VDC, 100% duty cycle</td>
</tr>
<tr>
<td>104 90 45 36 35.3 22.3</td>
<td>43 VDC</td>
</tr>
</tbody>
</table>

**Net Weight** (25 kg)
Dimension™ 650 and 650 ArcReach®

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

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.

ArcReach technology lets operators adjust welding parameters right at the weld joint without a control cord using the wire feeder or remote—maximizing arc-on time, improving safety and impacting the bottom line. See page 47 for ArcReach SuitCase feeders and the Stick/TIG Remote. Don’t walk. Weld! Learn more at MillerWelds.com/arcreach

Note: Dimension 650 ArcReach does not support the new Cable Length Compensation (CLC™) and Adjust While Welding (AWW™) features or the ArcReach Smart Feeder.

Every year, outdated welding equipment wastes hundreds of productive work hours—and thousands of dollars in profit—by forcing operators to make numerous walks from the weld joint to the welder. Welding systems with ArcReach technology let operators adjust welding parameters right at the weld joint without a control cord using the wire feeder or remote—maximizing arc-on time, improving safety and impacting the bottom line. See page 47 for ArcReach SuitCase feeders and the Stick/TIG Remote. Don’t walk. Weld! Learn more at MillerWelds.com/arcreach

Note: Dimension 650 ArcReach does not support the new Cable Length Compensation (CLC™) and Adjust While Welding (AWW™) features or the ArcReach Smart Feeder.

Dimension 650 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.

Dimension 650 MIGRunner™ package includes above plus

• Running gear cylinder rack

Most popular accessories

• Dimension 650 ArcReach Racks
907702 2-pack rack
907701 4-pack rack
Rack comes assembled with two or four Dimension 650 ArcReach power sources fused for 460 V.

• SuitCase® X-TREME™ Feeders (pg 22)
• ArcReach® SuitCase® Feeders (pg 22)
• 70 Series Feeders (pg 24)
• Bernard™ MIG Guns (pg 28/29)
• ArcReach Stick/TIG Remote 301325 (pg 47)
• Running Gear Cylinder Rack 300408 (pg 119)
• Industrial MIG 4/0 Kit (with lug connectors) 300390 (pg 121)
• Extension Cables (pg 126) 242208025 25 ft. (7.6 m) 242208050 50 ft. (15 m) 242208080 80 ft. (24.4 m)

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

Multiprocess

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)

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

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

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

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.

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

Choose the Right XMT

<table>
<thead>
<tr>
<th>300 Amp</th>
<th>350 Amp</th>
<th>450 Amp</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input Power</strong></td>
<td>XMT 304 CC/CV</td>
<td>XMT 350 CC/CV</td>
</tr>
<tr>
<td>Weld Output</td>
<td>300 A at 32 VDC</td>
<td>350 A at 34 VDC</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>
</tr>
<tr>
<td>Net Weight</td>
<td>79.5 lb. (36.1 kg)</td>
<td>80 lb. (36.3 kg)</td>
</tr>
<tr>
<td>Output Connector</td>
<td>Dinse</td>
<td>Dinse or Tweco</td>
</tr>
<tr>
<td>Pulsed MIG</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>14-pin Compliant</td>
<td>Yes</td>
<td>—</td>
</tr>
<tr>
<td>Insight Core Capable (requires Insight Core 14-pin module)</td>
<td>Yes (pg 69)</td>
<td>Yes (pg 69)</td>
</tr>
</tbody>
</table>

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.

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.

Insight Core™: XMT 14-pin models are Insight Core capable to monitor weld voltage, amperage, and arc-time and percentage.
XMT® 304 CC/CV  See literature DC/18.8
Cost-effective multiprocess machine featuring Auto-Link.

XMT® 350 CC/CV and 450 CC/CV  See literature DC/18.93 (350) and DC/18.94 (450)

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

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

XMT® 350 MPa and 450 MPa  See literature DC/18.93 (350) and DC/18.94 (450)

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

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

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

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

Synergic pulsed MIG. As you increase/decrease the wire feed speed, the pulse parameters increase/decrease, matching the right amount of power output to match the wire speed, eliminating the need to make additional adjustments.

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

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

*Feeder includes gun and drive rolls. MIGRunners add 2/0 weld cable and 2/0 work cable with clamp, flowmeter regulator with gas hose and MIGRunner cart.

**Optional 115-volt auxiliary power provides 10 amps of circuit-breaker protected power for coolant systems, etc.

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

<table>
<thead>
<tr>
<th>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>Power Source Dimensions</th>
<th>Power Source Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>300 A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XMT 304 CC/CV</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 30.5 – 18.9 – 12.2 11.6</td>
<td>17 VDC</td>
<td>H: 17 in. (432 mm) W: 12.5 in. (318 mm) D: 24 in. (610 mm)</td>
<td>90 lb. (36.1 kg)</td>
</tr>
<tr>
<td>(Dinse)</td>
<td>1-phase</td>
<td>5–400 A 10–35 V</td>
<td>225 A at 29 VDC, 60% duty cycle</td>
<td>52.4 47.4 – 24.5 – 11.3 7.6</td>
<td>17 VDC</td>
<td>H: 17 in. (432 mm) W: 12.5 in. (318 mm) D: 24 in. (610 mm)</td>
<td>80 lb. (36.3 kg)</td>
</tr>
<tr>
<td>(904711) 208–230/460 V power source only</td>
<td>(951343) 208–230/460 V MIG Runner w/22A*</td>
<td></td>
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</tr>
<tr>
<td>XMT 350 CC/CV</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 36.1 20.6 17.8 14.1 14.2 13.6</td>
<td>75 VDC</td>
<td>H: 17 in. (432 mm) W: 12.5 in. (318 mm) D: 24 in. (610 mm)</td>
<td>90 lb. (36.1 kg)</td>
</tr>
<tr>
<td>(Dinse)</td>
<td>1-phase</td>
<td>5–425 A 10–38 V</td>
<td>300 A at 32 VDC, 60% duty cycle***</td>
<td>60.8 54.6 29.7 24.5 19.9 11.7 11.2</td>
<td>75 VDC</td>
<td>H: 17 in. (432 mm) W: 12.5 in. (318 mm) D: 24 in. (610 mm)</td>
<td>80 lb. (36.3 kg)</td>
</tr>
<tr>
<td>(907161) 208–575 V power source only</td>
<td>(90716011) 208–575 V w/auxiliary power**</td>
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<tr>
<td></td>
<td>(951327) 208–575 V MIG Runner w/22A*</td>
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<tr>
<td></td>
<td>(951314) 208–575 V MIG Runner w/5–74D*</td>
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</tr>
<tr>
<td>XMT 350 MPa</td>
<td>3-phase</td>
<td>5–425 A 10–38 V</td>
<td>350 A at 34 VDC, 60% duty cycle***</td>
<td>60.8 54.6 29.7 24.5 19.9 11.7 11.2</td>
<td>75 VDC</td>
<td>H: 17 in. (432 mm) W: 12.5 in. (318 mm) D: 24 in. (610 mm)</td>
<td>80 lb. (36.3 kg)</td>
</tr>
<tr>
<td>(Dinse except where noted)</td>
<td>(907366) 208–575 V power source only</td>
<td></td>
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<tr>
<td></td>
<td>(90736011) 208–575 V w/auxiliary power**</td>
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<tr>
<td></td>
<td>(907360014) 208–575 V w/Tweco®</td>
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<tr>
<td>450 A</td>
<td>3-phase</td>
<td>15–600 A 10–38 V</td>
<td>450 A at 38 VDC, 100% duty cycle</td>
<td>– 51 – 27.6 24.4 22 18.9</td>
<td>90 VDC</td>
<td>H: 17.25 in. (438 mm) W: 14.5 in. (368 mm) D: 27.125 in. (689 mm)</td>
<td>122 lb. (55.3 kg)</td>
</tr>
<tr>
<td>XMT 450 CC/CV</td>
<td>3-phase</td>
<td>15–600 A 10–38 V</td>
<td>450 A at 38 VDC, 100% duty cycle</td>
<td>– 51 – 27.6 24.4 22 18.9</td>
<td>90 VDC</td>
<td>H: 17.25 in. (438 mm) W: 14.5 in. (368 mm) D: 27.125 in. (689 mm)</td>
<td>122 lb. (55.3 kg)</td>
</tr>
<tr>
<td>(1/2 in. stud)</td>
<td>1-phase</td>
<td>15–600 A 10–38 V</td>
<td>450 A at 38 VDC, 100% duty cycle</td>
<td>– 51 – 27.6 24.4 22 18.9</td>
<td>90 VDC</td>
<td>H: 17.25 in. (438 mm) W: 14.5 in. (368 mm) D: 27.125 in. (689 mm)</td>
<td>122 lb. (55.3 kg)</td>
</tr>
<tr>
<td>(904748) 230/460 V power source only</td>
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</tr>
<tr>
<td>XMT 450 MPa</td>
<td>3-phase</td>
<td>15–600 A 10–38 V</td>
<td>450 A at 38 VDC, 100% duty cycle</td>
<td>– 51 – 27.6 24.4 22 18.9</td>
<td>90 VDC</td>
<td>H: 17.25 in. (438 mm) W: 14.5 in. (368 mm) D: 27.125 in. (689 mm)</td>
<td>122 lb. (55.3 kg)</td>
</tr>
<tr>
<td>(1/2 in. stud)</td>
<td>1-phase</td>
<td>15–600 A 10–38 V</td>
<td>450 A at 38 VDC, 100% duty cycle</td>
<td>– 51 – 27.6 24.4 22 18.9</td>
<td>90 VDC</td>
<td>H: 17.25 in. (438 mm) W: 14.5 in. (368 mm) D: 27.125 in. (689 mm)</td>
<td>122 lb. (55.3 kg)</td>
</tr>
<tr>
<td>(904748) 575 V power source only</td>
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</tr>
<tr>
<td>XMT 450 MPa</td>
<td>3-phase</td>
<td>15–600 A 10–38 V</td>
<td>450 A at 38 VDC, 100% duty cycle</td>
<td>– 51 – 27.6 24.4 22 18.9</td>
<td>90 VDC</td>
<td>H: 17.25 in. (438 mm) W: 14.5 in. (368 mm) D: 27.125 in. (689 mm)</td>
<td>122 lb. (55.3 kg)</td>
</tr>
<tr>
<td>(1/2 in. stud)</td>
<td>1-phase</td>
<td>15–600 A 10–38 V</td>
<td>450 A at 38 VDC, 100% duty cycle</td>
<td>– 51 – 27.6 24.4 22 18.9</td>
<td>90 VDC</td>
<td>H: 17.25 in. (438 mm) W: 14.5 in. (368 mm) D: 27.125 in. (689 mm)</td>
<td>122 lb. (55.3 kg)</td>
</tr>
<tr>
<td>(90479001) 230/460 V power source only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XMT 450 MPa</td>
<td>3-phase</td>
<td>15–600 A 10–38 V</td>
<td>450 A at 38 VDC, 100% duty cycle</td>
<td>– 51 – 27.6 24.4 22 18.9</td>
<td>90 VDC</td>
<td>H: 17.25 in. (438 mm) W: 14.5 in. (368 mm) D: 27.125 in. (689 mm)</td>
<td>122 lb. (55.3 kg)</td>
</tr>
</tbody>
</table>
More jobsite productivity and efficiency
Cable Length Compensation (CLC™) ensures that the voltage a weld operator sets is the voltage they get by automatically adjusting voltage based on weld cable length, even hundreds of feet away from the power source.

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

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

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

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

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

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

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

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

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

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

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

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

Decrease the chance of an incorrect weld process being used because Auto-Process Select™ automatically sets the power source to the correct weld process based on the polarity applied to the weld accessory.
XMT® 450 CC/CV ArcReach®

See literature DC/18.94

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

Automatic return to panel settings. System automatically returns to XMT setting when ArcReach communication is terminated. For example, if the XMT is set to gouging at 550 amps and an ArcReach feeder is connected, the XMT will go to a MIG/FCAW process. If the feeder is disconnected, the XMT will go back to its previous setting (gouging at 550 amps).

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

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

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

### ArcReach® Accessories

- **ArcReach SuitCase® 8 and 12 feeders** (for MIG or flux-cored welding)
  - Locations: 951726, 951727, 951728, 951729, 951730, 951731, 951732
- **ArcReach Smart Feeder** (for RMD® or pulsed MIG welding)
  - Locations: 951733
- **ArcReach Stick/TIG Remote** (for stick or TIG welding)
  - Locations: 301325

*Optional 115-volt auxiliary power provides 10 amps of circuit-breaker protected power for coolant systems, etc.

**Duty cycle rating below achieved with 6-gauge input power cord (8-gauge cord supplied with unit).
PipeWorx 350 FieldPro™ System
See literature PWS/6.0

Simplicity-driven performance for your pipe construction site.

Remote control of the power source without a cord.

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

Stick/TIG system includes
• PipeWorx 350 FieldPro power source (907533)
• FieldPro Remote (300934)

MIG/flux-cored system includes
• PipeWorx 350 FieldPro power source (907533)
• ArcReach SuitCase 12 feeder with drive rolls
• Bernard® PipeWorx 300-15 MIG gun (951732)

RMD/pulse system includes
• PipeWorx 350 FieldPro power source (907533)
• FieldPro Smart Feeder with drive rolls (300935)
• Bernard® PipeWorx 300-15 MIG gun (195400)

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

PipeWorx 400 Welding System
See literature PWS/2.0

Optimized for pipe fabrication shops.

PipeWorx welding system comes complete with
• PipeWorx 400 power source with cable hangers (907382) or (907384)
• Dual feeder with drive rolls (300366)
• Two Bernard® PipeWorx 300-15 MIG guns (195400)
• Running gear with gas cylinder rack and handles (300368)
• Cable kit with 25 ft. (7.6 m) work sense lead (300367)

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

True multiprocess machine
• Weld processes are optimized to deliver superior arc performance and stability specifically for root, fill, and cap passes on pipe
• RMD® and pulsed MIG increase quality and productivity

Quick process changeover
• Simply push a process selection button to choose a welding process
• Eliminates setup 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

Regulated Metal Deposition (RMD®)
- 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; reduces rework
- Can eliminate the need for a hot pass
- Can eliminate backing/purge gas in some stainless applications

PipeWorx 350 FieldPro Racks

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

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

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

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.

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Rack Capacity</th>
<th>Input Power to Rack</th>
<th>Input Welding Circuit Rating</th>
<th>Wire Feed Speed</th>
<th>Wire Diameter Type and Capacity</th>
<th>Maximum Spool Size Capacity</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>PipeWorx 350 FieldPro System (951547)</td>
<td>4 units</td>
<td>230-575 V, three-phase, 50/60 Hz. (Fuses included for 460 or 575 V operation. Operation includes 460 or 575 V operation.)</td>
<td>.035–.045 in. (0.9–1.1 mm)</td>
<td>.250–.500 in. (6.4–12.7 mm)</td>
<td>.035–045 in. (0.9–1.1 mm)</td>
<td>12 in. (305 mm)</td>
<td>H: 59 in. (1,500 mm)</td>
<td>679 lb. (308 kg)</td>
</tr>
</tbody>
</table>

PipeWorx 400 Welding System

Most popular accessories for both PipeWorx Systems
- Bernard™ PipeWorx Guns
- Composite Cable Kits
- DSS-9 Dual Switch
- RFC-14 HD
- RPBS-14

Most popular accessories for PipeWorx 400 Welding System
- PipeWorx 400 Insight Module
- PipeWorx Accessories Kit
- MillerWelds.com or your distributor

*Welding with the Smart Feeder requires the PipeWorx 350 FieldPro to be hooked up to three-phase power. Dimensions and weight are for power source only.

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Rack Capacity</th>
<th>Input Power to Rack</th>
<th>Input Welding Circuit Rating</th>
<th>Wire Feed Speed</th>
<th>Wire Diameter Type and Capacity</th>
<th>Maximum Spool Size Capacity</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>PipeWorx 400 Welding System (951381)</td>
<td>6 units</td>
<td>230-575 V, three-phase, 50/60 Hz. (Fuses included for 460 or 575 V operation. Operation includes 460 or 575 V operation.)</td>
<td>.035–.045 in. (0.9–1.1 mm)</td>
<td>.250–.500 in. (6.4–12.7 mm)</td>
<td>.035–045 in. (0.9–1.1 mm)</td>
<td>12 in. (305 mm)</td>
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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.

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Rack Capacity</th>
<th>Input Power to Rack</th>
<th>Input Welding Circuit Rating</th>
<th>Wire Feed Speed</th>
<th>Wire Diameter Type and Capacity</th>
<th>Maximum Spool Size Capacity</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>PipeWorx 350 FieldPro System (951547)</td>
<td>6 units</td>
<td>230-575 V, three-phase, 50/60 Hz. (Fuses included for 460 or 575 V operation. Operation includes 460 or 575 V operation.)</td>
<td>.035–.045 in. (0.9–1.1 mm)</td>
<td>.250–.500 in. (6.4–12.7 mm)</td>
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</tbody>
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PipeWorx 400 Welding System

Most popular accessories for both PipeWorx Systems
- Bernard™ PipeWorx Guns
- Composite Cable Kits
- DSS-9 Dual Switch
- RFC-14 HD
- RPBS-14

Most popular accessories for PipeWorx 400 Welding System
- PipeWorx 400 Insight Module
- PipeWorx Accessories Kit
- MillerWelds.com or your distributor

*Welding with the Smart Feeder requires the PipeWorx 350 FieldPro to be hooked up to three-phase power. Dimensions and weight are for power source only.

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<tr>
<th>Model/Stock Number</th>
<th>Rack Capacity</th>
<th>Input Power to Rack</th>
<th>Input Welding Circuit Rating</th>
<th>Wire Feed Speed</th>
<th>Wire Diameter Type and Capacity</th>
<th>Maximum Spool Size Capacity</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>PipeWorx 400 Welding System (951381)</td>
<td>8 units</td>
<td>230-575 V, three-phase, 50/60 Hz. (Fuses included for 460 or 575 V operation. Operation includes 460 or 575 V operation.)</td>
<td>.035–.045 in. (0.9–1.1 mm)</td>
<td>.250–.500 in. (6.4–12.7 mm)</td>
<td>.035–045 in. (0.9–1.1 mm)</td>
<td>12 in. (305 mm)</td>
<td>H: 59 in. (1,500 mm)</td>
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</tbody>
</table>
**Thunderbolt® 160 and 210**

See literature DC/37.0

**New!**

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

Nearly 100 pounds lighter so you can work smarter not harder by bringing the welder to the work. It’s portable so it’s easier to carry and store. **More powerful** — up to 85 more amps — compared to leading competitive machines means you can weld thicker materials.

**Thunderbolt 160** includes multi-voltage plug (MVP™) which allows for connection to 120- or 240-volt receptacles without tools. Choose the plug that fits the receptacle and connect it to the power cord.

**Maxstar® 161 S**

See literature DC/27.3

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

Portable with adjustable handle/shoulder strap. Easy to transport at only 13 pounds. **Fan-On-Demand™** power source cooling system operates only when needed, reducing noise, energy use and the amount of contaminants pulled through the machine. **Stick-Stuck** detects if the electrode is stuck to the part and turns the welding output off to safely and easily remove the electrode. Menu selectable.

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

---

### Thunderbolt 160 and 210

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

### Maxstar 161 S

<table>
<thead>
<tr>
<th>Stock Number (907709) (907709001) with X-CASE</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>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>120 V</td>
<td>20–90</td>
<td>90 A at 23.6 V, 30% duty cycle</td>
<td>23.2</td>
<td>2.8</td>
<td>2.8</td>
<td>48 VDC</td>
<td>H: 10.3 in. (262 mm) W: 5.6 in. (142 mm) D: 13.5 in. (343 mm)</td>
<td>13 lb. (5.9 kg)</td>
<td></td>
</tr>
<tr>
<td>240 V</td>
<td>20–160</td>
<td>160 A at 26.4 V, 20% duty cycle</td>
<td>22.6</td>
<td>5.4</td>
<td>5.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Maxstar® 210 STR** See literature DC/32.1

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

- **Auto-Line™** allows for any input voltage hook-up (120–480 V) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable power.
- **Lift-Arc™** provides TIG arc initiation without the use of high frequency.
- **Dual schedule** allows operators to switch between welding parameters for specific electrodes without readjusting the machine.
- **Hot Start™ adaptive control** provides positive arc starts without sticking.
- **Fan-On-Demand™** power source cooling system operates only when needed, reducing noise, energy use and the amount of contaminants pulled through the machine.
- **Remote amperage control.**
- **Digital meters** for more precise control when presetting or monitoring welding amperage.
- **Portable with adjustable shoulder strap.**

Note: See page 56 in the TIG section for Maxstar 210 Series.

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

---

**Gold Star® Series** See literature DC/8.1

Rugged, reliable performance and superior arc characteristics.

- **Hot Start™** makes it easy to start difficult stick electrodes such as E-6010 and E-7018.
- **Built-in arc control** lets you get in tight without sticking the electrode. An electrode compensation circuit ensures consistent arc control performance regardless of the electrode size.
- **Fan-On-Demand™** cooling system operates only when needed. Reduces contaminants drawn into the machine and excess noise in work areas.
- **14-pin receptacle** provides quick, direct connection to Miller® 14-pin remote controls and switches.
- **115-volt duplex receptacle** provides 15 amps of auxiliary power.
- **Power efficient** for exceptional value and return on your investment.
- **Thermal overload protection with light** indicates power shutdown. Helps prevent machine damage if the duty cycle is exceeded or airflow is blocked.

Note: See page 125
CST™ 280 See literature 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.

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.

Stock Number Welding Process Input Power Welding Amperage Range Rated Output Amps Input at Rated Load Output, 50/60 Hz

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Welding Process</th>
<th>Input Power</th>
<th>Welding Amperage Range</th>
<th>Rated Output</th>
<th>Amps Input at Rated Load Output, 50/60 Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>(907244) Dinse</td>
<td>Stick/Tig</td>
<td>Three-phase</td>
<td>5-280</td>
<td>200 A at 28 V, 100% duty cycle</td>
<td>220–230/460–575 V</td>
</tr>
<tr>
<td>(907244011) Tweco®</td>
<td>Stick/Tig</td>
<td>Three-phase</td>
<td>5-280</td>
<td>200 A at 28 V, 100% duty cycle</td>
<td>220–230/460–575 V</td>
</tr>
<tr>
<td>(9072501011) Tweco® with meter</td>
<td>Stick/Tig</td>
<td>Three-phase</td>
<td>5-280</td>
<td>200 A at 28 V, 100% duty cycle</td>
<td>220–230/460–575 V</td>
</tr>
<tr>
<td>(907563) Dinse</td>
<td>Stick/Tig</td>
<td>Single-phase</td>
<td>5-200</td>
<td>200 A at 28 V, 50% duty cycle*</td>
<td>220–230/460–575 V</td>
</tr>
</tbody>
</table>

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

CST™ 280 Racks See literature DC/18.82

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

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.

Model Stock Number Rack Capacity Input Power to Rack Amps Input at Rated Output, 50/60 Hz

<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 Output, 50/60 Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-Pack Rack</td>
<td>(907247)</td>
<td>4 units</td>
<td>220–230/460–575 V, three-phase, 50/60 Hz. CST 280 machines are factory-linked for 460–575 V.</td>
<td>137</td>
</tr>
<tr>
<td>8-Pack Rack</td>
<td>(907365)</td>
<td>8 units</td>
<td>220–230/460–575 V, three-phase, 50/60 Hz. CST 280 machines are factory-linked for 460–575 V.</td>
<td>274</td>
</tr>
<tr>
<td>Empty Rack</td>
<td>(195051)</td>
<td>4 units</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>(300580)</td>
<td>8 units</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

Heavy Industrial

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

Most popular accessories
- 4-Pack Rack Running Gear 195114
- 8-Pack Rack Running Gear 195436

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

<table>
<thead>
<tr>
<th>Model</th>
<th>TIG</th>
<th>DC (Steel)</th>
<th>AC/DC (Aluminum/Steel)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maxstar® 161</td>
<td>54</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Maxstar® 210</td>
<td>56</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Maxstar® 280</td>
<td>56</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Maxstar® 400</td>
<td>54</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Maxstar® 800</td>
<td>54</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Diversion® 180</td>
<td>54</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Syncrowave® 210 Runner</td>
<td>56</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Dynasty® 210</td>
<td>56</td>
<td>3/16 in.</td>
<td>3/16 in.</td>
</tr>
<tr>
<td>Dynasty® 280</td>
<td>56</td>
<td>3/16 in.</td>
<td>3/16 in.</td>
</tr>
<tr>
<td>Dynasty® 400</td>
<td>56</td>
<td>3/16 in.</td>
<td>3/16 in.</td>
</tr>
<tr>
<td>Dynasty® 800</td>
<td>56</td>
<td>3/16 in.</td>
<td>3/16 in.</td>
</tr>
<tr>
<td>Syncrowave® 250 DX</td>
<td>59</td>
<td>1/4 in.</td>
<td>1/4 in.</td>
</tr>
<tr>
<td>Syncrowave® 350 LX</td>
<td>59</td>
<td>1/4 in.</td>
<td>1/4 in.</td>
</tr>
</tbody>
</table>

### Material Thickness Range (TIG)

- Maxstar® 161: 0.020–3/16 in.
- Maxstar® 210: 0.002–1/4 in.
- Maxstar® 280: 0.004–3/8 in.
- Maxstar® 400: 0.012–5/8 in.
- Maxstar® 800: 0.020–1 in.
- Diversion® 180: 0.025–3/16 in.
- Syncrowave® 210 Runner: 0.025–3/16 in.
- Dynasty® 210: 0.025–3/16 in.
- Dynasty® 280: 0.025–3/16 in.
- Dynasty® 400: 0.025–3/16 in.
- Dynasty® 800: 0.025–3/16 in.
- Syncrowave® 250 DX: 0.012–1/4 in.
- Syncrowave® 350 LX: 0.012–5/8 in.

### Welding Amperage Range

- Maxstar® 161: 5–160 A
- Maxstar® 210: 1–210 A
- Maxstar® 280: 1–280 A
- Maxstar® 400: 3–400 A
- Maxstar® 800: 5–800 A
- Diversion® 180: 2–210 A (AC)
- Dynasty® 210: 2–210 A (AC)
- Dynasty® 280: 2–280 A (AC)
- Dynasty® 400: 2–400 A (AC)
- Dynasty® 800: 2–400 A (AC)
- Syncrowave® 250 DX: 3–310 A
- Syncrowave® 350 LX: 3–400 A

### Pulse Capability

- Maxstar® 161: 0–150 PPS (STH model)
- Maxstar® 210: 0.1–250 PPS (base model)
- Maxstar® 280: 0.1–250 PPS (base model)
- Maxstar® 400: 0.1–5,000 PPS
- Maxstar® 800: 0.1–5,000 PPS
- Diversion® 180: 0.25–10 PPS (optional)
- Dynasty® 210: 0.1–150 PPS
- Dynasty® 280: 0.1–250 PPS (base, DC)
- Dynasty® 400: 0.1–500 PPS (DC model)
- Dynasty® 800: 0.1–5,000 PPS (DC model)
- Syncrowave® 250 DX: 0.25–10 PPS
- Syncrowave® 350 LX: 0.25–10 PPS

### Net Weight

- Maxstar® 161: 13 lb. (5.9 kg)
- Maxstar® 210: 36 lb. (17.2 kg)
- Maxstar® 280: 47 lb. (21.3 kg)
- Maxstar® 400: 134 lb. (61 kg)
- Maxstar® 800: 198 lb. (90 kg)
- Diversion® 180: 50 lb. (23 kg)
- Dynasty® 210: 133.5 lb. (61 kg)
- Dynasty® 280: 134 lb. (61 kg)
- Dynasty® 400: 134 lb. (61 kg)
- Dynasty® 800: 198 lb. (90 kg)
- Syncrowave® 250 DX: 378 lb. (172 kg)
- Syncrowave® 350 LX: 496 lb. (225 kg)

For more detailed information, visit MillerWelds.com/tig.
### Diversion™ 180 AC/DC TIG

See literature AD/1.5

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

**TIG Welding Capability**

<table>
<thead>
<tr>
<th>Material</th>
<th>Max. 3/16 in. (4.8 mm)</th>
<th>Min. 0.025 in. (0.6 mm)</th>
<th>Max. 3/16 in. (4.8 mm)</th>
<th>Min. 0.030 in. (0.75 mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aluminum</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

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

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

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

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

---

### Easy-to-understand operator interface.

Power up, select material type, set material thickness range and start welding!

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

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

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

*While idling.

