We build with the aerospace welder whose work helps us travel the world — and with the artist whose work helps us smile.

We build with the pro who’s welded in a factory for 30 years — and with the DIYer who’s welding in their backyard for the first time.

From pipelines to project cars, from skyscrapers to sculptures, if you weld, Miller welds with you. Together, WE BUILD™.

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

Hope Struse is the winner of our 2018 Build Welding’s Future promotion. Nominated by her former welding instructor, Hope is an award-winning welder who is now a welding instructor herself. She shares her knowledge with students at Cochise College in Sierra Vista, Arizona.

Dick Keeney runs the welding and machine shop that his father, Kelly, founded. For more than 60 years and through three generations, welding has supported the Keeney family — and has served citizens in and around Miles, Iowa (population 438), with quality metalwork.

Coleton Fisher is a welding fabricator at Metal Connection LLC in Oshkosh, Wisconsin. After spending his teen years exploring every technical class at his school, Coleton has found welding fabrication to be an ideal career — one in which every day brings a new challenge.
New from Blue

Shop with speed and convenience
Visit MillerWelds.com for a fast and easy way to buy welding products for your home or shop.

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

11 XR-AlumaFeed® SuitCase®
12 Deltaweld® 500 and Intellix™ Dual-Wire Feeders
40 Maxstar® 280 Multiprocess
57 Syncrowave® 300
73 Bobcat™ 200 Air Pak™ Diesel
105/107 LPR-100™ OV Half Mask Respirator and New Welding Helmet Graphics
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**

**ArcConnect™**

Next generation communication that utilizes high-speed signals to improve weld performance and allow point-of-use controls to be located at the feeder. Found on the Deltaweld® Systems (pg 12).

**MVP™ plugs and adapters**

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

- **MIG**
  - Millermatic® 211 (pg 7)
- **TIG**
  - Diversion™ (pg 52)
  - Syncrowave® 210 (pg 53)
- **Engine drives**
  - Fusion (pg 71)
- **Plasma cutters**
  - Spectrum® 375/625 (pg 90–91)

**Auto-Line™ technology**

Allows for any input voltage hookup with no manual linking. Provides convenience in any job setting and is ideal for dirty or unreliable power. Found on the following products:

- **MIG**
  - Millermatic® 255 (pg 9)
  - AlumaPower® 350 (pg 11)
  - Invision® 352 (pg 14)
  - Continuum™ (pg 15)
  - Auto-Continuum™ (pg 16)
- **Multiprocess**
  - Multimatic® 255 (pg 39)
  - Maxstar® (pg 40)
  - Dynasty® (pg 40)
  - XMT® 350 (pg 42–45)
- **Stick**
  - Maxstar® (pg 48–49)
- **TIG**
  - Maxstar® (pg 52/54–56)
  - Syncrowave® 210 (pg 53)
  - Dynasty® (pg 54–56)
- **Plasma cutters**
  - Spectrum® (pg 90–91)

**Pro-Set™**

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

- **Multiprocess**
  - Multimatic® 220 AC/DC (pg 38)
  - Maxstar® (pg 40)
  - Dynasty® (pg 40)
- **TIG**
  - Syncrowave® (pg 53, 57)
  - Maxstar® (except 161) (pg 54–56)
  - Dynasty® (pg 54–56)

**QuickTech™**

Provides easy setup and process changing on the Multimatic® 220 AC/DC multiprocess welder (pg 38).

- **Automatically** determines polarity. Work is always connected to the bottom right receptacle. MIG gun and TIG torch can stay connected at the same time.
- **Automatically** switches to the right process. Just hit trigger or foot control and the machine automatically changes, eliminating the need to manually change processes.
- **Automatically** recalls settings from the last process used.

**ClearLight™ lens technology**

Optimizes contrast and clarity in welding and light states. 1/1/1/2 optical clarity rating allows a lighter light state while not welding, providing versatility for varied applications. Found on T94™, Digital Infinity™, Digital Elite™ and Digital Performance™ welding helmets (pg 106–107).

**X-Mode™**

Electromagnetically senses the weld to eliminate sunlight interference and continuously detects the arc even if sensors are blocked. Found on T94™, Digital Infinity™, Digital Elite™ and Classic VSI™ welding helmets (pg 106–107).
Productivity

**ArcReach**

ArcReach technology allows operators to adjust welding parameters right at the weld joint without a control cord, using the wire feeder (pg 18/46) or remote (pg 46) — maximizing arc-on time and impacting the bottom line. Found on the following products:

- **Multi-process**
  - Dimension™ 650 ArcReach (pg 41)
  - XMT® 350 FieldPro™ models (pg 44)
  - XMT® 450 CC/CV ArcReach (pg 45)

- **Engine drives**
  - Trailblazer® 325 ArcReach models (pg 76)
  - Big Blue® ArcReach models (pg 78–81)

**Auto-Speed™**

Automatically adjusts engine speed to meet demands so the engine never works harder than necessary. Reduces fuel consumption, exhaust emissions and noise levels on the Bobcat™ 200 Air Pak™ (pg 73) and Trailblazer® 325 (pg 76) engine drives.

**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 select models of the Trailblazer® 325 engine drive (pg 76).

**Optimization and performance**

**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, calmer stable arc and less spatter.

Advanced welding processes are found on the following products:

- **MIG**
  - Deltaweld® 350/500 with Intellx™ Pro feeder (Accu-Pulse only) (pg 12)
  - Continuum™ Systems (pg 15)
  - Auto-Continuum™ Systems (pg 16)

- **Multi-process (RMD only)**
  - XMT® 350 FieldPro models (pg 44)*
  - PipeWorx 400 Welding System (pg 47)

- **Engine drives (RMD only)**
  - Trailblazer® 325 ArcReach models (pg 76)*
  - Big Blue® ArcReach models (pg 78–81)*

*Requires an ArcReach Smart Feeder.

**Augmented reality welding**

Builds a larger, more skilled welding workforce and quickly helps correct errors, reinforces proper welding practices and accelerates skill advancement. This training solution is found on the AugmentedArc™ augmented reality welding system (pg 113).

**InfoTrack™**

Data monitoring technology tracks arc time and features a clock. Version 2.0 adds arc count. Found on T94™ and Digital Infinity™ welding helmets (pg 106–107).

**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.

**ZoneFlow™ technology**

Extended-capture weld fume extraction technology extends the capture zone up to five feet deep and four feet wide (versus up to 18 inches from conventional source capture extractors). The increased capture zone reduces arm interactions so operators can keep welding, increasing arc-on time and productivity. Found on FILTAIR® Capture 5, and select FILTAIR® SWX and 4000–12000 models (pg 100–102).

**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 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 67–69. Insight Welding Intelligence is found on the following products:

- **MIG (Core is standard and Centerpoint is optional)**
  - Continuum™ (pg 15)
  - Auto-Continuum™ Systems (pg 16)

- **Multi-process (RMD only)**
  - XMT® 350 FieldPro models (pg 44)*
  - PipeWorx 400 Welding System (pg 47)

**Note:** Insight Core is compatible with many 14-pin compliant Miller® power sources (see list at MillerWelds.com/Insight) using an Insight Core 14-pin module or ALL power sources using an ArcAgent for Insight Core. Insight Centerpoint is compatible with ALL power sources using an ArcAgent Manual or ArcAgent Auto.
1-Phase

<table>
<thead>
<tr>
<th>Product Guide</th>
<th>Page</th>
<th>Class</th>
<th>Millermatic® 141</th>
<th>Millermatic® 211</th>
<th>Millermatic® 212 Auto-Set®</th>
<th>Millermatic® 252</th>
<th>Millermatic® 255</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7</td>
<td></td>
<td>Handles, optional running gear</td>
<td>Installed running gear</td>
<td>Installed running gear</td>
<td>Handles, optional running gear</td>
<td>Handles, optional running gear</td>
</tr>
<tr>
<td>Weldable Metals</td>
<td></td>
<td></td>
<td>Steel, stainless, aluminum</td>
<td>Steel, stainless, aluminum</td>
<td>Steel, stainless, aluminum</td>
<td>Steel, stainless, aluminum</td>
<td>Steel, stainless, aluminum</td>
</tr>
<tr>
<td>Welding Output Range</td>
<td>30-140 A</td>
<td>30-230 A</td>
<td>30-210 A</td>
<td>30-300 A</td>
<td>20-350 A</td>
<td>20-350 A</td>
<td></td>
</tr>
<tr>
<td>Special Features</td>
<td>All-in-one, 120 V input, Auto-Set®, Smooth-Start®</td>
<td>All-in-one, 120 or 240 V input, Auto-Set®, Smooth-Start®</td>
<td>All-in-one, 230 V input, Fan-On-Demand®, Gun-On-Demand®</td>
<td>All-in-one, standard times menu, Fan-On-Demand®, connects to standard MIG gun, push-pull gun or spool gun</td>
<td>All-in-one, Auto-Set®, stores up to 4 programs, connects to standard MIG gun, push-pull gun or spool gun</td>
<td>All-in-one, connects to standard MIG gun, push-pull gun or spool gun</td>
<td></td>
</tr>
<tr>
<td>Typical Applications</td>
<td>Up to 3/16 in. using self-shielded wire maintenance/repair, auto body, hobby</td>
<td>Up to 3/8 in. maintenance/repair, auto body, hobby</td>
<td>Up to 3/8 in. fabrication, farm, garage/body shops</td>
<td>Up to 1/2 in. industrial production/fabrication, farm</td>
<td>Up to 1/2 in. industrial production/fabrication, pulsed MIG ideal for thin gauge aluminum</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Also see Multiprocess section for machines that can MIG weld.

For more detailed information, visit MillerWelds.com/mig
Millermatic® 141 and 211

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

**Millermatic 141 (907612) (951601) with running gear/cylinder rack**
- **Input Power**: 120 V
- **Amps Range**: 30-140
- **Rated Output**: 90A at 18.5 VDC, 20% duty cycle
- **Wire Feed Speed**: 15-350 ipm (0.4-9.1 m/min.)
- **Wire Type and Diameter Capacity**: .023-.035 in. (0.6-0.9 mm)
- **Power Source Dimensions**: H: 12.5 in. (318 mm), W: 11.25 in. (286 mm)
- **Net Weight**: 51 lb. (23.1 kg)

**Millermatic 211 (907614) (951603) with running gear/cylinder rack**
- **Input Power**: 120 V
- **Amps Range**: 30-130
- **Rated Output**: 115 A at 19.8 VDC, 20% duty cycle
- **Wire Feed Speed**: 60-600 ipm (1.5-15.2 m/min.)
- **Wire Type and Diameter Capacity**: .023-.035 in. (0.6-0.9 mm)
- **Power Source Dimensions**: H: 12.5 in. (318 mm), W: 11.25 in. (286 mm), D: 20.5 in. (521 mm)
- **Net Weight**: 38 lb. (17.2 kg)

Mild Steel Welding Capability

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

Aluminum Welding Capability

<table>
<thead>
<tr>
<th>Model</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>141</td>
<td>18 ga. (1.2 mm)</td>
<td>14 ga. (1.9 mm)</td>
</tr>
<tr>
<td>211</td>
<td>18 ga. (1.2 mm)</td>
<td>3/8 in. (9.5 mm)</td>
</tr>
</tbody>
</table>

- **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.

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

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

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

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

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

**Millermatic 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** cooling system only operates when needed, reducing power consumption and keeping internal components cleaner.

- **Quick Select™ drive roll** for argon or AR/CO2 mix, two .030 in. contact tips, Hobart® spool of .030 in. solid wire, hook-and-loop cord wraps and material thickness gauge (229895)

- **Most popular accessories**
  - Spoolmate™ 100 300371 (pg 27)
  - Spoolmate™ 150 301272 (pg 27) (for Millermatic 211 only)

- **Running Gear/Cylinder Rack** 301239 (pg 114)
- **Protective Cover** 301262 (pg 117)
- **V-Knurled Drive Roll** 202926

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

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

**Comes complete with**
- 10 ft. (3 m) 100-amp MDX®-100 Mig gun
- 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

- Flow gauge regulator and hose for argon or AR/CO2 mix, two .030 in. contact tips, Hobart® spool of .030 in. solid wire, hook-and-loop cord wraps and material thickness gauge (229895)
- 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.

- **Auto Spoolmate™ 150** 301272 (pg 27) with Millermatic 211.
- **Running Gear/Cylinder Rack** 301239 (pg 114)
- **Protective Cover** 301262 (pg 117)
- **V-Knurled Drive Roll** 202926
Millermatic® 212 Auto-Set™

See literature DC/12.46

Welding Capability

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Amperage Range</th>
<th>Rated Output</th>
<th>Amps Input at Rated Output, 60 Hz</th>
<th>Wire Feed Speed</th>
<th>Wire Type and Diameter Capacity</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>(907405)</td>
<td>30–210</td>
<td>160 A at 24.5 VDC, 60% duty cycle</td>
<td>31 28 6.2 5.2</td>
<td>50–700 ipm (1.3–17.8 m/min.)</td>
<td>Solid steel .023–.035 in. (0.6–0.9 mm)</td>
<td>H: 30 in. (762 mm)</td>
<td>183 lb. (83 kg)</td>
</tr>
<tr>
<td>(951177)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Stainless .023–.035 in. (0.6–0.9 mm)</td>
<td>W: 19 in. (483 mm)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Flux-cored .030–.045 in. (0.8–1.2 mm)</td>
<td>D: 40 in. (1,016 mm)</td>
<td></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 7 for more information).

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

Millermatic® 252

See literature DC/12.49

Welding Capability

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Amperage Range</th>
<th>Rated Output</th>
<th>Amps Input at Rated Output, 60 Hz</th>
<th>Wire Feed Speed</th>
<th>Wire Type and Diameter Capacity</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>(907321)</td>
<td>30–300</td>
<td>200 A at 28 VDC, 60% duty cycle</td>
<td>48 42 – – 9.5 7.5 (at 60% duty cycle)</td>
<td>50–700 ipm (1.3–17.8 m/min.)</td>
<td>Solid steel .023–.045 in. (0.6–1.2 mm)</td>
<td>H: 30 in. (762 mm)</td>
<td>205 lb. (94 kg)</td>
</tr>
<tr>
<td>(951066*)</td>
<td>230/460/575 V</td>
<td>46 23 18 9.5 7.5 (at 60% duty cycle)</td>
<td></td>
<td></td>
<td>Stainless .023–.045 in. (0.6–1.2 mm)</td>
<td>W: 19 in. (483 mm)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>230/460/575 V</td>
<td></td>
<td></td>
<td></td>
<td>Flux-cored .030–.045 in. (0.8–1.2 mm)</td>
<td>D: 40 in. (1,016 mm)</td>
<td></td>
</tr>
</tbody>
</table>

Infinite voltage control with self-calibrating digital meters that preset the voltage of the weld 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.
**Millermatic® 255** See literature DC/12.8

**Welding Capability**

<table>
<thead>
<tr>
<th>Material</th>
<th>Min. 24 ga. (0.6 mm)</th>
<th>Max. 1/2 in. (13 mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild Steel</td>
<td>208 V</td>
<td>304 V</td>
</tr>
<tr>
<td>Aluminum</td>
<td>208 V</td>
<td>304 V</td>
</tr>
</tbody>
</table>

Recommended aluminum solution XR-Aluma-Pro® push-pull gun (page 29).

Easy-to-understand interface with 7-inch color LCD display ensures proper machine setup and parameter selection, reducing setup time and increasing weld time.

- Quick-access Auto-Set and pulse mode backlit buttons across the top illuminate when active
- Soft-key buttons below the display change function depending on which screen is displayed — makes setup or change quick, easy and intuitive
- Large text for easier readability
- Intuitive connection setup images
- Full troubleshooting descriptions versus help errors and look up codes

**AUTO-LINE® TECHNOLOGY** Allows for any input voltage hookup (208–240 V, single-phase) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable power.

**Auto-Set™ Elite** offers predefined weld settings to increase ease of use and ensure that the job is done right for operators of all skill levels.

- Available for MIG and pulsed MIG processes with the ability to fine-tune your settings
- Set weld parameters by selecting wire and gas type, wire diameter and material thickness

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

**Program mode** allows easy save and recall of favorite weld settings. Delivers more productivity and consistent quality while minimizing supervisor intervention.

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

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

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

**Industrial**

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

**Millermatic 255** comes complete with
- 15 ft. (4.5 m) 250-amp MDX™-250 MIG gun with Bernard® AccuLock™ S consumables
- 10 ft. (3 m) work cable with clamp
- 10 ft. (3 m) industrial power cord
- Factory-installed gas solenoid
- Flow gauge regulator and gas hose for argon or AR/CO2 mix
- Chain to secure gas cylinder
- .035/.045 in. reversible V-groove drive rolls
- Extra contact tips and material thickness gauge (229895)

**Most popular accessories**
- MDX™-250 EZ-Select™ MIG Gun 1770047 (pg 24)
- Spoolmatic® Spool Gun (pg 28) (non-Pro gun only)
- XR-Aluma-Pro™ Air-Cooled Push-Pull Guns (pg 29)
- EZ-Latch™ Single Cylinder Running Gear 301449 (pg 114)
- EZ-Latch™ Dual Cylinder Rack with Elevated Gun and Cable Rack 301481
- Protects an EZ-Latch™ Single Cylinder Running Gear into a Dual Cylinder Rack Running Gear as seen below

**Recommendations**
- EZ-Latch™ Dual Cylinder Rack Running Gear 961769 (pg 114)
- Protective Cover 301521 (pg 117)

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

---

**Stock Number**
- (907734) 208–240 V with single cylinder running gear
- (951768) 208–240 V

<table>
<thead>
<tr>
<th>Amperage</th>
<th>Rated Output</th>
<th>Amps Input at Rated Output, 50/60 Hz</th>
<th>Wire Feed Speed</th>
<th>Wire Type and Diameter Capacity</th>
<th>Power Source Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td>208 V 240 V</td>
<td>208 V 240 V KVA KW</td>
<td>50–800 ipm (1.3–20 m/min.)</td>
<td>Solid steel .023–.045 in. (0.6–1.2 mm) Stainless .023–.045 in. (0.6–1.2 mm) Aluminum .035–.047 in. (0.9–1.2 mm) Flux-cored .030–.045 in. (0.8–1.2 mm)</td>
<td>H: 19.24 in. (489 mm) W: 13.75 in. (349 mm) D: 26.25 in. (667 mm)</td>
<td>84 lb. (38 kg)</td>
</tr>
</tbody>
</table>
### Millermatic® 350P

**See literature DC/12.51**

**Welding Capability**

<table>
<thead>
<tr>
<th>Min. 24 ga. (0.6 mm)</th>
<th>Max. 1/2 in. (13 mm)</th>
<th>Max. 1/2 in. (13 mm)</th>
<th>Aluminum welding uses optional XR-Aluma-Pro push-pull gun.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild Steel</td>
<td>Aluminum</td>
<td></td>
<td></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 Aluminum

**See literature DC/12.56**

**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.

### Table: Millermatic 350P Aluminum

<table>
<thead>
<tr>
<th>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>1951451</td>
<td>Three-phase</td>
<td>25–400</td>
<td>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>
</tr>
<tr>
<td>1951452</td>
<td>Single-phase</td>
<td>25–400</td>
<td>300 A at 32 VDC, 60% duty cycle</td>
<td>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>Stainless .030–.045 in. (0.8–1.2 mm)</td>
<td>W: 19 in. (483 mm)</td>
<td></td>
</tr>
</tbody>
</table>

### Table: Millermatic 350P Aluminum Push-Pull Gun System

<table>
<thead>
<tr>
<th>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>1951455</td>
<td>Three-phase</td>
<td>25–400</td>
<td>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>Aluminum .035–.047 in. (0.9–1.2 mm)</td>
<td>H: 34 in. (863 mm)</td>
<td>181 lb. (82 kg)</td>
</tr>
<tr>
<td>1951456</td>
<td>Single-phase</td>
<td>25–400</td>
<td>300 A at 32 VDC, 60% duty cycle</td>
<td>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>Metal-cored .035–.052 in. (0.9–1.3 mm)</td>
<td>W: 19 in. (483 mm)</td>
<td></td>
</tr>
</tbody>
</table>

### Table: Millermatic 350P Aluminum Push-Pull Gun System (continued)

<table>
<thead>
<tr>
<th>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>1951458</td>
<td>Three-phase</td>
<td>25–400</td>
<td>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>Aluminum .035–.047 in. (0.9–1.2 mm)</td>
<td>H: 34 in. (863 mm)</td>
<td>181 lb. (82 kg)</td>
</tr>
<tr>
<td>1951459</td>
<td>Single-phase</td>
<td>25–400</td>
<td>300 A at 32 VDC, 60% duty cycle</td>
<td>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>Metal-cored .035–.052 in. (0.9–1.3 mm)</td>
<td>W: 19 in. (483 mm)</td>
<td></td>
</tr>
</tbody>
</table>

### Millermatic 350P Aluminum with XR-Aluma-Pro™ Lite gun shown.
AlumaFeed® Synergic Aluminum Welding System

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

*NEW!* Impact-resistant and flame-retardant suitcase-style feeder.