### Maxstar® 161 STL and STH DC TIG and Stick

See literature DC/27.5

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

**TIG Welding Capability**

Maxstar 161 STL TIG/stick package with remote fingertip control (907710001) shown — includes X-CASE.

Two models available. See page 50 in the Stick section for Maxstar 161 S.

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

**STH:** DC TIG/stick with high frequency and Lift-Arc® starting, plus built-in pulsing from 0–150 pulses per second.

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

**Portable with adjustable handle/shoulder strap.** Easy to transport at only 13 pounds.

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

**Digital meter** for more precise control.

**Fan-On-Demand** power source cooling system.

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

---

### Maxstar® 161 STL and STH DC TIG and Stick

See literature DC/27.5

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

**TIG Welding Capability**

Maxstar 161 STL TIG/stick package with remote fingertip control (907710001) shown — includes X-CASE.

Two models available. See page 50 in the Stick section for Maxstar 161 S.

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

**STH:** DC TIG/stick with high frequency and Lift-Arc® starting, plus built-in pulsing from 0–150 pulses per second.

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

**Portable with adjustable handle/shoulder strap.** Easy to transport at only 13 pounds.

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

**Digital meter** for more precise control.

**Fan-On-Demand** power source cooling system.

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

---

### Process • TIG (GTAW)

**Comes with**

- Power cord with MVP plugs for 120 V and 240 V
- 12.5 ft. (3.8 m) Weldcraft® A-150 TIG torch
- 12 ft. (3.7 m) work cable with clamp
- RFCS-RJ45 remote foot control
- Flow gauge regulator with hose

### Most popular accessories

- Running Gear/Cylinder Rack 301239 (pg 118)
- Protective Cover 300579 (pg 124)
- RCCS-RJ45 Remote Fingerip Control 301146 (pg 124)
- RJ45 to 14-Pin Adapter Cord 300688
- Weldcraft® Flexible Torch Body Kits (requires handle 105235R) A-125F (WP-9F) A-150F (WP-17F)
- TIG Torch Accessory Kit AK2C (see pg 55 for contents list)

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

---

### Light industrial

**Processes**

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

**Comes with**

- 6.5 ft. (2 m) 120 V and 240 V power cords
- 13 ft. (4 m) electrode cable with holder and 25 mm Dinse-style connector
- 10 ft. (3 m) work cable with clamp and 25 mm Dinse-style connector
- Air-cooled TIG torch connector
- Quick-reference guide

**TIG/stick packages include above plus**

- 12.5 ft. (3.8 m) Weldcraft® A-150 TIG torch (WP17120D125)
- Protective X-CASE® (301429)
- Flow gauge regulator with hose
- AK2C TIG torch accessory kit
- RCCS-6M remote fingertip control (packages 907710002 and 907710001 only)

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

---

### Model/Stock Number

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Model/Stock Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maxstar 161 STL (9077110) Power source only</td>
<td>Maxstar 161 STL (9077111) Power source only</td>
</tr>
<tr>
<td>Maxstar 161 STL TIG/stick package with remote fingertip control</td>
<td>Maxstar 161 STL TIG/stick package with remote fingertip control</td>
</tr>
<tr>
<td>Maxstar 161 STH (90771001) TIG/stick package with remote fingertip control</td>
<td>Maxstar 161 STH (90771001) TIG/stick package with remote fingertip control</td>
</tr>
</tbody>
</table>

**Welding Process**

<table>
<thead>
<tr>
<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>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 (.03*)</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>230 V</td>
<td>10–180</td>
<td>150 A at 16 V, 20% duty cycle</td>
<td>16 (.44*)</td>
<td>3.7 (.1*)</td>
<td>3.6 (.03*)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>230 V</td>
<td>10–180</td>
<td>180 A at 17.2 V, 10% duty cycle</td>
<td>20.5 (.44*)</td>
<td>4.7 (.1*)</td>
<td>4.6 (.03*)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Syncrowave® 210
AC/DC TIG, Stick and MIG (with Spool Gun) See literature AD/4.6
Continuing the tradition of innovation through advanced inverter technology for light-industrial and personal users.

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

TIG Welding Capability
Max. 1/4 in. (6.4 mm)
Min. 0.020 in. (0.5 mm)

AC frequency (TIG) controls the width of the arc cone and can improve directional control of the arc.
AC balance (TIG) control provides adjustable oxide removal which is essential for creating the highest quality aluminum welds.
Pulse (TIG). Pulsing can increase puddle agitation, arc stability and travel speeds while reducing heat input and distortion.
DIG (stick) control allows the arc characteristics to be changed for specific applications and electrodes. Lower the DIG setting for smooth running electrodes like E7018 and increase the DIG setting for stiffer, more penetrating electrodes like E6010.
Auto-Set™ (MIG) automatically sets your welder to the proper parameters. Simply set the wire size, material thickness, and shielding gas and you’re ready to weld with the Spoolmate™ spool gun.

Stock Number (951684)
Runner TIG/MIG Complete (includes Spoolmate 150)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>115 V</td>
<td>DC TIG</td>
<td>5–125 A</td>
<td>95 A at 13.8 V, 60% duty cycle</td>
<td>17.4 (.58 while idling)</td>
<td>47 VDC</td>
<td>H: 31.5 in. (800 mm) W: 18.5 in. (470 mm) D: 43 in. (1092 mm)</td>
<td>139.5 lb. (63 kg)</td>
</tr>
<tr>
<td></td>
<td>AC TIG</td>
<td>5–125 A</td>
<td>90 A at 13.6 V, 60% duty cycle</td>
<td>12.4 (.58 while idling)</td>
<td>47 VDC</td>
<td>H: 31.5 in. (800 mm) W: 18.5 in. (470 mm) D: 43 in. (1092 mm)</td>
<td>139.5 lb. (63 kg)</td>
</tr>
<tr>
<td></td>
<td>DC stick</td>
<td>20–90 A</td>
<td>70 A at 22.8 V, 60% duty cycle</td>
<td>20.5 (.58 while idling)</td>
<td>47 VDC</td>
<td>H: 31.5 in. (800 mm) W: 18.5 in. (470 mm) D: 43 in. (1092 mm)</td>
<td>139.5 lb. (63 kg)</td>
</tr>
<tr>
<td>230 V</td>
<td>DC TIG</td>
<td>5–210 A</td>
<td>125 A at 15 V, 60% duty cycle</td>
<td>11.9 (.35 while idling)</td>
<td>47 VDC</td>
<td>H: 31.5 in. (800 mm) W: 18.5 in. (470 mm) D: 43 in. (1092 mm)</td>
<td>139.5 lb. (63 kg)</td>
</tr>
<tr>
<td></td>
<td>AC TIG</td>
<td>5–210 A</td>
<td>114 A at 14.6 V, 60% duty cycle</td>
<td>8.62 (.35 while idling)</td>
<td>47 VDC</td>
<td>H: 31.5 in. (800 mm) W: 18.5 in. (470 mm) D: 43 in. (1092 mm)</td>
<td>139.5 lb. (63 kg)</td>
</tr>
<tr>
<td></td>
<td>DC stick</td>
<td>20–150 A</td>
<td>90 A at 23.6 V, 60% duty cycle</td>
<td>11.9 (.35 while idling)</td>
<td>47 VDC</td>
<td>H: 31.5 in. (800 mm) W: 18.5 in. (470 mm) D: 43 in. (1092 mm)</td>
<td>139.5 lb. (63 kg)</td>
</tr>
</tbody>
</table>

Light industrial • AC/DC TIG (GTAW) • DC stick (SMAW) • Pulsed TIG (GTAW-P) • MIG (GMAW) • Flux-cored (FCAW)

Complete package comes with
• 10 ft. power cord with MVP plugs for 120 V and 240 V
• 12.5 ft. (3.8 m) Weldcraft™ A-150 TIG torch (WP1712MFDI50)
• 12 ft. (3.7 m) work cable with clamp and Dinse-style connector
• Electrode holder with Dinse-style connector
• RFCS-14 HD heavy-duty remote foot control
• Flow gauge regulator with hose
• Spoolmate™ 150 spool gun (301272)
• 4-14 pin connector
• Flow-thru Dinse-style connector
• Factory-installed running gear with EZ-Change™ low cylinder rack
• Quick-reference guide

Most popular accessories
• 25 ft. (7.6 m) Weldcraft™ A-150 TIG Torch WP-17-25-R (pg 63)
• Protective Cover 195142 (pg 124)
• RCC-14 Remote Control 151086 (pg 124)
• Wireless Remote Foot Control 300429 (pg 125)
• TIG Torch Accessory Kit AK2C Includes one short back cap, one of each size (#4, #5, #6) alumina nozzle, and one of each size (.040, 1/16, 3/32 in.) of the following: collet, collet body, and 7-inch 2% ceriated tungsten electrode.
• TIG Torch Accessory Kit AK-150MFC Allows A-150 torch customization. Converts into 28 different torch styles while using existing cable. Includes collets, collet bodies, nozzles, torch heads, handle and more.

Visit MillerWelds.com or your distributor for other Miller® options and accessories.
Maxstar®
210/280 Series
DC TIG and Stick
See literature DC/32.1 (210) and DC/35.0 (280)

Dynasty®
210/280 Series
AC/DC TIG and Stick
See literature AD/4.81 (210) and AD/4.9 (280)

### 210 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>
</tr>
</thead>
<tbody>
<tr>
<td>Maxstar 210 (907683)</td>
<td>3-phase</td>
<td>1-500</td>
<td>160 A at 26.4 V</td>
<td>22</td>
<td>—</td>
</tr>
<tr>
<td>Maxstar 210 DX (907684)</td>
<td>3-phase</td>
<td>1-500</td>
<td>160 A at 26.4 V</td>
<td>22</td>
<td>—</td>
</tr>
</tbody>
</table>

**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 42 in the Multiprocess section for the Dynasty 280 DX with CV. See page 51 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.
- **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.

### 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>
</tr>
</thead>
<tbody>
<tr>
<td>Maxstar 280 (907552)</td>
<td>3-phase</td>
<td>1-200</td>
<td>200 A at 28 V</td>
<td>20</td>
<td>—</td>
</tr>
<tr>
<td>Maxstar 280 DX (907539) with CPS</td>
<td>3-phase</td>
<td>1-200</td>
<td>200 A at 28 V</td>
<td>20</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

Maxstar and Dynasty
210 Series (Maxstar 210 shown).
Dynasty welders add AC TIG capabilities and the following AC features (limited on base model)

**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™ (optional) welding information management systems into its capabilities. These systems help welding operations improve quality, retain weld records, increase productivity and manage costs. See pages 69 and 70 for more information.

---

**Dynasty Water-Cooled Complete Packages**

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

---

**Process**

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

**Comes with**

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

**Complete packages come with**

- 8 ft. (2.4 m) power cord (no plug)
- Quick-reference guide
- Small Runner® cart
- Coolmate® 1.3
- Coolant (4 one-gallon bottles)
- Remote control (foot or wireless foot)
- Weldcraft® water-cooled torch kit

**Dynasty 210: W-250 (WP-20)**

**Dynasty 280: W-280 (WP-280)**

**Most popular accessories**

- 2-Wheel Trolley Cart 300971 (pg 119)
- Small Runner® Cart 301318 (pg 119)
- Coolmate® 1.3 300972 (pg 119)
- Coolant 043810 (pg 119)

**Contractor Kits (pg 124)**

300185 W-250 (WP-20)
300990 W-280 (WP-280)
301268 W-375

**Remote Controls (pg 124/125)**

RCCS-14 finger control 043688
Coolmate® 1.3 with CPS

**Industrial**

**Circuit Voltage**

**Max. Open- Circuit Voltage**

**Dimensions**

**Net Weight**

- 47 lb. (21.3 kg) with CPS
- 52 lb. (23.6 kg) with CPS
- 55 lb. (25 kg) with CPS

---

<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 50% Duty Cycle</th>
<th>Amps Input at Rated Load Output, 50/60 Hz</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dynasty 210 (907685)</td>
<td>TIG</td>
<td>3-phase</td>
<td>1–14</td>
<td>115 A at 22.2 V</td>
<td>120 V</td>
<td>208 V</td>
<td>230 V</td>
</tr>
<tr>
<td>Dynasty 210 DX (907686)</td>
<td></td>
<td>3-phase</td>
<td>2–20</td>
<td>255 A at 21.6 V</td>
<td>120 V</td>
<td>208 V</td>
<td>230 V</td>
</tr>
<tr>
<td>Dynasty 280 (907550) with CPS</td>
<td></td>
<td>3-phase</td>
<td>1–12</td>
<td>210 A at 18.4 V</td>
<td>219 mm</td>
<td>78 kg</td>
<td>21.3 kg</td>
</tr>
<tr>
<td>Dynasty 280 DX (907551) with CPS</td>
<td></td>
<td>3-phase</td>
<td>1–12</td>
<td>210 A at 18.4 V</td>
<td>219 mm</td>
<td>78 kg</td>
<td>21.3 kg</td>
</tr>
<tr>
<td>Dynasty 280 (907554)</td>
<td></td>
<td>3-phase</td>
<td>1–12</td>
<td>210 A at 18.4 V</td>
<td>219 mm</td>
<td>78 kg</td>
<td>21.3 kg</td>
</tr>
<tr>
<td>Dynasty 280 DX (907555) with CPS</td>
<td></td>
<td>3-phase</td>
<td>1–12</td>
<td>210 A at 18.4 V</td>
<td>219 mm</td>
<td>78 kg</td>
<td>21.3 kg</td>
</tr>
</tbody>
</table>

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**Acknowledgement**

Visit MillerWelds.com or your distributor for other Miller® options and accessories.
Maxstar® and Dynasty® 400 and 800
DC (Maxstar) and AC/DC (Dynasty) TIG and Stick

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

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.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Maxstar 400</td>
<td>TIG/stick</td>
<td>3-phase</td>
<td>3–400</td>
<td>300 A at 32 V, 60% duty cycle</td>
<td>75 VDC (10–15 VDC)*</td>
<td>Ht. 24.75 in. (629 mm) W: 13.75 in. (349 mm) D: 22 in. (559 mm)</td>
<td>134 lb. (61 kg)</td>
</tr>
<tr>
<td>400 Max.</td>
<td>800 Max.</td>
<td>1 in. (25.4 mm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5/8 in. (15.9 mm)</td>
<td>0.012 in. (0.3 mm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>400 Min.</td>
<td>800 Min.</td>
<td>1 in. (25.4 mm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5/8 in. (15.9 mm)</td>
<td>0.015 in. (0.4 mm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>400 Min.</td>
<td>800 Min.</td>
<td>0.020 in. (0.5 mm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.020 in. (0.5 mm)</td>
<td>0.020 in. (0.5 mm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>800 Min.</td>
<td>800 Min.</td>
<td>0.020 in. (0.5 mm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**See literature DC/24.5 and AD/5.5 for Complete package dimensions and weight.

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

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

800 models come with
- Thread-lock torch connector
- Two thread-lock weld cable connectors
- Quick-reference guide (Dynasty only)

Note: Power cord is NOT included with 800 models.

Complete packages include above plus
- Runner™ cart
- Coolmate™ 3.5
- Coolant (4 one-gallon bottles)
- Remote control (foot or wireless foot)
- Weldcraft™ water-cooled torch kit (400: W-375, 800: W-400)

Most popular accessories
- Runner™ Cart 300244 (pg 119)
- Coolmate™ 3.5 300245 (pg 119)
- Coolant 043810 (pg 119)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.
Syncrowave® 250 DX and 350 LX
AC/DC TIG and Stick  See literature AD/4.2

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

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.

*See literature AD/4.2 for Complete package dimensions and weight.

<table>
<thead>
<tr>
<th>Model/Stock Number (Additional packages are available — visit MillerWelds.com or your distributor)</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>Power Source Dimensions*</th>
<th>Power Source Net Weight*</th>
</tr>
</thead>
</table>
| Syncrowave 250 DX  
(907195) 230/460/575 V, 50/60 Hz, power source only  
(951118) 230/460/575 V, 50/60 Hz, Complete  
(907194) 200/230/460 V, 50/60 Hz, power source only  
(951117) 200/230/460 V, 50/60 Hz, Complete | 3–310 | 200 A at 28 V, 60% duty cycle | – | 80 VDC | H: 36.25 in. (921 mm)  
W: 22.5 in. (572 mm)  
D: 25 in. (635 mm) | 378 lb. (172 kg) |
| | | 250 A at 30 V, 40% duty cycle | 110 96 48 38 22 11.8 | | | |
| Syncrowave 350 LX  
(907199) 230/460/575 V, 50/60 Hz, power source only  
(951623) 230/460/575 V, 50/60 Hz, Complete  
(907198) 200/230/460 V, 50/60 Hz, power source only  
(951622) 200/230/460 V, 50/60 Hz, Complete | 3–400 | 300 A at 32 V, 60% duty cycle | – | 80 VDC | H: 36.25 in. (921 mm)  
W: 22.5 in. (572 mm)  
D: 25 in. (635 mm) | 496 lb. (225 kg) |
| | | 350 A at 34 V, 40% duty cycle | 146 128 65 50 29.5 13.7 | | | |
Weldcraft™ Series TIG Torches

Synonymous with versatility and performance, Weldcraft TIG torches can handle the most intricate to the most demanding TIG welding challenges. From 125-amp hand-held MicroTIG® torches to 900-amp machine-held water-cooled models, there’s a Weldcraft torch for nearly every TIG application.

Setting the standard for performance

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

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

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

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

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

Extreme reliability

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

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

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

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

Product Naming

<table>
<thead>
<tr>
<th>Former Product Name</th>
<th>Current Product Name Breakdown</th>
<th>Current Product Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weldcraft A-125 Flex Valve</td>
<td>Weldcraft A-125 Flex Valve</td>
<td>“Flex Valve” signifies additional feature</td>
</tr>
<tr>
<td>“125” signifies an amperage of 125</td>
<td></td>
<td></td>
</tr>
<tr>
<td>“A” signifies air-cooled</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For more detailed information, visit MillerWelds.com/tigtorches
Weldcraft™ Air-Cooled Torches

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

Weldcraft™ Water-Cooled Torches

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

Weldcraft™ Specialty Torches

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

Weldcraft™ Automation Torches

Ideal for mechanized applications, the Weldcraft Automation Series offers air-cooled and water-cooled torches designed for both high and low applications. See literature AY/37.0 for more information.

Weldcraft™ Tungsten

Tungsten for the most demanding TIG welding applications!

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

<table>
<thead>
<tr>
<th>Type</th>
<th>Stock Number</th>
<th>Diameter In. (mm)</th>
<th>Type</th>
<th>Stock Number</th>
<th>Diameter In. (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2% Ceriated (EWCe-2)</td>
<td></td>
<td></td>
<td>Pure (EWP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WC040X7</td>
<td>0.040 (1.0)</td>
<td></td>
<td>WC018X7</td>
<td>0.040 (1.0)</td>
<td></td>
</tr>
<tr>
<td>WC116X7</td>
<td>1/16 (1.6)</td>
<td></td>
<td>WC116X7</td>
<td>1/16 (1.6)</td>
<td></td>
</tr>
<tr>
<td>WC332X7</td>
<td>3/32 (2.4)</td>
<td></td>
<td>WC332X7</td>
<td>3/32 (2.4)</td>
<td></td>
</tr>
<tr>
<td>WC018X7</td>
<td>1/8 (3.2)</td>
<td></td>
<td>WC018X7</td>
<td>1/8 (3.2)</td>
<td></td>
</tr>
<tr>
<td>WC532X7</td>
<td>5/32 (4.0)</td>
<td></td>
<td>WC532X7</td>
<td>5/32 (4.0)</td>
<td></td>
</tr>
<tr>
<td>2% Lanthanated (EWLa-2)</td>
<td></td>
<td></td>
<td>Rare Earth (EWR)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WL2040X7</td>
<td>0.040 (1.0)</td>
<td></td>
<td>WL2040X7</td>
<td>0.040 (1.0)</td>
<td></td>
</tr>
<tr>
<td>WL2116X7</td>
<td>1/16 (1.6)</td>
<td></td>
<td>WL2116X7</td>
<td>1/16 (1.6)</td>
<td></td>
</tr>
<tr>
<td>WL2332X7</td>
<td>3/32 (2.4)</td>
<td></td>
<td>WL2332X7</td>
<td>3/32 (2.4)</td>
<td></td>
</tr>
<tr>
<td>WL2018X7</td>
<td>1/8 (3.2)</td>
<td></td>
<td>WL2018X7</td>
<td>1/8 (3.2)</td>
<td></td>
</tr>
<tr>
<td>WL2532X7</td>
<td>5/32 (4.0)</td>
<td></td>
<td>WL2532X7</td>
<td>5/32 (4.0)</td>
<td></td>
</tr>
</tbody>
</table>

Note: Refer to manufacturer SDS sheets for proper preparation and safety. Use proper ventilation/capture during preparation. Refer to manufacturer warning regarding ventilation.
Weldcraft™ A-80 Series
Formerly known as WP-24 Series

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

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

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

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

Applications
• Shipbuilding • Motorsports
• Aerospace • Restricted areas

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

Most popular accessories
• Collet Body Wrench 53N20
Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model  Rubber 12.5 ft. (3.8 m)  25 ft. (7.6 m)  Type  Rated Output  Electrode Range
A-80  WP-24-12-R  WP-24-25-R  Air-cooled  DC: 80 A at 60% duty cycle  .020–3/32 in. (0.5–2.4 mm)
A-80 Flex  WP-24F-12-R  WP-24F-25-R  
A-80 Flex Valve  WP-24VF-12-R  WP-24VF-25-R  

Weldcraft™ A-125 Series
Formerly known as WP-9 Series

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

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

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

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

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

Applications
• Maintenance and repair
• Home/hobby • Motorsports
• Metal art • Fabrication

Most popular consumables
• Collets
13N22 1/16 in. (1.6 mm)
13N23 3/32 in. (2.4 mm)
13N24 1/8 in. (3.2 mm)
• Collet Bodies
13N27 1/16 in. (1.6 mm)
13N28 3/32 in. (2.4 mm)
13N29 1/8 in. (3.2 mm)
• Alumina Nozzles
A13N10 #6, 3/8 in.
A13N17 #7, 7/16 in.
A13N12 #8, 1/2 in.

Most popular accessories
• Accessory Kit AK1C
Includes one long back cap, one of each size (#4, #5, #6) alumina nozzle, and one of each size (.040, 1/16 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.

Model  Rubber 12.5 ft. (3.8 m)  25 ft. (7.6 m)  2-Piece Rubber 12.5 ft. (3.8 m)  25 ft. (7.6 m)  Type  Rated Output  Electrode Range
A-125  WP-9-12-R  WP-9-25-R  WP-9-12-2  WP-9-25-2  Air-cooled  DC: 125 A at 60% duty cycle  AC: 100 A at 60% duty cycle  .020–3/8 in. (0.5–9.5 mm)
A-125 Valve  WP-9V-12-R  WP-9V-25-R  WP-9V-12-2  WP-9V-25-2  
A-125 Flex Valve  WP-9FVF-12-R  WP-9FVF-25-R  WP-9FVF-12-2  WP-9FVF-25-2  
A-125 Pencil  WP-9P-12-R  WP-9P-25-R  ---  ---  ---  DC: 125 A at 60% duty cycle  AC: 100 A at 60% duty cycle  .020–1/8 in. (0.5–3.2 mm)
Weldcraft™ A-150 Series
Formerly known as WP-17 Series

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

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

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

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

Weldcraft™ A-200 Series
Formerly known as WP-26 Series

Dependable, top-performing air-cooled torches designed for heavy-duty welding applications.

Eliminate the expense of a water-cooled system. The air-cooled capability pairs reliability with cost-effectiveness for all field applications.

Combining the flexible neck and gas valve advances capabilities with greater comfort and control (A-200 Flex Valve).

Maximum versatility. Utilize the Redhead Series torches in a variety of welding applications without adding expenses.
**Weldcraft™ W-180**  
Formerly known as WP-24W

One of the smallest water-cooled TIG torches on the market and designed for welding in confined areas that require high amperage.

Use high amperage in confined areas for efficient welding.  
Superior maneuverability in limited-access locations with the compact torch body.

Excellent weld capacity without increasing torch size, due to the efficient cooling system.

<table>
<thead>
<tr>
<th>Model</th>
<th>Braided Rubber</th>
<th>Vinyl</th>
<th>Type</th>
<th>Rated Output</th>
<th>Electrode Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>W-180</td>
<td>WP-24W-12-R</td>
<td>WP-24W-12</td>
<td>Water-cooled</td>
<td>DC: 180 A at 100% duty cycle, AC: 115 A at 100% duty cycle</td>
<td>0.020-3/32 in. (0.5-2.4 mm)</td>
</tr>
</tbody>
</table>

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

Versatile water-cooled torch optimized for use in limited-access welding situations.

Pencil-style, flexible neck designed for both high-amperage applications and confined area access.

Decreased downtime and longer trouble-free service due to overheating with the innovative cooling design.

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

<table>
<thead>
<tr>
<th>Model</th>
<th>Braided Rubber</th>
<th>Vinyl</th>
<th>Type</th>
<th>Rated Output</th>
<th>Electrode Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>W-200</td>
<td>WP-25-12-R</td>
<td>WP-25-12</td>
<td>Water-cooled</td>
<td>DC: 200 A at 100% duty cycle, AC: 140 A at 100% duty cycle</td>
<td>0.020-1/8 in. (0.5-3.2 mm)</td>
</tr>
</tbody>
</table>

**Weldcraft™ W-225 Pencil**  
Formerly known as WP-20P

Water-cooled torch designed for long-term, trouble-free service with consistent welding performance in general applications.

Extend torch life and minimize downtime due to overheating with the efficient around-the-head cooling design.

Pencil-style head allows for greater access into hard-to-reach joints.

Comfort and control are increased with the lightweight, compact body design.

<table>
<thead>
<tr>
<th>Model</th>
<th>Vinyl</th>
<th>Type</th>
<th>Rated Output</th>
<th>Electrode Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>W-225 Pencil</td>
<td>WP-20P-12</td>
<td>Water-cooled</td>
<td>DC: 225 A at 100% duty cycle, AC: 180 A at 100% duty cycle</td>
<td>0.020-1/8 in. (0.5-3.2 mm)</td>
</tr>
</tbody>
</table>

**Applications**

- Aerospace
- Manufacturing
- Food/beverage industry
- Shipbuilding
- Maintenance and repair
- Petro/chemical
- Precision fabrication

**Most popular consumables**

- Collets
  - 53N16 0.040 in. (1.0 mm)
  - 53N14 1/16 in. (1.6 mm)
  - 24C332 3/32 in. (2.4 mm)
- Collet Bodies
  - 53N18 0.040 in. (1.0 mm)
  - 53N19 1/16 in. (1.6 mm)
  - 24C332 3/32 in. (2.4 mm)
- Alumina Nozzles
  - A53N24 #4, 1/4 in.
  - A53N25 #5, 5/16 in.
  - A53N27 #6, 3/8 in.
- Insulator (non-gas lens and gas lens) (required) 598882
- Collets (non-gas lens and gas lens)
  - 13N20 .020 in. (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
  - A53N24 #4, 1/4 in.
  - A53N25 #5, 5/16 in.
  - A53N27 #6, 3/8 in.
  - A53N28 #7, 7/16 in.
  - A53N29 #8, 1/2 in.
  - A53N30 #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
  - WC-3-10 10 ft. (3 m)
  - WC-3-22 22 ft. (6.7 m)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.
### Weldcraft™ W-250 Series
Formerly known as WP-20 Series

Water-cooled torch provides consistent performance and long-term trouble-free service with around-the-head water cooling.

**Applications**
- Aerospace
- Automotive
- Exotic material fabrication
- Precision metal fabrication
- Pressure vessel fabrication
- Shipbuilding
- Tool and die
- Tube and pipe
- Vocational

**Most popular consumables**
- Insulator (non-gas lens and gas lens) (required)
- Collets (non-gas lens and gas lens)
  - .020–1/8 in. (0.5–3.2 mm)
- Collet Bodies
  - .020 in. (0.5 mm)
  - .040 in. (1.0 mm)
  - 1/16 in. (1.6 mm)
  - 3/32 in. (2.4 mm)
  - 1/8 in. (3.2 mm)
- Gas Lens
  - .020 in. (0.5 mm)
  - .040 in. (1.0 mm)
  - 1/16 in. (1.6 mm)
  - 3/32 in. (2.4 mm)
  - 1/8 in. (3.2 mm)
- Alumina Nozzles
  - #4, 1/4 in.
  - #5, 5/16 in.
  - #6, 3/8 in.
  - #7, 7/16 in.
  - #8, 1/2 in.
  - #10, 5/8 in.
- Back Caps
  - Short
  - Medium
  - Long

**Most popular accessories**
- Cable Covers
- Accessory Kit AK4C

### Weldcraft™ W-280 Super Cool™
Formerly known as WP-280

Reliable water-cooled torch designed for demanding, high-amperage applications.