AlumaPower™ 350 MPa and XR-AlumaFeed® SuitCase® with XR-Aluma-Pro gun air-cooled package shown.

AlumaPower™ 350 MPa 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.*

**Power Source Only**

<table>
<thead>
<tr>
<th>Package Stock Number*</th>
<th>XR-AlumaFeed SuitCase Feeder</th>
<th>XR-Aluma-Pro® Push-Pull MIG Gun</th>
<th>XR™-Pistol Grip Push-Pull MIG Gun</th>
<th>Industrial MIG 4/8 Kit</th>
<th>Coolmate® with Coolant</th>
<th>Cart</th>
</tr>
</thead>
<tbody>
<tr>
<td>AlumaPower 350 MPa (907420) 208–575 V (907420001) 208–575 V with auxiliary power</td>
<td>(951834) w/350 model (907420) (301567) 25 ft. air-cooled – – – – –</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(951836) w/350 model (907420) (301567) – 30 ft. air-cooled – – –</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(951833) w/350 model (907420) (301567) 25 ft. air-cooled – With Dinse connectors – MIGRunner cart</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

AlumaPower 450 MPa (907483) 230/460 V w/auxiliary power (907484) 575 V w/auxiliary power

<table>
<thead>
<tr>
<th>Package Stock Number*</th>
<th>XR-AlumaFeed SuitCase Feeder</th>
<th>XR-Aluma-Pro® Push-Pull MIG Gun</th>
<th>XR™-Pistol Grip Push-Pull MIG Gun</th>
<th>Industrial MIG 4/8 Kit</th>
<th>Coolmate® with Coolant</th>
<th>Cart</th>
</tr>
</thead>
<tbody>
<tr>
<td>AlumaPower 450 MPa (907483) 230/460 V w/auxiliary power (907484) 575 V w/auxiliary power</td>
<td>(951840) w/450 model (907483) (301567) 25 ft. air-cooled – With lug connectors – MIGRunner cart</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(951839) w/450 model (907483) (301567) 25 ft. water-cooled – With lug connectors Coolmate 3 MIGRunner cart</td>
<td></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 out of the box to run 3/64-inch wire. 1/16-inch consumables not included — order separately above.

<table>
<thead>
<tr>
<th>Model</th>
<th>Input Power</th>
<th>Amp/Volt Ranges</th>
<th>Rated Output</th>
<th>AmPS Input at Rated Load Output, 60 Hz</th>
<th>KVA</th>
<th>KW</th>
<th>Max. Open-Circuit Voltage</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AlumaPower 350 MPa</td>
<td>Three-phase</td>
<td>5–425 A 10–38 V</td>
<td>350 A at 34 VDC, 60% duty cycle</td>
<td>40.4</td>
<td>36.1</td>
<td>20.6</td>
<td>17.8</td>
<td>14.1</td>
<td>14.2</td>
</tr>
<tr>
<td>AlumaPower 450 MPa</td>
<td>Three-phase</td>
<td>15–600 A 10–38 V</td>
<td>450 A at 36.5 VDC, 100% duty cycle</td>
<td>–</td>
<td>49.4</td>
<td>–</td>
<td>27.2</td>
<td>23.6</td>
<td>21.6</td>
</tr>
<tr>
<td>XR-AlumaFeed SuitCase Feeder</td>
<td>24 VAC, 5 A, 50/60 Hz</td>
<td>400 A at 100% duty cycle System duty cycle is limited to gun rating</td>
<td>–</td>
<td>50–900 spm (1.3–23 m/min.)</td>
<td>–</td>
<td>.035–1/16 in. (0.9–1.6 mm)</td>
<td>Requires wire kit (230708) for gun and drive roll kit (268850) for control box to run 1/16 in. (1.6 mm) wire</td>
<td>12 in. (305 mm)</td>
<td>15.5 in. (394 mm) W: 9 in. (229 mm) D: 21 in. (533 mm)</td>
</tr>
</tbody>
</table>
Deltaweld® Systems
See literature DC/16.5

The new standard in manufacturing provides the solution for welders of all skill levels, plus pulsed MIG capabilities with Intellx® Pro integrated packages.

Reduce the time and hassle of setting up welding systems. Make your move to a weld-ready Deltaweld MIGRunner®.

Ships as a complete package. Just hook up your primary power, add gas, wire and welding gun, and you’re ready to weld.

Versatile MIGRunner cart keeps you organized with its dual cylinder rack, MIG gun holders and spacious storage compartment beneath the power source, and portable with its lockable front casters and oversized rear wheels.

Quality-engineered cable management protects your connections to keep you productive.

Single-wire feeder swivels for convenience and function, eliminating wear on gun and liner assembly. It moves with the MIG gun, allowing operator to see the front of the feeder and which parameters are selected.

Deltaweld® Power Sources
Two power source choices
- **Deltaweld 350** has auxiliary power standard and optional 14-pin receptacle and meters for use with legacy feeders.
- **NEW! Deltaweld 500** has auxiliary power and meters standard and an optional 14-pin receptacle. It adds more power (500 amps at 100 percent duty cycle) and a dedicated gouge mode for up to 3/8-inch carbons.

ArcConnect® is a next generation communication that utilizes high-speed signals to improve weld performance and allow point-of-use controls to be located at the feeder.

Wind Tunnel Technology®: Internal air flow that protects components, greatly improving reliability.

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

<table>
<thead>
<tr>
<th>Model</th>
<th>Single-Wire Intellx Feeder MIGRunner</th>
<th>Single-Wire Intellx Pro Feeder MIGRunner</th>
<th>Dual-Wire Intellx Feeder MIGRunner</th>
<th>Dual-Wire Intellx Pro Feeder MIGRunner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deltaweld 350</td>
<td>(951792)</td>
<td>(951777)</td>
<td>(951817)</td>
<td>(951818)</td>
</tr>
<tr>
<td>208/230/460 V</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deltaweld 500</td>
<td>(951814)</td>
<td>(951808)</td>
<td>(951819)</td>
<td>(951820)</td>
</tr>
<tr>
<td>208/230/460 V</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deltaweld 500</td>
<td>–</td>
<td>(951824)</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>575 V</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Intellx™ Wire Feeders

**Dedicated wire feeder options**

- **Intellx™ feeders** with new arc control feature mean welders can produce better welds with minimal parameter adjustments.
- **Intellx® Pro feeders** add Accu-Pulse®, EZ-Set, steel weld programs, and memory buttons. Accu-Pulse® provides a 28 percent wider operating window and a more forgiving arc, while EZ-Set simplifies parameter setup based on material thickness, removing complexity.

**NEW! Dual-wire models** allow two different wire types to be available on one feeder, avoiding downtime from changing spools and drive rolls.

**User-friendly interface** makes the system easy to set up and adjust with minimal training.

**Rotatable drive assembly** allows operator to rotate the drive, eliminating severe bends in the wire feed path. This extends gun-liner life and aids in feeding difficult wires.

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

---

**Intellx™ Pro Swingarc™**

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

Optional Swingpak base (order separately)

Required Deltaweld 350 or 500 power source (order separately)

---

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

**Counterbalance design** makes it easy to position boom and 360-degree rotation and 60-degree lift angle maximize work area.

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

---

**Intellx Feeder Features**

- **Feature**
- **Intellx**
- **Intellx Pro**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Intellx</th>
<th>Intellx Pro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital meters</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Remote voltage</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Wire feed speed</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Acc control</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Trigger hold</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Wire jog and purge</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Wire feed speed feedback</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Four drive rolls</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Rotatable drive</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Up to 60 lb. spool</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>MIG process</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Dual-wire models</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>EZ-Set MIG</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>EZ-Set Accu-Pulse®</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Trigger select</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Preflow</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Postflow</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Memory slots (2)</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Out-of-box programs</td>
<td>yes</td>
<td>yes</td>
</tr>
</tbody>
</table>

---

**Power Sources/Packages**

- **Processes**
  - MIG (GMAW) • Flux-cored (FCAW)
  - Accu-Pulse® MIG (GMAW-P) with Intellx Pro feeder
  - Air carbon arc gouging (CAC-A) with Deltaweld 500

**MIGRunner™ packages include**

- Deltaweld power source 350: 907747
  
  500: 907785 or 907786

- Intellx OR Intellx Pro single-wire or dual-wire feeder

- Bernard® BTB Gun(s)
  
  (350: 300 A OR 500: 400 A) and .035/.045 in. V-groove drive rolls

- Factory-installed Deltaweld running gear with cable holder, gun holders, and chains for gas cylinders

- Cart accessory kit consisting of flowmeter regulator(s). 5 ft. (1.5 m) gas hose(s), 10 ft. (3 m) 4/0 feeder weld cable with lugs, 15 ft. (4.6 m) work cable with 600-amp C-clip, and 9 ft. (2.7 m) AnConnect cable

**Most popular accessories**

- Bernard® MIG Guns (pg 25–26)

  - Deltaweld 350/500/Running Gear 301523 (pg 115)

- Industrial MIG 4/0 Kits with lugs (stationary packages only) (pg 117)

- AnConnect Control/Motor Cables 280471009 9 ft. (2.7 m)

- 280471015 15 ft. (4.6 m)

- 280471025 25 ft. (7.6 m)

- 280471050 50 ft. (15.2 m)

- 280471075 75 ft. (22.9 m)

- 280471100 100 ft. (30.5 m)

- Cart Accessory Kit 301528

  (see above for contents)

  Note: For dual-wire feeder both 301528 and 301579 are required.

- Feeder Swivel Kit 301533

  Mounts single- or dual-wire feeder to Deltaweld – only single feeder swivels

- Stationary Handle Kit 301529

- Swinegall™ Base 183997

- Single/Dual Spool Carrier 300353

  For 4 ft. post 300352

  For 6 ft. post

  See page 22 for more information

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

---

**Deltaweld 500 A**

<table>
<thead>
<tr>
<th>Model</th>
<th>Single-Wire Intellx Pro Swingarc</th>
<th>Dual-Wire Intellx Pro Swingarc</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 ft. (3.7 m) Boom</td>
<td>(951804)</td>
<td>(951805)</td>
</tr>
<tr>
<td>16 ft. (4.9 m) Boom</td>
<td>(951806)</td>
<td>–</td>
</tr>
</tbody>
</table>

**Power Source Only/Stock Number**

- **Intellx Model**

- **Power Source Only/Stock Number**

- **500 A**

  - **Deltaweld 350** (907747) 208/230/460 V (90774001) 208/230/460 V with 14-pin and meters

<table>
<thead>
<tr>
<th>Amp/Volt Ranges</th>
<th>Rated Output*</th>
<th>Amps Input at Rated Load Output, 60 Hz*</th>
</tr>
</thead>
<tbody>
<tr>
<td>20–400 A 10–38 V</td>
<td>300 A at 29 VDC, 100% duty cycle</td>
<td>29.3, 26.5, 14.6 – – 11.6, 10.0</td>
</tr>
<tr>
<td></td>
<td>350 A at 31.5 VDC, 60% duty cycle</td>
<td>36.7, 33.4, 18.1 – – 14.5, 12.5</td>
</tr>
<tr>
<td></td>
<td>425 A at 35.25 VDC, 30% duty cycle</td>
<td>50.0, 45.1, 23.1 – – 18.5, 16.9</td>
</tr>
</tbody>
</table>

  - **Deltaweld 500** (907785) 208/230/480 V with 14-pin and meters (907789001) 208/230/460 V with 14-pin and meters (907786001) 575 V with 14-pin and meters

  | 30–650 A 10–44 V | 500 A at 39 VDC, 100% duty cycle | 64.2, 58.1, 30.4 24.8 24.2 21.7 |
  | | 575 A at 42.75 VDC, 60% duty cycle | 80.2, 73.5, 38.0 30.4 30.3 27.2 |
  | | 650 A at 44 VDC, 25% duty cycle | 94.2, 84.9, 43.9 34.9 35.0 31.6 |

**Net Weight**

- 350 A: 115 lb. (52.2 kg)
- 500 A: 145 lb. (65.8 kg)

---

**Feeder Only/Stock Number**

- **Intellx (951783)** Single-wire
- **Intellx Pro (951784)** Single-wire
- **Intellx (951815)** Dual-wire
- **Intellx Pro (951816)** Dual-wire

<table>
<thead>
<tr>
<th>Input Power</th>
<th>Input Welding Circuit Rating</th>
<th>Wire Feed Speed</th>
<th>Wire Diameter Capacity</th>
<th>Maximum Speed</th>
<th>Size Capacity (H x W x D)</th>
<th>Net Weight</th>
</tr>
</thead>
</table>
| 50 VDC | 600 A at 113 VDC, 60% duty cycle | 50–780 ipm (1.3–19.8 m/min.) | 0.023–0.064 in. (0.6–2.0 mm) | 18 in. (457 mm), 60 lb. (27 kg) | 16.25 x 12.38 x 27.88 in. (413 x 314 x 708 mm) | Single: 44.8 lb. (20.3 kg)
Dual: 77 lb. (34.9 kg) |
Invision™ MPa Plus Systems

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

**Auto-Line**: Invision 352 allows for any input voltage hookup (208–575 V, single- or three-phase) with no manual linking. 450 model is 230/460 V manual link or 575 V, three-phase only.

**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 spacing between the ripple pattern.

**Synergic pulsed MIG when using a 70 Series MPa Plus feeder**. 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.

### Recommended Aluminum Solution

Dedicated XR Plus guns work with MPa Plus feeders. See page 21 for information and stock numbers.

---

### Model Specifications

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Invision 352 MPa</td>
<td>(907431) 208–575 V</td>
<td>Alum (951844) w/model 907431</td>
<td>D-74 dual-wire feeder with two push-only MIG guns 25 ft. air-cooled D-74 single-wire feeder with one push-only MIG gun – D-74 single-wire feeder with one push-only MIG gun – D-74 dual-wire feeder with two push-only MIG guns –</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Invision 450 MPa</td>
<td>(907485) 230/460 V w/aux power</td>
<td>Steel (951499) w/model 907485</td>
<td>D-74 dual-wire feeder with two push-only MIG guns</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

### Hobart Filler Metals

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

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

---

Questions? Hobart is here to help.
Continuum™ Systems

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

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 68 and 69).

Feeder design

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

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

User-friendly interface makes the system easy to set up and adjust with minimal training.

More power — better reliability

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

- Allows for any input voltage hookup (230–575 V, three-phase) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable power.

Continuum Processes

<table>
<thead>
<tr>
<th>Process</th>
<th>Standard</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>Deposit</td>
<td>A</td>
<td>A</td>
<td>B</td>
<td>A</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td>Gap Filling</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>D</td>
<td>B</td>
<td>B</td>
<td>A</td>
<td>B</td>
<td>A</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>A</td>
<td>A</td>
<td>B</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Increased Travel Speed</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>B</td>
<td>A</td>
<td>C</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.

Power Source Dimensions

- Includes lift eye
- Comes with all standard accessories
- Requires Miller MIG guns (pg 25–26)
- Insight Centerpoint® Software (pg 69)
- Continuum Running Gear/Cylinder Rack 301264 (pg 115)
- Industrial MIG 4/0 Kits (with lug connectors) (pg 117)
- Continuum Integrated Cooler 301214 Mounts to bottom of power source — does not require external power
- Continuum Control/Motor Cables 263368003 3 ft. (0.9 m) 263368015 15 ft. (4.6 m) 263368025 25 ft. (7.6 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.

Most popular accessories

- Bernard® MIG Guns (pg 25–26)
- Insight Centerpoint® Software (pg 69)
- Continuum Running Gear/Cylinder Rack 301264 (pg 115)
- Industrial MIG 4/0 Kits (with lug connectors) (pg 117)
- Continuum Integrated Cooler 301214 Mounts to bottom of power source — does not require external power
- Continuum Control/Motor Cables 263368003 3 ft. (0.9 m) 263368015 15 ft. (4.6 m) 263368025 25 ft. (7.6 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.

Wire feeding options

- Continuum Feeders* (see chart below)
- Continuum SwinGarc™ Boom-Mounted Feeders*

Heavy industrial

- Push-only pkg: Continuum single-wire feeder with Bernard® BTB Gun 400 A and .035/.045 in. V-groove drive rolls
- Continuum running gear/cylinder rack and handles/cable hangers
- 3 ft. (0.9 m) control/motor cable
- Industrial MIG 4/0 kit consisting of flowmeter regulator(s) with 10 ft. (3 m) gas hose(s), 10 ft. (3 m) 4/0 feeder weld cable with lugs, and 15 ft. (4.6 m) work cable with 600-amp C-clamp

See literature DC/36.0 for additional booms and options.
Auto-Continuum™ Systems

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

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

Auto-Line Technology allows for any input voltage hookup (230–575 V, three-phase) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable power.

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, lowheat, 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 68).
- **Insight Centerpoint** (optional) is an advanced, real-time feedback solution to ensure consistent weld quality (see page 69).

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

**Most popular accessories**
- Insight Centerpoint™ Software (pg 69)
- Auto-Continuum Robotic MIG Kit 301455

Consists of 25 ft. (7.6 m) motor control cable, 15 ft. (4.6 m) 90-degree motor control extension cable, 15 ft. (4.6 m) weld cable, flowmeter regulator, 30 ft. (9.1 m) gas hose, 16.4 ft. (5 m) Ethernet cable, 0.035/0.045-inch V-groove drive roll kit with guides, 30 ft. (9.1 m) weld wire conduit assembly, and 10 ft. (3 m) conduit and clamps (for mounting motor control cable, weld cable and gas hose).

- Wire Drive Motor Mounting Brackets 301276 ABB® 1600
- 301277 ABB® 2600
- 300483 FANUC® 100 and 120 IC
- 300013 FANUC®/KUKA®/Motoman®
- 300375 Motoman® EA1400
- 300376 Motoman® EA1900
- Motor Control Cables 263368025 25 ft. (7.6 m)
- 263368050 50 ft. (15 m)
- 263368080 80 ft. (24.4 m)
- 263368100 100 ft. (30.5 m)
- 90-degree Motor Control Extension Cables 281554025 25 ft. (7.6 m)
- 281554030 45 ft. (13.7 m)

- EtherNet/IP™ Communication Cables 300734 9.8 ft. (3 m)
- 300735 15 ft. (4.6 m)

- DeviceNet Communication Cable 300021 20 ft. (6.1 m)

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

---

**Model/Stock Number** | **Amp/Volt Ranges** | **Rated Output** | **Amps Input at Rated Output, 50/60 Hz, 3-Phase** | **Max. Open-Circuit Voltage** | **Dimensions (Includes Lift Eye)** | **Net Weight**
--- | --- | --- | --- | --- | --- | ---
Auto-Continuum 350 (907656) | 20–400 A 10–44 V | 350 A at 31.5 VDC, 100% duty cycle | 36.7 | 0.17* | H: 21.87 in. (557 mm) W: 17.5 in. (444 mm) D: 28.22 in. (717 mm) | 150 lb. (68 kg)
(907658) | 230–575 V with auxiliary power | 300 A at 39 VDC, 100% duty cycle | 34.7 | 0.17* | 130 lb. (59 kg)
Auto-Continuum 500 (907657) | 20–600 A 10–44 V | 500 A at 39 VDC, 100% duty cycle | 57.6 | 0.17* | H: 21.87 in. (557 mm) W: 17.5 in. (444 mm) D: 28.22 in. (717 mm) |
(907659) | 230–575 V with auxiliary power | 400 A at 39 VDC, 100% duty cycle | 33.2 | 0.17* | 150 lb. (68 kg)

**Model/Stock Number** | **Input Power** | **Input Welding Circuit Rating** | **Wire Feed Speed** | **Wire Diameter Capacity** | **Dimensions** | **Net Weight**
--- | --- | --- | --- | --- | --- | ---
Auto-Continuum Wire Drive Motor Assembly (301207) | 50 VDC | 500 A at 100% duty cycle | Standard 50–1,000 ipm (1.3–25.4 m/min.) | 0.035/0.045 in. (0.9–2.0 mm) | H: 8.75 in. (222 mm) W: 10 in. (254 mm) D: 10 in. (254 mm) | 16.5 lb. (7.5 kg)
### Wire Feeders

For more detailed information, visit MillerWelds.com/wirefeeders

Also see MIG, MIG Guns and Multiprocess sections for wire feeding options.