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

**Reliable water-cooled torch designed for demanding, high-amperage applications.**

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

**Reliable water-cooled torch designed for demanding, high-amperage applications.**

**Applications**
- Aerospace
- Automotive
- Exotic material fabrication
- Precision metal fabrication
- Pressure vessel fabrication
- Shipbuilding
- Tool and die
- Tube and pipe
- Vocational

**Most popular consumables**
- Insulator (non-gas lens and gas lens) (required)
- Collets (non-gas lens and gas lens)
  - .020–1/8 in. (0.5–3.2 mm)
- Collet Bodies
  - .020 in. (0.5 mm)
  - .040 in. (1.0 mm)
  - 1/16 in. (1.6 mm)
  - 3/32 in. (2.4 mm)
  - 1/8 in. (3.2 mm)
- Gas Lens
  - .020 in. (0.5 mm)
  - .040 in. (1.0 mm)
  - 1/16 in. (1.6 mm)
  - 3/32 in. (2.4 mm)
  - 1/8 in. (3.2 mm)
- Alumina Nozzles
  - #4, 1/4 in.
  - #5, 5/16 in.
  - #6, 3/8 in.
  - #7, 7/16 in.
  - #8, 1/2 in.
  - #10, 5/8 in.
- Back Caps
  - Short
  - Medium
  - Long

**Most popular accessories**
- Cable Covers
- Accessory Kit AK4C

### Weldcraft™ W-375 Super Cool™

Reliable water-cooled torch designed for demanding, high-amperage applications.

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

**Reliable water-cooled torch designed for demanding, high-amperage applications.**

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

**Reliable water-cooled torch designed for demanding, high-amperage applications.**

**Applications**
- Aerospace
- Automotive
- Exotic material fabrication
- Precision metal fabrication
- Pressure vessel fabrication
- Shipbuilding
- Tool and die
- Tube and pipe
- Vocational

**Most popular consumables**
- Insulator (non-gas lens and gas lens) (required)
- Collets (non-gas lens and gas lens)
  - .020–1/8 in. (0.5–3.2 mm)
- Collet Bodies
  - .020 in. (0.5 mm)
  - .040 in. (1.0 mm)
  - 1/16 in. (1.6 mm)
  - 3/32 in. (2.4 mm)
  - 1/8 in. (3.2 mm)
- Gas Lens
  - .020 in. (0.5 mm)
  - .040 in. (1.0 mm)
  - 1/16 in. (1.6 mm)
  - 3/32 in. (2.4 mm)
  - 1/8 in. (3.2 mm)
- Alumina Nozzles
  - #4, 1/4 in.
  - #5, 5/16 in.
  - #6, 3/8 in.
  - #7, 7/16 in.
  - #8, 1/2 in.
  - #10, 5/8 in.
- Back Caps
  - Short
  - Medium
  - Long

**Most popular accessories**
- Cable Covers
- Accessory Kit AK4C

---

<table>
<thead>
<tr>
<th>Model</th>
<th>Braided Rubber</th>
<th>Vinyl</th>
<th>Type</th>
<th>Rated Output</th>
<th>Electrode Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>W-250</td>
<td>12.5 ft. (3.8 m)</td>
<td>25 ft. (7.6 m)</td>
<td>Water-cooled</td>
<td>DC: 250 A at 100% duty cycle</td>
<td>0.020–0.032 in. (0.5–0.8 mm)</td>
</tr>
<tr>
<td>W-250 Valve</td>
<td>--</td>
<td>--</td>
<td></td>
<td>AC: 180 A at 100% duty cycle</td>
<td>0.020–0.032 in. (0.5–0.8 mm)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>Braided Rubber</th>
<th>Braided Rubber with 50 mm Dinse</th>
<th>Type</th>
<th>Rated Output</th>
<th>Electrode Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>W-280 Super</td>
<td>301251012</td>
<td>301251001</td>
<td>Water-cooled</td>
<td>DC: 280 A at 100% duty cycle</td>
<td>0.020–0.032 in. (0.5–0.8 mm)</td>
</tr>
<tr>
<td>W-280 Valve</td>
<td>--</td>
<td>--</td>
<td></td>
<td>AC: 195 A at 100% duty cycle</td>
<td>0.020–0.032 in. (0.5–0.8 mm)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>Braided Rubber</th>
<th>Braided Rubber with 50 mm Dinse</th>
<th>Type</th>
<th>Rated Output</th>
<th>Electrode Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>W-375 Super</td>
<td>301253012</td>
<td>301253001</td>
<td>Water-cooled</td>
<td>DC: 375 A at 100% duty cycle</td>
<td>0.020–0.032 in. (0.5–0.8 mm)</td>
</tr>
<tr>
<td>W-375 Valve</td>
<td>--</td>
<td>--</td>
<td></td>
<td>AC: 265 A at 100% duty cycle</td>
<td>0.020–0.032 in. (0.5–0.8 mm)</td>
</tr>
</tbody>
</table>
Weldcraft™ W-350 Series
Formerly known as WP-18 Series

Rugged water-cooled torches engineered for high-amperage and continuous hand-held welding in mechanized applications.

Reduce downtime and costs by minimizing overheating with the unique cooling design engineered for operator comfort.

Reduce discomfort and fatigue using the comfortable handle design.

Superior gas flow control offered through the built-in fingertip gas control (W-350 Valve).

Applications
• Fabrication • Manufacturing
• Maintenance and repair
• Shipbuilding • Tube and pipe

Most popular consumables
• Collets
  10N24 3/32 in. (2.4 mm)
  10N25 1/8 in. (3.2 mm)
  54N20 5/32 in. (4.0 mm)
• Collet Bodies
  10N32 3/32 in. (2.4 mm)
  10N28 1/8 in. (3.2 mm)
  406488 5/32 in. (4.0 mm)
• Alumina Nozzles
  10N46 #8, 1/2 in.
  10N45 #10, 5/8 in.
  10N44 #12, 3/4 in.

Applications
• Heavy fabrication • Tool and die
• Pipe and tube fabrication
• Pressure vessel fabrication

Most popular consumables
• Heavy-Duty Collets
  10N25HD 1/8 in. (3.2 mm)
  54N20HD 5/32 in. (4.0 mm)
  18C36 3/16 in. (4.8 mm)
• Heavy-Duty Nose Collet Body
  (all sizes) NCB-36
• Alumina Nozzles
  54N16 #6, 3/8 in.
  54N15 #7, 7/16 in.
  54N14 #8, 1/2 in.

Applications
• Fabrication • Manufacturing
• Maintenance and repair
• Shipbuilding • Tube and pipe

Most popular consumables
• Collets
  10N24 3/32 in. (2.4 mm)
  10N25 1/8 in. (3.2 mm)
  54N20 5/32 in. (4.0 mm)
• Collet Bodies
  10N32 3/32 in. (2.4 mm)
  10N28 1/8 in. (3.2 mm)
  406488 5/32 in. (4.0 mm)
• Alumina Nozzles
  10N48 #6, 3/8 in.
  10N47 #7, 7/16 in.
  10N46 #8, 1/2 in.
  10N45 #10, 5/8 in.
  10N44 #12, 3/4 in.

Weldcraft™ W-400 Super Cool™
Formerly known as WP-18SC

Water-cooled torch designed to endure some of the most demanding applications while minimizing overheating.

Extend torch and consumable life with the full-flow water chamber that provides around-the-head cooling.

Improve gas coverage and cooling capacity with gas lens usage with heavy-duty stubby collet body.

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

Applications
• Heavy-fabrication • Tool and die
• Pipe and tube fabrication
• Pressure vessel fabrication

Most popular consumables
• Heavy-Duty Collets
  10N25HD 1/8 in. (3.2 mm)
  54N20HD 5/32 in. (4.0 mm)
  18C36 3/16 in. (4.8 mm)
• Heavy-Duty Nose Collet Body
  (all sizes) NCB-36
• Alumina Nozzles
  54N16 #6, 3/8 in.
  54N15 #7, 7/16 in.
  54N14 #8, 1/2 in.
• Back Caps
  57Y04 Short
  300M Medium

Weldcraft™ W-410
Formerly known as CS410

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

D-Handle® design features a self-indexing flat tip 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.

Applications
• Aerospace • Tube and pipe
• Exotic material fabrication
• Pipe and tube fabrication

Most popular consumables
• Collets
  10N24 3/32 in. (2.4 mm)
  10N25 1/8 in. (3.2 mm)
  54N20 5/32 in. (4.0 mm)
• Collet Bodies
  10N32 3/32 in. (2.4 mm)
  10N28 1/8 in. (3.2 mm)
  406488 5/32 in. (4.0 mm)
• Alumina Nozzles
  10N46 #8, 1/2 in.
  10N45 #10, 5/8 in.
  10N44 #12, 3/4 in.
**Weldcraft® W-125 Micro Series**  
Formerly known as WP-125 Series

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.

<table>
<thead>
<tr>
<th>Model</th>
<th>Braided Rubber</th>
<th>25 ft. (7.6 m)</th>
<th>Vinyl</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-125 Medium Micro</td>
<td>WP-125M-12-R</td>
<td>WP-125M-12</td>
<td>WP-125M-25-R</td>
<td>Water-cooled</td>
<td>DC: 125 A at 100% duty cycle, AC: 80 A at 100% duty cycle</td>
<td>.040–3/32 in. (1.0–2.4 mm)</td>
<td></td>
</tr>
<tr>
<td>W-125 Long Micro</td>
<td>WP-125L-12-R</td>
<td>WP-125L-12</td>
<td>WP-125L-25-R</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Applications**

- Aerospace • Food/beverage industry
- HVAC • Automotive • Petro/chemical
- Precision fabrication

**Most popular consumables**

- 90° Chucks
  - 125C040-90 .040 in. (1.0 mm)
  - 125C116-90 1/16 in. (1.6 mm)
  - 125C332-90 3/32 in. (2.4 mm)
- 90° Glass Nozzle (all sizes) 125N90
  - Other nozzles are available.

---

**Weldcraft® W-500**  
Formerly known as WP-12

Dependable water-cooled torch designed for high-capacity, demanding applications.

- **Comfort and reduced downtime** due to the sealed water chamber that minimizes torch overheating.
- **Heavy-duty components** provide reliable welding performance, even after continuous and demanding use.
- **100-percent-copper construction** ensures maximum thermal conductivity.

<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>W-500</td>
<td>WP-12-12</td>
<td>WP-12-25</td>
<td>Water-cooled</td>
<td>DC: 500 A at 100% duty cycle, AC: 350 A at 100% duty cycle</td>
<td>1/16–1/4 in. (1.6–6.4 mm)</td>
</tr>
</tbody>
</table>

**Applications**

- Heavy fabrication • Tool and die
- Pipe and tube fabrication
- Pressure vessel fabrication

**Most popular consumables**

- Insulator (required) 12NG
- Collets
  - 8SZ17 5/32 in. (4.0 mm)
  - 8SZ18 3/16 in. (4.8 mm)
  - 8SZ19 1/4 in. (6.4 mm)
- Collet Body (all sizes) 11WP65
- Alumina Nozzles
  - 14N59 #6, 3/8 in.
  - 14N60 #7, 7/16 in.
  - 14N61 #8, 1/2 in.
  - 14N61-10 #10, 5/8 in.
  - 14N61-12 #12, 3/4 in.

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**Weldcraft® Modular Series**  
See literature 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).

**Applications**

- Maintenance and repair • Aerospace
- Metal art • Food/beverage industry
- Petro/chemical • Shipbuilding
- Manufacturing • Vocational
- Precision fabrication • Tube and pipe

**Most popular accessories**

- **Accessory Kit**
  - AK-150MFC For A-150 torch
  - AK-225MFC For W-225 torch

---

**Applications**

- Aerospace • Food/beverage industry
- HVAC • Automotive • Petro/chemical
- Precision fabrication

**Most popular consumables**

- 90° Chucks
  - 125C040-90 .040 in. (1.0 mm)
  - 125C116-90 1/16 in. (1.6 mm)
  - 125C332-90 3/32 in. (2.4 mm)
- 90° Glass Nozzle (all sizes) 125N90
  - Other nozzles are available.

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**Applications**

- Heavy fabrication • Tool and die
- Pipe and tube fabrication
- Pressure vessel fabrication

**Most popular consumables**

- Insulator (required) 12NG
- Collets
  - 8SZ17 5/32 in. (4.0 mm)
  - 8SZ18 3/16 in. (4.8 mm)
  - 8SZ19 1/4 in. (6.4 mm)
- Collet Body (all sizes) 11WP65
- Alumina Nozzles
  - 14N59 #6, 3/8 in.
  - 14N60 #7, 7/16 in.
  - 14N61 #8, 1/2 in.
  - 14N61-10 #10, 5/8 in.
  - 14N61-12 #12, 3/4 in.

---

**Applications**

- Heavy fabrication • Tool and die
- Pipe and tube fabrication
- Pressure vessel fabrication

**Most popular consumables**

- Insulator (required) 12NG
- Collets
  - 8SZ17 5/32 in. (4.0 mm)
  - 8SZ18 3/16 in. (4.8 mm)
  - 8SZ19 1/4 in. (6.4 mm)
- Collet Body (all sizes) 11WP65
- Alumina Nozzles
  - 14N59 #6, 3/8 in.
  - 14N60 #7, 7/16 in.
  - 14N61 #8, 1/2 in.
  - 14N61-10 #10, 5/8 in.
  - 14N61-12 #12, 3/4 in.

---

**Applications**

- Heavy fabrication • Tool and die
- Pipe and tube fabrication
- Pressure vessel fabrication

**Most popular consumables**

- Insulator (required) 12NG
- Collets
  - 8SZ17 5/32 in. (4.0 mm)
  - 8SZ18 3/16 in. (4.8 mm)
  - 8SZ19 1/4 in. (6.4 mm)
- Collet Body (all sizes) 11WP65
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  - 14N59 #6, 3/8 in.
  - 14N60 #7, 7/16 in.
  - 14N61 #8, 1/2 in.
  - 14N61-10 #10, 5/8 in.
  - 14N61-12 #12, 3/4 in.

---

**Applications**

- Aerospace • Food/beverage industry
- HVAC • Automotive • Petro/chemical
- Precision fabrication

**Most popular consumables**

- 90° Chucks
  - 125C040-90 .040 in. (1.0 mm)
  - 125C116-90 1/16 in. (1.6 mm)
  - 125C332-90 3/32 in. (2.4 mm)
- 90° Glass Nozzle (all sizes) 125N90
  - Other nozzles are available.
Transform data into actionable information that drives continuous improvement.

**NEW!** ArcAgent for Insight Core
brand-neutral solution now available. See page 71 for more information.

![Welding Intelligence Logo](image)

**Choose the Right Welding Intelligence System**

<table>
<thead>
<tr>
<th>For Use With</th>
<th>Factory-Installed</th>
<th>Field-Installed/Activated</th>
<th>Requirements</th>
<th>What Capability Do You Need?</th>
<th>Data Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Insight Core</strong></td>
<td>• Continuum*/Auto-Continuum™</td>
<td>• 14-pin compliant power source (see MillerWelds.com/insight)</td>
<td>• Internet connection (wired/wireless)</td>
<td>• Productivity monitoring</td>
<td>• Cloud based</td>
</tr>
<tr>
<td><strong>Insight Centerpoint</strong></td>
<td>• Continuum*/Auto-Continuum™, Dynasty® 280 DX (see page 57)</td>
<td>• Continuum*/Auto-Continuum™, Dynasty® 280 DX</td>
<td>• PC and Ethernet connection</td>
<td>• Prevent/detect missed welds</td>
<td>• Local server or PC</td>
</tr>
<tr>
<td><strong>Insight Pipe and Vessel</strong></td>
<td>–</td>
<td>• PipeWorx 400 (see page 49)</td>
<td>• PC and Ethernet connection</td>
<td>• Real time contract, spool, joint documentation</td>
<td>• Local PC</td>
</tr>
<tr>
<td><strong>Insight ArcAgent</strong></td>
<td>• ANY welding power source (old or new)</td>
<td>• ANY welding process</td>
<td>• See Insight Core/Insight Centerpoint requirements</td>
<td>• Brand-neutral solution for use with Insight Core or Insight Centerpoint</td>
<td>• See Insight Core/Insight Centerpoint requirements</td>
</tr>
</tbody>
</table>

**Complete coverage for any application.**

- Aerospace
- Manufacturing
- Pipe and vessel
- Automation
- Submerged arc

For more detailed information, visit MillerWelds.com/insight

---

**Increase productivity**

**Improve weld quality**

**Manage costs**
Insight Core™

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

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

Insight Core dashboard descriptions

1 Asset tree. A list of power sources within your fleet — organized by building, department or machine — showing real-time activity status icons and active operators.

2 Productivity dashboard. Instant visibility of arc-on time and wire deposition, by location, work cell, power source or operator.

3 Quality dashboard. Real-time analysis and reporting of all welds, revealing when quality fails to meet established thresholds for amps, volts and WFS. Includes weld trace.

4 Goals dashboard. Shows progress toward continuous improvement goals you set for improving arc-on time, deposition rates and arc starts.

5 Reports. In-depth information is available in reports that can be easily modified and displayed in a wide variety of customizable formats.

6 Analytics tools. Business analytic tools allowing for weld data analysis based on individual/cell performance as well as overall financial terms.

7 Notifications. Email/text notifications based on your desired frequency and subject.

8 Multiple languages available. English, German, Spanish, French, Italian, Dutch, Portuguese and Chinese.

How it works

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

Factory installed on Continuum™/Auto-Continuum™ and Dynasty® 280 DX power sources.

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

NEW! ArcAgent for Insight Core brand-neutral solution now available. See page 71 for more information.

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

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

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

<table>
<thead>
<tr>
<th>Type</th>
<th>Continuum Model/Stock Number**</th>
<th>Miller 14-Pin Compliant Power Sources</th>
<th>Brand-Neutral Power Sources</th>
<th>Optional Extended Data Storage per Location (Time Period of Data Storage/Number of Devices)</th>
<th>High-Data Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factory-Installed Insight Core Power Sources</td>
<td>Continuum 350 (907636) Continuum 500 (907646) Auto-Continuum 350 (907656) Auto-Continuum 500 (907657)</td>
<td>—</td>
<td>—</td>
<td>(301501) 12 months/under 50 devices (301501001) 12 months/51-100 devices (301501002) 12 months/each 100 units over 100 devices</td>
<td>(301503) Over 20k welds per day</td>
</tr>
<tr>
<td>Field-Installed Insight Core Module or ArcAgent</td>
<td>—</td>
<td>(301072) Insight Core 14-pin module**</td>
<td>(851754) ArcAgent for Insight Core</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Insight Centerpoint™**

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

**New and improved Version 10**
- Designed for ease of use
- Faster start up time
- Drastically shortened learning curve

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

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

WorkFlow™ enables you to present electronic work instructions for pre/intra/post weld activities (using video, pdf, and more) to ensure consistent standardized production for every operator.

**Optional reporting software**
Insight Reporter™ provides preconfigured management charts and reports that provide a wide range of information about weld process, productivity and business metrics, stored in an SQL server database.

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

<table>
<thead>
<tr>
<th>Type</th>
<th>Continuum Model/Stock Number</th>
<th>Brand-Neutral Power Sources</th>
<th>Software Activation</th>
<th>Insight Centerpoint Software</th>
<th>Site License**</th>
<th>Optional Insight Reporter</th>
<th>Accessories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factory-Installed Insight Centerpoint Power Sources</td>
<td>Continuum 350 (907636)</td>
<td>(301490)</td>
<td>(301485) Software (301486) Maintenance</td>
<td>10-25 devices (301486001)</td>
<td>Single License (300709)</td>
<td>Insight LTD Gun (Q4015US3EML) For Continuum Insight LTD Remote (301383) M12/RJ45 Ethernet Cables (300734) 9.8 ft. (3 m) (300735) 16.4 ft. (5 m) (300736) 32.8 ft. (10 m) Field Application Support (195480) Miller field support (contact distributor for details)</td>
<td></td>
</tr>
<tr>
<td>Factory-Installed Insight Centerpoint Power Sources</td>
<td>Continuum 500 (907640)</td>
<td>(301490)</td>
<td>(301485) Software (301486) Maintenance</td>
<td>26-50 devices (301486002)</td>
<td>Single License (300709)</td>
<td>Insight LTD Gun (Q4015US3EML) For Continuum Insight LTD Remote (301383) M12/RJ45 Ethernet Cables (300734) 9.8 ft. (3 m) (300735) 16.4 ft. (5 m) (300736) 32.8 ft. (10 m) Field Application Support (195480) Miller field support (contact distributor for details)</td>
<td></td>
</tr>
<tr>
<td>Factory-Installed Insight Centerpoint Power Sources</td>
<td>Auto-Continuum 350 (907656)</td>
<td>(301490)</td>
<td>(301485) Software (301486) Maintenance</td>
<td>51-100 devices (301486003)</td>
<td>Single License (300709)</td>
<td>Insight LTD Gun (Q4015US3EML) For Continuum Insight LTD Remote (301383) M12/RJ45 Ethernet Cables (300734) 9.8 ft. (3 m) (300735) 16.4 ft. (5 m) (300736) 32.8 ft. (10 m) Field Application Support (195480) Miller field support (contact distributor for details)</td>
<td></td>
</tr>
<tr>
<td>Factory-Installed Insight Centerpoint Power Sources</td>
<td>Auto-Continuum 500 (907657)</td>
<td>(301490)</td>
<td>(301485) Software (301486) Maintenance</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Optional Insight Reporter** provides preconfigured management charts and reports that provide a wide range of information about weld process, productivity and business metrics, stored in an SQL server database.
Premium data acquisition tools that enable both Insight Core™ and Insight Centerpoint™ solutions to integrate with any brand of welding power source.

**Models**

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

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

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

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

**Typical ArcAgent for Insight Core welding installation**

![Typical ArcAgent for Insight Core welding installation](image)

**Typical ArcAgent Manual or ArcAgent Auto welding installation for Insight Centerpoint**

![Typical ArcAgent Manual or ArcAgent Auto welding installation for Insight Centerpoint](image)

**Most popular accessories**

- **Voltage monitoring**
  - TIG Filter Sensor 301359
  - Voltage sensing cable used in TIG applications. Requires 25 ft. (7.6 m) TIG filter cable (301384).
  - Voltage Sense Cables 301365 With lugs

- **Current monitoring**
  - Standard Current Sensors (for up to 4/0 lugged cables) 301353 150 A 301351 650 A
  - Large Diameter Current Sensors (for Dinse- or Tweco®-style cables) 301357 600 A solid core 301356 1,000 A solid core
  - Current Sensor Cables 301364 25 ft. (7.6 m) standard 301367 25 ft. (7.6 m) large diameter

- **Wire feed speed monitoring**
  - Wire Speed Sensor 301350
  - Wire Speed Sensor Cable 301368 25 ft. (7.6 m)

- **Gas flow monitoring**
  - Gas Flow Sensor 301358
  - Gas Flow Sensor Cable 301369 25 ft. (7.6 m)

- **Travel speed monitoring**
  - Travel Speed Wheel 301360 6 in. (152.4 mm)
  - Travel Speed Encoder 301362
  - Requires Auxiliary Sensor Module and Travel Speed Wheel.
  - Auxiliary Sensor Module (24 VDC) 301374
  - Allows for use of travel speed sensors as well as two analog inputs.
  - Travel Speed Wheel 301360 6 in. (152.4 mm)
  - Travel Speed Encoder Mounting Bracket 301363
  - Travel Speed Encoder Cable 301376 25 ft. (7.6 m)

For a complete accessory list see literature WI/1.0.

**Note:** See Insight Core on page 69 and Insight Centerpoint on page 70 for more information on licenses and options.
<table>
<thead>
<tr>
<th>Product Guide</th>
<th>Page</th>
<th>Class</th>
<th>Capable of this process</th>
<th>Weldable Metals</th>
<th>Continuous Generator Pwr. (watts)</th>
<th>Welding Amperage Range</th>
<th>Engine Brand</th>
<th>Special Features</th>
<th>Typical Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fusion 100</td>
<td>73</td>
<td>CI</td>
<td></td>
<td>Duracor®</td>
<td>6,200</td>
<td>50-100 DC</td>
<td>Kohler</td>
<td>Portable, PowerShift technology, inverter stick</td>
<td>Maintenance, construction, repair, service trucks</td>
</tr>
<tr>
<td>Blue Star® 18S</td>
<td>73</td>
<td>CI</td>
<td></td>
<td>Duracor®</td>
<td>6,200</td>
<td>60-185 DC</td>
<td>Kohler</td>
<td>Compact</td>
<td></td>
</tr>
<tr>
<td>Bobcat® 200 Air Pak™</td>
<td>76</td>
<td>CI</td>
<td></td>
<td>Lift eye, pickup mount, optional running gear or trailer</td>
<td>Steel, stainless</td>
<td>9,500 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® 225</td>
<td>76</td>
<td>CI</td>
<td></td>
<td>Lift eye, pickup mount, optional running gear or trailer</td>
<td>Steel, stainless</td>
<td>10,000 30-200 AC 50-210 DC</td>
<td>Kohler</td>
<td>Backup power for pivot irrigation</td>
<td>Farm/ranch</td>
</tr>
<tr>
<td>Bobcat® 3 Phase</td>
<td>76</td>
<td>CI</td>
<td></td>
<td>Lift eye, pickup mount, optional running gear or trailer</td>
<td>Steel, stainless</td>
<td>11,000 10-225 AC 10-350 DC</td>
<td>Kohler</td>
<td>AC/DC, CC/CV, 31 cfm air, battery charge/crank assist</td>
<td>Service/maintenance, construction</td>
</tr>
<tr>
<td>Trailblazer® 302 Air Pak™</td>
<td>80</td>
<td>CI</td>
<td></td>
<td>Lift eye, pickup mount, optional running gear or trailer</td>
<td>Steel, stainless</td>
<td>15,000 10-325 DC</td>
<td>Kohler</td>
<td>Auto-Speed™, optional EFI, Excel™ power, ArcReach®, battery charge/crank assist</td>
<td>Fab, maintenance, farm/ranch, construction</td>
</tr>
<tr>
<td>Bobcat® 250 Diesel</td>
<td>76</td>
<td>CI</td>
<td></td>
<td>Lift eye, pickup mount, optional running gear or trailer</td>
<td>Steel, stainless</td>
<td>9,500 40-250 DC</td>
<td>Kohler</td>
<td>Contractor's choice, AC/DC stick, strong FCAW</td>
<td>Fab, maintenance, farm/ranch, construction</td>
</tr>
<tr>
<td>Trailblazer® 325</td>
<td>78</td>
<td>CI</td>
<td></td>
<td>Lift eye, pickup mount, optional running gear or trailer</td>
<td>Steel, stainless</td>
<td>10,500 10-325 DC</td>
<td>Kohler</td>
<td>Auto-Speed™, optional EFI, Excel™ power, ArcReach®</td>
<td>Facility, structural, repair, pipe</td>
</tr>
<tr>
<td>Big Blue® 400 PipePro®</td>
<td>80</td>
<td>CI</td>
<td></td>
<td>Lift eye, pickup mount, optional running gear or trailer</td>
<td>Steel, stainless</td>
<td>10,000 20-400 DC</td>
<td>Kubota</td>
<td>Quiet, compact, fuel efficient, optional ArcReach®</td>
<td>Construction, repair</td>
</tr>
<tr>
<td>Big Blue® 450 Duo CST™</td>
<td>81</td>
<td>CI</td>
<td></td>
<td>Lift eye, pickup mount, optional running gear or trailer</td>
<td>Steel, stainless</td>
<td>10,000 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® 500 Pre</td>
<td>82</td>
<td>CI</td>
<td></td>
<td>Lift eye, generally mounted on optional trailer</td>
<td>Steel, stainless</td>
<td>20,000 20-500 DC</td>
<td>Kubota</td>
<td>Quiet, powerful, fuel efficient, optional ArcReach®</td>
<td>Construction, repair</td>
</tr>
<tr>
<td>Big Blue® 600 Series</td>
<td>82</td>
<td>CI</td>
<td></td>
<td>Lift eye, generally mounted on optional trailer</td>
<td>Steel, stainless</td>
<td>20,000 20-600 DC</td>
<td>Kubota</td>
<td>Quiet, powerful, fuel efficient, optional ArcReach® – Air Pak™ model comes standard with ArcReach® and air compressor</td>
<td>Construction, repair, maintenance, mining, rail</td>
</tr>
<tr>
<td>Big Blue® 800 Series</td>
<td>83</td>
<td>CI</td>
<td></td>
<td>Lift eye, generally mounted on optional trailer</td>
<td>Steel, stainless</td>
<td>20,000 20-800 DC</td>
<td>Deutz</td>
<td>Heavy duty, dual operator, ArcReach® – Air Pak™ model adds air compressor</td>
<td>Construction, repair, maintenance, mining, rail</td>
</tr>
</tbody>
</table>

**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

**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 and fewer emissions

**Product Key**
- Class: CI = Light industrial, CI = Industrial, CI = 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.
**Fusion 160**  
See literature ED/2.8

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

- **Amperage Range**: 30 – 160
- **Rated Output at 104°F (40°C)**: 160 A at 26.4 V, 20% duty cycle
  
- **Input Power**: Engine power
- **Welding Mode**: CC/DC
- **Welding Process**: DC stick

**Easier to transport.** The Fusion 160 welder/generator weighs 222 pounds. That’s up to 70 pounds less than similar machines, so moving the Fusion 160 is easier and faster. Less time is spent waiting, and more work can be done.