---

### Product Guide

<table>
<thead>
<tr>
<th>Product</th>
<th>Page</th>
<th>Class</th>
<th>MIG</th>
<th>RMD®</th>
<th>Flux-cored</th>
<th>Dual-shld</th>
<th>Self-shld</th>
<th>Power Source Required</th>
<th>Wire Diameter Capacity</th>
<th>Special Features</th>
<th>Typical Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArcReach® SuitCase® (8 and 12)</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td>CC/CV</td>
<td></td>
<td>CV</td>
<td></td>
<td>.023–.064 in. (0.6–2.0 mm)</td>
<td>8 in. (SuitCase 8) or 12 in. (SuitCase 12) diameter spool capacity, remote voltage control without a control cord, powered by arc voltage</td>
<td>Construction, site fabrication, field maintenance</td>
</tr>
<tr>
<td>ArcReach® Smart Feeder</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.035–.045 in. (0.9–1.1 mm)</td>
<td>12 in. diameter spool capacity, remote voltage control without a control cord, requires an XMT 350 FieldPro connected to three-phase power or an ArcReach-equipped engine drive</td>
<td>Process piping, refinery, petrochemical, power plants, HVAC, water pipe</td>
</tr>
<tr>
<td>SuitCase® 12RC</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td>CV</td>
<td></td>
<td></td>
<td></td>
<td>.023–.064 in. (0.6–2.0 mm)</td>
<td>12 in. diameter spool capacity, standard remote voltage control, powered by 14-pin control cord</td>
<td>Field maintenance, site fabrication</td>
</tr>
<tr>
<td>20 Series (Basic and Digital)</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td>CV</td>
<td></td>
<td></td>
<td></td>
<td>.023–.064 in. (0.6–2.0 mm)</td>
<td>Four quick-change drive rolls, digital meters, remote voltage control (meters and remote voltage control are a field kit option on basic model)</td>
<td>Manufacturing, fabrication</td>
</tr>
<tr>
<td>70 Series (74S and 74D) Singles and Duals</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td>CV</td>
<td></td>
<td></td>
<td></td>
<td>.023–.064 in. (0.6–2.0 mm)</td>
<td>Four quick-change drive rolls, remote voltage control (field kit option on 745 models), digital meters (74D only)</td>
<td>Heavy and light manufacturing, fabrication</td>
</tr>
<tr>
<td>70 Series (74 MPa Plus) Singles and Duals</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td>CV</td>
<td></td>
<td></td>
<td></td>
<td>.023–.064 in. (0.6–2.0 mm)</td>
<td>XR-Aluma-Pro™ Plus or XR™-Pistol Plus guns for feeding soft wires</td>
<td>Manufacturing requiring multiple wire types</td>
</tr>
<tr>
<td>70 Series Swingarc™ Singles and Duals</td>
<td>22</td>
<td></td>
<td></td>
<td></td>
<td>CV</td>
<td></td>
<td></td>
<td></td>
<td>.023–.064 in. (0.6–2.0 mm)</td>
<td>12 and 16 ft. booms, four drive rolls, adjustable weld control</td>
<td>Heavy and light manufacturing, fabrication</td>
</tr>
<tr>
<td>70 Series Remote Configurations Singles and Duals</td>
<td>22</td>
<td></td>
<td></td>
<td></td>
<td>CV</td>
<td></td>
<td></td>
<td></td>
<td>.023–.064 in. (0.6–2.0 mm)</td>
<td>Control box, cables and wire drive motor assemblies for generic booms or fixed automation</td>
<td>Heavy and light manufacturing, fabrication</td>
</tr>
</tbody>
</table>

### Product Key

<table>
<thead>
<tr>
<th>Class:</th>
<th>Capability:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light industrial</td>
<td>Designed for this process</td>
</tr>
<tr>
<td>Industrial</td>
<td>Capable of this process</td>
</tr>
<tr>
<td>Heavy industrial</td>
<td></td>
</tr>
</tbody>
</table>

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

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

3: 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.

### SuitCase Series Features

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

Note: ArcReach SuitCase feeders are compatible with standard power sources and engine-driven welders, but function as standard equipment without remote control capabilities. Full functionality of ArcReach is only available with ArcReach power sources.

Feeder include a male Tweco® connector installed on weld cable and are available with a Bernard® gun and drive rolls (see chart on page 19). BTB Gun 300 A and S-Gun™ come with reversible dual size (.045 and 1/16 in. V-knurled) drive rolls. Dura-Flux™ flux-cored gun comes with reversible dual size (.068/.072 and 5/64 in. V-knurled) drive rolls. PipeWorx 300-15 gun comes with reversible dual size (.035 V-grooved and .045 in. V-knurled) drive rolls.

---

### 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.

**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.

---

### Unique and durable case

**Impact-resistant, flame-retardant case** provides strength and durability, while protecting 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.

**ArcReach SuitCase models are available in two sizes.** SuitCase 8 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. SuitCase 12 model is sized for an 8- or 12-inch spool of wire. 12-inch spools are the most common in structural steel and fabrication.

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

**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 cord to purchase, maintain, string or unstring — saving time and money. See pages 41, 44–45 and 76–81 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.

Voltage-sensing feeders designed to run off of arc voltage. The ArcReach SuitCase 8 and 12 operate on the arc voltage of almost any power source. The ArcReach Smart Feeder requires an XMT® 350 FieldPro™ (page 44) connected to three-phase power or an ArcReach-equipped engine drive (pages 76–81).

**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.

**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.

*Suggested power sources*

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

**Note:** ArcReach SuitCase feeders are compatible with standard power sources and engine-driven welders, but function as standard equipment without remote control capabilities. Full functionality of ArcReach is only available with ArcReach power sources.

**For ArcReach SuitCase 8 and 12**
- Maxstar® 280 Multiprocess (pg 40)
- Dynasty® 280 DX Multiprocess (pg 40)
- Dimension® 650/650 ArcReach® (pg 41)
- XMT® Series (pg 42–45)
- Bobcat® 200 Air Pak® (pg 73)
- Bobcat® Series (pg 74)
- Trailblazer® Series (pg 76–78)
- Big Blue® Series (pg 78–81)

**For ArcReach Smart Feeder**
- XMT® 350 FieldPro (pg 44) (requires three-phase power)
- Trailblazer® Series (ArcReach models only) (pg 76)
- Big Blue® Series (ArcReach models only) (pg 78–81)

**Suggested guns**
- Bernard® Guns (pg 25–26)

**Most popular accessories**
- Extension Cables (pg 122)
  (for SuitCase 12RC only, 1 required)
- Flowmeter Kit 300343
- Shielding Gas Filter 195189

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

---

**ArcReach**

<table>
<thead>
<tr>
<th>Model</th>
<th>Stock Number*</th>
<th>Input Power</th>
<th>Input Welding Circuit Rating</th>
<th>Wire Feed Speed</th>
<th>Wire Type and Diameter Capacity</th>
<th>Maximum Spool Size Capacity</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArcReach SuitCase 8</td>
<td>(951726) w/Bernard BTB Gun 300 A (951727) w/Bernard S-Gun (951728) w/Bernard Dura-Flux gun (901457) Feeder only</td>
<td>330 A at 60% duty cycle</td>
<td>0.032–0.052 in. (0.8–1.4 mm)</td>
<td>50–780 ipm (1.28–20 m/min.)</td>
<td>Flux-cored</td>
<td>0.300–0.500 in. (7.6–12.7 mm)</td>
<td>8 in. (203 mm), 14 lb. (6.4 kg)</td>
<td>H: 12.75 in. (324 mm), W: 7.25 in. (184 mm), D: 18 in. (457 mm)</td>
</tr>
<tr>
<td>ArcReach SuitCase 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 (901456) Feeder only</td>
<td>425 A at 60% duty cycle</td>
<td>0.032–0.052 in. (0.8–1.4 mm)</td>
<td>50–780 ipm (1.28–20 m/min.)</td>
<td>Flux-cored</td>
<td>0.300–0.500 in. (7.6–12.7 mm)</td>
<td>12 in. (305 mm), 45 lb. (20 kg)</td>
<td>H: 15.5 in. (394 mm), W: 9 in. (229 mm), D: 21 in. (533 mm)</td>
</tr>
<tr>
<td>ArcReach Smart Feeder</td>
<td>(951733) w/Bernard PipeWorx gun (900955) Feeder only</td>
<td>XMT 350 FieldPro connected to three-phase power or an ArcReach-equipped engine drive</td>
<td>275 A at 60% duty cycle</td>
<td>50–780 ipm (1.28–20 m/min.)</td>
<td>Flux-cored</td>
<td>0.300–0.500 in. (7.6–12.7 mm)</td>
<td>12 in. (305 mm), 33 lb. (15 kg)</td>
<td>H: 18 in. (457 mm), W: 13 in. (330 mm), D: 21.5 in. (546 mm)</td>
</tr>
<tr>
<td>SuitCase 12RC</td>
<td>(951580) w/Bernard BTB Gun 300 A (901121) Feeder only</td>
<td>425 A at 60% duty cycle</td>
<td>0.032–0.052 in. (0.8–1.4 mm)</td>
<td>50–780 ipm (1.28–20 m/min.)</td>
<td>Flux-cored</td>
<td>0.300–0.500 in. (7.6–12.7 mm)</td>
<td>12 in. (305 mm), 45 lb. (20 kg)</td>
<td>H: 15.5 in. (394 mm), W: 9 in. (229 mm), D: 21 in. (533 mm)</td>
</tr>
</tbody>
</table>

*Additional packages are available — visit MillerWelds.com or your distributor.
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>
</tr>
</thead>
<tbody>
<tr>
<td>Available w/Bernard gun:</td>
<td>Basic</td>
<td>Digital</td>
</tr>
<tr>
<td>BTB Gun 300 A</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>BTB Gun 400 A</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Trigger hold</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Digital meter(s)</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Remote voltage control</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Automatic run-in control</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Dual-wire models</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Rotatable drive assembly</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Accu-Mate™</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Preflow/postflow</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Spot control</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Dual schedule control</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Trigger program select</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Trigger dual schedule</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Sequence control</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Locks and limits</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Weld programs</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Trigger schedule select</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Push-pull capability</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Synergic pulsed MIG</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Profile Pulse™</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>

*Standard ● Field option

Feeders include a 10 ft. interconnecting cord and are available with a Bernard® gun and drive rolls (see chart on page 21).

Feeder models include a 10-foot 14-pin interconnecting cord and are available with a 15-foot Bernard BTB Gun 300 A (20 Series) or BTB Gun 400 A (70 Series, two with dual-wire models). They come with Centerfire™ contact tips and .035/.045 in. drive rolls.

**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.

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

**Feeders include** a 10-foot 14-pin interconnecting cord and are available with a 15-foot Bernard BTB Gun 300 A (20 Series) or BTB Gun 400 A (70 Series, two with dual-wire models).

**Additional features for 70 Series feeders**

- **Available in dual-wire models** which allow two different wire types to be available on one feeder, avoiding downtime from changing spools and drive rolls.
- **Toolless rotatable drive assembly** allows operator to rotate the drive housing, allowing a straight path for wire flow.
- **Accu-Mate™** properly seats the MIG gun power pin for best feeding performance.
- **High-torque permanent-magnet motor, sealed ball bearing gear drive and solid-state speed and brake control** are maintenance free for long life.

### 20 Series (Basic and Digital)

**See literature M/11.0**

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

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

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

**Digital meter** (standard on digital model, field option on basic model) ensures accuracy when presetting and reading actual voltage, amperage and wire feed speed.

**Remote voltage control** (standard on digital model, field option on basic model) at feeder for easier adjustments in the weld cell.

**Adjustable run-in control** (standard on digital model, field option on basic model) for better arc-starting performance on a variety of wires.
70 Series (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 (standard on 74D, field option on 74S) 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.

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

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

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.

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.

Profile Pulse™ gives the operator the ability to recall up to four previously used processes and their parameters.

Recall up to four previously used processes and their parameters.

Four weld program memories allow operators 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.

Four weld program memories allow operators 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.

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.

70 Series (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.

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

Most popular accessories

- Feeder Cart 142382 (pg 114)
- Extension Cables (pg 122)
- Spool Adapter 047141 (pg 122)
- Turntable Assembly 146236 (pg 122)
- Wire Straightener (pg 122)
- Field Kits for 20 Series Basic 301513 Digital meter and remote voltage control 301515 Run-in control
- Field Kits for 70 Series (74S) 194988 Remote voltage control for single-wire models 194991 Remote voltage control for dual-wire models
- Hanging Bail 058435
- Spool Covers 057607 For 20 and 70 Series single-wire models and left side of dual-wire models 090389 For right side of dual-wire models
- Wire Reel Assembly 108008
- Remote configurations are available — see page 22 and literature M/3.0 Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model | Stock Number* | Input Power | Wire Feed Speed | Wire Type and Diameter Capacity | Maximum Spool Size Capacity | Dimensions | Net Weight |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>20 Series</td>
<td>Basic (301495) Feeder only</td>
<td>24 VAC, 3.5 A, 50/60 Hz</td>
<td>75-750 ipm (1.9-19 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: 16 in. (406 mm)</td>
<td>46 lb. (21 kg)</td>
</tr>
<tr>
<td>70 Series</td>
<td>S-744 (951198) w/Bernard BTB Gun 400 A</td>
<td>24 VAC, 10 A, 50/60 Hz</td>
<td>50-780 ipm (1.3-19.8 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: 14 in. (356 mm)</td>
<td>48 lb. (21.2 kg)</td>
</tr>
<tr>
<td>70 Series</td>
<td>D-744 (951203) w/Bernard BTB Gun 400 A</td>
<td>24 VAC, 10 A, 50/60 Hz</td>
<td>50-780 ipm (1.3-19.8 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: 14 in. (356 mm)</td>
<td>87 lb. (39.5 kg)</td>
</tr>
</tbody>
</table>

Options

- Optional Push-Pull Gun (For MPa Plus feeders only)
  - XR-Aluma-Pro Plus (Air-cooled) (301575) (301574)
  - XR-Aluma-Pro Plus (Water-cooled) (301576) (301577)
  - XR-Pistol Plus (Air-cooled) (300753) (300754)
  - XR-Pistol Plus (Water-cooled) (300757)

*Additional packages are available — visit MillerWelds.com or your distributor. **Requires wire kit (230708) to run 1/16 in. (1.6 mm) wire.
70 Series Swingarc™ See literature M/13.11

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

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

Counterbalance design makes it easy to position boom and 360-degree rotation and 60-degree lift angle maximize work area.

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

MPa Plus Swingarc. Optimized for the Invision™ MPa and XMT™ MPa power sources and available in single- or dual-wire models in two boom lengths.

Models include a 10 ft. 14-pin interconnecting cord, Bernard® BTB Gun 400 A (two with dual-wire models) with Centerfire™ contact tips, and .035/.045 in. drive rolls.

70 Series Remote Configurations See literature M/3.0

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

Swingpak™ Base  183997

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

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

### Light industrial

<table>
<thead>
<tr>
<th>Processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>• MIG (GMAW) • Flux-cored (FCAW)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Suggested power sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Millermatic® 141/211 (M-100/M-150) (pg 7)</td>
</tr>
<tr>
<td>• Multimatic 200 (M-150) (pg 37)</td>
</tr>
<tr>
<td>• Multimatic 215 (M-100/M-150) (pg 37)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Most popular accessories</th>
</tr>
</thead>
<tbody>
<tr>
<td>• MIGmatic M-Series Consumable Kits (pg 117)</td>
</tr>
<tr>
<td>• 234607 .023 in. (0.6 mm)</td>
</tr>
<tr>
<td>• 234608 .030 in. (0.8 mm)</td>
</tr>
<tr>
<td>• 234609 .035 in. (0.9 mm)</td>
</tr>
<tr>
<td>• MIGmatic M-Series Guns AccuLock™ Conversion Kit 1880269</td>
</tr>
<tr>
<td>• Allows M-100 and M-150 MIG guns to upgrade to AccuLock™ MDX™ nozzles and tips (see pg 24)</td>
</tr>
</tbody>
</table>

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

---

### Table of Wire Types

<table>
<thead>
<tr>
<th>Wire Types</th>
<th>Flux-cored</th>
<th>Dual-shield</th>
<th>Self-shield</th>
<th>Dual-shield Alum.</th>
<th>Self-shield Alum.</th>
<th>Wire Diameter Capacity</th>
<th>Available Cable Lengths</th>
<th>Typical Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hard</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spoolmate™ Spool Guns</td>
<td>27</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.035 in. (0.9 mm)</td>
<td>10 ft.</td>
<td>Light industrial aluminum fabrication</td>
</tr>
<tr>
<td>Spoolmatic™ Spool Guns</td>
<td>28</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.030 in. (0.8 mm)</td>
<td>10 or 30 ft.</td>
<td>Industrial aluminum fabrication</td>
</tr>
<tr>
<td>XR-Aluma-Pro™ Lite Push-Pull Gun</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.023 in. (0.6 mm)</td>
<td>10 ft.</td>
<td>Industrial aluminum fabrication</td>
</tr>
<tr>
<td>XR-Aluma-Pro™ Push-Pull Guns</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.023 in. (0.6 mm)</td>
<td>10 ft.</td>
<td>Industrial aluminum fabrication</td>
</tr>
<tr>
<td>XR®-Pistol Push-Pull Guns</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.023 in. (0.6 mm)</td>
<td>10 ft.</td>
<td>Industrial aluminum fabrication</td>
</tr>
</tbody>
</table>

---

### Table of Model 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>0.023–0.045 in. (0.6–1.2 mm)</td>
<td>3.2 lb. (1.5 kg)</td>
</tr>
<tr>
<td>M-150</td>
<td>(249029)</td>
<td>10 ft. (3 m)</td>
<td>150 A</td>
<td>100% with CO₂ gas, 60% with mixed gas</td>
<td>0.023–0.045 in. (0.6–1.2 mm)</td>
<td>4.4 lb. (2.0 kg)</td>
</tr>
<tr>
<td></td>
<td>(249040)</td>
<td>12 ft. (3.7 m)</td>
<td></td>
<td></td>
<td></td>
<td>4.7 lb. (2.1 kg)</td>
</tr>
<tr>
<td></td>
<td>(249041)</td>
<td>15 ft. (4.6 m)</td>
<td></td>
<td></td>
<td></td>
<td>6.0 lb. (2.7 kg)</td>
</tr>
</tbody>
</table>
MDX™ Series MIG Guns

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

Durable, ergonomic handle features rubber overmolding for improved grip and rear swivel to reduce welder fatigue.

AccuLock™ consumables provide long life and superior wire feeding. See below for more information.