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

**Blue Star® 185**  
See literature ED/2.5

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

- **Compact and portable,** its small footprint uses little truck space. Optional running gear also makes the Blue Star one-man portable.
- **All engine controls are on front panel.**
- **Stick and TIG capable.**

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

**Includes electric start, 120-volt GFCI and 240-volt receptacles, 6.25-gallon fuel capacity, auto-idle and engine hour meter.**

**Gasoline**  
Kohler CH440: 13.4 hp at 3,600 rpm
One-cylinder, four-cycle, OHV, air-cooled

**Most popular accessories**
- Lifting Eye 195353 (pg 120)
- Running Gear 301246 (pg 120)
- Protective Cover 301245 (pg 120)

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

---

**Light industrial Process**  
CC/DC

**Gasoline engine**  
Kohler CH440: 13.4 hp at 3,600 rpm
One-cylinder, four-cycle, OHV, air-cooled

**Most popular accessories**
- Lifting Eye 195353 (pg 120)
- Running Gear 301246 (pg 120)
- Protective Cover 301245 (pg 120)

Visit MillermWelds.com or your distributor for other Miller® options and accessories.
### Sound Levels (at 23 feet)

<table>
<thead>
<tr>
<th>Generator</th>
<th>Bobcat 225 (pg 76)</th>
<th>Bobcat 250 (pg 76)</th>
<th>Trailblazer 325 (pg 78)</th>
</tr>
</thead>
<tbody>
<tr>
<td>At Maximum Load/At 150 Amps</td>
<td>73 dB/72 dB</td>
<td>73 dB/72 dB</td>
<td>74 dB/65 dB</td>
</tr>
<tr>
<td>Sound Quality</td>
<td>Very good</td>
<td>Very good</td>
<td>Excellent</td>
</tr>
</tbody>
</table>

### Fuel System

<table>
<thead>
<tr>
<th>Type</th>
<th>Bobcat</th>
<th>Trailblazer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typical Runtime per 12-Gallon Tank*</td>
<td>13 hours</td>
<td>Up to 21 hours with options</td>
</tr>
<tr>
<td>Efficiency</td>
<td>Good/Very good</td>
<td>Excellent</td>
</tr>
<tr>
<td>Type</td>
<td>Gasoline or LP</td>
<td>Gasoline or LP</td>
</tr>
<tr>
<td>Delivery</td>
<td>Carburetor</td>
<td>Carburetor or EFI available</td>
</tr>
</tbody>
</table>

### Generator

<table>
<thead>
<tr>
<th>Peak Watts</th>
<th>Bobcat 225</th>
<th>Bobcat 250</th>
<th>Trailblazer 325</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clean Power Quality</td>
<td>Very good/Excellent</td>
<td>Very good/Excellent</td>
<td>Excellent</td>
</tr>
<tr>
<td>Power While Welding</td>
<td>Fair/Good — With voltage control set near maximum</td>
<td>Good — Easier to fine-tune with arc voltage control near maximum</td>
<td>Independent weld and generator power with no interaction between tools and welding arc</td>
</tr>
<tr>
<td>Excel™ Power Generator</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Weld Performance</td>
<td></td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Stick</td>
<td>Good/Very good</td>
<td>Very good</td>
<td>Excellent</td>
</tr>
<tr>
<td>MIG — Wire (solid/FCAW), Steel</td>
<td>Fair (.035 in.)</td>
<td>Good (.035-1/16 in.)</td>
<td>Excellent (.023-1/16 in.)</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>
</tr>
<tr>
<td>DC TIG (steel)</td>
<td>Good</td>
<td>Very good</td>
<td>Excellent</td>
</tr>
<tr>
<td>AC Weld</td>
<td>70-150 amps</td>
<td>40-250 amps</td>
<td>Add Dynasty* (page 56)</td>
</tr>
</tbody>
</table>

### Key Features

<table>
<thead>
<tr>
<th>Digital Meters with SunVision™</th>
<th>Bobcat</th>
<th>Trailblazer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance Displays</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Battery Charge/Jump Start</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>14-pin Receptacle</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>ArcReach technology available</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### Bobcat™/Trailblazer®/Big Blue®

<table>
<thead>
<tr>
<th>Bobcat 200 Air Pak (pg 75)</th>
<th>Trailblazer 302 Air Pak (pg 80)</th>
<th>Big Blue 600 Air Pak (pg 82)</th>
<th>Big Blue 800 Duo Air Pak (pg 83)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressed Air</td>
<td>28 cfm, 175 psi</td>
<td>31 cfm, 160 psi</td>
<td>60 cfm, 100 psi</td>
</tr>
<tr>
<td>Battery Charge/Crank Assist</td>
<td>Yes</td>
<td>Yes</td>
<td>N/A</td>
</tr>
<tr>
<td>Generator Power</td>
<td>Single-phase: Peak: 5,500 watts</td>
<td>Continuous: 5,500 watts</td>
<td>Peak: 15,000 watts</td>
</tr>
<tr>
<td></td>
<td>Three-phase: N/A</td>
<td>N/A</td>
<td>Continuous: 12,000 watts</td>
</tr>
<tr>
<td>Weld Output Range</td>
<td>50-210 amps (CC/DC)</td>
<td>10-300 amps (CV/DC, CC/DC, CC/AC)</td>
<td>20-600 amps (CV/DC, CC/DC)</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>N/A</td>
<td>Single weld mode: 40-800 amps (CV/DC, CC/DC)</td>
</tr>
<tr>
<td>General Construction</td>
<td>Yes</td>
<td>Yes</td>
<td>N/A</td>
</tr>
<tr>
<td>Farm and Ranch</td>
<td>Yes</td>
<td>Yes</td>
<td>N/A</td>
</tr>
<tr>
<td>Mining</td>
<td>N/A</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Railroad Maintenance</td>
<td>N/A</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Service Trucks</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>ArcReach technology standard</td>
<td>Yes</td>
<td>ArcReach technology standard</td>
<td>ArcReach technology standard</td>
</tr>
</tbody>
</table>
Reviews & Ratings offer valuable insights to help guide your next purchase. They’re written and submitted by people who have purchased and used Miller equipment. If you’d like to share your experience and help your fellow welders select the right welding equipment consider writing a review. Simply visit the product page on the website for the product you want to write about and click on “Write a Review”.

Visit now at MillerWelds.com

**Bobcat™ 200 Air Pak™**

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

Maximize available payload. Reduce weight by up to 550 pounds and increase available payload by up to 24 cubic feet by reducing the equipment on the truck.

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

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

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

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

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

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

---

**Gasoline Engine-Driven**

**Process**
- Stick (SMAW)

**Gasoline engine**
- Kohler CH730 with eChoke™: 23.5 hp at 3,600 rpm
- Twin-cylinder, four-cycle, overhead valve, industrial, air-cooled

**Most popular accessories**
- Spectrum® 375 X-TREME™ (pg 92)
- Multi-Terrain Running Gear 301460 (pg 120)
- Full KVA Adapter Cord 300517 (pg 120)
- Protective Cover (pg 120)
- HWY-Mid Frame Trailer 301438 (pg 121)
- 25 ft. Battery Charge/Jump Cables with Plug 300422
- Air Compressor Oil Heater 301448
- Auxiliary Fuel Tank Pump 301450
- GFCI Panel Mount 120 VAC Duplex Kit 300975
- Spark Arrestor Kit 300924

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

---

**Specifications**

**Gasoline Air Compressor**

<table>
<thead>
<tr>
<th>Stock Number (907706) Kohler</th>
<th>Process</th>
<th>Output Ranges</th>
<th>Rated Weld Output at 104°F (40°C)</th>
<th>Single-Phase Generator Power at 104°F (40°C)</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC stick</td>
<td>50–210 A</td>
<td>150 A at 26 V, 100% duty cycle</td>
<td>Continuous/peak: 5,500 watts</td>
<td>H: 23.76 in. (604 mm)</td>
<td>558 lb. (253 kg)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>180 A at 27 V, 60% duty cycle</td>
<td></td>
<td>H: 29.78 in. (756 mm) to top of exhaust</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>210 A at 25 V, 20% duty cycle</td>
<td></td>
<td>W: 20 in. (508 mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>D: 46.64 in. (1,185 mm)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Air Compressor Features**

- Rotary screw with auto idle, oil change intervals of 500 hours

**Free Air Delivery**
- 28 cfm (0.79 m³/min.) at 3,600 rpm

**Working Pressure**
- 80-175 psig

**Duty Cycle**
- 100%

**Oil Capacity**
- 2 qt. (1.89 L)
Bobcat™ Series
Gas, LP and Diesel

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.
**Bobcat 225 (Gas)** See literature ED/4.4

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

Features three DC stick/TIG controls, one AC stick/TIG control and one wire range for output control. Stick ranges designed for 3/32, 1/8 and 5/32 inch. Very easy to set.

**Bobcat 3 Phase (Gas)** See literature ED/4.33

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

**Bobcat 250 (Gas, LP or Diesel)** See literature ED/4.4 (Gas/LP) and ED/4.34 (Diesel)

*Most Popular!*

Multiprocess engine-driven welder/generator capable of carbon arc gouging features a larger stabilizer for less spatter and smoother arc. Ideal welder/generator for maintenance/repair, construction, farm/ranch or as a stand-alone generator.

Convenient front panel fuel gauge.

More precise amperage settings with wider range for optimal stick/flux-cored welding.

Features four AC/DC stick/TIG controls and two wire ranges for output control. Stick ranges designed for 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.

---

### Bobcat 225 (Gas) [907498001] Kohler with GFCI

<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>(907498001)</td>
<td>CC/AC</td>
<td>Stick/TIG</td>
<td>70–150 A</td>
<td>150 A at 25 V, 100% duty cycle</td>
<td>Single-phase</td>
<td>H: 28 in. (711 mm)</td>
<td>485 lb.</td>
</tr>
<tr>
<td></td>
<td>(90749898)</td>
<td>CC/DC</td>
<td>Stick/TIG</td>
<td>50–225 A</td>
<td>225 A at 25 V, 100% duty cycle</td>
<td>Continuous: 9,500 watts</td>
<td>D: 45.5 in. (1,156 mm)</td>
<td>(220 kg)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CV/DC</td>
<td>MIG/FCW</td>
<td>19–28 V</td>
<td>200 A at 20 V, 100% duty cycle</td>
<td>Continuous: 9,500 watts</td>
<td>W: 18.5 in. (470 mm)</td>
<td></td>
</tr>
</tbody>
</table>

### Bobcat 3 Phase [9075050] Kohler with GFCI

<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 250</td>
<td>(907500001)</td>
<td>CC/AC</td>
<td>Stick/TIG</td>
<td>50–200 A</td>
<td>200 A at 25 V, 100% duty cycle</td>
<td>Single-phase</td>
<td>H: 28 in. (711 mm)</td>
<td>495 lb.</td>
</tr>
<tr>
<td></td>
<td>(9075005)</td>
<td>CC/DC</td>
<td>Stick/TIG</td>
<td>50–210 A</td>
<td>210 A at 25 V, 100% duty cycle</td>
<td>Continuous: 9,500 watts</td>
<td>D: 45.5 in. (1,156 mm)</td>
<td>(225 kg)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CV/DC</td>
<td>MIG/FCW</td>
<td>19–28 V</td>
<td>200 A at 20 V, 100% duty cycle</td>
<td>Continuous: 9,500 watts</td>
<td>W: 18.5 in. (470 mm)</td>
<td></td>
</tr>
</tbody>
</table>

### Bobcat 250 (Gas, LP or Diesel) [9075000001] Kohler with GFCI

<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 250</td>
<td>(9075000001)</td>
<td>CC/AC</td>
<td>Stick/TIG</td>
<td>40–250 A</td>
<td>250 A at 25 V, 60% duty cycle</td>
<td>Single-phase</td>
<td>H: 28 in. (711 mm)</td>
<td>501 lb.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CC/DC</td>
<td>Stick/TIG</td>
<td>40–275 A</td>
<td>225 A at 25 V, 100% duty cycle</td>
<td>Continuous: 9,500 watts</td>
<td>D: 45.5 in. (1,156 mm)</td>
<td>(227 kg)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CV/DC</td>
<td>MIG/FCW</td>
<td>17–28 V</td>
<td>275 A at 25 V, 60% duty cycle</td>
<td>Continuous: 9,500 watts</td>
<td>W: 20 in. (508 mm)</td>
<td></td>
</tr>
</tbody>
</table>

### Bobcat 250 Diesel [9075065] Kubota with GFCI

<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 250 Diesel</td>
<td>(9075000001)</td>
<td>CC/AC</td>
<td>Stick/TIG</td>
<td>40–275 A</td>
<td>250 A at 25 V, 100% duty cycle</td>
<td>Single-phase</td>
<td>H: 28 in. (711 mm)</td>
<td>638 lb.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CC/DC</td>
<td>Stick/TIG</td>
<td>17–28 V</td>
<td>275 A at 25 V, 60% duty cycle</td>
<td>Continuous: 9,500 watts</td>
<td>D: 45.5 in. (1,156 mm)</td>
<td>(299 kg)</td>
</tr>
</tbody>
</table>

---

1. With voltage-sensing feeder.
2. Only available with Dynasty® Series.
3. Bobcat 250 models only.

**Processes**

- AC/DC stick (SMAW)
- MIG (GMAW)\(^1\)
- Flux-cored (FCAW)\(^2\)
- AC/DC TIG (GTAW)
- Air carbon arc cutting and gouging (CAC-A)\(^3\)

**Engines**

- Gas: Kohler CH730
  - 23.5 hp at 3,600 rpm
- EFI gas: Kohler ECCH730
  - 23 hp at 3,600 rpm
- LP: Kohler CH730
  - Liquid withdrawal LP system
  - 21.5 hp at 3,600 rpm

**Note:** Engines are warranted separately by engine manufacturer.

**Most popular accessories**

- SuitCase® X-TREME™ Feeder (pg 22)
- Dynasty® 210 Series (pg 56)
- Spectrum® 625 X-TREME™ (pg 92)
- Multi-Terrain Running Gear (pg 120)
- Off-Road Running Gear (pg 120)
- Protective Cage with Cable Holders (pg 120)
- Hose and LP Tank Mounting Assembly (pg 120)
- Remote Oil Drain/Filter Kit (pg 120)
- All-Purpose Running Gear (pg 120)
- Full KVA Adapter Cord 300517 (pg 120)
- Protective Cover (pg 120)
- HWY-Mid Frame Trailer 301438 (pg 121)
- GFCI Panel Mount 120 VAC Duplex Kit 300975 (pg 120)
- Electric Fuel Pump Kit* (for gas models only) 300976
- Spark Arrestor Kit (for gas models only) 300924

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

---

**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.*
Unbeatable arc performance
Wide amperage output with better welding deposition rates means you can get jobs done faster, saving time and money. The Trailblazer also has precise arc control, which allows you to fine-tune the arc to match your personal preferences and quickly dial in the perfect parameters to optimize weld quality and maximize productivity across a variety of applications and welding processes.

Cleaner and stronger generator power
Combines a 25 hp engine and 12,000 watts of clean, truly usable generator power that is Accu-Rated™, not inflated — tested to deliver uninterrupted peak output for a minimum of 30 seconds for big loads, so you can get more jobs done.

Maximum cost savings
Less money spent on fuel means more profit for you. Every Trailblazer welder/generator has fuel-saving Auto-Speed technology — add optional Excel™ power and EFI to save even more on fuel costs and enjoy a combination of advanced, profit-enhancing features that are only available on a Trailblazer welder/generator.

Safer, more productive jobsites
Quieter jobsites are safer and more productive because work crews can communicate easier, and work can start earlier and end later — even in noise-sensitive areas.

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.

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.

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.

IMPROVED!
Now available with ArcReach.

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

Welding at idle speed
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

Auto-Speed™ in XX18 mode

IMPROVED!
Now available with ArcReach.

See page 125
Options to Maximize Your Trailblazer 325 Performance

Electronic fuel injection EFI (gas models)
Adding EFI to your Trailblazer welder/generator adds multiple benefits. With EFI, you’ll get faster, more-reliable starts in any weather — no choke adjustments needed. EFI-equipped Trailblazer machines are also up to 42 percent more fuel efficient than standard carbureted models, improving profitability. Plus, refueling less frequently means you’ll spend more of your time welding, improving productivity.

Add Excel power to your Trailblazer with EFI, and you’ll have the most fuel-efficient compact welder/generator available.

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.

ArcReach® remote control technology
Remote control of the power source without a control cord. An ArcReach system allows you to change weld settings from your ArcReach feeder or remote, saving a trip to the power supply. ArcReach technology uses the existing weld cable to communicate welding control information between the feeder or remote and the power source. This technology eliminates the need for control cords, and their associated problems and costs. Learn more at MillerWelds.com/arcreach

Battery charge/crank assist (gas models)
Reduce downtime with battery charge/crank assist capability. Designed and recommended for mechanics or anyone else responsible for a fleet of trucks or equipment. By using your Trailblazer to charge dead batteries or jump a stubborn engine, you’ll keep your crew working and the fleet up and running. Provides up to 75 amps of DC current to quickly charge 12- and 24-volt batteries. Jobsite equipment with weak batteries can get up to 350 amps of crank assist.

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

*Recommended for operation at altitudes above 5,000 feet.
**For LP models order Hose and LP Tank Mounting Assembly (301458) separately.

---

**Processes**
- Stick (SMAW) • Mig (GMAW)†
- Flux-cored (FCAW)‡ • Dc Tig (GTAW)§
- RMD™‡* Pulsed Mig (GMAN-P*)
- Air carbon arc cutting and gouging (CAC-A) (rated 3/16 in. carbons)

†With wire feeder.
‡Two-piece Tig torch recommended.
§ArcReach model only with ArcReach Smart Feeder.

**Engines**
- Gas: Kohler CH730 23.5 hp at 3,600 rpm
- EFI gas: Kohler ECH730 23 hp at 3,600 rpm
- LP: Kohler PCH740 Vapor withdrawal LP system 25 hp at 3,600 rpm

Three-cylinder, four-cycle, overhead valve, industrial, air-cooled

EPA Tier 4 Final Diesel: Kubota D902 24.8 hp at 3,600 rpm
Three-cylinder, industrial, liquid-cooled

Note: Engines are warranted separately by engine manufacturer.

**Most popular accessories**
- SuitCase® X-TREME® 12VS (pg 22)
- ArcReach® SuitCase® 8/12 (pg 22)
- ArcReach® Smart Feeder 951733 (for ArcReach model only) (pg 22)
- ArcReach® Stick/Tig Remote 301325 (for ArcReach model only) (pg 47)
- Spoolmatic® 30A / WC-24 Control 130831 / 137549 (pg 31)
- Multi-Terrain Running Gear (pg 120)
- Off-Road Running Gear (pg 120)
- Protective Cage with Cable Holders (pg. 120)
- Hose and LP Tank Mounting Assembly (pg 120)
- All-Purpose Running Gear (pg 120)
- Full KVA Adapter Cord (pg 120)
- Protective Cover (pg 120)
- HWY-Mid Frame Trailer (pg 121)
- Electric Fuel Pump Kit (for gas models only) 300976
- Recommended for operation at altitudes above 5,000 feet.
- 25 ft. Battery Charge/Jump Cables with plug (for Trailblazer 325 EFI 907754003 only) 300422
- Visit MillerWelds.com or your distributor for other Miller® options and accessories.
Trailblazer® 302 Air Pak

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 1/2-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/crank assist. Provides selectable 12- or 24-volt battery charging with up to 450 amps of battery crank assist capability. Convenient front panel access.

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

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Welding Mode</th>
<th>Process</th>
<th>Amp/Volt Ranges</th>
<th>Rated Weld Output at 104°F (40°C)</th>
<th>Single-Phase Generator Power at 104°F (40°C)</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>(907549001) Kohler</td>
<td>CC/DC</td>
<td>Stick/TIG</td>
<td>10-300 A</td>
<td>1,000 watts</td>
<td>71 lb (32 kg)</td>
<td>30-1/2 in. (76 mm)</td>
<td>300422</td>
</tr>
<tr>
<td>(907549003) Kohler</td>
<td>CV/DC</td>
<td>MIG/FCAW</td>
<td>13-35 V, 350 A</td>
<td>1,000 watts</td>
<td>71 lb (32 kg)</td>
<td>30-1/2 in. (76 mm)</td>
<td>300422</td>
</tr>
<tr>
<td>(907549005) Kohler</td>
<td>CC/AC</td>
<td>Stick/TIG</td>
<td>10-225 A</td>
<td>1,000 watts</td>
<td>71 lb (32 kg)</td>
<td>30-1/2 in. (76 mm)</td>
<td>300422</td>
</tr>
</tbody>
</table>

Air Compressor Features Free Air Delivery Working Pressure Constant Duty Cycle Oil Capacity

<table>
<thead>
<tr>
<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>Single-Phase Generator Power at 104°F (40°C)</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>(907732001) Kubota</td>
<td>CC/DC</td>
<td>Stick/TIG</td>
<td>20-400 A</td>
<td>1,000 watts</td>
<td>71 lb (32 kg)</td>
<td>30-1/2 in. (76 mm)</td>
<td>300422</td>
</tr>
<tr>
<td>(907732003) Kubota</td>
<td>CV/DC</td>
<td>MIG/FCAW</td>
<td>14-40 V</td>
<td>1,000 watts</td>
<td>71 lb (32 kg)</td>
<td>30-1/2 in. (76 mm)</td>
<td>300422</td>
</tr>
</tbody>
</table>

Big Blue® 400 Pro

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

ArcReach® Available on select models. Remote control of the power source without a control cord. See page 79 for more information.

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

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

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

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

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

<table>
<thead>
<tr>
<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>Single-Phase Generator Power at 104°F (40°C)</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>(907732001) Kubota</td>
<td>CC/DC</td>
<td>Stick/TIG</td>
<td>20-400 A</td>
<td>1,000 watts</td>
<td>71 lb (32 kg)</td>
<td>30-1/2 in. (76 mm)</td>
<td>300422</td>
</tr>
<tr>
<td>(907732003) Kubota</td>
<td>CV/DC</td>
<td>MIG/FCAW</td>
<td>14-40 V</td>
<td>1,000 watts</td>
<td>71 lb (32 kg)</td>
<td>30-1/2 in. (76 mm)</td>
<td>300422</td>
</tr>
</tbody>
</table>
Steel requirements for the most demanding pipeline jobs.

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.

Remote control of the power source without a control cord. See page 79 for more information.

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

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

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

Compact size and weight optimizes truck space.

LINE-X® cover provides superior impact, corrosion and abrasion protection.

Quiet operation. Only 72.1 decibels (97 Lwa) under full load. Improves jobsite communication and safety.

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

See page 125. Wireless antenna kit (300749) recommended.

Big Blue® 500 Duo CST™

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 52) for additional details.

Save fuel, reduce maintenance costs and increase productivity.

Quiet operation. At 72.1 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 125. Wireless antenna kit (300749) recommended.
Clean, quiet, multiprocess machines designed to give welders the output they need for heavy-duty applications on construction and fabrication sites.

**ArcReach**

Available on Deluxe and Air Pak® models. Remote control of the power source without a control cord. See page 79 for more information.

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

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

**Deluxe models** add ArcReach, a polarity reversing switch and a vandalism lockout (protects control panel and receptacles, see photo at right).

**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.

**Heavy industrial**

**Processes**

- Stick (SMAW) • MIG (GMAW)
- Flux-cored (FCAW) • DC TIG (GTAW)
- RMD** • Pulsed MIG (GMAW-P)*
- Air carbon arc cutting and gouging (CAC-A) (500: rated 5/16 in. carbons; 600: rated 3/8 in. carbons)
- *ArcReach models only with ArcReach Smart Feeder.

**Diesel engines**

- EPA Tier 4 Final choices
- 500 and 600 Pro — Kubota V2403
  48.9 hp at 1,800 rpm
- Turbo-charged, four-cylinder, industrial, liquid-cooled
- 600 Air Pak — Deutz TD2.9 L4
  65.7 hp at 1,800 rpm
- Turbo-charged, four-cylinder, industrial, liquid-cooled

*Note: Engines are warranted separately by engine manufacturer.

**Most popular accessories**

- SuitCase® X-TREME® 8VS/12VS (pg 22)
- ArcReach® SuitCase® 8/12 (pg 22)
- ArcReach® Smart Feeder (pg 22)**
- ArcReach® Stick/TIG Remote (pg 47)**
- Dynasty 210™ Series (pg 56)
- Full KVA Adapter Cord (pg 120)
- Full KVA Plug Kit (pg 120)
- Protective Cover (pg 120)
- 301495 Kubota
- 301113 Deutz
- HWY-225 Trailer 301338 (pg 121)
- Wireless Remote Hand Control / Wireless Antenna Kit 300430/300749 (pg 125)
- Desiccant Air Dry System (for Air Pak model only)
- 195117 Side mount
- 19517001 Rear mount
- Eliminates moisture in the air stream and prevents air line freeze-ups in cold climates.
- Spark Arrestor Kit 195012

**For ArcReach models only.**

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

### Ingersoll Rand CE55 G1 Air Compressor (Air Pak model only)

**Features**

- Rotary screw with electric clutch for on/off, oil change intervals of 500 hours, life expectancy of 30,000 hours
- Idle: 40 cfm (1.13 m³/min.)
- Weld: 60 cfm (1.70 m³/min.)
- 100 psig (7 bar)
- **100%**
- 4 qf (3.79 l)

### Diesel

<table>
<thead>
<tr>
<th>Model/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>
<tbody>
<tr>
<td>Big Blue 500 Pro (907736) Kubota (907736001) Kubota Deluxe model with ArcReach</td>
<td>CC/DC (Stick/Tig)</td>
<td>20–500 A</td>
<td>400 A at 36 V, 100% duty cycle</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: 46 in. (1,168 mm)</td>
<td>1,750 lb. (794 kg)</td>
</tr>
<tr>
<td>Big Blue 600 Pro (907737) Kubota (907737001) Kubota Deluxe model w/ArcReach</td>
<td>CC/DC (Stick/Tig)</td>
<td>20–600 A</td>
<td>600 Pro 500 A at 40 V, 100% duty cycle 550 A at 42 V, 60% duty cycle 600 A at 42 V, 40% duty cycle</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>2,040 lb. (925 kg)</td>
</tr>
<tr>
<td>Big Blue 600 Air Pak (907750) Deutz with ArcReach</td>
<td>CC/DC (Stick/Tig)</td>
<td>14–50 V</td>
<td>600 Air Pak 500 A at 40 V, 100% duty cycle 575 A at 43 V, 100% duty cycle 600 A at 44 V, 60% duty cycle</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>2,040 lb. (925 kg)</td>
</tr>
</tbody>
</table>

*Big Blue 600 Series has wider truck specific models available — visit MillerWelds.com or your distributor.
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.

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

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

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

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

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

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

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

Ingersoll Rand ultra-reliable industrial rotary screw compressor (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 life intervals.

*Big Blue 800 Duo Air Pak has welder truck specific models available — visit MillerWelds.com or your distributor.

Ingersoll Rand Air Compressor (Air Pak model only)

<table>
<thead>
<tr>
<th>Features</th>
<th>Free Air Delivery</th>
<th>Working Pressure Constant</th>
<th>Duty Cycle</th>
<th>Oil Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotary screw with electric clutch for on/off, oil change intervals of 500 hours, life expectancy of 30,000 hours</td>
<td>Idle: 40 cfm (1.13 m³/min.)</td>
<td>100 psig (7 bar)</td>
<td>100%</td>
<td>4 qt. (3.79 l)</td>
</tr>
</tbody>
</table>

Diesel engine

EPA Tier 4 Final

Deutz Td2.9 L4: 65.7 hp at 1,800 rpm Turbo-charged, four-cylinder, industrial, liquid-cooled

Note: Engines are warranted separately by engine manufacturer.