Pulse welding capable due to increased copper in the gun cable which ensures reliable performance with CV and pulse waveforms (MDX-250/MDX-250 EZ-Select only).

EZ-Select™ function allows you to conveniently select from up to four weld programs by tapping the MIG gun trigger rather than walking back to the machine. Lights on handle indicate weld program selected (MDX-250 EZ-Select only).

AccuLock™ MDX™ Consumables

See literature AY/15.5

Flawless wire feeding path. Front-loading liner is locked (without set screws) and concentrically aligned with both the contact tip and power pin.

Error-proof liner trimming ensures accurate replacement every time — no measuring required!

Maximized electrical conductivity and tip life. Tapered mating surface between the contact tip and gas diffuser locks tips in place for optimal performance.

Upgrade to Bernard® AccuLock S consumables for increased durability and longer life when guns are used in pulsed welding or more industrial applications. See page 25 for more information.

AccuLock S Consumables

- Liners (inches)
  - LM1A-10 .023–.025, 10 ft. length
  - LM2A-10 .030–.035, 10 ft. length
  - LM3A-10 .035–.045, 10 ft. length
  - LM1A-12 .023–.025, 12 ft. length
  - LM2A-12 .030–.035, 12 ft. length
  - LM3A-12 .035–.045, 12 ft. length
  - LM1A-15 .023–.025, 15 ft. length
  - LM2A-15 .030–.035, 15 ft. length
  - LM3A-15 .035–.045, 15 ft. length

- Diffusers
  - D-M100 MDX-100
  - D-M250 MDX-250
  - D-MA250 MDX-250 AccuLock S conversion

- MDX-100 Nozzles (inches)
  - NS-M1200B 1/2 ID, flush, brass
  - NS-M1200C 1/2 ID, flush, copper
  - NS-MFLX Gasless nozzle

- MDX-250 Nozzles (inches)
  - AccuLock MDX N-M1200C 1/2 ID, flush, copper
  - N-M1218C 1/2 ID, 1/8 rec., copper
  - N-M5800C 5/8 ID, flush, copper
  - N-M5818C 5/8 ID, 1/8 rec., copper
  - N-M58XTC 5/8 ID, 1/8 ext., copper

- Contact Tips (inches)
  - T-M023 .023
  - T-M030 .030
  - T-M035 .035
  - T-M045 .045
  - T-M047 3/64

Visit MillerWelds.com or your distributor for other Miller® options and accessories.
Bernard® Semi-Automatic Guns

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

BTB Air-Cooled MIG Guns  See Bernard literature SP-BTB

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

Fully configurable BTB MIG guns help keep your skilled welders comfortable while also increasing their productivity. Choose from a variety of necks, handles and trigger styles to optimize welder ergonomics and weld access, then standardize with a single line of consumables to simplify maintenance and contain costs. See chart below for a pre-configured BTB MIG gun or visit MillerWelds.com/ConfigureMyGun to view a complete list. Configure your BTB MIG gun by selecting the appropriate series, handle and trigger style.

Bernard® AccuLock® S Consumables  See Bernard literature SP-ALS

Load and lock for flawless wire feeding
- Shorten your troubleshooting list by reducing liner misalignment and gaps
- Error-proof your liner installation — no measuring required!
- Reduce parts, increase accuracy
- Use AccuLock S consumables on both your Bernard BTB and Miller® MDX-250 MIG guns (see page 24) to simplify inventory and reduce replacement errors

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Amperage</th>
<th>Cable Length</th>
<th>Handle</th>
<th>Trigger</th>
<th>Neck</th>
<th>Consumables</th>
<th>Wire Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q30194EXB2MC</td>
<td>300</td>
<td>15 ft. (4.6 m)</td>
<td>B Series straight</td>
<td>Standard</td>
<td>Rotatable med. 45°</td>
<td>Centerfire™ (flush)</td>
<td>.045 in. (1.2 mm)</td>
</tr>
<tr>
<td>Q30194EBB2MC</td>
<td>300</td>
<td>15 ft. (4.6 m)</td>
<td>B Series straight</td>
<td>Standard</td>
<td>Rotatable med. 45°</td>
<td>Centerfire™</td>
<td>.045 in. (1.2 mm)</td>
</tr>
<tr>
<td>Q30195EBZ2MC</td>
<td>300</td>
<td>15 ft. (4.6 m)</td>
<td>B Series straight</td>
<td>Standard</td>
<td>Rotatable med. 45°</td>
<td>Centerfire™</td>
<td>.045 in. (1.2 mm)</td>
</tr>
<tr>
<td>Q30195EBX2MC</td>
<td>300</td>
<td>15 ft. (4.6 m)</td>
<td>B Series straight</td>
<td>Standard</td>
<td>Rotatable med. 45°</td>
<td>Centerfire™</td>
<td>.045 in. (1.2 mm)</td>
</tr>
<tr>
<td>Q30195EBY2MC</td>
<td>300</td>
<td>15 ft. (4.6 m)</td>
<td>B Series straight</td>
<td>Standard</td>
<td>Rotatable med. 45°</td>
<td>Centerfire™</td>
<td>.045 in. (1.2 mm)</td>
</tr>
</tbody>
</table>

For more detailed information, visit BernardWelds.com or your distributor for additional Bernard consumable options.
Bernard® Semi-Automatic Guns

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

Clean Air™ Fume Extraction MIG Guns
See Bernard literature SP-CLA

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, Quik Tip and TOUGH LOCK 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 Consumables

<table>
<thead>
<tr>
<th>Diffusers (amps)</th>
<th>D-1 400, 500, 600, large</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper Nozzles (inches)</td>
<td>NS-5818C 5/8 ID, 1/8 rec., small</td>
</tr>
<tr>
<td>Contact Tips (inches)</td>
<td>T-035 0.035</td>
</tr>
<tr>
<td>Contact Tip Insulator (Dura-Flux only)</td>
<td>7010024 Fixed power cable liner</td>
</tr>
<tr>
<td>Quik Tip Consumables</td>
<td></td>
</tr>
<tr>
<td>Diffusers (amps)</td>
<td>B118Q 300, 400</td>
</tr>
<tr>
<td>Plated Copper Nozzles (inches)</td>
<td>N1C58Q 5/8 ID</td>
</tr>
<tr>
<td>Contact Tips (inches)</td>
<td>T1035 0.035</td>
</tr>
<tr>
<td>Contact Tip Insulator (Dura-Flux only)</td>
<td>7010062 Replaceable power cable liner</td>
</tr>
<tr>
<td>TOUGH LOCK Consumables</td>
<td></td>
</tr>
<tr>
<td>Diffusers (amps)</td>
<td>403-20-35-25 300, 400, 500, 600 HD</td>
</tr>
<tr>
<td>Copper Nozzles (inches)</td>
<td>401-6-62 5/8 ID, 1/8 rec., HD</td>
</tr>
<tr>
<td>Contact Tips (inches)</td>
<td>403-20-116-25 1/16 HD</td>
</tr>
</tbody>
</table>

For more detailed information, visit BernardWelds.com or your distributor for additional Bernard consumable options.
Spoolmate™ Spool Guns

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

**Spoolmate 100** See literature M/1.45
Light industrial gun for 4043 series aluminum wire rated at 135 amps at 30 percent duty cycle.

**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.

**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.

**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.

**Welding Current Rating**

<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>135 A at 30% duty cycle</td>
<td>5–625 ipm (1.7–15.9 m/min.)</td>
<td>Aluminum .030–.035 in. (0.8–0.9 mm)</td>
<td>4 in. (102 mm)</td>
<td>L: 13 in. (330 mm)</td>
<td>9 lb. (4.1 kg)</td>
</tr>
<tr>
<td>Spoolmate 150 (301272)</td>
<td>150 A at 60% duty cycle</td>
<td>115–715 ipm (2.9–18.1 m/min.)</td>
<td>Aluminum .030–.035 in. (0.8–0.9 mm)</td>
<td>4 in. (102 mm)</td>
<td>L: 12.5 in. (318 mm)</td>
<td>7.3 lb. (3.2 kg)</td>
</tr>
<tr>
<td>Spoolmate 200 (300457)</td>
<td>160 A at 60% duty cycle</td>
<td>70–875 ipm (1.8–22.2 m/min.)</td>
<td>Aluminum .030–.035 in. (0.8–0.9 mm)</td>
<td>4 in. (102 mm)</td>
<td>L: 14.5 in. (368 mm)</td>
<td>11 lb. (5 kg)</td>
</tr>
<tr>
<td>Spoolmate 3035 (195016)</td>
<td>150 A at 60% duty cycle, 200 A at 60% duty cycle with optional heavy-duty head tube</td>
<td>115–715 ipm (2.9–18.1 m/min.)</td>
<td>Aluminum .030–.035 in. (0.8–0.9 mm)</td>
<td>4 in. (102 mm)</td>
<td>L: 8 in. (203 mm)</td>
<td>9.1 lb. (4.1 kg)</td>
</tr>
</tbody>
</table>
**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** service time by allowing a means of changing drive rolls and head tube, or performing routine maintenance, without disassembly of gun.
- **Easy-to-reverse, 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.

---

**Spoolmatic**

**Spoolmatic Pro**

<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 (195156) 15 ft. (4.5 m) cable (130831) 30 ft. (9 m) cable</td>
<td>200 A at 100% duty cycle</td>
<td>70–875 ipm (1.8–22.2 m/min.) Wire speed dependent on control or Millermatic used</td>
<td>Aluminum* .030–1/16 in. (0.8–1.6 mm) Wire speed dependent on control or Millermatic used</td>
<td>4 in. (102 mm)</td>
<td>H: 10.25 in. (260 mm) W: 2.5 in. (64 mm) L: 15.125 in. (384 mm)</td>
<td>2.9 lb. (1.3 kg)</td>
</tr>
<tr>
<td>Spoolmatic Pro (301147) 15 ft. (4.5 m) cable (301148) 30 ft. (9 m) cable</td>
<td>200 A at 100% duty cycle</td>
<td>70–900 ipm (1.8–23 m/min.) Wire speed dependent on control or Millermatic used</td>
<td>Hard wire .030–.045 in. (0.8–1.1 mm) Wire speed dependent on control or Millermatic used</td>
<td>4 in. (102 mm)</td>
<td>H: 10.75 in. (273 mm) W: 2.5 in. (64 mm) L: 15.375 in. (390 mm)</td>
<td>3.0 lb. (1.4 kg)</td>
</tr>
</tbody>
</table>

---

**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-AlumaFeed or select Millermatic machines to provide the best solution for push-pull applications.

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

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

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

**XR-Aluma-Pro™ Lite**  
Lightest weight goose-neck-style gun features rear trigger that allows access to hard-to-reach welds.

**XR-Aluma-Pro™**  
Robust professional-grade gun has the highest duty cycle rating in its class.

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

**XR™-Pistol**  
Reliable, cost-effective gun for light- to medium-industrial applications.

**XR™-Pistol-Pro**  
Exceptional aluminum welding results for heavy-industrial applications.

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

Easy access to drive assembly and removable toolless head tube reduce service time by allowing a 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.

---

<table>
<thead>
<tr>
<th>Model</th>
<th>15 ft. (4.6 m)</th>
<th>25 ft. (7.6 m)</th>
<th>30 ft. (9 m)</th>
<th>35 ft. (10.6 m)</th>
<th>Welding Current Rating</th>
<th>Wire Feed Speed*</th>
<th>Wire Type and Diameter Capacity</th>
<th>Dimensions</th>
<th>Gun Only Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>XR-Aluma-Pro Lite</td>
<td></td>
<td>(300948)</td>
<td>(301568)</td>
<td>(301569)</td>
<td>175 A at 60% duty cycle</td>
<td>70–900 ipm (1.8–23 m/min.)</td>
<td>Aluminum .030–.047 in. (0.8–1.2 mm)</td>
<td>H: 4 in. (102 mm)</td>
<td>2.0 lb. (0.9 kg)</td>
</tr>
<tr>
<td>XR-Aluma-Pro (Air-cooled)</td>
<td>(301568)</td>
<td>(301569)</td>
<td>(301570)</td>
<td>(301571)</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)</td>
<td>2.5 lb. (1.1 kg)</td>
</tr>
<tr>
<td>XR-Aluma-Pro (Water-cooled)</td>
<td>(301571)</td>
<td>(301572)</td>
<td>(301573)</td>
<td>(301574)</td>
<td>400 A at 100% duty cycle</td>
<td>70–875 ipm (1.8–22.2 m/min.)</td>
<td>Aluminum .030–.1/16 in. (0.8–1.6 mm)</td>
<td>H: 7.375 in. (187 mm)</td>
<td>2.2 lb. (1 kg)</td>
</tr>
<tr>
<td>XR-Pistol (Air-cooled)</td>
<td>(198127)</td>
<td>(198128)</td>
<td>(198129)</td>
<td>(198130)</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>L: 17 in. (432 mm)</td>
<td>2.4 lb. (1.1 kg)</td>
</tr>
<tr>
<td>XR-Pistol (Water-cooled)</td>
<td>(198127)</td>
<td>(198128)</td>
<td>(198129)</td>
<td>(198130)</td>
<td>400 A at 100% duty cycle</td>
<td>70–875 ipm (1.8–22.2 m/min.)</td>
<td>Aluminum .030–.1/16 in. (0.8–1.6 mm)</td>
<td>L: 17 in. (432 mm)</td>
<td>2.4 lb. (1.1 kg)</td>
</tr>
<tr>
<td>XR-Pistol-Pro (Air-cooled)</td>
<td>(300782)</td>
<td>(300783)</td>
<td>(300784)</td>
<td>(300785)</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>L: 10.625 in. (270 mm)</td>
<td>2.2 lb. (1 kg)</td>
</tr>
<tr>
<td>XR-Pistol-Pro (Water-cooled)</td>
<td>(300786)</td>
<td>(300787)</td>
<td>(300788)</td>
<td>(300789)</td>
<td>400 A at 100% duty cycle</td>
<td>70–875 ipm (1.8–22.2 m/min.)</td>
<td>Aluminum .030–.1/16 in. (0.8–1.6 mm)</td>
<td>L: 10.625 in. (270 mm)</td>
<td>2.2 lb. (1 kg)</td>
</tr>
</tbody>
</table>
A family of pre-engineered automation cells to increase productivity and improve weld quality.

**Fast installation.** Pre-wired and pre-assembled make setup 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

- **PA250M** 250 lb./side, 60 in. manually indexed table
- **PA350S** 350 lb./side, 66 in. servo indexing table
- **PA750S/PA750SW** 750 lb./side, 92 or 108 in. servo indexing table

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

- **PA550H** 550 lb./side, 48 in. long x 34 in. turning diameter on 92 in. servo indexer
- **PA550HW** 550 lb./side, 60 in. long x 40 in. turning diameter on 108 in. servo indexer
- **PA1100HW** 1,100 lb./side, 60 in. long x 40 in. turning diameter on 108 in. servo indexer

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

- **PA1100FW** 1,100 lb./side, 118 in. long x 43 in. turning diameter

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

- **PA1100SS** 1,100 lb./side, 120 in. long x 44 in. turning diameter
- **PA2200SS** 2,200 lb./side, 120 in. long x 66 in. turning diameter

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

- **Robot between dual head and tailstock/single- or dual-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

---

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

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

For more detailed information, visit MillerWelds.com/automation
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 pendant, 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 16)
Insight Core™, Centerpoint™ and ArcAgent™ Welding Intelligence™ (pg 67–69)
Tregaskiss® robotic MIG guns and reamers (pg 34–35)
FLYAIR® weld fume extraction system with low profile hood (pg 102–103)
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-pound maximum part
  - Light duty: 500-pound maximum part
  - Medium duty: 2,000-pound maximum part
  - Heavy duty: 10,000-pound 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 foot
  - 9 x 9 foot
  - 12 x 12 foot
Jetline arc length control maintains a constant arc length by controlling arc voltage in gas tungsten arc welding (GTAW) or plasma arc welding (PAW) 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

Jetline cold wire feeder is used for automated gas tungsten arc welding (GTAW) or plasma arc welding (PAW) applications 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

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

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

Jetline cold wire feeder is used for automated gas tungsten arc welding (GTAW) or plasma arc welding (PAW) applications 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
Tregaskiss® Robotic Guns

Available with all PerformArc® robotic welding systems, fully configurable Tregaskiss TOUGH GUN® TA3 and CA3 robotic MIG guns are engineered for accurate, reliable and repeatable performance that maximizes production uptime and throughput. Parts can be replaced with minimal downtime and little to no impact on Tool Center Point (TCP).

Air-Cooled MIG Guns

See Tregaskiss literature SP-TA3 and SP-CA3

**TA3 robotic 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 robotic 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

Tregaskiss® Fixed Automatic Guns

Tregaskiss fixed automatic MIG guns are engineered for hard tooling automation applications requiring a simple, durable and repeatable MIG gun. These automatic torches can be configured with the same consumables as your Bernard® semi-automatic or Tregaskiss robotic MIG guns to simplify your inventory.

**Air-Cooled MIG Guns**

See Tregaskiss literature M033

**MA1 automatic MIG gun**
- Available in 500- and 600-amp models
- Spring-guard strain relief prevents kinking and abrasion
- Air-cooled neck is made from aircraft-grade aluminum

**Water-Cooled MIG Guns**

See Tregaskiss literature M033 and SP-WCA

**MW1 automatic MIG gun**
- Available in 450- and 600-amp models
- Spring-guard strain relief prevents kinking and abrasion
- Water-cooled neck is made from stainless steel and is silver brazed and leak tested
- 600-amp water-cooled model has a thread-on heavy-duty nozzle

**AW2 automatic MIG gun**
- Available in both cable and cableless 600-amp models
- Power cable equipped guns are available in lengths of 3-25 feet in 1/2-foot increments
- Internal threaded connections stay tight inside the anti-vibration compression fit body for good electrical connectivity and longer life
Tough on spatter and designed to operate reliably in even the harshest welding environments.

Two models available. TT3A 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.
## Power Source Welding Performance

<table>
<thead>
<tr>
<th>Material</th>
<th>Light Industrial</th>
<th>Industrial</th>
<th>Heavy Industrial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild Steel</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Stainless Steel</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Aluminum</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Wire Size</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

### Material Thickness

<table>
<thead>
<tr>
<th>Thickness</th>
<th>Light Industrial</th>
<th>Industrial</th>
<th>Heavy Industrial</th>
</tr>
</thead>
<tbody>
<tr>
<td>(.020–.125 in.)</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>(.125–.375 in.)</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>(.375–1 in.)</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>(1+ in.)</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

### Wire Size

<table>
<thead>
<tr>
<th>Size</th>
<th>Light Industrial</th>
<th>Industrial</th>
<th>Heavy Industrial</th>
</tr>
</thead>
<tbody>
<tr>
<td>.023 in.</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>.030 in.</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>.035 in.</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>.045 in.</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>.052 in.</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>1/16 in.</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>5/64 in.</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>3/32 in.</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

### Process

<table>
<thead>
<tr>
<th>Process</th>
<th>Light Industrial</th>
<th>Industrial</th>
<th>Heavy Industrial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Circuit</td>
<td>★★★★</td>
<td>★★★★</td>
<td>★★★★</td>
</tr>
<tr>
<td>Pulsed Spray</td>
<td>★★★★</td>
<td>★★★★</td>
<td>★★★★</td>
</tr>
<tr>
<td>Stick</td>
<td>★★</td>
<td>★★</td>
<td>★★</td>
</tr>
<tr>
<td>AC TIG</td>
<td>★★★★</td>
<td>★★★★</td>
<td>★★★★</td>
</tr>
<tr>
<td>DC TIG</td>
<td>★★★★</td>
<td>★★★★</td>
<td>★★★★</td>
</tr>
<tr>
<td>CMC-A</td>
<td>★★</td>
<td>3/16 in.</td>
<td>3/16 in.</td>
</tr>
</tbody>
</table>

**Icon Key**

- ● Designed for
- ○ Capable of
- ★★ Good
- ★★★ Better
- ★★★★ Best
- ★★★★★ Optimized

New! products appear in blue type.