Most popular accessories

- SuitCase® X-TREME® 8VS/12VS (pg 22)
- ArcReach SuitCase® 8/12 (pg 22)
- ArcReach® Smart Feeder 951733 (pg 22)
- ArcReach® Stick/TIG Remote 301325 (pg 47)
- Dynasty 210® Series (pg 56)
- Full KVA Adapter Cord 300517 (pg 120)
- Full KVA Plug Kit (pg 120) 119172 Single-phase 254140 Three-phase 301113 (pg 120)
- HWY-225 Trailer 301338 (pg 121)
- Wireless Remote Hand Control/ Wireless Antenna Kit 300430/300749 (pg 125)
- Desiccant Air Dry System (Air Pak model only) 195117 Side mount 195117001 Rear mount Eliminates moisture in the air stream and prevents air line freeze-ups in cold climates.
- Spark Arrestor Kit 195012

Visit MillerWelds.com or your distributor for other Miller® options and 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 IP23 rated providing a high level of protection for harsh environments.

**Easy to integrate.** Our SubArc power sources are easy to integrate by using a standard Modbus® connection.

All power sources also feature thermal overload protection, line voltage compensation and Fan-On-Demand™.

---

**Heavy industrial**

SubArc DC Series is DC only.

**Processes**
- Submerged arc (SAW)
- Electroslag (ESW)
- Air carbon arc cutting and gouging (CAC-A)

**Most popular accessories**
- 14-pin Insight Core™ Module 301072 (pg 69)
- Requires Insight Core to SubArc Digital Series Adapter Kit (301295).
- ArcAgent® Auto 301346 (pg 71)
- 15 ft. (4.6 m) SubArc Parallel Cable 260775015 (pg 123)
- 15 ft. (4.6 m) SubArc Tandem Cable 260878015 (pg 123)

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

---

**SubArc DC 650 Digital**

- **Amperrage Range (CC Mode):** 50–815 A
- **Voltage Range (Sub Arc Mode):** 20–44 V
- **Rated Output:** 650 A at 44 V, 100% duty cycle
- **Amps Input at Rated Output, 60 Hz:** 126 A, 230 V
- **Max Open-Circuit Voltage:** 75 Vpk
- **Dimensions (Includes lift eye, but not strain relief):** H: 30 in. (762 mm), W: 23 in. (584 mm), D: 38 in. (965 mm)
- **Net Weight:** 593 lb. (269 kg)

**SubArc DC 1000 Digital**

- **Amperage Range (CC Mode):** 100–1,250 A
- **Voltage Range (Sub Arc Mode):** 20–44 V
- **Rated Output:** 1,000 A at 44 V, 100% duty cycle
- **Amps Input at Rated Output, 60 Hz:** 180 A, 230 V
- **Max Open-Circuit Voltage:** 68 Vpk
- **Dimensions (Includes lift eye, but not strain relief):** H: 43 in. (1,092 mm), W: 28 in. (711 mm), D: 48 in. (1,219 mm)
- **Net Weight:** 682 lb. (309 kg)

**SubArc AC/DC Digital**

- **Amperage Range (CC Mode):** 300–1,250 A
- **Voltage Range (Sub Arc Mode):** 20–44 V
- **Rated Output:** 1,000 A at 44 V, 100% duty cycle
- **Amps Input at Rated Output, 60 Hz:** 122 A, 230 V
- **Max Open-Circuit Voltage:** 93 Vpk
- **Dimensions (Includes lift eye, but not strain relief):** H: 43 in. (1,092 mm), W: 28 in. (711 mm), D: 48 in. (1,219 mm)
- **Net Weight:** 1,187 lb. (538 kg)

*While idling.

---

Miller offers an array of versatile submerged arc components, including power sources, controls, wire drives, torches, tractors and a variety of other accessories.

**Submerged Arc**

Miller recommends Hobart® filler metal and flux solutions for submerged arc welding applications.

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.
**SubArc Interface Control**

See literature no. AD/7.3

Easier setup and operation. The SubArc Interface Digital control recognizes the power source and wire drive connected, and automatically configures the system for proper operation.

Internal terminal strip is able to integrate with positioners, sidebeams, turning rolls and other peripheral equipment.

**Most popular accessories**

- SubArc Control Cables (pg 123)
  - 260622030  30 ft. (9 m)
  - 260622050  50 ft. (15 m)
  - 260622060  60 ft. (18.3 m)
  - 260622080  80 ft. (24.4 m)
  - 260622100  100 ft. (30.5 m)
  - 260622120  120 ft. (36.6 m)
  - 260622200  200 ft. (61.0 m)

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

**SubArc Remote Operator Interface**

See literature AD/7.3

Point-of-use installation. Remote Pendant can be handheld or secured at point of use to improve operation.

Remote installation. Motor Control can be remotely installed, resulting in reduced cables at the operator workstation.

Side handles on Remote Pendant provides option for handheld operation with full functionality of a traditional SubArc Interface.

**Most popular accessories**

- SubArc Control Cables (see pg 123 for complete list)
  - 260622030  30 ft. (9 m)
  - 260622050  50 ft. (15 m)
  - 260622080  80 ft. (24.4 m)

- Continuum Control/Motor Cables (see pg 123 for complete list)
  - 263368015  15 ft. (4.6 m)
  - 263368025  25 ft. (7.6 m)
  - 263368050  50 ft. (15 m)

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

**SubArc Wire Drive Assemblies**

See literature AD/7.3

SubArc Strip Drive 100 Digital Low Voltage is a heavy-duty, right-angle drive assembly with mounting bracket. Designed for automated strip clad applications.

SubArc Wire Drive 400 Digital Low Voltage is a standard-speed, right-angle wire drive assembly.

**Most popular accessories**

- Motor Extension Cables (pg 123)
  - 254232005  5 ft. (1.5 m)
  - 254232010  10 ft. (3 m)
  - 254232025  25 ft. (7.6 m)
  - 254232065  65 ft. (19.8 m)

- Drive Rolls (pg 123)

- Single-Wire Straighten 199733 (pg 123)

- Twin-Wire Straighteners (for twin-wire torches only) (pg 123)

- Manual Single Slide (pg 123)

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

See literature AD/7.3

**SubArc Flux Hopper Digital Low Voltage.**

Our SubArc Flux Hopper Digital Low Voltage utilizes a flux valve mechanism that assures continuous delivery of flux to the arc.

**Sight glass** allows the weld operator to visually monitor the remaining flux in the hopper.

**Versatile opening** is sized to allow hook-up of any flux-hopper-mounted recovery system.

**Includes slag screen** to capture fused slag particles from entering the flux hopper.

---

### Most popular accessories

- **OBT 600 Torch Body Extensions**
  - (pg 123)
  - 043967 1 inch (25.4 mm)
  - 043969 2 inch (50.8 mm)
  - 043973 4 inch (101.6 mm)
  - 043975 6 inch (152.4 mm)
- **OBT 1200 Torch Body Extension**
  - 043981 (pg 123)
- **Contact Tips**
  - (pg 123)

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

---

### External Cladding Head

See literature AY/52.0

Cost-efficient means of depositing stainless steel and Ni-alloy materials to create corrosion- or wear-resistant overlays on large non- or low-alloyed steel components.

**Designed for both submerged arc and electroslag strip cladding applications.**

**Flexible external cladding head** accommodates strip widths from 30 to 90 mm.

**Individually adjustable spring-loaded contact jaws** provide optimal current transfer, reducing risk of cladding failures.

### Most popular accessories

- **SubArc Strip Drive 100 Digital Low Voltage** (pg 85)
  - 300940
- **Coolant Flow Switch Kit**
  - 195461 (pg 118)
- **Coolmate™ 3**
  - (pg 119)
  - 043007 115 V
  - 043008 230 V
- **Water Hose Extensions**
  - 40V76R6 6 ft. (1.8 m)
  - 40V76R 12.5 ft. (3.8 m)
  - 40V76LR 25 ft. (7.6 m)
- **Water Coupler**
  - 11N18
- **Quick-Release Water Kit**
  - QRW

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

---

### SubArc Flux Hopper

See literature AD/7.3

**Improved flux delivery system.** Our SubArc Flux Hopper Digital Low Voltage utilizes a flux valve mechanism that assures continuous delivery of flux to the arc.

**Sight glass** allows the weld operator to visually monitor the remaining flux in the hopper.

**Versatile opening** is sized to allow hook-up of any flux-hopper-mounted recovery system.

**Includes slag screen** to capture fused slag particles from entering the flux hopper.

---

### Stock Numbers

- **SubArc Flux Hopper Digital Low Voltage** (300942)
- **SubArc External Cladding Head** 30–90 mm (301167)
- **OBT 600** (043923)
- **OBT 1200** (043900)
- **1200-Amp Twin-Wire Torch (301144) Long**

---

### Specifications

**OBT 600** is a 600-amp, 100 percent duty cycle torch with concentric flux flow nozzle. For use with 1/16–5/32 inch (1.6–4.0 mm) wire.

**OBT 1200** is a 1,200-amp, 100 percent duty cycle torch with concentric flux flow nozzle. For use 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 Twin-Wire Torch (long)** is a 1,200-amp, 100 percent duty cycle torch. For use with 3/64–3/32 inch (1.2–2.4 mm) wire.

---

### External Cladding Head Specifications

- **Rated Output**: 3,000 A at 100% duty cycle
- **Strip Width Range**: 30–90 mm
- **Cooling Method**: Coolant
- **Dimensions**:
  - H: 14.92 in. (379 mm)
  - W: 8.76 in. (223 mm)
  - D: 8.9 in. (226 mm)
- **Net Weight**: 38.5 lb. (17.5 kg)

---

### SubArc Flux Hopper Specifications

- **Input Power**: 12 VDC (PWM signal from SubArc Interface)
- **Input Power Cord**: 11 ft. (3.3 m)
- **Flux Capacity**: 25 lb. (11 kg)
- **Net Weight**: 11 lb. (5 kg)
SubArc 3-Wheel Tractor

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

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

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

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

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

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

Low-voltage operation and improved environmental protection. The new digital series accessories are powered with 24 VAC control voltage from the power source. All power sources, interface controls and wire drives are IP23 rated providing a high level of protection for harsh environments.

SubArc Portable Welding System

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, slide 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 slide provides 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
- OBT 600 torch
- Wire straightener

Most popular accessories

- 14-pin Insight Core™ Module 301072 (pg 69)
- Requires Insight Core to SubArc Digital Series Adapter Kit (301295).
- ArcAgent™ Auto 301346 (pg 71)
- Contact Tips (pg 123)
- Drive Rolls (pg 123)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.
**ProHeat™ Induction Heating**

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

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

**Induction heating solves many key issues in today’s environment.**

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

**Induction heating applications:**

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

**ProHeat 35 Power Source**

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

**Digital Recorder (optional)**

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

**Heavy-Duty Induction Cooler (optional)**

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

To learn more:

Call **1-844-IND-HEAT (1-844-463-4328)**
or email InductionSales@MillerWelds.com
One ProHeat™ System — Three Basic Induction Heating Configurations

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

Liquid-Cooled Cables  See literature IN/15.0

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

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

Liquid-Cooled Rolling  See literature IN/13.0

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

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

Air-Cooled Blankets  See literature IN/14.0

Preheating applications up to 400 degrees Fahrenheit (204°C).

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

<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 6 in. (152 mm) 12 in. (305 mm) 18 in. (457 mm)</th>
<th>Max Open-Circuit Voltage</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSW-41 (900371)</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 kVA at 50% duty cycle</td>
<td>5,550 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 (901345)</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 kVA at 50% duty cycle</td>
<td>6,750 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>
</tbody>
</table>

*Tongs and tips must be ordered separately — see literature SW/1.0 for full range of tongs and tips.
Plasma Cutters

For more detailed information, visit MillerWelds.com/plasmacutters

*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.

### Product Guide

<table>
<thead>
<tr>
<th>Product</th>
<th>Page</th>
<th>Class</th>
<th>Gouging/Piercing</th>
<th>Rated Output/ Duty Cycle</th>
<th>Rated Cutting Thickness*</th>
<th>Max. Sever Thickness</th>
<th>Special Features</th>
<th>Typical Applications</th>
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<tbody>
<tr>
<td>Spectra**m® 625 X-TREME®</td>
<td>92</td>
<td>Industrial</td>
<td>□</td>
<td>□</td>
<td>40 A at 50%</td>
<td>Mild Steel: 5/8 in.</td>
<td>Stainless Steel: 1/2 in.</td>
<td>Aluminum: 3/8 in.</td>
</tr>
<tr>
<td>Spectra**m® 875 Auto-Line®</td>
<td>92</td>
<td>Heavy industrial</td>
<td>□</td>
<td>□</td>
<td>60 A at 50%</td>
<td>Mild Steel: 7/8 in.</td>
<td>Stainless Steel: 7/8 in.</td>
<td>Aluminum: 5/8 in.</td>
</tr>
</tbody>
</table>

*See note on cut capacity ratings above. **240 V, full KVA plug. Derate cut capacity with less generator power.

For more detailed information, see individual specification sheets.

---

**Product Key**

Class: □ Light industrial □ Industrial □ Heavy industrial Capability: △ Designed for this process □ Capable of this process

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91
Our Spectrum line of plasma cutters provides big cutting power in portable packages and with features like flexible cables and Auto-Refire technology they are better than ever. Step up to Spectrum 625 X-TREME™ or 875/875 Auto-Line™ models to add Ultra-Quick Connect hand-held torches and machine torch capabilities.

### Spectrum Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>375</th>
<th>625 X-TREME</th>
<th>875</th>
<th>875 Auto-Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto-Line (120–240 V)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Auto-Line (208–575 V)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>MVP™ plugs/adapters</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Quick connect flexible work cable with clamp</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Built-in gas/air filter and regulator</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Auto-Refire</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Auto postflow</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Auto air regulation</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>X-CASE™ Machine torch capable</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

### Steel/Stainless/Aluminum Rated Cutting Capacity

<table>
<thead>
<tr>
<th>Steel/Stainless/Aluminum</th>
<th>Spectrum 375 X-TREME</th>
<th>Spectrum 625 X-TREME</th>
<th>Spectrum 875</th>
<th>Spectrum 875 Auto-Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8 in. (9.5 mm)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>5/8 in. (15.9 mm)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>7/8 in. (22.2 mm)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

*Stainless: 1/2 in. (12.7 mm) for Spectrum 625 X-TREME.

Cut capacity ratings are based on traveling speed of approximately 15 inches per minute to achieve a precise cut. This is the key rating that should meet or exceed your typical cutting thickness requirements. Factors that can affect actual cut speeds, thickness capacity and duty cycles are: types of thermally conductive material being cut, available input power, output power settings and operator technique. For highly thermal conductive metals such as aluminum, cutting capacities may be reduced up to 30 percent compared to mild steel.

### Power factor correction (PFC)
Uses less energy by utilizing input power more efficiently and increases productivity by reducing nuisance circuit breaker trips.

### LED indicators for easy troubleshooting

### Non-high-frequency arc starting
does not interfere with or damage controls or computers.

### Postflow cooling circuitry
extends life of the consumable and torch by cooling them with postflow air after trigger is released.

### Auto-Refire™
provides ultimate convenience by automatically controlling the pilot arc when cutting expanded metal or multiple pieces of metal.

### Built-in gas/air filter and regulator
Provides air filtration of airborne particles five microns and larger. Additional filtration and water separation recommended.

### LVC™ line voltage compensation
provides peak performance power under variable input voltage conditions for clean, steady cuts.

### Wind Tunnel Technology™
prevents abrasive dust and particles from damaging internal components.

### Fan-On-Demand™ cooling system
only operates when needed, reducing the amount of airborne dust/dirt pulled through the unit.

### Quick connect flexible work cable with heavy-duty clamp

### Steel/Stainless/Aluminum Cut Capacity

*Cut capacity ratings are based on traveling speed of approximately 15 inches per minute to achieve a precise cut. This is the key rating that should meet or exceed your typical cutting thickness requirements. Factors that can affect actual cut speeds, thickness capacity and duty cycles are: types of thermally conductive material being cut, available input power, output power settings and operator technique. For highly thermal conductive metals such as aluminum, cutting capacities may be reduced up to 30 percent compared to mild steel.
### 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 X-TREME 120–240 V, 50/60 Hz</td>
<td>Single-phase</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>Spectrum 625 X-TREME 120–240 V, 60 Hz</td>
<td>Single-phase</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) 20 ft. 23 lb. (10.5 kg) 25 ft. 24 lb. (10.7 kg)</td>
</tr>
<tr>
<td>Spectrum 875 208/230 V, 50/60 Hz</td>
<td>Single-phase</td>
<td>208 V: 60 A at 140 VDC, 40% duty cycle 230 V: 60 A at 140 VDC, 50% duty cycle</td>
<td>208 V: 47</td>
<td>9.9</td>
<td>9.8</td>
<td>6.75 cfm (191 L/min.) at 90 psi (621 kPa)</td>
<td>H: 13.5 in. (343 mm) W: 8.75 in. (222 mm) D: 18.5 in. (470 mm)</td>
<td>20 ft. 49 lb. (22.2 kg) 50 ft. 58 lb. (26.3 kg)</td>
</tr>
<tr>
<td>Spectrum 875 Auto-Line 208–575 V, 50/60 Hz</td>
<td>Three-phase</td>
<td>208 V: 60 A at 140 VDC, 40% duty cycle 230–380 V: 60 A at 140 VDC, 50% duty cycle 380–575 V: 50 A at 140 VDC, 100% duty cycle</td>
<td>208 V: 27.5</td>
<td>9.9</td>
<td>9.4</td>
<td>20 ft. 54 lb. (24.5 kg) 25 ft. 56 lb. (25.4 kg) 50 ft. 63 lb. (28.6 kg)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spectrum 875 shown.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**Plasma Cutters**

**Light Industrial**

- Spectrum 625 X-TREME
- Spectrum 875 Auto-Line

**Industrial**

- 375/625 models
- Spectrum 875

**Processes**

- Air plasma cutting
- Air plasma gouging (625/875 models)

**375 X-TREME package comes complete with**

- XT30 hand-held torch with 12 ft. (3.7 m) cable
- Heavy-duty work clamp with 12 ft. (3.7 m) flexible cable
- 10 ft. (3 m) power cord with MVP 5-15P (120 V, 15 A) and 6-50P (240 V, 50 A) plugs
- X-CASE for protection and storage
- Shoulder strap
- Consumables box with two electrodes, two tips, deflector and air fitting

**625 X-TREME package comes complete with**

- XT40M hand-held torch with 12 ft. (3.7 m) or 20 ft. (6.1 m) cable
- XT40M long body machine torch with 25 ft. (7.6 m) cable
- Heavy-duty work clamp and flexible cable with quick connect
- 12 ft. (3.7 m) power cord with 240 V, L6-30P twist lock plug
- MVP adapters with 5-15P (120 V, 15 A) and 6-50P (240 V, 50 A) plugs
- X-CASE for protection and storage
- Shoulder strap
- Consumables box with two electrodes, two 40 A tips and one 30 A tip, 30 A drag shield, deflector and air fitting
- Machine torch package includes corresponding automation kit

**875 and 875 Auto-Line packages come complete with**

- 10 ft. (3 m) power cord
- Extra consumables
- Machine torch packages include corresponding automation kit

**Most popular accessories**

- Automation Kits (pg 122)
- Cables and Cable Covers (pg 122)
- Cutting Guides (pg 122)
- Filters (pg 122)
- Plugs and Cords (pg 122)
- Protective Covers/Cases (pg 122)
- Torches (pg 122)
- Torch Consumables (pg 122)
- Visit MillerWelds.com or your distributor for other Miller® options and accessories.
Spectrum® Automation-Ready Machines

See literature PC/9.6 (625 X-TREME) or PC/9.8 (875 models)

Machine torch capable. 625 X-TREME and both 875 models can be ordered with a long body machine torch (see page 92) or can be converted to use a machine torch with optional automation kits (at right).

XT40M (for 625 X-TREME) and XT60M (for 875 models) machine torches. Short body and long body machine torches can be ordered separately (see page 122). Only long body machine torches are available in packages (see page 92). XT60M is also available in 25- or 50-foot cable lengths.

Automated kits

- Spectrum 625 X-TREME Automation Kit 301156 (pg 122)
  Note: Requires a Spectrum 625 X-TREME with Ultra-Quick Connect™ feature for unit to be converted for use with long or short body machine torches.

- Spectrum 875 Auto-Line Automation Kit 301157 (pg 122)
  Includes remote pendant control for manual on/off.

Spectrum 625 X-TREME™ machine torch package (907579002) shown.
Spectrum 875 machine torch package (without remote pendant control) is also available.

Note: Machine torch packages shown include long body torches.

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A feeling of pride. The exhilaration of making metal that’s memorable. Frank Pagano, winner of the #whyiweldcontest, represents the heart and soul of what it means to weld — on and off the job. Together, we build inspiration.

Visit MillerWelds.com/webuild to see how people like you have joined Miller in celebrating how WE BUILD together.
Miller offers an extensive line of quality regulators, cutting torches, tips and a variety of accessories for your oxy-fuel cutting and welding requirements.

Regulators

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 98 for optional Hard Hat™ regulator guards designed to help prevent broken gauges.

Heavy-duty single-stage station regulators
Our Series 46™ brass line regulators are rugged, accurate and corrosion-resistant. Station regulators are used to connect pipeline gas delivery systems to the welding stations. Because the pipeline pressure is regulated upstream, station regulators only require a single delivery pressure gauge. Covered by a three-year warranty.

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>
</thead>
<tbody>
<tr>
<td>Heavy-Duty Series 40 Single-Stage Pressure Regulators</td>
<td>40-175-540</td>
<td>Single-stage</td>
<td>Oxygen</td>
<td>175 psig (12 bar)</td>
<td>3,000 psig (207 bar)</td>
<td>9/16-18 RH</td>
</tr>
<tr>
<td></td>
<td>40-275-540</td>
<td>Single-stage</td>
<td>Oxygen</td>
<td>275 psig (19 bar)</td>
<td>3,000 psig (207 bar)</td>
<td>9/16-18 RH</td>
</tr>
<tr>
<td></td>
<td>40-15-510</td>
<td>Single-stage</td>
<td>Acetylene</td>
<td>15 psig (1 bar)</td>
<td>400 psig (28 bar)</td>
<td>9/16-18 LH</td>
</tr>
<tr>
<td></td>
<td>40-15-300</td>
<td>Single-stage</td>
<td>Acetylene</td>
<td>15 psig (1 bar)</td>
<td>400 psig (28 bar)</td>
<td>9/16-18 LH</td>
</tr>
<tr>
<td></td>
<td>40-50-510</td>
<td>Single-stage</td>
<td>LP gas</td>
<td>50 psig (3 bar)</td>
<td>400 psig (28 bar)</td>
<td>9/16-18 LH</td>
</tr>
<tr>
<td></td>
<td>40-275-580</td>
<td>Single-stage</td>
<td>Inert gas</td>
<td>275 psig (19 bar)</td>
<td>3,000 psig (207 bar)</td>
<td>5/8&quot;-18 RH internal</td>
</tr>
<tr>
<td>Medium-Duty Series 30 Single-Stage Pressure Regulators</td>
<td>30-100-540</td>
<td>Single-stage</td>
<td>Oxygen</td>
<td>100 psig (7 bar)</td>
<td>3,000 psig (207 bar)</td>
<td>9/16-18 RH</td>
</tr>
<tr>
<td></td>
<td>30-20-540</td>
<td>Single-stage</td>
<td>Oxygen</td>
<td>20 psig (1.4 bar)</td>
<td>3,000 psig (207 bar)</td>
<td>9/16-18 RH</td>
</tr>
<tr>
<td></td>
<td>30-15-510</td>
<td>Single-stage</td>
<td>Acetylene</td>
<td>15 psig (1 bar)</td>
<td>400 psig (28 bar)</td>
<td>9/16-18 LH</td>
</tr>
<tr>
<td></td>
<td>30-15-300</td>
<td>Single-stage</td>
<td>Acetylene</td>
<td>15 psig (1 bar)</td>
<td>400 psig (28 bar)</td>
<td>9/16-18 LH</td>
</tr>
<tr>
<td></td>
<td>30-15-520</td>
<td>Single-stage</td>
<td>Acetylene</td>
<td>15 psig (1 bar)</td>
<td>400 psig (28 bar)</td>
<td>9/16-18 LH</td>
</tr>
<tr>
<td></td>
<td>30-15-200</td>
<td>Single-stage</td>
<td>Acetylene</td>
<td>15 psig (1 bar)</td>
<td>400 psig (28 bar)</td>
<td>9/16-18 LH</td>
</tr>
<tr>
<td></td>
<td>30-50-510</td>
<td>Single-stage</td>
<td>LP gas</td>
<td>50 psig (3 bar)</td>
<td>400 psig (28 bar)</td>
<td>9/16-18 LH</td>
</tr>
<tr>
<td></td>
<td>30-150-580</td>
<td>Single-stage</td>
<td>Inert gas</td>
<td>150 psig (10 bar)</td>
<td>3,000 psig (207 bar)</td>
<td>5/8&quot;-18 RH internal</td>
</tr>
<tr>
<td></td>
<td>30-150-320</td>
<td>Single-stage</td>
<td>CO2 gas</td>
<td>150 psig (10 bar)</td>
<td>3,000 psig (207 bar)</td>
<td>5/8&quot;-18 RH internal</td>
</tr>
<tr>
<td></td>
<td>30-100-350</td>
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<td>Hydrogen/methane</td>
<td>100 psig (7 bar)</td>
<td>3,000 psig (207 bar)</td>
<td>9/16-18 LH</td>
</tr>
<tr>
<td>Heavy-Duty Series 46 Station Regulators</td>
<td>46-175</td>
<td>Single-stage</td>
<td>Oxygen</td>
<td>175 psig (12 bar)</td>
<td>200 psig (14 bar)</td>
<td>9/16-18 RH &quot;B&quot;</td>
</tr>
<tr>
<td></td>
<td>46-15</td>
<td>Single-stage</td>
<td>Acetylene</td>
<td>15 psig (1 bar)</td>
<td>200 psig (14 bar)</td>
<td>9/16-18 LH &quot;B&quot;</td>
</tr>
<tr>
<td></td>
<td>46-50</td>
<td>Single-stage</td>
<td>LP gas</td>
<td>50 psig (3 bar)</td>
<td>200 psig (14 bar)</td>
<td>9/16-18 LH &quot;B&quot;</td>
</tr>
<tr>
<td>Series 30 Two-Stage Regulators</td>
<td>35-125-540</td>
<td>Two-stage</td>
<td>Oxygen</td>
<td>125 psig (9 bar)</td>
<td>3,000 psig (207 bar)</td>
<td>9/16-18 RH &quot;B&quot;</td>
</tr>
<tr>
<td></td>
<td>35-15-510</td>
<td>Two-stage</td>
<td>Acetylene</td>
<td>15 psig (1 bar)</td>
<td>400 psig (28 bar)</td>
<td>9/16-18 LH &quot;B&quot;</td>
</tr>
<tr>
<td></td>
<td>35-50-580</td>
<td>Two-stage</td>
<td>Inert gas</td>
<td>50 psig (3 bar)</td>
<td>3,000 psig (207 bar)</td>
<td>5/8&quot;-18 RH internal</td>
</tr>
</tbody>
</table>
Heavy-duty flowmeter regulators and flowmeters

Our 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.

Economy flowmeter regulators and flowmeters

Our economy flowmeter regulators and flowmeters combine exceptional value and a compact design with precise shielding gas regulation for MIG and TIG welding applications and more. Covered by a three-year warranty.

Single-stage flow gauge regulators

Series 30™ single-stage flow gauge regulators are compact and feature a forged brass body and a self-resetting pressure relief valve. They include a Sure Seat™ protective inlet filter and a durable neoprene-composite diaphragm. Covered by a three-year warranty.