1 CC/CV and FieldPro™ models are capable of aluminum welding. MPa models are designed for aluminum welding. XR™AlumaFeed SuitCase system is recommended for best results.

2 MPa models only.
Multimatic® 200 and 215

Weighing only 29 pounds (200) or 38 pounds (215), these lightweight MIG, stick and TIG welders provide portability on the job.

Impact-resistant, flame-retardant case (200 only) provides strength and durability, while protecting components and welding wire from moisture, dust and other contaminants.

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

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

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

Multimatic 215 model additional features

Intuitive color LCD 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-foot guns.

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Welding Mode/Process</th>
<th>Input Power</th>
<th>Amperage Range</th>
<th>Rated Output</th>
<th>Amps Input at Rated Output, 50/60 Hz</th>
<th>Wire Feed Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CV: MIG/flux-cored</td>
<td>120 V</td>
<td>30-140</td>
<td>90 A at 18.5 V, 60% duty cycle</td>
<td>18.0 – 2.2 2.0</td>
<td>70-425 ipm (1.8-10.8 m/min.)</td>
</tr>
<tr>
<td>Multimatic 200</td>
<td></td>
<td></td>
<td>110 A at 19.5 V, 20% duty cycle</td>
<td>22.4 – 2.7 2.6</td>
<td>70-425 ipm (1.8-10.8 m/min.)</td>
<td></td>
</tr>
<tr>
<td>(907518) (951649)</td>
<td></td>
<td>230 V</td>
<td>30-200</td>
<td>150 A at 21.5 V, 20% duty cycle</td>
<td>– 17.5 4.0 3.8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CC: TIG</td>
<td>120 V</td>
<td>5-150</td>
<td>150 A at 18 V, 30% duty cycle</td>
<td>27.0 – 3.3 3.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>230 V</td>
<td>5-150</td>
<td>150 A at 18 V, 30% duty cycle</td>
<td>– 13.8 3.2 3.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CC: Stick</td>
<td>120 V</td>
<td>20-100</td>
<td>100 A at 24 V, 35% duty cycle</td>
<td>24.0 – 2.9 2.8</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>230 V</td>
<td>20-150</td>
<td>150 A at 26 V, 30% duty cycle</td>
<td>– 20.8 4.8 4.5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Welding Mode/Process</th>
<th>Input Power</th>
<th>Amperage Range</th>
<th>Rated Output</th>
<th>Amps Input at Rated Output, 50/60 Hz</th>
<th>Wire Feed Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multimatic 215</td>
<td>CV: MIG/flux-cored</td>
<td>120 V</td>
<td>30-125</td>
<td>110 A at 19.5 V, 60% duty cycle</td>
<td>23.0 – 2.8 2.8</td>
<td></td>
</tr>
<tr>
<td>(907693) (951674)</td>
<td></td>
<td>240 V</td>
<td>30-230</td>
<td>200 A at 24 V, 20% duty cycle</td>
<td>– 25.8 6.2 6.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>150 A at 21.5 V, 40% duty cycle</td>
<td>– 16.7 4.0 4.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CC: TIG</td>
<td>120 V</td>
<td>20-150</td>
<td>140 A at 15.6 V, 40% duty cycle</td>
<td>24.6 – 3.0 3.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>240 V</td>
<td>20-210</td>
<td>190 A at 17.6 V, 20% duty cycle</td>
<td>– 18.0 6.7 6.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CC: Stick</td>
<td>120 V</td>
<td>30-100</td>
<td>90 A at 23.6 V, 40% duty cycle</td>
<td>22.7 – 2.7 2.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>240 V</td>
<td>30-200</td>
<td>190 A at 27.6 V, 20% duty cycle</td>
<td>– 27.0 6.5 6.5</td>
<td></td>
</tr>
</tbody>
</table>

Light industrial
Nameplate:
• MIG (GMAW) • Flux-cored (FCAW)
• DC stick (SMAW) • DC TIG (DC GTAW)

Comes complete with:
• 10 ft. (3 m) 250-amp MDX™-250 MIG gun (Multimatic 200) OR 10 ft. (3 m) 100-amp MDX™-100 MIG gun (Multimatic 215)
• 13 ft. (4 m) cable with electrode holder and 25 mm Dinse-style connector
• 10 ft. (3 m) work cable with clamp and 25 mm Dinse-style connector
• Power cord with MVP plugs for 120 V and 240 V
• Quick Select® drive roll for .024 in. (0.6 mm) or .030/.035 in. (0.8/0.9 mm) solid wire, and .030/.035 in. (0.8/0.9 mm) flux-cored wire

• Flow gauge regulator and gas hose for argon or AR/CO₂ mix, extra MDX contact tips, information/settings chart and material thickness gauge (229895) — Hobart® spool of .030 in. solid wire and hook-and-loop cord wraps as seen in photo above are included with Multimatic 215 model only

Most popular accessories:
• Spoolmate® Spool Guns (pg 27) 300371 Spoolmate 100 301272 Spoolmate 150
• Running Gear/Cylinder Rack 301239 (pg 114)
• Protective Cover 301262 (pg 117) (for Multimatic 215 only)
• TIG Contractor Kits (pg 120) 301287 For Multimatic 200 301337 For Multimatic 215

Visit MillerWelds.com or your distributor for other Miller® options and accessories.
Multumatic® 220 AC/DC  
See literature DC/12.65

**Welding Capability**

<table>
<thead>
<tr>
<th>Process</th>
<th>Max. 3/8 in. (9.5 mm)</th>
<th>Max. 1/8 in. (3.2 mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIG Mild Steel</td>
<td>Min. 24 ga. (0.6 mm)</td>
<td>Min. 18 ga. (1.2 mm)</td>
</tr>
<tr>
<td>MIG Aluminum</td>
<td>Max. 1/4 in. (6.4 mm)</td>
<td>Max. 1/4 in. (6.4 mm)</td>
</tr>
<tr>
<td>TIG Mild Steel</td>
<td>Min. 24 ga. (0.6 mm)</td>
<td>Min. 24 ga. (0.6 mm)</td>
</tr>
<tr>
<td>Stick Mild Steel</td>
<td>Max. 3/8 in. (9.5 mm)</td>
<td>Min. 16 ga. (1.5 mm)</td>
</tr>
</tbody>
</table>

**All in one.** Comes equipped with all accessories to MIG, stick, AC and DC TIG weld with one machine — unlike other machines where you need to purchase additional accessories.

**Innovative QuickTech** technology makes setup and changing processes even easier.
- **Automatically** determines the polarity. Work is always connected to the bottom right receptacle. MIG gun and TIG torch can stay connected at the same time.
- **Automatically** switches to the right process. Just hit the trigger or the foot control and the machine automatically changes, eliminating the need to manually change processes.
- **Automatically** recalls the settings from the last process used.

**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!

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

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

**Weighing only 56 pounds,** this lightweight MIG, stick and AC/DC TIG welder provides portability on the job.

**Two shielding gas connections** (one for MIG gas and one for TIG gas) so both gases can be left connected to the machine — no switching needed.

**Manual mode offers additional TIG adjustments** for increased control including AC balance, AC frequency and DC pulsing.

**TIG high-frequency (HF) arc starting** for non-contact arc initiation, reducing tungsten and material contamination.

---

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

**Comes complete with**
- 10 ft. (3 m) 100-amp MDX™-100 MIG gun
- 13 ft. (4 m) cable with electrode holder and 25 mm Dinse-style connector
- 12.5 ft. (3.8 m) Weldcraft™ A-150 (WP-17) TIG torch with 25 mm Dinse-style connector
- 10 ft. (3 m) work cable with clamp and 25 mm Dinse-style connector
- 6.5 ft. (2 m) power cord with MVP plugs for 120 V and 240 V
- RFC-14 HD foot control with 20 ft. (6 m) cord
- Quick Select™ drive roll for .024 in. (0.6 mm) or .030/.035 in. (0.8/0.9 mm) solid wire, .030/.035 in. (0.8/0.9 mm) flux-cored wire
- Two flow gauge regulators and gas hoses for argon or AR/CO₂ mix, extra contact tips, Hobart® spool of .030 in. solid wire, AK2C TIG torch accessory kit, hook-and-loop cord wraps and material thickness gauge (229895)

**Most popular accessories**
- Spoolmate™ Spool Guns (pg 27) 300371 Spoolmate 100 301272 Spoolmate 150
- Dual Cylinder Rack Cart 951770 (pg 114)
- Protective Cover 301524 (pg 117)
- Wireless Remote Foot Control 300429 (pg 121)

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

---

**Dimensions**

- H: 17.5 in. (445 mm)
- W: 11.25 in. (286 mm)
- D: 21.5 in. (546 mm)

**Net Weight**

- 56 lb. (25.3 kg)

---

**Light Industrial**

- 30–200 Amps Input at Rated Output, 50/60 Hz
- C: 24.5 in. (622 mm)
- KVA: 7.5
- KW: 7.5
- Rated Output 200 A at 28.4 V, 15% duty cycle
- 90 A at 23.6 V, 40% duty cycle
- 210 A at 18.4 V, 20% duty cycle
- 130 A at 15.2 V, 40% duty cycle
- 170 A at 21.5 V, 40% duty cycle
- 240 V
- 24.0 V at 15.2 V, 40% duty cycle
- 170 A at 21.5 V, 40% duty cycle
- 21.5 in. (546 mm)
- 3.8 in. (97 mm)
- 22.4 lbs (10.1 kg)
- 46 VDC
Multimatic® 255

See literature DC/12.9

Welding Capability

<table>
<thead>
<tr>
<th>Mode</th>
<th>Range</th>
<th>Min.</th>
<th>Max.</th>
<th>Amperage</th>
<th>Power Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>CV: MIG/flux-cored</td>
<td>20-350</td>
<td>230 A at 25 V, 60% duty cycle</td>
<td>34.7</td>
<td>8.2 kW</td>
<td>81 VDC</td>
</tr>
<tr>
<td>CC: Stick</td>
<td>30-275</td>
<td>200 A at 28 V, 60% duty cycle</td>
<td>33.5</td>
<td>7.8 kW</td>
<td>81 VDC</td>
</tr>
<tr>
<td>CC: DC TIG</td>
<td>5-275</td>
<td>275 A at 21 V, 60% duty cycle</td>
<td>34.1</td>
<td>8.1 kW</td>
<td>81 VDC</td>
</tr>
</tbody>
</table>

Auto-Set™ Elite offers predefined weld settings to increase ease of use and ensure that the job is done right for operators of all skill levels.
- Available for MIG, pulsed MIG, stick and DC TIG processes with the ability to fine-tune your settings
- Set weld parameters by: MIG — selecting wire and gas type, wire diameter and material thickness Stick — selecting electrode type, electrode diameter and material thickness DC Lift-Arc® TIG — selecting remote on/off, tungsten diameter and material thickness

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

Program mode allows easy save and recall of favorite weld settings. Save up to four programs for each process. Delivers more productivity and consistent quality while minimizing supervisor intervention.

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

Heavy-duty aluminum two-drive-roll system.

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

Processes
- MIG (GMAW) • Flux-cored (FCAW)
- Pulsed MIG (GMAW-P)
- DC stick (SMAW)
- DC Lift-Arc® TIG (GTAW)
- Pulsed TIG (GTAW-P)

Multimatic 255 comes complete with
- 15 ft. (4.5 m) 250-amp MDX®-250 MIG gun with Bernard® AccuLock™ S consumables
- 10 ft. (3 m) cable with electrode holder
- 10 ft. (3 m) work cable with clamp
- 10 ft. (3 m) industrial power cord
- Factory-installed gas solenoid
- Flow gauge regulator and gas hose for argon or AR/CO2 mix
- Chain to secure gas cylinder
- .035/.045 in. reversible V-groove drive rolls
- Extra contact tips and material thickness gauge (229895)

Most popular accessories
- MDX®-250 EZ-Select™ MIG Gun 1770047 (pg 24)
- Spoolmatic® Spool Gun (pg 28) (non-Pro gun only)
- XR-Aluma-Pro™ Air-Cooled Push-Pull Guns (pg 29)
- EZ-Latch™ Single Cylinder Running Gear 301449 (pg 114)
- EZ-Latch™ Dual Cylinder Rack with Elevated Gun and Cable Rack 301481

Converts an EZ-Latch™ Single Cylinder Running Gear into a Dual Cylinder Rack Running Gear as seen below

EZ-Latch™ Dual Cylinder Running Gear 951769 (pg 114)
- Protective Cover 301521 (pg 117)
- Multimatic 255 TIG Kit 301518 (pg 120)
- 10-Pin to 14-Pin Adapter Cord 301545 (pg 120)
- Wireless Remote Foot Control 300429 (pg 121)

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

Stock Number
- 907728 208–575 V
- 951767 208–575 V with single cylinder running gear
- 951768 208–575 V with dual cylinder running gear and TIG kit

Welding Mode/Process
- CV: MIG/flux-cored 20–350
- CC: Stick 30–275
- CC: DC TIG 5–275

Amperage Range
- 230 A at 25 V, 60% duty cycle
- 200 A at 28 V, 60% duty cycle
- 275 A at 21 V, 60% duty cycle

Rated Output
- 208 V
- 240 V
- 460 V
- 575 V

KVA
- 34.7
- 33.5
- 34.1

KW
- 8.2
- 7.8
- 8.1

Wire Feed Speed
- 50–800 ipm (1.3–20 m/min.)
- –

Max. Open-Circuit Voltage
- 81 VDC

Power Source Dimensions
- 84 lb. (38 kg)

Power Source Net Weight
- 39
**NEW! Maxstar 280 Multiprocess**

**Dynasty® 280 DX Multiprocess**

See literature DC/35.5 (Maxstar) and AD/4.95 (Dynasty)

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

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

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

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

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

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

---

**Welding Equipment**

**Maxstar 280 Multiprocess (90752201)**

- **Power source only**

**Dynasty 280 DX Multiprocess (907514007)**

- **Power source only**

**Contractor w/foot and SuitCase 12**

**Contractor w/fingertip and SuitCase 12**

**Contractor w/foot and SuitCase 8**

**Contractor w/fingertip and SuitCase 8**

---

**Processes**

- AC/DC TIG (GTAW) + Pulsed TIG (GTAW-P)
- MIG (GMAW) + Flux-cored (FCAW)
- Stick (SWMA) + Air carbon arc (CAC-A)

**Comes with**

- 8 ft. (2.4 m) power cord (no plug)
- Two 50 mm Dinse-style connectors
- Two Dinse/Tweco® adapters
- 8 ft. (2.4 m) weld cable with Tweco®-style connectors to power feeder
- Quick reference guide

**Contractor packages include above, plus**

- Contractor kit with A-200 TIG torch
- RFC 14 finger control
- Coolimate® HD foot control
- Bernard BTB Gun 300 A with three .035 in. and two .045 in. Centerfire® contact tips

**Complete package includes ArcReach SuitCase 12 and Bernard BTG gun from package above, plus**

- Coolimate® 1.3
- Coolant (4 one-gallon bottles)
- Small Runner® cart
- Wireless foot control
- Weldcraft® W-280 water-cooled torch kit

**Most popular accessories**

- ArcReach® SuitCase® Feeders
- Small Runner® Cart
- Coolimate® 1.3
- Contractor Kits (pg 120)
- Weldcraft® Water-Cooled Torch Kits
- Remote Controls (pg 120–121)

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

---

**Dynasty 280 DX Multiprocess (907514007)**

**Model/Stock Number**

<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 208 V</th>
<th>Rated Load Output, 50/60 Hz</th>
<th>Max. Open-Circuit Voltage</th>
<th>Power Source Dimensions</th>
<th>Power Source Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dynasty 280 DX Multiprocess (907514007)</strong></td>
<td><strong>TIG</strong></td>
<td>3-phase</td>
<td>2-280 (AC) 1-280 (DC)</td>
<td>250 A at 20 V</td>
<td>21</td>
<td>21</td>
<td>19</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td><strong>Dynasty 280 DX Multiprocess (907514007)</strong></td>
<td><strong>Stick</strong></td>
<td>3-phase</td>
<td>2-280 (AC) 1-280 (DC)</td>
<td>250 A at 20 V</td>
<td>35</td>
<td>35</td>
<td>32</td>
<td>18</td>
<td>16</td>
</tr>
<tr>
<td><strong>Dynasty 280 DX Multiprocess (907514007)</strong></td>
<td><strong>MIG</strong></td>
<td>3-phase</td>
<td>2-280 (AC) 1-280 (DC)</td>
<td>250 A at 20 V</td>
<td>32</td>
<td>32</td>
<td>29</td>
<td>16</td>
<td>13</td>
</tr>
<tr>
<td><strong>Dynasty 280 DX Multiprocess (907514007)</strong></td>
<td><strong>MIG</strong></td>
<td>3-phase</td>
<td>2-280 (AC) 1-280 (DC)</td>
<td>250 A at 20 V</td>
<td>32</td>
<td>32</td>
<td>29</td>
<td>16</td>
<td>13</td>
</tr>
<tr>
<td><strong>Dynasty 280 DX Multiprocess (907514007)</strong></td>
<td><strong>MIG</strong></td>
<td>3-phase</td>
<td>2-280 (AC) 1-280 (DC)</td>
<td>250 A at 20 V</td>
<td>32</td>
<td>32</td>
<td>29</td>
<td>16</td>
<td>13</td>
</tr>
<tr>
<td><strong>Dynasty 280 DX Multiprocess (907514007)</strong></td>
<td><strong>MIG</strong></td>
<td>3-phase</td>
<td>2-280 (AC) 1-280 (DC)</td>
<td>250 A at 20 V</td>
<td>32</td>
<td>32</td>
<td>29</td>
<td>16</td>
<td>13</td>
</tr>
</tbody>
</table>
Dimension™ 650 and 650 ArcReach®

See literature DC/19.3

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

**ArcReach**

Every year, outdated welding equipment wastes hundreds of productive work hours — and thousands of dollars in profit — by forcing operators to make numerous walks from the weld joint to the welder. Welding systems with ArcReach technology let operators adjust welding parameters right at the weld joint without a control cord using the wire feeder or remote — maximizing arc-on time, improving safety and impacting the bottom line. See pages 18/46 for ArcReach SuitCase feeders and page 46 for 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.

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™: Internal air flow that protects components, greatly improving reliability.