<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>Heavy-Duty</td>
<td></td>
<td>Argon/CO₂</td>
<td>10-80 scfh (5-38 lpm)</td>
<td>3,000 psig (207 bar)</td>
<td>5/8”-18 RH internal</td>
<td>CGA 580</td>
</tr>
<tr>
<td>Flowmeter Regulators</td>
<td></td>
<td>Argon</td>
<td>10-80 scfh (5-38 lpm)</td>
<td>3,000 psig (207 bar)</td>
<td>5/8”-18 RH internal</td>
<td>CGA 580</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CO₂</td>
<td>10-80 scfh (5-38 lpm)</td>
<td>3,000 psig (207 bar)</td>
<td>5/8”-18 RH internal</td>
<td>CGA 580</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Argon/CO₂</td>
<td>10-55 scfh (5-26 lpm)</td>
<td>3,000 psig (207 bar)</td>
<td>5/8”-18 RH internal</td>
<td>CGA 580</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Helium</td>
<td>10-160 scfh (5-76 lpm)</td>
<td>3,000 psig (207 bar)</td>
<td>5/8”-18 RH internal</td>
<td>CGA 580</td>
</tr>
<tr>
<td></td>
<td>16530</td>
<td>Argon, CO₂</td>
<td>10-80 scfh (5-38 lpm)</td>
<td>80 psig (6 bar) recommended</td>
<td>5/8”-18 RH internal</td>
<td>1/4” NPT female</td>
</tr>
<tr>
<td></td>
<td>16531</td>
<td>Argon, CO₂, helium</td>
<td>Depends on gas</td>
<td>30 psig (2 bar) recommended</td>
<td>5/8”-18 RH internal</td>
<td>1/4” NPT female</td>
</tr>
<tr>
<td>Economy</td>
<td></td>
<td>Argon, CO₂</td>
<td>0-60 scfh (0-28 lpm)</td>
<td>3,000 psig (207 bar)</td>
<td>5/8”-18 RH internal</td>
<td>CGA 580</td>
</tr>
<tr>
<td>Flowmeter Regulators</td>
<td></td>
<td>Argon/CO₂</td>
<td>0-50 scfh (0-24 lpm)</td>
<td>3,000 psig (207 bar)</td>
<td>5/8”-18 RH internal</td>
<td>CGA 580</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Helium</td>
<td>0-160 scfh (0-76 lpm)</td>
<td>3,000 psig (207 bar)</td>
<td>5/8”-18 RH internal</td>
<td>CGA 580</td>
</tr>
<tr>
<td></td>
<td>H2051B-580</td>
<td>Argon, CO₂, helium</td>
<td>Depends on gas</td>
<td>50 psig (3 bar) recommended</td>
<td>5/8”-18 RH internal</td>
<td>1/4” NPT male</td>
</tr>
<tr>
<td></td>
<td>H2051B-580H</td>
<td>Single-stage</td>
<td>Depends on gas</td>
<td>50 psig (3 bar) recommended</td>
<td>5/8”-18 RH internal</td>
<td>1/4” NPT female</td>
</tr>
<tr>
<td></td>
<td>H2230A</td>
<td>Argon, helium, CO₂</td>
<td>Depends on gas</td>
<td>50 psig (3 bar) recommended</td>
<td>5/8”-18 RH internal</td>
<td>1/4” NPT male</td>
</tr>
<tr>
<td></td>
<td>H2231A</td>
<td>Multi-scale</td>
<td>Depends on gas</td>
<td>50 psig (3 bar) recommended</td>
<td>5/8”-18 RH internal</td>
<td>1/4” NPT male</td>
</tr>
<tr>
<td>Heavy-Duty Series 30</td>
<td></td>
<td>Argon</td>
<td>0-50 scfh (0-24 lpm)</td>
<td>3,000 psig (207 bar)</td>
<td>5/8”-18 RH internal</td>
<td>CGA 580</td>
</tr>
<tr>
<td>Flow Gauge Regulators</td>
<td></td>
<td>Argon/CO₂</td>
<td>0-50 scfh (0-24 lpm)</td>
<td>3,000 psig (207 bar)</td>
<td>5/8”-18 RH internal</td>
<td>CGA 580</td>
</tr>
<tr>
<td></td>
<td>31-50-580</td>
<td>CO₂</td>
<td>0-50 scfh (0-24 lpm)</td>
<td>3,000 psig (207 bar)</td>
<td>5/8”-18 RH internal</td>
<td>CGA 580</td>
</tr>
<tr>
<td></td>
<td>31-50-580-6</td>
<td>CO₂</td>
<td>0-50 scfh (0-24 lpm)</td>
<td>3,000 psig (207 bar)</td>
<td>5/8”-18 RH internal</td>
<td>CGA 580</td>
</tr>
<tr>
<td></td>
<td>31-50-320</td>
<td>CO₂</td>
<td>0-50 scfh (0-24 lpm)</td>
<td>3,000 psig (207 bar)</td>
<td>5/8”-18 RH internal</td>
<td>CGA 580</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, 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

<table>
<thead>
<tr>
<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>
</thead>
<tbody>
<tr>
<td>30-450-580</td>
<td>Nitrogen</td>
<td>450 psig (31 bar)</td>
<td>3,000 psig (207 bar)</td>
<td>7/16&quot;-20 external flair fitting</td>
<td>CGA 580</td>
</tr>
</tbody>
</table>

**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

**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

**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

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Outlet Pressure</th>
<th>Max. Inlet Pressure</th>
<th>Outlet Connection</th>
<th>Inlet Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>16391</td>
<td>0-500 psig</td>
<td>150 psig (10 bar)</td>
<td>6 psig (0.4 bar)</td>
<td>CGA 580</td>
</tr>
<tr>
<td>16347-3</td>
<td>0-6,000 psig</td>
<td>8 psig (0.6 bar)</td>
<td>3,000 psig (207 bar)</td>
<td>1/2&quot; FNPT</td>
</tr>
</tbody>
</table>

Note: Operation temperature: -40° to +180° Fahrenheit. Operation voltage (model 16347-3): 5 amps at 12/24 volts DC or 125 volts AC. 3 amps at 250 volts. Pressure switch setting: Adjustable from 70–300 psig (ships preset at 250 psig), 3/32-inch Allen head screw switch. Switch wiring: Normally open or normally closed (DPDT), three 18-inch flying leads.

Note: Use Series 40™ heavy-duty regulators constructed with a stainless steel diaphragm for high-volume or liquid (cryogenic) cylinder applications.

Most popular accessories

- **Hard Hat** Regulation Guards
  - H8190 For Series 40
  - H195 For Series 30
- **Reverse-Flow Check Valve Set (oxygen and fuel)**
  - H697 Torch mount
  - H698 Regulator mount
- **Flashback Arrestor Set (oxygen and fuel)**
  - H743 Torch mount
  - H753 Regulator mount
- **GASAVER®**
  - WDW100 Propylene/oxygen
  - WDW101 Acetylene/oxygen
  - WDW103 Propane or natural gas (less than 4 psi)
  - WDW104 Propane or natural gas/oxygen (4 psi and above)
  - For repetitive brazing and soldering
  - Hang torch to shut off
  - Pilot light for relighting
  - Eliminates flame readjustment

Visit MillerWelds.com for more information.

**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 other Miller® options and accessories.
**Torches**

**Cutting torches (acetylene, natural gas, LP or 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 20 inches (508 mm) with LP and up to 12 inches (305 mm) with acetylene or propylene

Heavy-duty cutting torches feature solid construction and ease of operation for industries such as construction, fabrication, shipyards and salvage.
- Covered by five-year 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, LP or propylene-based fuels)**

Constructed to last a lifetime for safe performance under rugged conditions.
- Covered by five-year warranty
- Heavy- and medium-duty torches feature a Flo-Trol valve to help prevent the accidental reverse flow of mixed gases and a spring-loaded back-pressure check valve designed to stop the most common cause of cutting valve seat burnout
- Ease-on cutting oxygen valve to reduce slag blowback when piercing
- Thick-wall brass head forgings resist warping and distortion
- Heavy- and medium-duty torches 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, natural gas, LP or propylene-based fuels)**

Superior performance with solid construction.
- Covered by five-year 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 12 inches (305 mm) with acetylene or propylene 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, propylene, LP or natural gas

<table>
<thead>
<tr>
<th>Torches</th>
<th>Stock Number</th>
<th>Head Angle in Degrees</th>
<th>Length in Inches (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Axe Extra Heavy-Duty Cutting Torches</td>
<td>SC925</td>
<td>75</td>
<td>21 (533)</td>
</tr>
<tr>
<td></td>
<td>SC929</td>
<td>90</td>
<td>21 (533)</td>
</tr>
<tr>
<td></td>
<td>SC935</td>
<td>75</td>
<td>36 (914)</td>
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<tr>
<td></td>
<td>SC939</td>
<td>90</td>
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<tr>
<td></td>
<td>SC930</td>
<td>180</td>
<td>36 (914)</td>
</tr>
<tr>
<td></td>
<td>SC945</td>
<td>75</td>
<td>48 (1,219)</td>
</tr>
<tr>
<td></td>
<td>SC949</td>
<td>90</td>
<td>48 (1,219)</td>
</tr>
<tr>
<td></td>
<td>SC940</td>
<td>180</td>
<td>48 (1,219)</td>
</tr>
<tr>
<td></td>
<td>SC965</td>
<td>75</td>
<td>72 (1,829)</td>
</tr>
<tr>
<td></td>
<td>SC969</td>
<td>90</td>
<td>72 (1,829)</td>
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<tr>
<td></td>
<td>SC960</td>
<td>180</td>
<td>72 (1,829)</td>
</tr>
<tr>
<td>Heavy-Duty Cutting Torches</td>
<td>SC175</td>
<td>75</td>
<td>17 (432)</td>
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<tr>
<td></td>
<td>SC179</td>
<td>90</td>
<td>17 (432)</td>
</tr>
<tr>
<td></td>
<td>SC225</td>
<td>75</td>
<td>21 (533)</td>
</tr>
<tr>
<td></td>
<td>SC225S</td>
<td>75</td>
<td>21 (533)</td>
</tr>
<tr>
<td></td>
<td>SC229</td>
<td>90</td>
<td>21 (533)</td>
</tr>
<tr>
<td></td>
<td>SC229S</td>
<td>90</td>
<td>21 (533)</td>
</tr>
<tr>
<td></td>
<td>SC220</td>
<td>180</td>
<td>21 (533)</td>
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<td></td>
<td>SC365</td>
<td>75</td>
<td>36 (914)</td>
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<td></td>
<td>SC369</td>
<td>90</td>
<td>36 (914)</td>
</tr>
<tr>
<td></td>
<td>SC360</td>
<td>180</td>
<td>36 (914)</td>
</tr>
<tr>
<td>Medium-Duty Combination Torches</td>
<td>MC505</td>
<td>75</td>
<td>11.25 (286)</td>
</tr>
<tr>
<td></td>
<td>MC509</td>
<td>90</td>
<td>11.25 (286)</td>
</tr>
<tr>
<td></td>
<td>WH100</td>
<td>Handle</td>
<td>7 (178)</td>
</tr>
<tr>
<td>Standard-Duty Combination Torches</td>
<td>AC309</td>
<td>90</td>
<td>8.5 (216)</td>
</tr>
<tr>
<td></td>
<td>AW1A</td>
<td>Handle</td>
<td>5.75 (146)</td>
</tr>
<tr>
<td>Machine Torches</td>
<td>SC781A</td>
<td>–</td>
<td>15.5 (394)</td>
</tr>
<tr>
<td></td>
<td>SC772A</td>
<td>–</td>
<td>13.75 (349)</td>
</tr>
<tr>
<td></td>
<td>SC770</td>
<td>–</td>
<td>8 (203)</td>
</tr>
</tbody>
</table>

**Most popular accessories**

- Circle Cutter Guide 16229
- Flashback Arrestor Set (oxygen and fuel) H743 Torch mount
  H753 Regulator mount
- Safety Glasses (see page 106 for more styles)
  235661 Blue frame/shade 3
  235657 Blue frame/shade 5
- Safety Gloves (pg 108)

Visit MillerWelds.com or your distributor for other 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 five-year 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
- Both HBA-40510 and HBA-40300 outfits cut up to 1-1/4 inch (32 mm) with tip included, other outfits cut up to 5/8 inch (16 mm)
- All outfits cut up to 8 inches (203 mm) with optional tips

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 five-year 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 five-year warranty has reversible (top or bottom) mounting 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 flashback 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, HBS 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</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 (61)</td>
<td>51</td>
</tr>
<tr>
<td>SC12-4</td>
<td>4 (102)</td>
<td>45</td>
</tr>
<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>
</tbody>
</table>

Propane/Natural Gas Cutting

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Max. Metal Thickness</th>
<th>Cutting Jet Drill Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC50-00</td>
<td>3/16 (5)</td>
<td>68</td>
</tr>
<tr>
<td>SC50-0</td>
<td>3/8 (10)</td>
<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 (61)</td>
<td>51</td>
</tr>
<tr>
<td>SC50-4</td>
<td>4 (102)</td>
<td>45</td>
</tr>
<tr>
<td>SC50-5</td>
<td>8 (203)</td>
<td>41</td>
</tr>
<tr>
<td>SC50-6</td>
<td>12 (305)</td>
<td>32</td>
</tr>
<tr>
<td>SC50-7</td>
<td>14 (354)</td>
<td>28</td>
</tr>
<tr>
<td>SC50-8</td>
<td>18 (457)</td>
<td>17</td>
</tr>
<tr>
<td>SC50-9</td>
<td>20 (508)</td>
<td>3</td>
</tr>
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</table>

Acetylene Gouging

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Max. Metal Thickness</th>
<th>Cutting Jet Drill Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC13-3</td>
<td>3/8 (10) wide, 1/4 (6) deep</td>
<td></td>
</tr>
</tbody>
</table>

Propane/Natural Gas Gouging

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Max. Metal Thickness</th>
<th>Cutting Jet Drill Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC23-3</td>
<td>3/8 (10) wide, 1/4 (6) deep</td>
<td></td>
</tr>
</tbody>
</table>

Acetylene Welding

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Max. Metal Thickness</th>
<th>Cutting Jet Drill Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW201</td>
<td>1/32 in. (0.7 mm)</td>
<td>60</td>
</tr>
<tr>
<td>SW203</td>
<td>5/64 in. (1.9 mm)</td>
<td>45</td>
</tr>
<tr>
<td>SW205</td>
<td>1/8 in. (3 mm)</td>
<td>24</td>
</tr>
<tr>
<td>SW207</td>
<td>3/16 in. (5 mm)</td>
<td>18</td>
</tr>
<tr>
<td>SW209</td>
<td>3/8 in. (10 mm)</td>
<td>18</td>
</tr>
<tr>
<td>SW210</td>
<td>1/2 in. (13 mm)</td>
<td>12</td>
</tr>
</tbody>
</table>

Acetylene Heating

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Max. Metal Thickness</th>
<th>Cutting Jet Drill Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST602</td>
<td>40,000 Btu</td>
<td>40</td>
</tr>
<tr>
<td>ST603</td>
<td>72,000 Btu</td>
<td>72</td>
</tr>
<tr>
<td>ST605</td>
<td>125,000 Btu</td>
<td>125</td>
</tr>
<tr>
<td>ST610</td>
<td>195,000 Btu</td>
<td>195</td>
</tr>
</tbody>
</table>

Visit MillerWelds.com or your distributor for additional tips, options and accessories.

*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, brazing or heating project.
- Medium-duty Series 30™ regulators with three-year warranty
- Medium-duty torches with five-year 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 provides for resistance to flashbacks
- 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 five-year 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 with three-year warranty
- 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 five-year warranty

*Acetylene regulator has CGA 300 inlet fitting.

<table>
<thead>
<tr>
<th>Outfit</th>
<th>Stock Number</th>
<th>Fuel</th>
<th>Cut Tip</th>
<th>Weld Tip</th>
<th>Heat Tip</th>
<th>Description</th>
<th>Typical Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combination</td>
<td>MBA-30510</td>
<td>Acetylene</td>
<td>MC12-0</td>
<td>MW205</td>
<td>MT603</td>
<td>Medium-duty combination torch, medium-duty regulators, 20 ft. (6.1 m) hose,</td>
<td>Fabrication, farm and ranch, pipe, truck and auto,</td>
</tr>
<tr>
<td>Torch</td>
<td>MBA-30300*</td>
<td></td>
<td>MC12-1</td>
<td></td>
<td></td>
<td>lighter, safety glasses, tip cleaner and flashback arrestors</td>
<td>auto, refrigeration, maintenance/repair</td>
</tr>
<tr>
<td>Complete</td>
<td>MBA-30510LP</td>
<td>Propane</td>
<td>MC40-1</td>
<td></td>
<td></td>
<td>Medium-duty combination torch, medium-duty regulation, 20 ft. (6.1 m)</td>
<td></td>
</tr>
<tr>
<td>Outfits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>&quot;T&quot;-grade hose, lighter, safety glasses, tip cleaner and check valves</td>
<td></td>
</tr>
<tr>
<td>Combination</td>
<td>16205</td>
<td>Acetylene</td>
<td>MC12-1</td>
<td>MW203</td>
<td>MT603</td>
<td>Medium-duty combination torch and flashback arrestors</td>
<td>Fabrication, farm and ranch, pipe, truck and auto,</td>
</tr>
<tr>
<td>Torch and Tip</td>
<td>16281</td>
<td></td>
<td>MC12-0, MC12-1</td>
<td></td>
<td></td>
<td></td>
<td>auto, refrigeration, maintenance/repair</td>
</tr>
<tr>
<td>Kits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toughcut</td>
<td>MB55A-510</td>
<td>Acetylene</td>
<td>MC12-1</td>
<td>MW205</td>
<td>MT603</td>
<td>Medium-duty combination torch, medium-duty regulator, 20 ft. (6.1 m) hose,</td>
<td>Fabrication, farm and ranch, pipe, hobby, auto,</td>
</tr>
<tr>
<td>Economy</td>
<td>MB55A-300*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>lighter, safety glasses and check valves</td>
<td>auto, refrigeration, maintenance/repair</td>
</tr>
<tr>
<td>Combination</td>
<td>MB54A-510</td>
<td>Acetylene</td>
<td>MC12-1</td>
<td>MW205</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Torch Outfits</td>
<td>MB54A-300*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MB54A-510LP</td>
<td>Propane</td>
<td>MC40-1</td>
<td></td>
<td></td>
<td></td>
<td>Medium-duty combination torch, medium-duty regulator, 20 ft. (6.1 m) &quot;T&quot;-grade</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>grade hose, lighter, safety glasses and check valves</td>
<td></td>
</tr>
<tr>
<td>Combination</td>
<td>TL-500</td>
<td>Acetylene</td>
<td>MC12-0</td>
<td>MW203</td>
<td></td>
<td>Medium-duty (TL500/TL550) or standard-duty (VT-4T) combination torch,</td>
<td>Farm and ranch, hobby, DIY, auto, refrigeration,</td>
</tr>
<tr>
<td>Torch Portable</td>
<td>TL-550</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>medium-duty regulator, 12.5 ft. (3.8 m) hose, carrier, lighter, safety</td>
<td>maintenance/repair</td>
</tr>
<tr>
<td>Outfits</td>
<td>VT-4T</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>glasses, check valves and cylinders (cylinders NOT included with TL-550)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acetylene</td>
<td>MC12-00</td>
<td>LT103, LT104, LT106</td>
<td>13716</td>
<td>Medium-duty (TL500/TL550) or standard-duty (VT-4T) combination torch,</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>medium-duty regulator, 12.5 ft. (3.8 m) hose, carrier, lighter, safety</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>glasses, check valves and cylinders (cylinders NOT included with TL-550)</td>
<td></td>
</tr>
</tbody>
</table>
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</td>
</tr>
<tr>
<td></td>
<td>CO₂</td>
<td>100-0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Argon/oxygen</td>
</tr>
<tr>
<td></td>
<td>Helium</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CO₂/oxygen</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</td>
</tr>
<tr>
<td></td>
<td>Helium</td>
<td>100-0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Argon/Oxygen</td>
</tr>
<tr>
<td></td>
<td>CO₂</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CO₂/Oxygen</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/hydrogen</td>
</tr>
<tr>
<td></td>
<td>Hydrogen</td>
<td>50-0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Argon/oxygen</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/helium</td>
</tr>
<tr>
<td></td>
<td>Oxygen</td>
<td>20-0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Argon/helium</td>
</tr>
</tbody>
</table>

Registering your new welder is quick and easy

Complete registration as soon as possible. Registering your new Miller® equipment may help with any future insurance claims or in the event we need to contact you regarding changes or upgrades. Whether you’re a DIY welder or have purchased Miller equipment on behalf of the company for which you work… all Miller equipment should be registered so we can provide you with the highest level of service.

Register now at MillerWelds.com
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).

**Fully loaded 60SX model (951413) shown. See below for other models.**

---

**F-Series ArcStation™**

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 (300850) to make this the ultimate portable workbench.

---

**S-Series accessories**

Miller ArcStation accessories allow you to get the most out of your ArcStation.

- **X-clamps**
  - 300613  6-inch
  - 300850  5-inch
- **Side Shelf** 300680
- **Tool Chest** with ball-bearing slides 300610
- **Interior Shelf** 300679
- **Quick-remove Vise** 300611 5-inch vise and mount 300612 Mount only
- **Weld Curtain** 300685 30S Series 300686 60S Series
- **Casters** 300849

**Convenience Kit** 300614
Includes the following:

- **Gun holder**
- **Tool holder**
- **Clamp bar**

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

---

**Model/Stock Number**

<table>
<thead>
<tr>
<th>Steel Top</th>
<th>Load Capacity</th>
<th>Dimensions</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>30FX (300837)</td>
<td>500 lb. (227 kg)</td>
<td>35 x 29 x 35 in. (889 x 737 x 889 mm)</td>
<td>74 lb. (34 kg)</td>
</tr>
<tr>
<td>30S (951167)</td>
<td>1,000 lb. (454 kg)</td>
<td>35 x 29 x 29 in. (889 x 737 x 737 mm)</td>
<td>123 lb. (56 kg)</td>
</tr>
<tr>
<td>30SX (951168)</td>
<td>1,000 lb. (454 kg)</td>
<td>35 x 29 x 29 in. (889 x 737 x 737 mm)</td>
<td>177 lb. (80 kg)</td>
</tr>
<tr>
<td>60S (951169)</td>
<td>1,000 lb. (454 kg)</td>
<td>35 x 58 x 29 in. (889 x 1,473 x 737 mm)</td>
<td>230 lb. (104 kg)</td>
</tr>
<tr>
<td>60SX (951170)</td>
<td>1,000 lb. (454 kg)</td>
<td>35 x 58 x 29 in. (889 x 1,473 x 737 mm)</td>
<td>318 lb. (144 kg)</td>
</tr>
</tbody>
</table>

---

Count on Miller to design the perfect workbench to make welding projects faster and easier. The ArcStation is the first-ever, all-in-one workstation designed for welding and metalworking. It’s versatile, affordable and just the right height to work comfortably. You can organize equipment, tools, and raw materials into one convenient workspace. And you can also customize your workbench with a wide range of handy accessories.
Welding Helmets

<table>
<thead>
<tr>
<th>T94™</th>
<th>T94</th>
<th>Digital Infinity™</th>
<th>Digital Elite™</th>
<th>Digital Performance™</th>
<th>Classic Series VSi™</th>
<th>Classic Series VS</th>
<th>Classic Series FS#10 Flip-Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viewing Area</td>
<td>9.0 sq. in.</td>
<td>9.0 sq. in.</td>
<td>13.4 sq. in.</td>
<td>9.2 sq. in.</td>
<td>7.2 sq. in.</td>
<td>5.9 sq. in.</td>
<td>5.2 sq. in.</td>
</tr>
<tr>
<td>Auto-Darkening</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>ClearLight™ Lens Technology</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Integrated Grind Shield</td>
<td>Yes</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Auto-on</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Sensors</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>TIG Rating</td>
<td>3 amps</td>
<td>3 amps</td>
<td>5 amps/below</td>
<td>5 amps/below</td>
<td>5 amps</td>
<td>5 amps/below</td>
<td>20 amps</td>
</tr>
<tr>
<td>Switching Speed</td>
<td>1/20,000</td>
<td>1/20,000</td>
<td>1/20,000</td>
<td>1/10,000</td>
<td>1/20,000</td>
<td>1/10,000</td>
<td>1/3,600</td>
</tr>
<tr>
<td>Digital Controls</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Premium Headgear</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>InfoTrack™</td>
<td>Yes - 2.0</td>
<td>Yes - 2.0</td>
<td>Yes - 1.0</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Weight</td>
<td>26 oz. (737 g)</td>
<td>21 oz. (599 g)</td>
<td>23 oz. (652 g)</td>
<td>18 oz. (510 g)</td>
<td>17 oz. (482 g)</td>
<td>24 oz. (673 g)</td>
<td>16 oz. (454 g)</td>
</tr>
<tr>
<td>Warranty</td>
<td>3 years</td>
<td>3 years</td>
<td>3 years</td>
<td>3 years</td>
<td>3 years</td>
<td>2 years</td>
<td>2 years</td>
</tr>
</tbody>
</table>

See chart above for feature availability.

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

ClearLight™ Lens Technology optimizes contrast and clarity in welding and light states. 1/11/12 optical clarity rating allows for a lighter light state while not welding — keeping the helmet down — maximizing safety and productivity.

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

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

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

T94™ Series

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

ClearLight™ Lens Technology optimizes contrast and clarity in welding and light states. Silver finish reflects ambient heat, keeping the user cooler.

InfoTrack™ 2.0 monitors arc time and arc count.

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

Best-in-class comfort for all-day wearability

- **4% LIGHTER** for reduced fatigue
- **14% BETTER BALANCE** for elevated comfort
- **17% LESS TORQUE** for reduced neck strain

Statistics above compare T94i to previous model.
Digital Infinity™ Series  Industry's largest viewing area maximizes visibility.  See literature AY/42.0

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

Digital Performance™ Series  See literature AY/44.0
Lightweight helmet with superior headgear for increased efficiency.

MP-10™ Helmet
Best-in-class traditional passive helmet.

Classical Series  Helmets for the value-minded welder.  See literature AY/45.0
Helmet Accessories

Gen II Headgear 256174
- Extensive adjustability settings and a pivoting top for better fit and comfort

Gen III Headgear 271325
- Oversized comfort cushion provides extensive adjustability, settings, and enhanced support

Gen IV Headgear 260486
- Ergonomic, four-point flexible design provides a secure fit, while avoiding major pressure points within the head — for the T94™ Series helmets

Slotted Hard Hat Adapter 259637
- Compatible with most slotted hard hats. Helmet and hat not included

Hard Hat Adapter 213110 XL and XLI 222003 Elite, Performance, Classic, MP-10, Titanium, Pro-Hobby, XLx
- Compatible with most Fibre Metal and MSA hats. Other brands may fit depending on size and shape. Helmet and hat not included

2x4 Auto-Darkening Lens
- Shade 5–8 for use with MIG, TIG, stick, and gas welding and cutting
- Ideal for industrial or construction environments — can be worn under a hard hat with a Miller® Half Mask Respirator and select safety glasses
- Shades 5–13 for use with MIG, TIG, stick, and gas welding and cutting
- X-Mode™ electromagnetically senses the weld to eliminate sunlight interference and continuously detects the arc even if sensors are blocked
- Wide, singular lens provides unmatched auto-darkening range of visibility

Helmet Bib 252882
- Flame-resistant WeldX™ material provides additional neck coverage for the T94™ Series helmets

Helmet Bib 279078
- Flame-resistant material provides additional neck coverage for the T94™ Series helmets

Helmet Cape 279080
- Flame-resistant material provides additional head and back-of-the-neck coverage for the T94™ Series helmets

Helmet Hook 251018
- Holds welding helmets, grinding shields or other helmets with a headgear
- Silicone strap secures the helmet in place

Jobsite Tool Bag 228028
- Over twenty separate pockets
- Opening of 12 x 18.5 inches (305 x 470 mm)

CoolBelt® Belt-Mounted Cooling System 245230
- Up to 17 degrees Fahrenheit cooler under the hood
- Provides all-day comfort through maximized airflow power
- Multiple airflow speeds eliminate stagnant air and reduce fogging
- Lightweight design extends wearability
- Compatible with Infinity, Elite, Performance, Classic and MP-10 Series helmets

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
- ANSI Z87.1+ compliant
- I/O (indoor/outdoor) lenses feature light shading with a mirrored finish
- Smoke lenses provide shade protection in outdoor applications
- Shade 3 and 5 green IR lenses are for cutting, brazing or soldering

Safety and Cutting Glasses Chart

<table>
<thead>
<tr>
<th>Frame Style/Color</th>
<th>Clear</th>
<th>I/O</th>
<th>Smoke</th>
<th>Shade 3</th>
<th>Shade 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classic</td>
<td>272187</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Classic with Strap</td>
<td>272188</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Spark*</td>
<td>272190</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Spatter* - Black</td>
<td>272191</td>
<td>—</td>
<td>272195</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Spatter* - White</td>
<td>272198</td>
<td>—</td>
<td>272199</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Slag* - Black</td>
<td>272201</td>
<td>272202</td>
<td>272203</td>
<td>272204</td>
<td>272205</td>
</tr>
<tr>
<td>Slag* - White</td>
<td>272206</td>
<td>272207</td>
<td>272208</td>
<td>272196</td>
<td>272209</td>
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<tr>
<td>Gen I - Black</td>
<td>238979</td>
<td>—</td>
<td>235656</td>
<td>235662</td>
<td>235658</td>
</tr>
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Welding Apparel

See literature AY/47.5

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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</thead>
<tbody>
<tr>
<td>Grain Leather Jacket</td>
<td>—</td>
<td>—</td>
<td>231090</td>
<td>231091</td>
<td>231092</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Split Leather Jacket</td>
<td>273212</td>
<td>273213</td>
<td>273214</td>
<td>273215</td>
<td>273216</td>
<td>273217</td>
<td>273218</td>
<td>273219</td>
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<tr>
<td>WeldX® Jacket</td>
<td>247114</td>
<td>247115</td>
<td>247116</td>
<td>247117</td>
<td>247118</td>
<td>247119</td>
<td>247120</td>
<td>247121</td>
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<tr>
<td>Combo Jacket</td>
<td>—</td>
<td>—</td>
<td>231082</td>
<td>231083</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
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<tr>
<td>Indura Cloth Jacket</td>
<td>—</td>
<td>258097</td>
<td>258098</td>
<td>258099</td>
<td>258100</td>
<td>—</td>
<td>—</td>
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<tr>
<td>Classic Cloth Jacket</td>
<td>244749</td>
<td>244750</td>
<td>244751</td>
<td>244752</td>
<td>244754</td>
<td>244755</td>
<td>244756</td>
<td>244758</td>
</tr>
</tbody>
</table>

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

Split Leather Jacket
(See size chart)
- Premium pig split leather
- Extended rear tail for additional protection
- Expandable leather strategically placed for optimal mobility
- Mesh lining
- Sewn entirely with Kevlar® thread, adding structural durability at each seam

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

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

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

Classic Cloth Jacket
(See size chart)
- 9-ounce flame-resistant navy cotton
- Pre-shrunk fabric
- Fold-in sleeve snaps
- Finished hems and reinforced stitching

Leather Bib/Apron 231125
- Attaches to combo jacket with snaps across the chest as a bib or along the bottom as an apron

Combo Sleeves 231096
- Indura® flame-resistant cotton/top grain leather
- 21-inch length

Classic Cloth Sleeves 247148
- 18-inch length
- Fold-in sleeve snaps
- One-handed cinch closure

Classic Cloth Apron 247149
- 35-inch length with accessible front pocket
- Adjustable drawstring ensures a good fit
Welding Gloves

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

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

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

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

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

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

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

Classic — traditional design for the value-minded welder.