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

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

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

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

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

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Description</th>
<th>Model/Stock Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension 650</td>
<td>Multiprocess</td>
<td>Dimension 650 ArcReach</td>
<td>Multiprocess</td>
</tr>
<tr>
<td>(907617)</td>
<td>380/460 V power source only</td>
<td>(907617001)</td>
<td>380/460 V power source only</td>
</tr>
<tr>
<td>(951638)</td>
<td>380/460 V stationary package</td>
<td>(951637)</td>
<td>380/460 V MIGRunner package</td>
</tr>
<tr>
<td>(907617)</td>
<td>380/460 V power source only</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amperage/Voltage Ranges</td>
<td>Rated Output Amperage at Rated Output, 50/60 Hz</td>
<td>Max. Open-Circuit Voltage</td>
<td>Power Source Dimensions</td>
</tr>
<tr>
<td>CC mode: 10–815 A, CV mode: 10–44 V</td>
<td>650 A at 44 VDC, 100% duty cycle</td>
<td>87 VDC</td>
<td>Power Source (Includes lift eye)</td>
</tr>
<tr>
<td>SAW mode: 10–65 V</td>
<td>53.2</td>
<td>42.8</td>
<td>34</td>
</tr>
<tr>
<td>Model/Stock Number</td>
<td>Description</td>
<td>Model/Stock Number</td>
<td>Description</td>
</tr>
<tr>
<td>Dimension 650</td>
<td>Multiprocess</td>
<td>Dimension 650 ArcReach</td>
<td>Multiprocess</td>
</tr>
<tr>
<td>(907617)</td>
<td>380/460 V power source only</td>
<td>(907617001)</td>
<td>380/460 V power source only</td>
</tr>
<tr>
<td>(951638)</td>
<td>380/460 V stationary package</td>
<td>(951637)</td>
<td>380/460 V MIGRunner package</td>
</tr>
<tr>
<td>(907617)</td>
<td>380/460 V power source only</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiprocess</td>
<td>Processes</td>
<td>Multiprocess</td>
<td>Processes</td>
</tr>
<tr>
<td>MIG (GMAW)</td>
<td>• MIG (GMAW) • Flux-cored (FCAW)</td>
<td>MIG (GMAW)</td>
<td>• MIG (GMAW) • Flux-cored (FCAW)</td>
</tr>
<tr>
<td>Stick (SMAW)</td>
<td>• Stick (SMAW) • TIG (GTAW)</td>
<td>Stick (SMAW)</td>
<td>• Stick (SMAW) • TIG (GTAW)</td>
</tr>
<tr>
<td>Submerged arc (SAW)</td>
<td>• Submerged arc (SAW)</td>
<td>Submerged arc (SAW)</td>
<td>• Submerged arc (SAW)</td>
</tr>
<tr>
<td>Air carbon arc cutting and gouging (CAC-A) (rated 3/8 in. carbons)</td>
<td>• Air carbon arc cutting and gouging (CAC-A) (rated 3/8 in. carbons)</td>
<td>• Air carbon arc cutting and gouging (CAC-A) (rated 3/8 in. carbons)</td>
<td>• Air carbon arc cutting and gouging (CAC-A) (rated 3/8 in. carbons)</td>
</tr>
<tr>
<td>Dimension 650 Stationary package includes</td>
<td>• Power source</td>
<td>• Power source</td>
<td></td>
</tr>
<tr>
<td>MIGRunner™ package includes above plus</td>
<td>• Running gear cylinder rack</td>
<td>• Running gear cylinder rack</td>
<td></td>
</tr>
</tbody>
</table>

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

XMT 350 models allow 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 on XMT 450 models. 230/460 V manual link or 575 V, 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.

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

Reliability

Wind Tunnel Technology™ Internal air flow that protects components, greatly improving reliability.

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

Welder-friendly control panel

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

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

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

Output connector choices

Dinse- or Tweco-style weld disconnects (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.

Choose the Right XMT

<table>
<thead>
<tr>
<th></th>
<th>350 Amp</th>
<th>450 Amp</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>XMT 350 CC/CV</td>
<td>XMT 350 MPa</td>
</tr>
<tr>
<td>Input Power</td>
<td>3- or 1-phase power</td>
<td>3-phase</td>
</tr>
<tr>
<td>Primary Operating Range</td>
<td>Auto-Line (208–575 V)</td>
<td>Manual link (230/460 V) or 575 V</td>
</tr>
<tr>
<td>Weld Output</td>
<td>350 A at 34 VDC (3-phase input power at 60% duty cycle)</td>
<td>Upgrade 450 A at 38 VDC (3-phase input power at 100% duty cycle)</td>
</tr>
<tr>
<td>Carbon Arc Gouging</td>
<td>Rated: 1/4 in. (6.4 mm)</td>
<td>Upgrade Rated: 5/16 in. (7.9 mm)</td>
</tr>
<tr>
<td>Net Weight</td>
<td>80 lb. (36.3 kg)</td>
<td>122 lb. (55.3 kg)</td>
</tr>
<tr>
<td>Output Connector</td>
<td>Dinse-style</td>
<td>Dinse- or Tweco-style</td>
</tr>
<tr>
<td>Pulsed MIG</td>
<td>—</td>
<td>Upgrade —</td>
</tr>
<tr>
<td>14-pin Compliant</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Insight Core Capable (requires Insight Core 14-pin module)</td>
<td>Yes (page 68)</td>
<td>Yes (page 68)</td>
</tr>
<tr>
<td>ArcReach</td>
<td>Factory option (page 44)</td>
<td>—</td>
</tr>
<tr>
<td>UPGRADE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Choose the Right XMT
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.

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 a reduced heat-affected zone and good gap filling ability, and are great for thick to thin metal. They allow welding in all positions, as well as 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 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.

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

1 Optional 115-volt auxiliary power provides 10 amps of circuit-breaker protected power for coolant systems, etc.
2 Feeders include gun and drive rolls. MIGRunner adds 2/0 weld cable and 2/0 work cable with clamp, flowmeter regulator with gas hose and MIGRunner cart.
3 Duty cycle rating below achieved with 6-gauge input power cord (8-gauge cord supplied with unit).

Visit MillerWelds.com or your distributor for other Miller® options and accessories.
XMT® 350 FieldPro™ Systems  See literature DC/18.96

Top row left to right: ArcReach SuitCase 12 feeder, XMT 350 FieldPro power source, XMT 350 FieldPro with Polarity Reversing power source, and ArcReach Smart Feeder.
Bottom row left to right: ArcReach Stick/TIG Remote and ArcReach Stick/TIG Remote with Polarity Reversing. Feeders include gun and drive rolls (see page 18 for details).

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.

Polarity reversing models of power source and remote are ideal for pipe and module assembly where changing polarity happens frequently.

Auto-Line 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 proven in the field.

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 multistory 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.

ArcReach Every year, outdated welding equipment wastes hundreds of productive work hours — and thousands of dollars in profit — by forcing operators to make numerous walks from the weld joint to the welder. Welding systems with ArcReach technology let operators adjust welding parameters right at the weld joint without a control cord using the wire feeder or remote — maximizing arc-on time, improving safety and impacting the bottom line. See page 18/46 for ArcReach feeders and page 46 for the Stick/TIG Remotes. Don’t walk. Weld! Learn more at MillerWelds.com/arcreach
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.

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

*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 card (8-gauge cord supplied with unit).

XMT Racks

All the benefits of an individual XMT in an easy-to-transport package for multiple arcs in the field.

Flexible solution. The flexibility of the XMT 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.

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Input Power</th>
<th>Average Voltage Ranges</th>
<th>Rated Output</th>
<th>Amps Input at Rated Load Output, 60 Hz</th>
<th>Max. Open-Circuit Voltage</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>XMT 350 FieldPro</td>
<td>4-Pack Rack (907739)</td>
<td>208–575 V, three-phase</td>
<td>350 A at 34 VDC, 60% duty cycle</td>
<td>40.4 36.1 20.6 17.8 14.1 14.2 13.5</td>
<td>75 VDC</td>
<td>H. 10 in. (254 mm)</td>
<td>42.2 kg</td>
</tr>
<tr>
<td>XMT 350 FieldPro with Polarity Reversing</td>
<td>4-Pack Rack (907742)</td>
<td>208–575 V, three-phase</td>
<td>350 A at 34 VDC, 60% duty cycle</td>
<td>40.4 36.1 20.6 17.8 14.1 14.2 13.5</td>
<td>75 VDC</td>
<td>H. 10 in. (254 mm)</td>
<td>42.2 kg</td>
</tr>
<tr>
<td>XMT 450 CC/CV ArcReach</td>
<td>4-Pack Rack (907700)</td>
<td>208–575 V, three-phase</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. 11.75 in. (298 mm)</td>
<td>55.3 kg</td>
</tr>
</tbody>
</table>

Most popular accessories

- XR-AlumaFeed® SuitCase® 301567 (pg 11)
- ArcReach® SuitCase® Feeder (pg 18/46)
- ArcReach® Smart Feeder (pg 18/46) (for XMT 350 FieldPro power sources only)
- 20 and 70 Series Feeders (pg 20)
- Spoolmatic®/WC-24 (pg 28/122)
- ArcReach® Stick/TIG Remote 301325 (pg 46)
- ArcReach® Stick/TIG Remote with Polarity Reversing 300934 (pg 46) (for XMT 350 FieldPro with Polarity Reversing power source only)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.
“Business as usual” could cost you thousands of dollars a year and waste hundreds of hours of productive time. Welders can get more done — and your business can make more money — when you use Miller® products with ArcReach® technology.

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

**WHAT IT DOES:**
With ArcReach technology, weld parameters can be adjusted remotely without a control cable. Parameter changes are sent to the power source through the weld leads.

**HOW IT HELPS:**
ArcReach technology saves welders multiple walks back and forth to the power source. That saves time, boosts productivity, and improves safety and weld quality.

---

**ARCReach power sources and accessories**

**ARCReach Plug-in Power Sources**
- XMT® 350 FieldPro™ system  pg 44
  Exceptional arc performance maximizes weld quality, minimizes defects.
- XMT® 350 FieldPro™ system with Polarity Reversing  pg 44
  Automatically selects polarity, lead outputs and weld parameters.
- XMT® 450 CC/CV ArcReach®  pg 45
  Portability and excellent arc performance with flexibility and simplicity.
- Dimension™ 650 ArcReach®  pg 41
  For harsh environments and a wide range of output requirements.

**ARCReach Engine-Driven Power Sources**
- Trailblazer® 325 ArcReach® models**  pg 76
  Smaller and lighter than competition with unbeatable arc performance.
- Big Blue® ArcReach® models**  pg 78–81
  Tackle tough jobs that require high output for welding, gouging and aux power.

**ARCReach Wire Feeders**
- ArcReach® SuitCase® Feeders  pg 18
  For all ArcReach power sources. For MIG and flux-cored welding. Features remote voltage control and Auto-Process Select®.
- ArcReach® Smart Feeder  pg 18
  For both XMT 350 FieldPro models and all ArcReach engine drives. For RMD® and pulsed MIG welding up to 200 feet from the power source. Helps reduce weld failures and eliminate backing gas on some stainless and chrome-moly applications.

**ARCReach Stick/TIG Remotes**
- ArcReach® Stick/TIG Remote  301325
  For all ArcReach power sources except XMT 350 FieldPro with Polarity Reversing. Features remote amperage control, arc control for stick and Auto-Process Select.
- ArcReach® Stick/TIG Remote with Polarity Reversing  300934
  For XMT 350 FieldPro with Polarity Reversing power source only. Provides all the same functionality of the XMT 350 FieldPro with Polarity Reversing hundreds of feet from the power source, including process changeover and amperage adjustment — with no special cables.

**MillerWelds.com/arcreach**
**PipeWorx 400 Welding System**

Optimized for pipe fabrication shops.

**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 System**

**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

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

---

**Model/Stock Number**

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Welding Mode/Process</th>
<th>Amperage/Voltage Ranges</th>
<th>Rated Output at 100% Duty Cycle</th>
<th>Amps Input at Rated Output, 60 Hz, 3-Phase</th>
<th>Max. Open-Circuit Voltage</th>
<th>Dimensions*</th>
<th>Net Weight*</th>
</tr>
</thead>
<tbody>
<tr>
<td>PipeWorx 400 Welding System (951382)</td>
<td>CC: Stick</td>
<td>40–400 A</td>
<td>400 A at 36 VDC</td>
<td>17.5</td>
<td>90 VDC</td>
<td>H: 28.5 in. (724 mm) W: 19.5 in. (495 mm) D: 31.75 in. (806 mm)</td>
<td>225 lb. (102 kg)</td>
</tr>
<tr>
<td></td>
<td>CC/DC: TIG</td>
<td>10–350 A</td>
<td>350 A at 24 VDC</td>
<td>11.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CV: MIG/flux-cored</td>
<td>10–44 V</td>
<td>400 A at 34 VDC</td>
<td>17.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PipeWorx 400 Power Source only (907382)</td>
<td>CC: Stick</td>
<td>40–400 A</td>
<td>400 A at 36 VDC</td>
<td>17.5</td>
<td>90 VDC</td>
<td>H: 28.5 in. (724 mm) W: 19.5 in. (495 mm) D: 31.75 in. (806 mm)</td>
<td>225 lb. (102 kg)</td>
</tr>
<tr>
<td></td>
<td>CC/DC: TIG</td>
<td>10–350 A</td>
<td>350 A at 24 VDC</td>
<td>11.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CV: MIG/flux-cored</td>
<td>10–44 V</td>
<td>400 A at 34 VDC</td>
<td>17.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PipeWorx Dual-wire Feeder only (300366)</td>
<td>Input Power</td>
<td>Input Welding Circuit Rating</td>
<td>Wire Feed Speed</td>
<td>Wire Diameter Capacity</td>
<td>Maximum Spool Size Capacity</td>
<td>Dimensions</td>
<td>Net Weight</td>
</tr>
<tr>
<td></td>
<td>24 VAC, 11 A</td>
<td>100 V, 750 A at 100% duty cycle</td>
<td>50–780 ipm (1.3–19.8 m/min.)</td>
<td>.035–.062 in. (0.9–1.6 mm)</td>
<td>60 lb. (27 kg)</td>
<td>H: 14 in. (356 mm) W: 19 in. (483 mm) D: 29 in. (737 mm)</td>
<td>90 lb. (41 kg)</td>
</tr>
</tbody>
</table>

---

*Dimensions and weight are for power source only.

---

**Heavy industrial**

- RMD® and pulsed MIG increase quality and productivity
- Optimized for pipe fabrication shops.
- More tolerant of hi-lo conditions
- Less spatter
- Calm stable arc
- Can eliminate backing/purge gas in some stainless applications
- Can eliminate the need for a hot pass
- Can eliminate backing/purge gas in some stainless applications
- Reduced training requirements
- Faster travel speeds
- Higher deposition rates
- Virtually eliminates arc wander
- Is easier to control the puddle
- Compensates for tip-to-work variations automatically
- When used with RMD, it is possible to use one wire and one gas for all passes

---

Visit MillerWelds.com or your distributor for other Miller® options and accessories.
Dependable, portable, powerful stick welder.

### Thunderbolt® 160 and 210

**Nearly 100 pounds lighter** so you can work smarter not harder by bringing the welder to the work. **More powerful** — up to 85 more amps — compared to leading competitive machine means you can weld thicker materials. **Hot Start™** technology provides easy, quick and reliable arc starts.

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

#### Thunderbolt 160 (907721)

<table>
<thead>
<tr>
<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>
</tr>
</thead>
<tbody>
<tr>
<td>120 V</td>
<td>20-80</td>
<td>85 A at 20% duty cycle</td>
<td>20.7</td>
<td>91 VDC</td>
</tr>
<tr>
<td>240 V</td>
<td>20-160</td>
<td>160 A at 30% duty cycle</td>
<td>27.8</td>
<td>91 VDC</td>
</tr>
<tr>
<td>240 V</td>
<td>25-210</td>
<td>210 A at 20% duty cycle</td>
<td>43.4</td>
<td>85 VDC</td>
</tr>
</tbody>
</table>

#### Thunderbolt 210 (907722)

<table>
<thead>
<tr>
<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>
</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>
</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>
</tr>
</tbody>
</table>

### Maxstar® 161 S

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

**AUTO-LINE™ TECHNOLOGY**

Allows for any input voltage hookup (120–240 V) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable power.

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 contaminates pulled through the machine.

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

Adaptive Hot Start™ for stick arc starts.

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.

**See literature DC/37.3**

#### Model/Stock Number

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Input Power</th>
<th>Welding Amperage Range</th>
<th>Rated Output</th>
<th>Amps Input at Rated Output</th>
<th>Max. Open-Circuit Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>(907709)</td>
<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>
</tr>
<tr>
<td>(90709001)</td>
<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>
</tr>
</tbody>
</table>

**Note:** See page 52 in the TIG section for Maxstar 161 STL and STH. *Sense voltage for stick.
**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® TECHNOLOGY**
  - Allows for any input voltage hookup (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.**

---

**Get the Latest News from Miller®**

Are you a professional fabricator, or do you like to repair everyday items in your home garage? Perhaps you’re a welding educator looking for class resources or to share what your school has been working on?

Sign up for the Miller eNewsletters — **PRO, DIY, Instructor** and **The Bevel** — to receive new product updates, success stories, how-to and technical articles and videos, special offers, project ideas and other information tailored to your interests.

If you’re an occupational health and safety professional, sign up for the **Welding Safety** eNewsletter to receive information on regulatory updates, industry news and solutions that can elevate productivity and compliance within the workplace.

![Click to visit MillerWelds.com/newsletters](image-url)

---

**Stock Number (907862)**

<table>
<thead>
<tr>
<th>Welding Process</th>
<th>Input Power</th>
<th>Welding Amperage Range</th>
<th>Rated Output</th>
<th>Phase</th>
<th>Amps Input at Rated Load Output, 50/60 Hz</th>
<th>Max. Open-Circuit Voltage</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stick</td>
<td>208–480 V</td>
<td>5–210 160 A at 26.4 V, 60% duty cycle</td>
<td>Three-phase</td>
<td>15 13 8</td>
<td>5.5 5.2</td>
<td>80 VDC (11 VDC*)</td>
<td>H: 13.6 in. (346 mm)</td>
<td>W: 8.6 in. (219 mm)</td>
</tr>
<tr>
<td>Stick</td>
<td>120 V</td>
<td>5–100 90 A at 23.6 V, 60% duty cycle</td>
<td>Single-phase</td>
<td>26 22 13 11</td>
<td>5.3 5.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TIG</td>
<td>208–480 V</td>
<td>1–210 210 A at 18.4 V, 60% duty cycle</td>
<td>Single-phase</td>
<td>23 14 12 7 6</td>
<td>5.2 4.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TIG</td>
<td>120 V</td>
<td>1–210 125 A at 15 V, 60% duty cycle</td>
<td>Single-phase</td>
<td>24 20 12 10 10</td>
<td>4.9 4.9</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

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

---

**Processes**
- Stick (SMAW) • TIG (GTAW)

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

**Most popular accessories**
- 12.5 ft. (3.8 m) Weldcraft® A-150 Valve TIG torch WP-17V-25-2 (pg 60)
- Remote Controls (pg 120)
- Air-Cooled TIG Torch Connector (pg 121)

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

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 eyes simplify 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.

### CST™ 280 Racks

**See page 121**

CST 280 8-pack rack shown.

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

### 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.

### 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 eyes simplify 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.

**Stock Number**

Welding

<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>
<th>Max. Open-Circuit Voltage</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>(907244) Dinse</td>
<td>Stick/TIG</td>
<td>Three-phase</td>
<td>5-280</td>
<td>280 A at 31.2 V, 35% duty cycle</td>
<td>35.0 34.2 17.8 14.7 14.6 10.2</td>
<td>77 VDC</td>
<td>H: 13.5 in. (343 mm) W: 7.5 in. (191 mm) D: 18 in. (457 mm)</td>
<td>41 lb. (18.6 kg)</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>23.3 22.5 11.7 9.7 9.6 6.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(907696) Dinse with meter</td>
<td>Stick/TIG</td>
<td>Single-phase</td>
<td>5-200</td>
<td>200 A at 28 V, 50% duty cycle*</td>
<td>43.9 43.0 10.1 6.6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Process**

- Stick (SMAW)
- TIG (GTAW)

** Comes with**

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

**Most popular accessories**

- CST 280 Rack (see below)
- Remote Controls (pg 120–121)
- For TIG torches see literature DC/29.55

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

**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 eyes simplify 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.

### 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 eyes simplify 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.

**Stock Number**

Welding

<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>
<th>Max. Open-Circuit Voltage</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>(907244) Dinse</td>
<td>Stick/TIG</td>
<td>Three-phase</td>
<td>5-280</td>
<td>280 A at 31.2 V, 35% duty cycle</td>
<td>35.0 34.2 17.8 14.7 14.6 10.2</td>
<td>77 VDC</td>
<td>H: 13.5 in. (343 mm) W: 7.5 in. (191 mm) D: 18 in. (457 mm)</td>
<td>41 lb. (18.6 kg)</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>23.3 22.5 11.7 9.7 9.6 6.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(907696) Dinse with meter</td>
<td>Stick/TIG</td>
<td>Single-phase</td>
<td>5-200</td>
<td>200 A at 28 V, 50% duty cycle*</td>
<td>43.9 43.0 10.1 6.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>-------</td>
<td>-------</td>
<td>-----</td>
<td>------------</td>
<td>-------</td>
<td>--------------</td>
<td>------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Maxstar® 161</td>
<td>52</td>
<td>Light industrial</td>
<td>Light industrial</td>
<td>Light industrial</td>
<td>Light industrial</td>
<td>Light industrial</td>
<td>Light industrial</td>
<td>Light industrial</td>
</tr>
<tr>
<td>Maxstar® 210</td>
<td>54</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
</tr>
<tr>
<td>Maxstar® 280</td>
<td>54</td>
<td>Heavy industrial</td>
<td>Heavy industrial</td>
<td>Heavy industrial</td>
<td>Heavy industrial</td>
<td>Heavy industrial</td>
<td>Heavy industrial</td>
<td>Heavy industrial</td>
</tr>
<tr>
<td>Maxstar® 400</td>
<td>56</td>
<td>Light industrial</td>
<td>Light industrial</td>
<td>Light industrial</td>
<td>Light industrial</td>
<td>Light industrial</td>
<td>Light industrial</td>
<td>Light industrial</td>
</tr>
<tr>
<td>Maxstar® 800</td>
<td>56</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
</tr>
<tr>
<td>Diversion™ 180</td>
<td>52</td>
<td>Light industrial</td>
<td>Light industrial</td>
<td>Light industrial</td>
<td>Light industrial</td>
<td>Light industrial</td>
<td>Light industrial</td>
<td>Light industrial</td>
</tr>
<tr>
<td>Syncrowave® 210</td>
<td>53</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
</tr>
<tr>
<td>Dynasty® 210</td>
<td>54</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
</tr>
<tr>
<td>Dynasty® 280</td>
<td>54</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
</tr>
<tr>
<td>Dynasty® 400</td>
<td>56</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
</tr>
<tr>
<td>Dynasty® 800</td>
<td>56</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
</tr>
<tr>
<td>Syncrowave® 300</td>
<td>57</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
<td>Industrial</td>
</tr>
</tbody>
</table>

For more detailed information, visit MillerWelds.com/tig

GTAW | TIG

Also see Multiprocess section for machines that can TIG weld.

Product Key

<table>
<thead>
<tr>
<th>Class</th>
<th>Light industrial</th>
<th>Industrial</th>
<th>Heavy industrial</th>
<th>Capability</th>
<th>All models</th>
<th>Some models</th>
</tr>
</thead>
</table>

New! products appear in blue type.
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.

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

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.

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.

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

**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.

### TIG Welding Capability

<table>
<thead>
<tr>
<th>Stock Number (907627)</th>
<th>Input Power</th>
<th>Welding Amp Range</th>
<th>Rated Output</th>
<th>Amps Input at Rated Output</th>
<th>KVA</th>
<th>KW</th>
<th>Max. Open-Circuit Voltage</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC</td>
<td>115 V</td>
<td>10-125</td>
<td>125 A at 15 V, 35% duty cycle</td>
<td>26.5 (.88&quot;)</td>
<td>3.1 (.1&quot;)</td>
<td>3.0 (.03&quot;)</td>
<td>80 VDC</td>
<td>H: 17 in. (433 mm)</td>
<td>W: 9.875 in. (251 mm)</td>
</tr>
<tr>
<td>DC</td>
<td>230 V</td>
<td>10-180</td>
<td>150 A at 16 V, 20% duty cycle</td>
<td>16 (.44&quot;)</td>
<td>3.7 (.1&quot;)</td>
<td>3.6 (.03&quot;)</td>
<td>80 VDC</td>
<td>H: 17 in. (433 mm)</td>
<td>W: 9.875 in. (251 mm)</td>
</tr>
<tr>
<td>DC</td>
<td>180 A at 17.2 V, 10% duty cycle</td>
<td>20.5 (.44&quot;)</td>
<td>4.7 (.1&quot;)</td>
<td>4.6 (.03&quot;)</td>
<td>80 VDC</td>
<td>H: 17 in. (433 mm)</td>
<td>W: 9.875 in. (251 mm)</td>
<td>D: 17 in. (433 mm)</td>
<td></td>
</tr>
</tbody>
</table>

### 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.**

Two models available. See page 48 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.

- Allows for any input voltage hookup (120–240 V) with no manual linking, providing convenience in any job setting.
- **Portable with adjustable handle/shoulder strap.** Easy to transport at only 13 pounds.
- **Built-in gas solenoid** eliminates need for a bulky torch with 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.

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

### 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.**

Two models available. See page 48 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.

- Allows for any input voltage hookup (120–240 V) with no manual linking, providing convenience in any job setting.
- **Portable with adjustable handle/shoulder strap.** Easy to transport at only 13 pounds.
- **Built-in gas solenoid** eliminates need for a bulky torch with 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.

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

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DC</td>
<td>DC</td>
<td>TIG</td>
<td>120 V</td>
<td>5-130</td>
<td>130 A at 15.2 V, 30% duty cycle</td>
<td>22.6</td>
<td>2.73</td>
<td>2.70</td>
<td>48 VDC</td>
<td>H: 10.3 in. (262 mm)</td>
<td>W: 5.6 in. (142 mm)</td>
</tr>
<tr>
<td>DC</td>
<td>DC</td>
<td>Stock</td>
<td>240 V</td>
<td>5-160</td>
<td>160 A at 16.4 V, 20% duty cycle</td>
<td>15.05</td>
<td>3.62</td>
<td>3.49</td>
<td>48 VDC</td>
<td>H: 10.3 in. (262 mm)</td>
<td>W: 5.6 in. (142 mm)</td>
</tr>
<tr>
<td>DC</td>
<td>DC</td>
<td>TIG</td>
<td>120 V</td>
<td>20-90</td>
<td>90 A at 23.6 V, 30% duty cycle</td>
<td>23.16</td>
<td>2.78</td>
<td>2.76</td>
<td>48 VDC</td>
<td>H: 10.3 in. (262 mm)</td>
<td>W: 5.6 in. (142 mm)</td>
</tr>
<tr>
<td>DC</td>
<td>DC</td>
<td>Stock</td>
<td>240 V</td>
<td>20-180</td>
<td>160 A at 26.4 V, 20% duty cycle</td>
<td>22.55</td>
<td>5.41</td>
<td>5.25</td>
<td>48 VDC</td>
<td>H: 10.3 in. (262 mm)</td>
<td>W: 5.6 in. (142 mm)</td>
</tr>
</tbody>
</table>

**Light industrial**

**Processes - 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**
- TIG Torch Accessory Kit AK2C (pg 66)
- Running Gear/Cylinder Rack 301329 (pg 114)
- Protective Cover 300579 (pg 120)
- RCCS-RJ45 Remote Fingerip Control 301146 (pg 120)
- RJ45 to 14-Pin Adapter Cord 30068B
- Weldcraft™ Flexible Torch Body Kits (requires handle 105255R) A-125F (WP-9F) A-150F (WP-17F)

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

**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**
- TIG Torch Accessory Kit AK2C (pg 66)
- Running Gear/Cylinder Rack 301329 (pg 114)
- Protective Cover 300579 (pg 120)
- RCCS-RJ45 Remote Fingerip Control 301146 (pg 120)
- RJ45 to 14-Pin Adapter Cord 30068B
- Weldcraft™ Flexible Torch Body Kits (requires handle 105255R) A-125F (WP-9F) A-150F (WP-17F)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.
Syncrowave® 210
AC/DC TIG, Stick and MIG (with Spool Gun)

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

<table>
<thead>
<tr>
<th>Steel</th>
<th>Aluminum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. 1/4 in. (6.4 mm)</td>
<td>Min. 0.020 in. (0.5 mm)</td>
</tr>
</tbody>
</table>

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.

Light industrial

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

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
- Factory-installed running gear with EZ-Change™ low cylinder rack
- Quick-reference guide

TIG/MIG Complete package includes above plus
- Spoolmate™ 150 spool gun (301272)
- 4-14 pin connector
- Flow-thru Dinse-style connector

Most popular accessories
- 25 ft. (7.6 m) Weldcraft™ A-150 TIG Torch WP-17-25-R (pg 60)
- TIG Torch Accessory Kit AK2C (pg 66)
- 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 (pg 66)
- 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
- Protective Cover 195142 (pg 120)
- RCC-14 Remote Control 151086 (pg 120)
- Wireless Remote Foot Control 300429 (pg 121)

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

Syncrowave® 210 Runner TIG/MIG Complete package shown.

AUTO-LINE® TECHNOLOGY

Allows for any input voltage hookup (120–240 V) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable power.

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

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

High-frequency (HF) arc starting for non-contact arc initiation, reducing tungsten and material contamination.

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

AC/DC

Stock Number
(907596) Runner
(951884) Runner TIG/MIG Complete
(includes Spoolmate 150)

<table>
<thead>
<tr>
<th>Input Power</th>
<th>Welding Process</th>
<th>Welding Amperage Range</th>
<th>Rated Output (R.M.S.)</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>115 V</td>
<td>DC TIG</td>
<td>5–125</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>Runner package: 133.5 lb. (61 kg)</td>
</tr>
<tr>
<td></td>
<td>AC TIG</td>
<td>5–125</td>
<td>90 A at 13.6 V, 60% duty cycle</td>
<td>12.4 (58 while idling)</td>
<td></td>
<td></td>
<td>Runner TIG/MIG Complete package: 139.5 lb. (63 kg)</td>
</tr>
<tr>
<td></td>
<td>DC stick</td>
<td>20–90</td>
<td>70 A at 22.8 V, 60% duty cycle</td>
<td>20.5 (58 while idling)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>230 V</td>
<td>DC TIG</td>
<td>5–210</td>
<td>125 A at 15 V, 60% duty cycle</td>
<td>11.9 (35 white idling)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AC TIG</td>
<td>5–210</td>
<td>114 A at 14.6 V, 60% duty cycle</td>
<td>8.62 (35 white idling)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>DC stick</td>
<td>20–150</td>
<td>90 A at 23.8 V, 60% duty cycle</td>
<td>11.9 (35 white idling)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Maxstar® and Dynasty® 210/280 Series
DC (Maxstar) and AC/DC (Dynasty) TIG and Stick

See literature DC/32.1 (Maxstar 210), DC/35.0 (Maxstar 280), AD/4.81 (Dynasty 210) and AD/4.9 (Dynasty 280)

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

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

---

**DC Maxstar**

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Welding Process</th>
<th>Input Power</th>
<th>Welding Amp Range</th>
<th>Rated Output at 60% Duty Cycle</th>
<th>Amps Input at Rated Load Output, 50/60 Hz</th>
<th>Max. Open-Circuit Voltage</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maxstar 210</td>
<td>TIG</td>
<td>3-phase</td>
<td>1-210</td>
<td>210 A at 18.4 V</td>
<td>14 – 12 7 6 5.2 4.9</td>
<td>80 VDC (11 VDC**)</td>
<td>H: 13.6 in.</td>
<td>38 lb.</td>
</tr>
<tr>
<td>(907683)</td>
<td></td>
<td>1-phase</td>
<td>1-210</td>
<td>210 A at 18.4 V</td>
<td>24 – 20 12 10 4.9 4.9</td>
<td>W: 8.6 in.</td>
<td>(346 mm)</td>
<td>(17.2 kg)</td>
</tr>
<tr>
<td>Maxstar 210 DX</td>
<td></td>
<td>1-phase</td>
<td>1-150</td>
<td>125 A at 15 V</td>
<td>22 – 18 – 14 6 5.5 5.2</td>
<td>D: 19.0 in.</td>
<td>(219 mm)</td>
<td></td>
</tr>
<tr>
<td>(907684)</td>
<td></td>
<td>1-phase (120 V)</td>
<td>1-150</td>
<td>125 A at 15 V</td>
<td>22 – 18 – 14 6 5.5 5.2</td>
<td>(495 mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stick</td>
<td></td>
<td>3-phase</td>
<td>5-210</td>
<td>160 A at 26.4 V</td>
<td>26 – 22 13 11 5.3 5.5</td>
<td></td>
<td>H: 13.6 in.</td>
<td>47 lb.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-phase</td>
<td>5-210</td>
<td>160 A at 26.4 V</td>
<td>26 – 22 13 11 5.3 5.5</td>
<td>W: 8.6 in.</td>
<td>(346 mm)</td>
<td>(21.3 kg)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-phase (120 V)</td>
<td>5-100</td>
<td>90 A at 23.6 V</td>
<td>23 – 19 – 11 7 7.6 7.3</td>
<td>D: 19.0 in.</td>
<td>(219 mm)</td>
<td>(50 lb.)</td>
</tr>
</tbody>
</table>

**Dynasty 280**

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Welding Process</th>
<th>Input Power</th>
<th>Welding Amp Range</th>
<th>Rated Output at 60% Duty Cycle</th>
<th>Amps Input at Rated Load Output, 50/60 Hz</th>
<th>Max. Open-Circuit Voltage</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maxstar 280</td>
<td>TIG</td>
<td>3-phase</td>
<td>1-280</td>
<td>250 A at 20 V</td>
<td>21 19 11 9 7 7.6 7.3</td>
<td>60 VDC (11 VDC**)</td>
<td>H: 13.6 in.</td>
<td>47 lb.</td>
</tr>
<tr>
<td>(907552)</td>
<td></td>
<td>1-phase</td>
<td>1-280</td>
<td>250 A at 20 V</td>
<td>35 32 18 16 13 7.3 7.1</td>
<td>W: 8.6 in.</td>
<td>(346 mm)</td>
<td>(22.7 kg)</td>
</tr>
<tr>
<td>with CPS</td>
<td></td>
<td>1-phase</td>
<td>1-280</td>
<td>250 A at 20 V</td>
<td>35 32 18 16 13 7.3 7.1</td>
<td>D: 22.5 in.</td>
<td>(219 mm)</td>
<td>(22.7 kg)</td>
</tr>
<tr>
<td>Maxstar 280</td>
<td>Stick</td>
<td>3-phase</td>
<td>5-280</td>
<td>250 A at 30 V</td>
<td>* * * * 14 10 9.9 9.6</td>
<td></td>
<td>H: 13.6 in.</td>
<td>47 lb.</td>
</tr>
<tr>
<td>DX (90753)</td>
<td></td>
<td>1-phase</td>
<td>5-280</td>
<td>250 A at 30 V</td>
<td>* * * * 14 10 9.9 9.6</td>
<td>W: 8.6 in.</td>
<td>(346 mm)</td>
<td>(21.3 kg)</td>
</tr>
<tr>
<td>(90753)</td>
<td></td>
<td>1-phase</td>
<td>5-280</td>
<td>180 A at 27.2 V</td>
<td>32 29 * * * * 6.7 6.5</td>
<td>D: 22.5 in.</td>
<td>(219 mm)</td>
<td>(50 lb.)</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 40 in the Multiprocess section for the Maxstar 280 Multiprocess and Dynasty 280 DX Multiprocess, and see page 49 in the Stick section for the Maxstar 210 STR.

**AUTO-LINE Technology**

Allows for any input voltage hookup (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. Reduces noise, energy use, and airborne contaminants pulled through the cooler. Only available on CPS models.

---

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

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

54
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 Water-Cooled Complete Packages

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

<table>
<thead>
<tr>
<th>Model</th>
<th>Packages with Foot Control and CPS</th>
<th>Packages with Wireless Foot Control and CPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dynasty 210</td>
<td>(951666)</td>
<td>(951667)</td>
</tr>
<tr>
<td>Dynasty 210 DX</td>
<td>(951668)</td>
<td>(951669)</td>
</tr>
<tr>
<td>Dynasty 280</td>
<td>(951466)</td>
<td></td>
</tr>
<tr>
<td>Dynasty 280 DX</td>
<td>(951468)</td>
<td>(951469)</td>
</tr>
</tbody>
</table>

AC/DC Dynasty

Dynasty 210 (907685) (907685002) with CPS
Dynasty 210 DX (907686) (907686002) with CPS

Dynasty 280 (907550) (907537) with CPS
Dynasty 280 DX (907551) (907514) with CPS

Welding Process

- TIG
  - 3-phase
  - 1-phase
  - 1-phase (120 V)
  - 1-phase (120 V)
- Stick
  - 3-phase
  - 3-phase
  - 1-phase
  - 1-phase (120 V)

Rated Output at 60% Duty Cycle

<table>
<thead>
<tr>
<th>Amps</th>
<th>120 V</th>
<th>208 V</th>
<th>230 V</th>
<th>240 V</th>
<th>400 V</th>
<th>460 V</th>
<th>480 V</th>
<th>575 V</th>
<th>KVA</th>
<th>KW</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-210</td>
<td>210 A</td>
<td>18.4 V</td>
<td>210 A</td>
<td>18.4 V</td>
<td>210 A</td>
<td>18.4 V</td>
<td>210 A</td>
<td>18.4 V</td>
<td>210 A</td>
<td>18.4 V</td>
</tr>
<tr>
<td>1-150</td>
<td>150 A</td>
<td>18.4 V</td>
<td>150 A</td>
<td>18.4 V</td>
<td>150 A</td>
<td>18.4 V</td>
<td>150 A</td>
<td>18.4 V</td>
<td>150 A</td>
<td>18.4 V</td>
</tr>
<tr>
<td>5-100</td>
<td>100 A</td>
<td>23.6 V</td>
<td>100 A</td>
<td>23.6 V</td>
<td>100 A</td>
<td>23.6 V</td>
<td>100 A</td>
<td>23.6 V</td>
<td>100 A</td>
<td>23.6 V</td>
</tr>
</tbody>
</table>

Max. Open-Circuit Voltage

<table>
<thead>
<tr>
<th>Model</th>
<th>80 VDC (11 VDC***)</th>
<th>H: 13.6 m.</th>
<th>W: 8.6 in.</th>
<th>D: 22.5 in.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIG</td>
<td>80 VDC (11 VDC***)</td>
<td>(144 mm)</td>
<td>(219 mm)</td>
<td>(569 mm)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>H: 13.6 m.</td>
<td>W: 8.6 in.</td>
<td>D: 22.5 in.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(144 mm)</td>
<td>(219 mm)</td>
<td>(569 mm)</td>
</tr>
</tbody>
</table>

Dimensions

<table>
<thead>
<tr>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>47 lb.</td>
</tr>
<tr>
<td>(21.3 kg)</td>
</tr>
<tr>
<td>50 lb.</td>
</tr>
<tr>
<td>(22.7 kg)</td>
</tr>
<tr>
<td>with CPS</td>
</tr>
</tbody>
</table>

*Refer to owner’s manual for complete ratings.
**Sense voltage for low OCV stick and Lift-Arc® TIG.

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)

**Sense voltage for low OCV stick and Lift-Arc™ TIG.
See literature DC/24.5 (Maxstar) and AD/5.5 (Dynasty)**

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

High-speed DC TIG pulse controls that maintain/save your parameters.

Program memory features nine independent program memories per second.