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

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

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

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

Welding Glove Size Chart

<table>
<thead>
<tr>
<th>Performance Gloves</th>
<th>Small</th>
<th>Medium</th>
<th>Large</th>
<th>X-Large</th>
<th>2X-Large</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy-Duty MIG/Stick</td>
<td>–</td>
<td>–</td>
<td>263339</td>
<td>263340</td>
<td>269615*</td>
</tr>
<tr>
<td>MIG (Lined)</td>
<td>–</td>
<td>263332</td>
<td>263333</td>
<td>263334</td>
<td>269618*</td>
</tr>
<tr>
<td>TIG</td>
<td>263346</td>
<td>263347</td>
<td>263348</td>
<td>263349</td>
<td>–</td>
</tr>
<tr>
<td>TIG/Multitask</td>
<td>263352</td>
<td>263353</td>
<td>263354</td>
<td>263355</td>
<td>–</td>
</tr>
<tr>
<td>Work</td>
<td>–</td>
<td>266041*</td>
<td>266042*</td>
<td>266043*</td>
<td>–</td>
</tr>
<tr>
<td>Metalworker</td>
<td>–</td>
<td>251066</td>
<td>251067</td>
<td>251068</td>
<td>–</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Classic Gloves</th>
<th>Medium</th>
<th>Large</th>
<th>X-Large</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy-Duty MIG/Stick</td>
<td>–</td>
<td>271877*</td>
<td>271887*</td>
</tr>
<tr>
<td>MIG (Pigskin)</td>
<td>–</td>
<td>271888*</td>
<td>271889*</td>
</tr>
<tr>
<td>MIG (Cowhide)</td>
<td>–</td>
<td>271890*</td>
<td>271891*</td>
</tr>
<tr>
<td>TIG</td>
<td>271892*</td>
<td>271893*</td>
<td>271894*</td>
</tr>
</tbody>
</table>

*All asterisked stock numbers are sold as one pair. All others are sold as six packs (six pairs).
Respiratory

PAPR Powered Air-Purifying Respirator  See literature AY/4.1

Available packages:
- With T94i-R™ helmet (integrated clear grind shield) 264575 With auto-darkening lens assembly
- With T94-R™ helmet (external grind control) 264573 With auto-darkening lens assembly

With Titanium 9400i™ helmet (integrated clear grind shield) 264577 With auto-darkening lens assembly
With Titanium 9400™ helmet (external grind control) 264579 With auto-darkening lens assembly

With hard hat and Titanium 9400i™ helmet (integrated clear grind shield) 266159 With auto-darkening lens assembly
With hard hat and Titanium 9400™ helmet (external grind control) 259385 With auto-darkening lens assembly

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

Designed for comfort
- Well-balanced design reduces torque on neck, increasing all-day wear.
- Patent-pending Dualtec™ manifold system optimizes helmet balance and sound, while six-point air distribution system maximizes cooling through targeted air placement.
- Ergonomic headgear provides secure fit without the need for over-tightening.
- Lightweight low-profile blower assembly with integrated shoulder straps reduces lower back strain and fatigue.

Superior visibility
- ClearLight™ Lens Technology optimizes contrast and clarity in welding and light states, easing eye strain.
- Shade 5.0 side windows and oversized clear grind shield maximize downward and peripheral visibility, improving sense of surroundings.
- Half-shade lens adjustability provides fine shade adjustment for optimized comfort and vision.

Improved productivity
- Enhanced comfort, cooling and visibility maximize all-day wearability — increasing productivity, safety and regulatory compliance.
- Low-profile breathing-tube attachment eases on/off process while flexible tube material eliminates breathing tube snags in work cell.
- Two lightweight lithium-ion batteries included with each system eliminate downtime.

LPR-100™ Half Mask Respirator  See literature AY/4.5
- ML00894 Respirator with P100 filters (small/medium)
- ML00895 Respirator with P100 filters (medium/large)
- ML00994 Respirator with P100 nuisance level OV relief filters (small/medium)
- ML00995 Respirator with P100 nuisance level OV relief filters (medium/large)

Filters and accessories
- SA00818 P100 filters (one pair)
- SA00819 P100 nuisance level OV relief filters (one pair)
- 261086 Quantitative fit-test kit adapter

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

N95 Disposable Mask Respirator  See literature AY/4.8
- 267334 Respirator (10 pack)
- 267335 Respirator with nuisance level OV relief (10 pack)
- 267334-2 Respirator (2 pack)
- 267335-2 Respirator with nuisance level OV relief (2 pack)

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

Our 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
See literature AY/3.1
Portable, high-vacuum weld fume extractor designed for use with accessories like nozzles and fume guns to collect weld fume particles at the source.

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.

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.

Processes
- Stick (SMAW) • Flux-cored (FCAW)
- MIG (GMAW) • TIG (GTAW)

Comes with
- FilTek® XL filter
- 8 ft. collection hose
- 20 ft. power cord

Most popular consumables
- Replacement FilTek® XL Filter 301267

Most popular accessories
- Collection Hose 300896 17 ft. (5.2 m)
300897 34 ft. (10.4 m)

- Magnetic Nozzles 300895 11.8 in. (300 mm) width

- Flexible Funnel Magnetic Nozzle 300668

- Bernard™ Clean Air™ Fume Extraction MIG Gun (pg 29)
Suited for use with solid and flux-cored wires. Available in 300, 400, 500 and 600 A models. For more detailed information, visit BernardWelds.com.

<table>
<thead>
<tr>
<th>FILTAIR</th>
<th>130</th>
<th>SWX</th>
<th>MWX</th>
<th>Capture 5</th>
<th>4000–12000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weld Fume Extractor Type</td>
<td>Portable, high-vacuum</td>
<td>Stationary, low-vacuum suited for wall or column mounting</td>
<td>Mobile, low-vacuum</td>
<td>Mobile, low-vacuum with the industry’s largest capture zone</td>
<td>Centralized, low-vacuum customizable systems</td>
</tr>
<tr>
<td>Ideal For</td>
<td>Contractors, maintenance and repair operations, light fabrication work and light manufacturing</td>
<td>Fabrication shops, manufacturing, and training centers where weld areas are near filtration system</td>
<td>Fabrication shops, manufacturing, and training centers</td>
<td>Manufacturing and fabrication — the best solution for weldments over 18 inches long</td>
<td>Manufacturing, hand-held and automation, fabrication shops, and training facilities</td>
</tr>
<tr>
<td>Welding Arcs</td>
<td>1</td>
<td>Up to 2 per unit</td>
<td>1</td>
<td>1</td>
<td>Up to 16 per unit</td>
</tr>
<tr>
<td>Filter Type</td>
<td>Manual cleaning</td>
<td>SWX-D: Disposable SWX-S: Self-cleaning</td>
<td>MWX-D: Disposable MWX-S: Self-cleaning</td>
<td>Self-cleaning (automatic)</td>
<td>Self-cleaning (automatic/programmable)</td>
</tr>
</tbody>
</table>

Stock Number (300595)
Accu-Rated™ Airflow | Sound Level | Motor | Input Power | Dimensions | Net Weight |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>132 cfm (62 l/sec.)</td>
<td>68.5 dBA at 5 ft. (1.5 m)</td>
<td>1.1 kW</td>
<td>115 V, 1-phase, 60 Hz at 11.25 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® 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

Unrivaled 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. Note: Compressed air required to operate cleaning mechanism.

Disposal drawer provides easy and convenient access to empty out collected particles. Handle releases drawer allowing it to slide out.

Upgrade to self-cleaning models for high arc-on time, extracting from heavy fume processes, or when welding aluminum or galvanized materials.

Processes

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

Comes with

- FilTek® XL filter
- Pre-assembled arm

Most popular consumables

- Replacement FilTek XL Filters
  - 300540 Self-cleaning models
  - 300539 Disposable filter models

Filters efficiently capture the smallest weld fume particles and offer superior filter life.

Most popular accessories

- Hood Light with Arc Sensor
  - 300763 For SWX Series
  - 300689 For MWX Series

Illuminates the welding zone and enables the fume extractor to start automatically when welding begins.

- SWX Dual-Arm Add-On Packages
  - 951621 With telescoping arm
  - 951519 With 7 ft. standard arm
  - 951520 With 10 ft. standard arm
  - 951521 With 12 ft. standard arm

Includes 8-inch diameter arm, blower, control box, mounting bracket, duct and back draft dampers to turn single-arm weld fume extractor into dual-arm extractor.

**SWX wall- or column-mounted fume extraction systems designed specifically for welding.**

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.**

---

**Table**

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Filter Media</th>
<th>Accu-Rated™ Airflow</th>
<th>Extraction Arm Diameter</th>
<th>Sound Level</th>
<th>Motor</th>
<th>Input Power</th>
<th>Dimensions</th>
<th>Net Weight without Arm</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWX-S (Self-Cleaning Model) Pkg (951620) Telescoping arm (951517) 10 ft. standard arm (951518) 12 ft. standard arm</td>
<td>SWX-D (Disposable Filter) Pkg (951619) Telescoping arm (951513) 7 ft. standard arm (951514) 10 ft. standard arm (951515) 12 ft. standard arm</td>
<td>490 sq. ft. (45.52 sq. m)</td>
<td>875 cfm (413 L/sec.)</td>
<td>8 in. (203 mm)</td>
<td>Approximately 74 dBA at 5 ft. (1.5 m)</td>
<td>1 hp, 3,450 rpm</td>
<td>115 V, 1-phase, 60 Hz at approximately 11.9 A</td>
<td>SWX-S H: 33 in. (838 mm) SWX-D H: 29 in. (737 mm) W: 27.25 in. (692 mm) D: 33 in. (838 mm)</td>
</tr>
<tr>
<td>MWX-S (Self-Cleaning Model) Pkg (951619) 7 ft. standard arm (951511) 10 ft. standard arm (951512) 12 ft. standard arm</td>
<td>MWX-D (Disposable Filter) Pkg (951507) 7 ft. standard arm (951508) 10 ft. standard arm (951509) 12 ft. standard arm</td>
<td>490 sq. ft. (45.52 sq. m)</td>
<td>875 cfm (413 L/sec.)</td>
<td>8 in. (203 mm)</td>
<td>Approximately 70 dBA at 5 ft. (1.5 m)</td>
<td>1 hp, 3,450 rpm</td>
<td>115 V, 1-phase, 60 Hz at approximately 11.9 A</td>
<td>H: 34.75 in. (883 mm) W: 31.75 in. (806 mm) D: 48 in. (1,219 mm)</td>
</tr>
</tbody>
</table>
FILTAIR® Capture 5

See literature AV/3.5

The capture zone redefined. Innovative, extended-capture fume extraction system designed specifically for welding.

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.

Conventional technology capture zone is a maximum of 18 inches. ZoneFlow technology increases the capture zone up to 5 feet!
FILTAIR® 4000–12000

See literature AY/3.4

The industrial centralized weld fume extractors are custom engineered solutions designed for multiple capture sources which require ducting and accessories to complete the system.

FILTAIR engineering resources. Design and engineering resources recommend, develop and support custom-engineered solutions.

Implements 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 866-931-9730 for information and requests for quotes on custom-engineered solutions to fit your needs.

FILTAIR® 4000 model shown. Other models are available (6000, 8000, and 12000).

*Based on clean filters. **Dimensions for base models without factory options.
FILTAIR® Accessories  See literature AY/3.7 (Extraction Arms) and AY/3.6 (Low Profile Hoods)

Miller offers a full line of accessories for complete system solutions and turnkey installation.

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>(301242) 3–4.5 ft. arm</td>
<td>(301237) 3–4.5 ft. arm</td>
</tr>
<tr>
<td>Standard Arm</td>
<td>(300953) 7 ft. arm</td>
<td>(300988) 7 ft. arm</td>
</tr>
<tr>
<td></td>
<td>(300954) 10 ft. arm</td>
<td>(300981) 10 ft. arm</td>
</tr>
<tr>
<td></td>
<td>(300955) 12 ft. arm</td>
<td>(300982) 12 ft. arm</td>
</tr>
<tr>
<td>Arm Mounting Bracket</td>
<td>(300952)</td>
<td>(300771)</td>
</tr>
<tr>
<td>and Ducting Kit</td>
<td></td>
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</tbody>
</table>

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</th>
<th>Efficiency %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.3 to 1 μm</td>
<td>1 to 3 μm</td>
</tr>
<tr>
<td>10</td>
<td>Not Rated</td>
<td>50–65%</td>
</tr>
<tr>
<td>11</td>
<td>Not Rated</td>
<td>65–80%</td>
</tr>
<tr>
<td>12</td>
<td>Not Rated</td>
<td>80–90%</td>
</tr>
<tr>
<td>13</td>
<td>&lt; 75%</td>
<td>90%</td>
</tr>
<tr>
<td>14</td>
<td>75–85%</td>
<td>90%</td>
</tr>
<tr>
<td>15 <strong>Miller® FilTek XL</strong></td>
<td>85–95%</td>
<td>90%</td>
</tr>
<tr>
<td>16</td>
<td>≥95%</td>
<td>≥95%</td>
</tr>
<tr>
<td><strong>HEPA</strong></td>
<td>≥99.97%</td>
<td>≥99.97%</td>
</tr>
</tbody>
</table>

| Weld Fume Composition                      | 75–95%              | ≤15%         | ≤10%         |

Filters are rated on a MERV scale, which measures filter efficiency based on particle count. MERV ratings range from 1–16, with 16 being the best at filtering small particles — such as those found in weld fumes. The vast majority of weld fumes are less than one micron in diameter, or roughly 1/100th the width of a human hair.

Filters in common air filtration systems often have MERV ratings between 7–11. FilTek XL filters are rated at class-leading MERV 15 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 deep 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

Spark Cooler®

• Cools sparks using the fume extractor’s airflow

• Very efficient — maximizes the extractor’s power

• Simple design is easy to install

FILTAIR low profile hood

• Available in sizes from 4 x 4 feet up to 16 x 16 feet in one-foot increments

• Exclusive design — capture velocity zone is maximized and distributed over the work area

• Hood airflow design reduces sound for better communication

• Unique airflow offers spark abatement in the extraction rail, and also in the recommended Spark Cooler

• Clear, UV-protected polycarbonate ceiling panels allow maximum light into the cell

• Corner lift hooks are convenient for installing or hanging over a work area. The hood can also be placed on an existing cell enclosure or supported with post assemblies

For stock numbers and ordering information, visit MillerWelds.com
The AugmentedArc™ augmented reality welding system allows students and trainees to experience the most realistic multiprocess welding simulation available — and then seamlessly transition to the industry’s most complete live-arc experience in the LiveArc™ welding performance management system.

Delivering unbeatable advantages
- Optimize instructor efficiency
- Deliver real-time feedback
- Reduce overall training time
- Assess weld operator skills and performance
- Minimize material cost
- Enhance job candidate recruiting and screening
- Build a larger, more-skilled welding workforce

For more detailed information, visit MillerWelds.com/trainingsolutions

When AugmentedArc and LiveArc systems are used together, students follow an efficient, natural progression from classroom welding simulation to laboratory live arc welding — gaining both the knowledge and the experience they need to become skilled and productive weld operators.

The AugmentedArc™ system uses a specially designed helmet that shows images of the real world, augmented with computer-generated images of metal workpieces, weld arcs and weld beads. The result is a simulation that closely resembles live-arc welding — without using an actual arc or consuming wire, shielding gas or coupons. Instructors use the FREE Teacher Software to develop a curriculum with theory, quizzes and welding assignments, to monitor student performance and to create progress reports. When a welding exercise is complete, an analysis screen provides feedback on the user’s performance in the form of scores and graphs. Each simulation is recorded and made available for later playback, allowing instructors to evaluate students’ performance.

Ideal for lab training, the LiveArc™ welding performance management system provides both a simulation/pre-weld setup mode as well as a live-arc training mode, allowing the user to gain experience and build techniques in pre-weld exercises before seamlessly transitioning into real welding with GMAW, FCAW and SMAW processes. 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. The system also gives welding instructors the ability to configure assignments and technique parameters and it stores the detailed performance history of each operator.

Check out MillerWelds.com/trainingsolutions for videos, product information and more!
AugmentedArc™ System
Augmented Reality Welding System

The industry’s most realistic welding simulation solution for classroom training.

Innovative augmented reality technology. Blending real-world and computer-generated images into a unique, augmented reality environment.

Optimize instructor efficiency. Instructors can use the Teacher Software with an AugmentedArc system to develop a customized curriculum with weld exercises, theory and quizzes, or modify preset exercises for each process. Multiple systems can be networked together with a Controller to create a virtual classroom. Students can work at their own pace, and instructors have more time to assist students one-on-one.

Deliver real-time feedback. By providing immediate feedback on users’ techniques, AugmentedArc quickly helps correct errors, reinforce proper welding practices and accelerate skill advancement prior to actual live-arc welding in a lab.

Reduce overall training time. Compared to traditional methods, AugmentedArc significantly reduces the amount of time needed to teach students.

Minimize material cost. By helping students refine their welding skills in a simulation environment before beginning live-arc welding, AugmentedArc system delivers a green training solution. There’s less waste of wire, gas and coupons.

Build a larger, more-skilled welding workforce. AugmentedArc is a great way to introduce new learners to welding in a safe and learner-friendly environment. It draws students towards welding education programs, providing a foundation their success — key to building a larger, more-skilled welding workforce.

AugmentedArc system comes complete with
• AugmentedArc simulator
• Teacher software
• Black Infinity™ AR helmet with premium headgear
• AugmentedArc router
• Work stand for out-of-position applications
• SMAW stinger
• SMAW electrode
• TIG torch with AR tip
• TIG filler rod
• MIG gun with AR tip
• Butt joint coupon
• T-joint coupon
• Pipe-to-pipe coupon
• Pipe-to-plate coupon
• Work stand for out-of-position
• AugmentedArc router
• Teacher software
• AugmentedArc simulator

comes complete with

Only available at approved distributors!

Augmented reality displays

Helmet’s external optical sensor captures and sends images of coded devices and coupons to AugmentedArc simulator

Simulator generates three-dimensional images of metal workpieces, augmenting them into a real-world environment

Display on simulator replicates the view inside helmet to give real-time feedback

Welding simulation screen

• Visual graphical aids guide the user to achieve target parameters
• Adherence to pre-determined or custom welding parameters is monitored, with confirmation when maintained or alerts when exceeded
• Realistic arc sounds from inside helmet

Post-weld feedback screen

• User’s performance is scored, graphed and recorded for playback
• Performance feedback on various parameters is provided

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</thead>
<tbody>
<tr>
<td></td>
<td>115 V, 15 A, 60 Hz</td>
<td>DSAW, FCAW, SAW, GTAW</td>
<td>1F-4F, 1G-6G</td>
<td>1-joint, flat, overhead</td>
<td>Horizontal, vertical, flat, overhead</td>
<td>GMAW 10–36 V 25–270 A</td>
<td>DC, CDE, AC</td>
<td>CO2, argon O2, argon CO2, mixtures</td>
<td>GMAW/FCAW 47–787 ipm (1.2–20 m/min.)</td>
<td>Carbon steel, stainless steel, aluminum</td>
<td>1/8 in. (3.2 mm), 1/4 in. (6.4 mm), 3/8 in. (9.5 mm)</td>
<td>5/64, 3/32, 5/32 in. (2.0, 2.4 mm)</td>
<td>28 in. (711 mm)</td>
<td>26.3 in. (668 mm)</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td>FCAW 12–36 V 25–270 A</td>
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<td>21 in. (533 mm)</td>
<td>26.3 in. (668 mm)</td>
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<td>SAW 50–240 A</td>
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<td>21 in. (533 mm)</td>
<td>26.3 in. (668 mm)</td>
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<td>GTAW 25–270 A</td>
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<td></td>
<td></td>
<td></td>
<td>21 in. (533 mm)</td>
<td>26.3 in. (668 mm)</td>
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</tbody>
</table>
LiveArc™ System
Welding Performance Management System

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

Better training. While utilizing a live arc, the intuitive system promotes user independence and provides objective, quantitative feedback on key performance parameters. The flexible system is ideal for recruiting, screening, training and performance management.

Faster results. Independent usage accelerates personal development. Accelerated training times put trainees in production lines faster while shorter educational periods allow trainees to focus on additional learning opportunities.

More cost effective. Trainers and educators have more time for one-on-one training while pre-weld simulation saves money on coupons, wire and gas (GMAW/FCAW only). Also reduces the frequency of poor-quality welding and defects, rework and downtime.

Welding positioning arm allows training in out-of-position welding applications.

SmartGun is an industry-exclusive 400-amp MIG gun featuring built-in LEDs that are tracked by the system’s cameras. The ergonomic soft-grip handle provides tactile vibration feedback that helps guide real-time performance adjustments, reinforcing optimal position and movement.

OLED display on gun provides initial visual feedback to guide proper gun positioning. Pushbuttons provide a convenient alternative to the touch screen for navigation.

SmartStinger extends training capabilities to the SMAW process. LiveArc guides pre-weld positioning for travel and work angles via the LiveArc display.

Intuitive user interface

Assignment selection screen
- Guides the user through a range of targeted exercises
- Includes a library of assignments designed by Miller and the flexibility to configure customized assignments
- Offers assignment completion status, history summary and easy access to detailed performance history data

Welding procedure specification (WPS) screen
- Guides the user through proper selection and preparation of materials
- Provides correct power source and wire feeder settings
- Provides target values and limits for various parameters
- Assignment parameters can be configured to suit the skill level (and scoring potential) of the user
- Displays instructor-determined target score and assignment completion criteria

Post-weld feedback screen
- Data is provided following tests in both simulation and live-arc modes
- Performance feedback on various parameters is provided
- All test data is stored and allows for monitoring and evaluation

LiveArc GMAW/FCAW system comes complete with
- SmartGun with 15 ft. (4.6 m) cable
- Calibration tool
- Two table clamps
- C-clamp assembly
- Removable arm extension for right- and left-hand applications
- Extra Bernard consumables

LiveArc GMAW/FCAW/SMAW system includes above plus
- SmartStinger with 12 ft. (3.7 m) cable
- 15 ft. (4.6 m) Dinse-style cable
- Router box
- Software update for SMAW applications

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

Stock Number
(907714001) LiveArc GMAW/FCAW system
(907714001) LiveArc GMAW/FCAW/SMAW system
(301391) LiveArc stick upgrade module

Only available at approved distributors!

LiveArc GMAW/FCAW system

Rated Capacity
- GMAlift 400A at 60% duty cycle (mixed gases)
- SmartStinger 250 A at 60% duty cycle

Computer
- Intel core i7, 128 GB SSD, fanless cooling, HDMI port supports most secondary monitors (not included)

Display
- 21.5 HD LCD touch screen display

Dimensions
- H: 77.5 in. (1,969 mm)
- W: 46 in. (1,168 mm)
- D: 31 in. (787 mm)

Net Weight
- 480 lb. (218 kg)

LiveArc GMAW/FCAW system

Rated Capacity
- 400 A

Computer
- Intel core i7, 128 GB SSD, fanless cooling, HDMI port supports most secondary monitors (not included)

Display
- 21.5 HD LCD touch screen display

Dimensions
- H: 77.5 in. (1,969 mm)
- W: 46 in. (1,168 mm)
- D: 31 in. (787 mm)

Net Weight
- 527 lb. (239 kg)
Automated MIG

For adapters and drive motors, visit MillerWelds.com.

Automated MIG 118

• Coolant Systems 119
  • Carts, Cylinder Racks and Running Gear 118–120

Cable Connectors and Adapters 118/125

For Torch and Weld Cable Connectors in TIG Accessories on page 125.

Cable Connectors and Adapters

Also see Torch and Weld Cable Connectors in TIG Accessories on page 125.

Also see Engine Drive Accessories on page 120.

Cable Connectors and Adapters

Coolant Flow Switch

Coolant Flow Switch 195461

For water-cooled guns and external cladding head.

To ensure coolant is flowing in the system. A lack of coolant flow may cause damage to water-cooled guns or cladding head. Module allows wiring into the peripheral connector port. 50-foot (15.2 m) cable with connector and separate shell connector for simple modification to desired length in the field. Quarter-turn quick connection.

MCS-2 Motorized Cross Slide

098380 Control

045623 Adapter Plate*

Provides accurate weld head adjustment with convenient motorized control. Used to align the welding head (gun) to the weld joint, by providing vertical or horizontal adjustments, based on mounting preferences.

*Required when using two slides.

Load Banks 121

MIG Accessories 121

• Machine and Gun Accessory Kits • Protective Covers

Plasma Cutter Accessories 122

• Automation Kits • Cables and Cable Covers

• Cutting Guides • Filters • Plugs and Cords

• Protective Covers • Torches

Polarity Switches/Controls 123

Remote Controls and Wireless Remote Controls 123–125

Stick Accessory Kits 123

Submerged Arc Accessories 123

• Cables • Torch Accessories

• Wire Drive Assembly Accessories

TIG Accessories 124–125

• Kits • Protective Covers • Remote Controls

• Torch and Weld Cable Connectors

Wire Feeder Accessories 126

• Extension Cables (14-pin) • Power Supply Adapter

• Spool Adapter • Spool Gun Controls and Kits

• Turntable Assembly • Wire Straightener

Universal Cart and Cylinder Rack

042934 For Invision 352 MPa, XMT 304/350, CST, Diversio, Maxstar 210/280 and Dynasty 210/280. Also accommodates a single gas cylinder up to 56 inches (1,422 mm) high measuring 6 to 9 inches (152 to 229 mm) in diameter. Provides storage for auxiliary items such as electrodes, helmets and gloves.

Running Gear / Cylinder Rack

301239 For Millermatic 141/211, Multimatic and Diversio. Heavy-duty construction with 8-inch rubber rear wheels. Convenient front handles, cable holders and plastic consumable box. For gas cylinders no greater than 7 inches (178 mm) in diameter or 65 pounds (29.5 kg) in weight.

Dual Cylinder Rack Conversion Kit and Tool Holder

301454 Converts Running Gear / Cylinder Rack (301239) from a single cylinder cart to a dual cylinder cart. Top bracket is able to hold a variety of tools including a wiper, adjustable wrench, screwdrivers, chipping hammer, wire brush and filler rod.

Dual EZ-Change Low Cylinder Rack with Elevated Gun and Cable Rack

300337 For Millermatic 212 Auto-Set/252 and Syncrowave 210. Allows operators to easily roll cylinders on and off the rack with no lifting. Gun and cable rack keeps cables off the floor and tangle free.

Elevated Gun and Cable Rack

300335 For Millermatic 212 Auto-Set/252 and Syncrowave 210. For use with single-cylinder rack. (Included with Dual EZ-Change Low Cylinder Rack.)

Dual Cylinder Rack

Coolmate 3.5 300245 120 V
For Maxstar 400/800 and Dynasty 400/800. Industrial, 3.5-gallon cooler designed for water-cooled torches rated up to 600 amps*.

Coolmate 4 042288 120 V
Best performer in its class — industrial, 4-gallon cooler designed for water-cooled torches rated up to 600 amps*.

Coolmate™ Coolant Systems

Coolmate 1.3 300972 120 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 043007 120 V 043008 240 V
Economical, 3-gallon cooler designed for water-cooled torches rated up to 500 amps*.

Coolmate 3.5 300245 120 V
For Maxstar 400/800 and Dynasty 400/800. Industrial, 3.5-gallon cooler designed for water-cooled torches rated up to 600 amps*.

Coolmate 4 042288 120 V
Best performer in its class — industrial, 4-gallon cooler designed for water-cooled torches rated up to 600 amps*.

Coolant

Sold in multiples of four in 1-gallon recyclable plastic bottles. Miller® coolants contain a base of ethylene glycol and deionized water to protect against freezing to -37° Fahrenheit (-38°C) or boiling to 227° Fahrenheit (108°C).

Low-Conductivity Coolant
(clear, pre-mixed) 043810
For TIG and MIG applications. NOT for use in push-pull systems or systems where aluminum is in coolant path/circuit.

Aluminum-Protecting Coolant
(green, pre-mixed) 043809
Primarily used in push-pull systems where aluminum is in coolant path/circuit and high frequency is NOT used.
**Accessories**

### Engine Drive Accessories

*Also see Trailers on page 121.*

#### Big Blue Accessories

- **Cable Holder** 043946
  - For Big Blue 500 Pro/600 Series/800 Series.

- **Vandalism Lockout Kit** 399802 Field
  - For Big Blue 500 Pro/600 Series. Lockable hinged steel panels cover and protect name plate gauges and ignition switch (padlock included). Also includes engine compartment door lock and key.

#### Blue Star Accessories

- **Lifting Eye** 195353
  - For Fusion and Blue Star.

- **Running Gear** 301246
  - For Fusion and Blue Star. Compact and balanced, lightweight wheelbarrow-style running gear provides easy onsite mobility.

#### Bobcat and Trailblazer Accessories (Gas/LP)

- **Multi-Terrain Running Gear** 301460
  - For Bobcat Air Pak. Includes two heavy-duty Never Flat® 15-inch tires, two 8-inch rubber swivel casters and a heavy-duty handle. Recommended for all surfaces and applications and is easy to move around the jobsite.

- **Multi-Terrain Running Gear** 300913 Inner tubes 300914 Never Flat® tires
  - For gas/LP Bobcat and Trailblazer (except Air Pak models). Includes two heavy-duty 15-inch tires, two 8-inch rubber swivel casters and a heavy-duty handle. Recommended for all surfaces and applications and is easy to move around the jobsite.

- **Off-Road Running Gear** 300909 Inner tubes 300910 Never Flat® tires
  - For gas/LP Bobcat and Trailblazer (except Air Pak models). 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** 300912
  - For gas/LP Bobcat and Trailblazer (except Air Pak models). Running gear and rugged cage with cable holders protects your investment and is easy to move around the jobsite.

- **Protective Cage with Cable Holders** 300921
  - For gas/LP Bobcat and Trailblazer (except Air Pak models). Designed for use with Running Gear, Protective Cage, or by itself. Includes base tray with bottle bracket, vertical support rack and safety chain.

- **Protective Cage with Cable Holders** 300478
  - For Trailblazer 302 Air Pak. Rugged cage with cable holders protects your investment. Works with Running Gear, Gas Cylinder Mounting Assembly or LP Tank Mounting Assembly.

- **Gas Cylinder Mounting Assembly** 300918
  - For gas Bobcat and Trailblazer (except Air Pak models). Designed for use with Running Gear, Protective Cage, or by itself. Includes bracket and clamp to mount 33- and 43-pound tanks horizontally, and hose with fittings to converter.

- **Hose and LP Tank Mounting Assembly** 300917 For LP Bobcat.
  - Designed for use with Running Gear, Protective Cage, or by itself. Includes bracket and clamp to mount 33- and 43-pound tanks horizontally, and hose with fittings to converter.

- **Remote Oil Drain and Filter Kit** 300923 Field
  - For gas Bobcat and Trailblazer (except Air Pak models). Front mount for Kohler engines makes servicing easy when engine drive is mounted in tight spots.

- **All-Purpose Running Gear with Never Flat® Tires** 300977
  - 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 all surfaces and applications and is easy to move around the jobsite.

- **Protective Covers**
  - Protective covers (300919) and (195301) shown.

- **Protective Covers**
  - Heavy-duty, water- and mildew-resistant covers protect and maintain the finish of the welder. 301245 For Fusion and Blue Star.
  - 301475 For Bobcat 200 Air Pak without Running Gear.
  - 301476 For Bobcat 200 Air Pak with Running Gear.
  - 300919 For gas Bobcat and Trailblazer (except Air Pak models) without Protective Cage or Running Gear.
  - 300920 For gas Bobcat and Trailblazer (except Air Pak models) with Protective Cage or Running Gear.
  - 301099 For diesel Bobcat and Trailblazer without Protective Cage or Running Gear.
  - 300379 For Trailblazer 302 Air Pak.
  - 195301 For Big Blue 400 Pro/400 PipePro/450 Duo CST.
  - 301495 For Big Blue 500 Pro/600 Pro with Kubota.
  - 301113 For Big Blue 600 Air Pak/800 Series with Deutz.

- **Twist Lock Adapter Cord** 301489
  - For Fusion, L14-30R to NEMA 6-50R. Adapts engine drive 120/240-volt twist lock plug to common Millermatic and Spectrum 240-volt plug.

- **Full KVA Adapter Cord** 300517
  - For Bobcat, Trailblazer and Big Blue models. NEMA 14-50P to NEMA 6-50R. Adapts engine drive 120/240-volt plug to common Millermatic and Spectrum 240-volt plug.

- **Full KVA Plug Kit** 191172
  - 1-phase, 120/240 V, 50 A plug (NEMA 14-50P). For Bobcat, Trailblazer and Big Blue models.
  - 195683 3-phase, 480 V, 30 A plug (NEMA 116-30P). For Bobcat 3 Phase.
  - 254140 3-phase, 240 V, 50 A plug (NEMA 15-50P). For Big Blue 500 Pro/600 Series/800 Series.
**Trailers**

See literature AY/20.0

**HWY-Mid Frame Trailer  301438**
For Bobcat, Trailblazer, and Big Blue 400 Pro/400 PipePro/450 Duo CST models. A 1,424-pound (646 kg) capacity highway trailer with welded steel tubing frame, heavy-duty axle with roller bearing hubs and leaf-spring suspension. Includes jack stand, fenders, lights, and dual hitch with 2-inch (50 mm) ball hitch and 3-inch (76 mm) lunette eye.

**HWY-225 Trailer  301338**
For Big Blue models. A 2,700-pound (1,225 kg) capacity highway trailer with welded steel tubing frame, heavy-duty axle with roller bearing hubs and leaf-spring suspension. Includes jack stand, fenders, lights, and dual hitch with 2-inch (50 mm) ball hitch and 3-inch (76 mm) lunette eye.

**4 West Four-Wheel Steerable Off-Road Trailer  042801**
For Big Blue 500 Pro/600 Series/800 Series. A heavy-duty 2,550-pound (1,157 kg) capacity trailer designed for use in mines, quarries and other rough terrain. Has narrow 22-foot (6.7 m) turning radius. Includes 3-inch (76 mm) lunette eye, universal hitch and safety chains.

**Load Banks**

LBP-350  043329
Designed to provide an adjustable load for troubleshooting or calibrating welding power sources or generators. Standard equipment includes analog meters for both AC and DC output with jacks for external metering connections. It comes with a 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  902804
Designed to load test the output of transformer-type, engine- or motor-driven generator welding power sources. This unit can be used to test AC or DC welder outputs, and to demonstrate welding equipment to customers.

**Machine and Gun Accessory Kits**

**Aluminum Conversion Kit  172136**
For M-25 gun. Allows 10-foot (3 m) guns to feed 3/64-inch (1.2 mm) aluminum wire.

**Industrial MIG 4/0 Kit  300390**
For single feeders.
**300957**
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  300405**
For single feeders.
**300956**
For dual feeders.
Same as above except weld and work cables have Dinse-style connector on one end instead of lug.

**Trailer accessories**

**Fender Kit  301439**
For HWY-Mid Frame and HWY-225. Replacement fenders.

**Dual Hitch  301441**
For HWY-Mid Frame and HWY-225. Combination 2-inch (50 mm) ball hitch and 3-inch (76 mm) lunette eye in one reversible assembly.

**Cable Tree  043826**
For HWY-Mid Frame and HWY-225. Provides an area to conveniently wrap weld cables and extension cords.

**2-In-1 Document/Fire Extinguisher Holder  301236**
For HWY-Mid Frame and HWY-225. Stores documents and holds a 5-pound fire extinguisher. Note: Holder shown mounted on trailer. Fire extinguisher not included.

**MIGmatic™ M-Series Gun Consumable Kits**

For M-100 and M-150 guns
**234607**
.023 in. (0.6 m) wire
**234608**
.030 in. (0.8 m) wire
**234609**
.035 in. (0.9 m) wire
For M-25 gun
**234610**
.035 in. (0.9 m) wire
**234611**
.035 in. (0.9 m) wire
**234612**
.045 in. (1.2 m) wire
M-100/M-150 kits include 10 contact tips, 1 tip adapter, 1 standard nozzle and a consumable storage box. M-25 kits add 1 nozzle adapter.

**Protective Covers**

195142

301262
For Millermatic 141/211 and Multimatic 215.
Plasma Circle-Cutting Guides  253055
Includes 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 625 X-TREME  301158
Upgrades quick-connect hand-held torch packages to add machine torch capabilities.

Cables and Cable Covers
Flexible Work Cable  234838 20 ft. (6.1 m)  234930 50 ft. (15.2 m)
Work cable with quick connect and heavy-duty clamp.

Cable Covers  239642 20 ft. (6.1 m)  231867 25 ft. (7.6 m)  231868 50 ft. (15.2 m)

Cutting Guides
Plasma Circle-Cutting Guides  253055
For XT30C/XT30/XT40/XT60 torches. Cut straight lines or circles up to 12 inches in diameter.

Suction/Magnetic Pivot Base  195979
Add this to your cutting guide for convenient attachment to all flat surfaces. The extended arm accommodates holes up to 30 inches in diameter.

Plasma Standoff Roller Guide  253054
Helps maintain recommended standoff distance to maximize cutting performance and improve tip life.

Filters
In-Line Air Filter Kit  228926

RTI Filter and Bracket  300491
For Spectrum 875/875 Auto-Line. Dryer will remove water, dirt and oil as small as one micron with 99.9 percent efficiency. Can be mounted on plasma cutter or on wall. Install as close as possible to point of air consumption. Replaceable filter element (212771).

Plugs and Cords
MVP® Plugs
219258  For 6-50P power cable (230/240 V, 50 A).
219261  For 5-15P power cable (115/120 V, 15 A).
219259  For 5-20P power cable (115/120 V, 20 A). For Spectrum 375 X-TREME, Millermatic 211, Multimatic, Thunderbolt 160, Diversion, Syncrowave 210 and Fusion. Allows connection of machine to 115/120-volt or 230/240-volt receptacles without tools — just choose the plug that fits the receptacle.

MVP® Adapters
254328  For connection to 6-50P receptacle (240 V, 50 A).
254330  For connection to 5-15P receptacle (120 V, 15 A).
254331  For connection to 5-20P receptacle (120 V, 20 A). For Spectrum 625 X-TREME. Allows connection of machine to 120- or 240-volt receptacles without tools — just choose the adapter cord that fits the receptacle.

Protective Covers
Protective Cover  300388
For Spectrum 875.

X-CASE  300184
For Spectrum 375 X-TREME/625 X-TREME. 301429 For Maxstar 161 models.

Torches
See your Miller® distributor for complete information on the following XT plasma torches and their consumables:

Spectrum Plasma Cutter Hand-Held Torches
For Spectrum 375 X-TREME  249949  12 ft. (3.7 m) XT30
For Spectrum 625 X-TREME  257462  12 ft. (3.7 m) XT40
  257464  25 ft. (7.6 m) XT60
For Spectrum 875 and 875 Auto-Line  249953  20 ft. (6.1 m) XT60
  249954  50 ft. (15.2 m) XT60

Spectrum Plasma Cutter Machine Torches
For Spectrum 625 X-TREME  259305  25 ft. (7.6 m) long body XT40M
  257462  25 ft. (7.6 m) short body XT40M
For Spectrum 875 and 875 Auto-Line  249955  25 ft. (7.6 m) long body XT60M
  249956  50 ft. (15.2 m) long body XT60M
  257464  25 ft. (7.6 m) short body XT60M
  263952  50 ft. (15.2 m) short body XT60M

Plasma Torch Consumable Kits
For XT30 torche  253520
Includes 5 electrodes, 5 tips, 1 swirl ring, 1 retaining cup, 1 o-ring and silicone grease.

For XT40 torche  253521
Includes 5 electrodes, 5 tips (40 A), 3 tips (30 A), 1 drag shield (40 A), 2 drag shields (30 A), 1 deflector, 1 o-ring, 1 swirl ring, 1 retaining cup, 1 gouge tip (40 A), 1 gouge shield and silicone grease.

For XT60 torche  256033
Includes 3 standard electrodes, 3 standard tips, 1 drag shield, 1 deflector, 1 o-ring, 1 swirl ring, 1 retaining cup, 1 gouge tip, 1 gouge shield and silicone grease.

127493 Empty consumable storage box.
Polarity Switches/Controls

Polarity Control 042871
This dual-function control is designed for use with dual wire feeders or any application where electrical isolation and/or polarity reversing of weld current is required. Both functions can be used at the same time.

Process Selector Control 042872
For CC, CV or CC/CV welding power source. Provides easy way to change welding process. Also includes features of Polarity Control.

Remote Controls
Also see Remote Controls in TIG Accessories on pages 124 and 125.

PRHC-14 Hand Control 195511
For all solid-state power sources after serial number JK674521. Complete current or voltage control brings 120 volts of GFCI power to work area in a single cord. Housed in a durable 125-foot (38 m) cord with plugs.

Remote On/Off Control 242197025
For Deltaweld, Dimension 452, and Gold Star. Also see Remote Controls in TIG Accessories on pages 124 and 125.

Polarity Switches/Controls

Submerged Arc Accessories

Cables

2/0 Weld Cable Extensions
195456 50 ft. (15 m)
195455 100 ft. (30 m)
Extends weld cables (195457, 195458 and 301387).

SubArc Control Cables
260622030 30 ft. (9.1 m)
260622050 50 ft. (15 m)
260622060 60 ft. (18.3 m)
260622080 80 ft. (24.4 m)
260622100 100 ft. (30.5 m)
260622120 120 ft. (36.6 m)
260622200 200 ft. (61.0 m)
Cable between SubArc Interface or Motor Control and power source.

Flux Hopper Extension Cables
260623010 10 ft. (3 m)
260623025 25 ft. (7.6 m)
260623065 65 ft. (19.8 m)
Cable between SubArc Interface or Motor Control and flux hopper.

Motor Extension Cables
254232005 5 ft. (1.5 m)
254232010 10 ft. (3 m)
254232025 25 ft. (7.6 m)
254232065 65 ft. (19.8 m)
Cable between SubArc Interface or Motor Control and drive motor.

Continuum Motor/Control Cables
263368015 15 ft. (4.6 m)
263368020 20 ft. (6.1 m)
263368025 25 ft. (7.6 m)
263368050 50 ft. (15 m)
263368080 80 ft. (24.4 m)
263368100 100 ft. (30.5 m)
Cable between SubArc Motor Control and SubArc Remote Pendant.

SubArc Parallel Cable
260775015 15 ft. (4.6 m)
SubArc Tandem Cable
260878015 15 ft. (4.6 m)

Torch Accessories

OBT 600 Torch Body Extensions
043967 1 inch (25.4 mm)
043969 2 inch (50.8 mm)
043973 4 inch (101.6 mm)
043975 6 inch (152.4 mm)

OBT 1200 Torch Body Extension 043981
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 Wire Size
192700 192141 1/16 in. (1.6 mm)
192701 192026 5/64 in. (2.0 mm)
192702 192142 3/32 in. (2.4 mm)
192703 200771 7/64 in. (2.8 mm)
192704 192143 1/8 in. (3.2 mm)
192705 192144 5/32 in. (4.0 mm)
192706 192136 3/16 in. (4.8 mm)

1200-Amp Twin-Wire Torch Contact Tips
264595 3/64 in. (1.2 mm)
264596 1/16 in. (1.6 mm)
264597 5/64 in. (2.0 mm)
264588 3/32 in. (2.4 mm)

Wire Drive Assembly Accessories

Drive Rolls
132955 1/16 in. (1.6 mm)
132960 5/64 in. (2.0 mm)
132961 3/32 in. (2.4 mm)
132962 7/64 in. (2.8 mm)
132963 1/8 in. (3.2 mm)
193700 5/32 in. (4.0 mm)
193701 3/16 in. (4.8 mm)

Single-Wire Straightener 199733
For OBT 600 and OBT 1200 single-wire torches. For 1/16–3/16 inch (1.6–4.8 mm) wire.

Twin-Wire Straighteners
301160 Single adjustment
301162 Double/separate adjustment For 1200-amp twin-wire torch only.

Manual Single Slide 301137
Provides smooth and accurate movement of the welding heads. Allows for 7.87 inch (200 mm) travel adjustment with load capacity of 220 pounds (100 kg) at 1.64 feet (500 mm). Not recommended for tandem.

Wire Reel 108008
Supports 60-pound (27 kg) coil of wire. Requires Spool Support Assembly (119438).
## TIG Accessories

### Kits

**Contractor Kit**

- **301311** TIG/stick pkg with RCCS-14 fingertip control OR RFCS-14 HD foot control, 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. 

**301309** TIG/stick pkg with RFCS-14 HD foot pedal. For Maxstar 210/280 and Dynasty 210/280. 

All-in-one TIG/stick welding kit comes with either a RCCS-14 fingertip control OR RFCS-14 HD foot control, Weldcraft A-150 TIG torch, 200-amp stick electrode holder with 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. 

**301287** For Multimatic 200. 

**301337** For Multimatic 215. 

**TIG Contractor Kit**

- **301287** For Multimatic 200. 

Kit comes with Weldcraft A-150 TIG torch with Dinse-style connector, either a RFCS-6M foot control (Multimatic 200 kit) OR RFCS-RJ45 foot control (Multimatic 215 kit), flow gauge regulator with 12-foot (3.7 m) gas hose, and AK2C torch accessory kit. 

**300185** 250 A, W-250 (WP-20) 

**300990** 280 A, W-280 (WP-280) 

**301268** 375 A, W-375 

**300186** 400 A, W-400 (WP-18SC) 

For Maxstar (except 161 models), Dynasty, and Syncrowave 250 DX/350 LX. Kit comes with 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.

**301118** 13.25 ft. (4 m) cord with plug. 

**301813** 20 ft. (6 m) cord with plug. 

**301138** For Maxstar 280 and Dynasty 210/280. 

**195142** For Syncrowave 210. 

**195320** For Syncrowave 250 DX/350 LX. 

**195478** For XMT 304/350. 

**13-Pin to 6-Pin Adapter Cord** 

13-Pin to 6-Pin Adapter Cord 

**300507** For Maxstar 161 STL/STH and Multimatic 200. 

12-inch (305 mm) cord adapts Miller 14-pin foot control or fingertip control to a 6-pin plug.

**RCC-6M** (6-pin plug) 

**301116** 13.25 ft. (4 m) cord with plug. 

**300990** For Maxstar 210/280 and Dynasty 210/280. 

**RCC-14** (14-pin plug) 

**151086** 26.5 ft. (8 m) cord with plug. 

East/west rotary-motion fingertip current/contactor control attaches to TIG torch using two hook-and-loop fasteners. Great for production or contractors that need quick ramp-up.

**RCCS-6M** (6-pin plug) 

- **195184** 13.25 ft. (4 m) cord with plug 

- **195504** 26.5 ft. (8 m) cord with plug 

For Maxstar 161 STL/STH and Multimatic 200. 

**RCCS-RJ45** (14-pin plug) 

- **301146** 13.25 ft. (4 m) cord with plug 

- **For Diversion and Multimatic 215.** 

**RCCS-14** (14-pin plug) 

**043688** 26.5 ft. (8 m) cord with plug. 

North/south rotary-motion fingertip current/contactor control attaches to TIG torch using two hook-and-loop fasteners. Great for applications that require a finer amperage control.

**RHC-14** (14-pin plug) 

**242211020** 20 ft. (6 m) cord with plug 

**242211100** 100 ft. (30.5 m) cord with plug. 

Miniature hand current/contactor control. Dimensions: 4 x 4 x 3.25 inches (102 x 102 x 82 mm).

**RMS-6M** (6-pin plug) 

**195269** For Maxstar 161 STL/STH. 

**RMS-14** (14-pin plug) 

**187208** Momentary-contact switch for contactor control. Rubber-covered pushbutton dome switch ideal for repetitive on-off applications. Includes 26.5-foot (8 m) cord with plug.

**RPBS-14** (14-pin plug) 

**300666** Attaches to the TIG torch to remotely start and stop the TIG welding process. Includes 25-foot (7.6 m) cord with plug.
Wireless Remote Foot and Hand Controls

See literature AY/6.5 (Foot) and AY/6.6 (Hand)

Increases productivity, saves money, improves safety and easy to use.

Wireless foot control

Wireless hand control

Foot control

Foot control is designed specifically for TIG welding in manufacturing, fabrication and plant applications, allowing operator to adjust amperage at point of use without the limitations of remote cord.

Auto on feature extends the battery life up to 250 hours of welding without turning the pedal on and off.

Easy-Glide Wear Pads™ glide across concrete, making it easy to reposition the pedal for comfort and speed.

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.

*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.

Table 1

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Component</th>
<th>Power Supply</th>
<th>Battery Life</th>
<th>Rated Range*</th>
<th>Temperature</th>
<th>Radio Frequency</th>
<th>RF Power</th>
<th>Antenna</th>
<th>Dimensions</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wireless Foot Control System</td>
<td>Foot control (transmitter)</td>
<td>Three AA batteries</td>
<td>250 hours</td>
<td>90 ft. (27.4 m)</td>
<td>-13° to +185°F</td>
<td>2.4 GHz (ISM band)</td>
<td>&lt;3 mW</td>
<td>Internal</td>
<td>H: 6 in. (152 mm) W: 5.75 in. (146 mm) D: 11.5 in. (292 mm)</td>
<td>3 lb. (1.4 kg) w/batteries</td>
</tr>
<tr>
<td>Wireless Hand Control System</td>
<td>Hand control (transmitter)</td>
<td>Three AA batteries</td>
<td>250 hours</td>
<td>300 ft. (91 m)</td>
<td>-13° to +185°F</td>
<td>2.4 GHz (ISM band)</td>
<td>&lt;3 mW</td>
<td>Internal</td>
<td>H: 5 in. (127 mm) W: 2.75 in. (70 mm) D: 1.375 in. (35 mm)</td>
<td>0.6 lb. (0.27 kg) w/batteries</td>
</tr>
</tbody>
</table>

Wireless Remote Foot and Hand Controls

Torch and Weld Cable Connectors

Air-Cooled TIG (GTAW) Torch Connectors

- 273483
  - For Maxstar 161 and Multimatic.
  - 25 mm (small) Dinse-style gas thru for one-piece air-cooled torches.

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

- 195379
  - A-200 (WP26)
  - All others
  - For CST, Maxstar 210/280/400, Dynasty 210/280/400, and Syncrowave 250 DX/350 LX.
  - 50 mm Dinse-style for one-piece air-cooled torches.

Water-Cooled TIG (GTAW) Torch Connectors

- 50 mm Dinse-Style Flow Thru
  - 195380
  - For Syncrowave 210.
  - Used with all Weldcraft™ water-cooled torches.

- 50 mm Dinse-Style with Water Return Line
  - 195377
  - For Maxstar 210/280/400, Dynasty 210/280/400, and Syncrowave 250 DX/350 LX.
  - Used with all Weldcraft™ water-cooled torches.

Wireless Remote Compatible

Smart Touch™

- Belt clip (for hand control only)
- Four Easy-Glide Wear Pads™
- Three AA batteries
- Battery box (249297)
- Easy Programmed
- Auto on feature extends the battery life up to 250 hours without the limitations of remote cord.

Comes complete with

- Wireless foot control (300429) OR hand control (300430) transmitter
- Wireless 14-pin receiver (300722)
- Battery box (249297)
- Three AA batteries
- Four Easy-Glide Wear Pads™ (for foot control only)

Look throughout this catalog for the icon above signifying compatibility with a wireless remote. For a complete power source compatibility list visit MillerWelds.com/wireless.

Suggested power sources

Industrial

Processes

- TIG (GTAW) • Pulsed TIG (GTAW-P)
- The following processes are with hand control only
- Stick (SMAW) • MIG (GMAW)*
- Flux-cored (FCAW)
- *Only with voltage-sensing feeder.

*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.
Wire Feeder Accessories

**Extension Cables (14-Pin)**

8-Conductor Cables
- 242208025 25 ft. (7.6 m)
- 242208050 50 ft. (15 m)
- 242208080 80 ft. (24.4 m)
  - For SuitCase 12RC feeder, 20 Series feeders, 70 Series (except MPa Plus) feeders, and XR Control. For 14-pin remote controls/24 VAC wire feeders. 14-pin plug to a 14-pin socket. (Not for 115-volt XR or 50 Series feeders.)

11-Conductor Cables
- 247831025 25 ft. (7.6 m)
- 247831050 50 ft. (15 m)
- 247831080 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 process select and side select capabilities.

14-Conductor Cables
- 242205025 25 ft. (7.6 m)
- 242205050 50 ft. (15 m)
- 242205080 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.

**Power Supply Adapter**

**PSA-2 Control 141604**
- Required when using SuitCase 12RC, 20 Series, and 70 Series feeders with power sources having only 115-volt power available. Control is equipped with a 14-pin receptacle and a 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 047813**
- 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 047141**
- 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 M/1.5, M/1.73 and M/1.76.

**SGA 100 043856**
- Required to connect Spoolmate 3035 spool gun to any Millermatic 141/211. Also allows connection to virtually any similar MIG welder – Miller or other brands. Includes 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 043857**
- 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
  - 137546011 With contactor
  - Operates on 115-volt power and designed primarily for constant-current DC power sources. Can also be used with constant-voltage power sources or DC engine drives supplying 115 volts. Used with a CC source, the control circuit functions in a voltage-sensing mode and with a CV source, it functions as a constant-speed circuit. Includes wire run-in and drive motor acceleration controls which ensure optimum arc starting performance.

**WC-24 Weld Control 137549**
  - For Spoolmate 200, Spoolmatic and Spoolmatic Pro. Easily mounts on power source. Designed for use with Miller CV power sources with 14-pin receptacles and supplying 24 VAC.

**Spool Gun Extension Hose and Cable Kits**
- 132228 25 ft. (7.6 m)
- 132229 50 ft. (15 m)
  - For Spoolmatic and Spoolmatic Pro.
  - Extends leads, etc. between spool gun and power source.

**Turntable Assembly 146236**
- Allows feeder to rotate as operator changes work position. Reduces strain and bending of gun cable.

**Wire Straightener**
- For 20 Series and 70 Series.
  - 141580 For .035–.045 inch (0.9–1.1 mm) wire.
  - 141581 For 1/16–1/8 inch (1.6–3.2 mm) wire.

Design the perfect MIG guns for all your welds!

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

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

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