**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.

**Cooler power supply (CPS)** is an integrated 120-volt dedicated-use receptacle for the Coolmate™ 3.5.

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

**High-speed DC TIG pulse controls** capable of 5,000 pulses per second.

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

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

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

**Hot Start™ high frequency.**

**Cooler power supply (CPS)** is an integrated 120-volt dedicated-use receptacle for the Coolmate™ 3.5.

**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.

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

**High-speed DC TIG pulse controls** capable of 5,000 pulses per second.

**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>Model/Stock Number</th>
<th>Welding Process</th>
<th>Input Power</th>
<th>Welding Amp Range</th>
<th>Rated Output</th>
<th>Amps Input at Rated Load Output, 50/60 Hz</th>
<th>Max. Open-Circuit Voltage</th>
<th>Power Source Dimensions**</th>
<th>Power Source Net Weight**</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DC Maxstar</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>208 V 230 V 400 V 460 V 575 V KVA KW</td>
<td>75 VDC (10–15 VDC**)</td>
<td>H: 24.75 in. (629 mm) W: 13.75 in. (349 mm) D: 22 in. (559 mm)</td>
<td>134 lb. (61 kg)</td>
</tr>
<tr>
<td>Maxstar 400 (907716)</td>
<td>TIG/stick</td>
<td>3-phase 3-400</td>
<td>300 A at 32 V, 60% duty cycle</td>
<td>33 30 17 15 12 12.0 11.6</td>
<td>75 VDC (10–15 VDC**)</td>
<td>H: 24.75 in. (629 mm) W: 13.75 in. (349 mm) D: 22 in. (559 mm)</td>
<td>134 lb. (61 kg)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-phase 3-400</td>
<td>250 A at 44 V, 60% duty cycle</td>
<td>48 43 24 20 16 10 9.2</td>
<td>75 VDC (10–15 VDC**)</td>
<td>H: 24.75 in. (629 mm) W: 13.75 in. (349 mm) D: 22 in. (559 mm)</td>
<td>134 lb. (61 kg)</td>
<td></td>
</tr>
<tr>
<td>Maxstar 800 (907718)</td>
<td>TIG/stick</td>
<td>3-phase 5-800</td>
<td>600 A at 44 V, 60% duty cycle</td>
<td>90 80 45 39 31 32 31</td>
<td>75 VDC (10–15 VDC**)</td>
<td>H: 24.75 in. (629 mm) W: 13.75 in. (349 mm) D: 22 in. (559 mm)</td>
<td>196 lb. (90 kg)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-phase 5-800</td>
<td>500 A at 40 V, 60% duty cycle</td>
<td>126 112 61 53 41 26 24</td>
<td>75 VDC (10–15 VDC**)</td>
<td>H: 24.75 in. (629 mm) W: 13.75 in. (349 mm) D: 22 in. (559 mm)</td>
<td>196 lb. (90 kg)</td>
<td></td>
</tr>
<tr>
<td><strong>Dynasty</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>208 V 230 V 400 V 460 V 575 V KVA KW</td>
<td>75 VDC (10–15 VDC**)</td>
<td>H: 24.75 in. (629 mm) W: 13.75 in. (349 mm) D: 22 in. (559 mm)</td>
<td>196 lb. (90 kg)</td>
</tr>
<tr>
<td>Dynasty 400 (907717)</td>
<td>TIG/stick</td>
<td>3-phase 3-400</td>
<td>300 A at 32 V, 60% duty cycle</td>
<td>36 33 19 16 13 13.1 12.5</td>
<td>75 VDC (10–15 VDC**)</td>
<td>H: 24.75 in. (629 mm) W: 13.75 in. (349 mm) D: 22 in. (559 mm)</td>
<td>196 lb. (90 kg)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-phase 3-400</td>
<td>250 A at 29 V, 60% duty cycle</td>
<td>52 47 26 22 17 10.9 9.9</td>
<td>75 VDC (10–15 VDC**)</td>
<td>H: 24.75 in. (629 mm) W: 13.75 in. (349 mm) D: 22 in. (559 mm)</td>
<td>196 lb. (90 kg)</td>
<td></td>
</tr>
<tr>
<td>Dynasty 800 (907719)</td>
<td>TIG/stick</td>
<td>3-phase 5-800</td>
<td>600 A at 44 V, 60% duty cycle</td>
<td>96 86 48 42 33 35 33</td>
<td>75 VDC (10–15 VDC**)</td>
<td>H: 24.75 in. (629 mm) W: 13.75 in. (349 mm) D: 22 in. (559 mm)</td>
<td>196 lb. (90 kg)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-phase 5-800</td>
<td>500 A at 40 V, 60% duty cycle</td>
<td>136 122 66 56 44 28 26</td>
<td>75 VDC (10–15 VDC**)</td>
<td>H: 24.75 in. (629 mm) W: 13.75 in. (349 mm) D: 22 in. (559 mm)</td>
<td>196 lb. (90 kg)</td>
<td></td>
</tr>
</tbody>
</table>
Syncrowave® 300 AC/DC TIG and Stick

Auto-Link® circuit automatically links the power source to primary voltage being applied (208/240/480 V, single- or three-phase).

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

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.

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.

Arc timer/cycle counter records actual welding time and number of arc starts. Great for estimating job costs.

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

Coolmate™ 3 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.

**See literature AD/4.25 for Complete package dimensions and weight.

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Welding Process</th>
<th>Input Power</th>
<th>Welding Amp Range</th>
<th>Rated Output</th>
<th>Welding 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>
<tbody>
<tr>
<td>Syncrowave 300</td>
<td>TIG (includes cooler power draw)</td>
<td>3-phase</td>
<td>5–300</td>
<td>210 A at 18.4 V, 60% duty cycle</td>
<td>18-27</td>
<td>5 VDC (13 VDC*)</td>
<td>29.4 in. (746 mm)</td>
<td>101 lb. (45.8 kg)</td>
</tr>
<tr>
<td>(907782)</td>
<td></td>
<td>1-phase</td>
<td></td>
<td></td>
<td>14-24</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Syncrowave 300</td>
<td>Stick</td>
<td>3-phase</td>
<td>5–300</td>
<td>160 A at 26.4 V, 60% duty cycle</td>
<td>16-27</td>
<td>W: 15 in. (381 mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(951829)</td>
<td></td>
<td>1-phase</td>
<td></td>
<td></td>
<td>11-23</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(951830)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

**See literature AD/4.25 for Complete package dimensions and weight.
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 the 125-amp hand-held MicroTIG® torch to the 500-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.

---

TIG Torch Configurator

Our TIG Torch Configurator is a simple way to make sure you are using the right torch and consumables for your application.

Answer a few simple questions about your specific application and get a recommendation for the appropriate torch, tungsten, collet, collet body and more. Email or print the recommendation for reference when purchasing your next Weldcraft torch.

Visit now at MillerWelds.com/torchconfig

---

---

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

Recommended for welding amperages under 250 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. The Modular Series torches allow for a quick change to many different torch styles for any joint configuration. For those hard-to-reach areas the W-125 MicroTIG® torch provides access and superior maneuverability.

Weldcraft™ Automation Torches

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

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.

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

Weldcraft™ A-80 Series

<table>
<thead>
<tr>
<th>Model</th>
<th>Rubber</th>
<th>Type</th>
<th>Rated Output</th>
<th>Electrode Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-80 Flex</td>
<td>WP-24F-12-R</td>
<td>DC: 80 A at 60% duty cycle</td>
<td>.020–.20 in.</td>
<td>0.0–2.0 mm</td>
</tr>
<tr>
<td>A-80 Flex Valve</td>
<td>WP-24FV-12-R</td>
<td>AC: 50 A at 60% duty cycle</td>
<td>.020–.32 in.</td>
<td>0.0–2.4 mm</td>
</tr>
</tbody>
</table>
**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.

Lightweight body reduces fatigue and downtime, while increasing operator comfort.

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

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

<table>
<thead>
<tr>
<th>Model</th>
<th>Rubber</th>
<th>2-Piece Rubber</th>
<th>Type</th>
<th>Rated Output</th>
<th>Electrode Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-125</td>
<td>WP-9-12-R</td>
<td>—</td>
<td>Air-cooled</td>
<td>DC: 125 A at 60% duty cycle AC: 100 A at 60% duty cycle</td>
<td>.020–1/8 in. (0.5–3.2 mm)</td>
</tr>
<tr>
<td>A-125 Valve</td>
<td>WP-9V-12-R</td>
<td>WP-9V-25-R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-125 Flex</td>
<td>WP-9F-12-R</td>
<td>WP-9F-25-R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-125 Flex Valve</td>
<td>WP-9VF-12-R</td>
<td>WP-9VF-25-R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-125 Pencil</td>
<td>WP-9P-12-R</td>
<td>WP-9P-25-R</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**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** has ergonomic contact points for thumb and fingers. Provides a more comfortable grip and reduces operator fatigue (A-150 and A-150 Valve).

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

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

<table>
<thead>
<tr>
<th>Model</th>
<th>Rubber</th>
<th>2-Piece Rubber</th>
<th>Mono-Flex™</th>
<th>2-Piece Rubber</th>
<th>Type</th>
<th>Rated Output</th>
<th>Electrode Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-150</td>
<td>WP-17-12-R</td>
<td>WP-17-25-R</td>
<td>WP-17-12-MF</td>
<td>WP-17-25-2</td>
<td>Air-cooled</td>
<td>DC: 150 A at 60% duty cycle AC: 115 A at 60% duty cycle</td>
<td>.020–1/8 in. (0.5–3.2 mm)</td>
</tr>
<tr>
<td>A-150 Valve</td>
<td>WP-17V-12-R</td>
<td>WP-17V-25-R</td>
<td>WP-17V-12-MF</td>
<td>WP-17V-25-MF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-150 Flex</td>
<td>WP-17F-12-R</td>
<td>WP-17F-25-R</td>
<td>—</td>
<td>WP-17F-25-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-150 Flex Valve</td>
<td>WP-17VF-12-R</td>
<td>WP-17VF-25-R</td>
<td>—</td>
<td>WP-17VF-25-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-150 Flex Valve Redhead</td>
<td>WP-R17VF-12-R</td>
<td>WP-R17VF-25-R</td>
<td>—</td>
<td>WP-R17VF-25-2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**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 of the A-200 Series pairs reliability with cost-effectiveness for all field applications. Combined flexible neck and gas valve advances capabilities with greater comfort and control (A-200 Flex Valve).

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

<table>
<thead>
<tr>
<th>Model</th>
<th>Rubber 12.5 ft. (3.8 m)</th>
<th>25 ft. (7.6 m)</th>
<th>2-Piece Rubber 12.5 ft. (3.8 m)</th>
<th>25 ft. (7.6 m)</th>
<th>Type</th>
<th>Rated Output</th>
<th>Electrode Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-200 Valve</td>
<td>WP-26-12-R</td>
<td>WP-26-25-R</td>
<td>WP-26-12-2</td>
<td>WP-26-25-2</td>
<td>Air-cooled</td>
<td>DC: 200 A at 60% duty cycle</td>
<td>.020-.032 in. (0.5–4.0 mm)</td>
</tr>
<tr>
<td>A-200 Flex</td>
<td>WP-26F-12-R</td>
<td>WP-26F-25-R</td>
<td>—</td>
<td>WP-26F-25-2</td>
<td>Air-cooled</td>
<td>AC: 150 A at 60% duty cycle</td>
<td>.020-.032 in. (0.5–4.0 mm)</td>
</tr>
<tr>
<td>A-200 Flex Valve</td>
<td>WP-26FV-12-R</td>
<td>WP-26FV-25-R</td>
<td>WP-26FV-12-2</td>
<td>WP-26FV-25-2</td>
<td>Air-cooled</td>
<td>DC: 200 A at 60% duty cycle</td>
<td>.020-.032 in. (0.5–4.0 mm)</td>
</tr>
<tr>
<td>A-200 Flex Valve Redhead</td>
<td>WP-R26F-12-R</td>
<td>WP-R26FV-25-R</td>
<td>—</td>
<td>—</td>
<td>Air-cooled</td>
<td>DC: 200 A at 60% duty cycle</td>
<td>.020-.032 in. (0.5–4.0 mm)</td>
</tr>
</tbody>
</table>

**Weldcraft™ A-250 Series**

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


<table>
<thead>
<tr>
<th>Model</th>
<th>2-Piece Rubber, 25 ft. (7.6 m)</th>
<th>Type</th>
<th>Rated Output</th>
<th>Electrode Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-250</td>
<td>301525025</td>
<td>Air-cooled</td>
<td>DC: 250 A at 60% duty cycle</td>
<td>.020-.032 in. (0.5–4.0 mm)</td>
</tr>
<tr>
<td>A-250 Valve</td>
<td>301526025</td>
<td></td>
<td>AC: 188 A at 60% duty cycle</td>
<td></td>
</tr>
</tbody>
</table>

**Applications**

- Fabrication • Maintenance and repair
- Manufacturing • Shipbuilding
- Vocational

**Most popular consumables**

- Collets
  - 10N23 1/16 in. (1.6 mm)
  - 10N24 3/32 in. (2.4 mm)
  - 10N25 1/8 in. (3.2 mm)
- Collet Bodies
  - 10N31 1/16 in. (1.6 mm)
  - 10N32 3/32 in. (2.4 mm)
  - 10N28 1/8 in. (3.2 mm)
- Alumina Nozzles
  - 10N47 #7, 7/16 in.
  - 10N46 #8, 1/2 in.
  - 10N45 #10, 5/8 in.

**Most popular accessories**

- **Gas Lens Kit** AK3GL (pg 66)
  - Includes one short back cap, one of each size (#6, #7, #8) alumina nozzle, and one of each size (1/16, 3/32, 1/8 inch) of the following: gas lens, collet, and 7-inch 2% ceriated tungsten electrode

- **Accessory Kit** AK3C (pg 66)
  - Includes one short back cap, one of each size (#5, #6, #8) alumina nozzle, and one of each size (1/16, 3/32, 1/8 inch) 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.

**Share Your Passion**

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
### 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.

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

**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.

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

**Most popular consumables**
- Insulator (non-gas lens and gas lens) (required) 598882
- Collets (non-gas lens and gas lens)
  - 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
  - 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
  - 45V42 .040 in. (1.0 mm)
  - 45V43 1/16 in. (1.6 mm)
  - 45V44 3/32 in. (2.4 mm)
  - 45V45 1/8 in. (3.2 mm)
- Alumina Nozzles
  - 13N08 #4, 1/4 in.
  - 13N09 #5, 5/16 in.
  - 13N10 #6, 3/8 in.
  - 13N11 #7, 7/16 in.
  - 13N12 #8, 1/2 in.
  - 13N13 #10, 5/8 in.
  - 53N58 #4, 1/4 in. (gas lens)
  - 53N59 #5, 5/16 in. (gas lens)
  - 53N60 #6, 3/8 in. (gas lens)
  - 53N61 #7, 7/16 in. (gas lens)
  - 53N61S #8, 1/2 in. (gas lens)

### 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.

**Applications**
- Aerospace • Aluminum fabrication
- Automotive • Manufacturing
- Exotic material fabrication
- Pressure vessel fabrication
- Shipbuilding • Tool and die
- Tube and pipe • Vocational

**Most popular consumables**
- Insulator (non-gas lens and gas lens) (required) 598882
- Collets (non-gas lens and gas lens)
  - 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
  - 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
  - 45V42 .040 in. (1.0 mm)
  - 45V43 1/16 in. (1.6 mm)
  - 45V44 3/32 in. (2.4 mm)
  - 45V45 1/8 in. (3.2 mm)
- Alumina Nozzles
  - 13N08 #4, 1/4 in.
  - 13N09 #5, 5/16 in.
  - 13N10 #6, 3/8 in.
  - 13N11 #7, 7/16 in.
  - 13N12 #8, 1/2 in.
  - 13N13 #10, 5/8 in.
  - 53N58 #4, 1/4 in. (gas lens)
  - 53N59 #5, 5/16 in. (gas lens)
  - 53N60 #6, 3/8 in. (gas lens)
  - 53N61 #7, 7/16 in. (gas lens)
  - 53N61S #8, 1/2 in. (gas lens)

### Weldcraft™ W-250 Series
Formerly known as WP-20 Series

Water-cooled torches that provide consistent performance and long-term trouble-free service with around-the-head water cooling.

Extend torch life and minimize downtime due to overheating with the efficient around-the-head cooling design. Reduce leakage of gas and water through secure mechanical fittings and connections. Easy hose replacement with the innovative mechanical fittings design (W-250 Valve).

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

**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.

### Weldcraft™ W-250 Series
Formerly known as WP-20 Series

Water-cooled torches that provide consistent performance and long-term trouble-free service with around-the-head water cooling.

Extend torch life and minimize downtime due to overheating with the efficient around-the-head cooling design. Reduce leakage of gas and water through secure mechanical fittings and connections. Easy hose replacement with the innovative mechanical fittings design (W-250 Valve).
**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.  
**Reduce downtime** due to overheating through consistent water-cooled performance.  
**Reduce leakage** of gas and water through secure mechanical fittings and connections.

| Model       | Braided Rubber 12.5 ft. (3.8 m) | Braided Rubber with 50 mm Dinse 25 ft. (7.6 m) | Type          | Rated Output DC: 280 A at 100% duty cycle  
|            | & Vinil 12.5 ft. (3.8 m)        | 25 ft. (7.6 m) |              | AC: 195 A at 100% duty cycle  
| W-280 Super Cool | 301251012                     | 301251025     | Water-cooled | 0.020–1/8 in. (0.5–3.2 mm) |

**Weldcraft™ W-375 Super Cool™**

Formerly known as WP-375

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

**Super Cool technology** provides additional surface area to increase cooling efficiency and capacity.  
**Reduce downtime** due to overheating through consistent water-cooled performance.  
**Reduce leakage** of gas and water through secure mechanical fittings and connections.

| Model       | Braided Rubber 12.5 ft. (3.8 m) | Braided Rubber with 50 mm Dinse 25 ft. (7.6 m) | Type          | Rated Output DC: 375 A at 100% duty cycle  
|            | & Vinil 12.5 ft. (3.8 m)        | 25 ft. (7.6 m) |              | AC: 265 A at 100% duty cycle  
| W-375 Super Cool | 301253012                     | 301253025     | Water-cooled | 0.020–1/8 in. (0.5–3.2 mm) |

**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).

| Model       | Rubber 12.5 ft. (3.8 m) | Vinyl 12.5 ft. (3.8 m) | Type          | Rated Output DC: 350 A at 100% duty cycle  
|            | 25 ft. (7.6 m)          | 25 ft. (7.6 m)        |              | AC: 265 A at 100% duty cycle  
| W-350       | WP-18-12-R              | WP-18-25-R           | Water-cooled | 0.020–5/32 in. (0.5–4.0 mm) |
| W-350 Valve | –                      | WP-18V-25-R          | –            | – |

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

**Most popular consumables**
- Insulator (non-gas lens and gas lens)  
- Collets (non-gas lens and gas lens)  
- Back Caps  
- Alumina Nozzles  
- Alumina Nozzles (gas lens)  
- Alumina Nozzles (gas lens)

**Most popular accessories**
- Cable Covers  
- Visits MillerWelds.com or your distributor for other Miller® options and accessories.

**Weldcraft™ W-350 Valve**

(WP-18V)

**Applications**
- Fabrication  
- Manufacturing  
- Maintenance and repair  
- Shipbuilding  
- Tube and pipe

**Most popular consumables**
- Collets  
- Collet Bodies  
- Alumina Nozzles  
- Alumina Nozzles (gas lens)  
- Alumina Nozzles (gas lens)

**Most popular accessories**
- Cable Covers  
- Visits MillerWelds.com or your distributor for other Miller® options and accessories.
**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

<table>
<thead>
<tr>
<th>Model</th>
<th>Rubber, 25 ft. (7.6 m)</th>
<th>Vinyl, 25 ft. (7.6 m)</th>
<th>Type</th>
<th>Rated Output</th>
<th>Electrode Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>W-400 Super Cool</td>
<td>WP-18SC-25-R</td>
<td>WP-18SC-25</td>
<td>Water-cooled</td>
<td>DC: 400 A at 100% duty cycle, AC: 280 A at 100% duty cycle</td>
<td>.020-3/16 in. (0.5–4.8 mm)</td>
</tr>
</tbody>
</table>

**Weldcraft™ Modular Series**

Air-cooled and water-cooled torches engineered to weld multiple joint configurations for various applications and angles.

**Built-in, efficient cooling system** reduces overheating to extend parts and consumable life.

**Modular design** minimizes costs and downtime for torch changeover and parts inventory.

**Easy configurable head options** provide greater flexibility and joint access, minimizing downtime for torch changeover.

**Gas valve** provides greater shielding gas flow control (A-150 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 (pg 66) AK-150MFC For A-150 torch
- AK-225MFC For W-225 torch

<table>
<thead>
<tr>
<th>Model</th>
<th>Rubber, 25 ft. (7.6 m)</th>
<th>Type</th>
<th>Rated Output</th>
<th>Electrode Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-150 Modular</td>
<td>WP-150-12-R</td>
<td>Air-cooled</td>
<td>DC: 150 A at 60% duty cycle, AC: 105 A at 60% duty cycle</td>
<td>.020-1/8 in. (0.5–3.2 mm)</td>
</tr>
<tr>
<td>A-150 Modular Valve</td>
<td>WP-150V-25-R</td>
<td></td>
<td></td>
<td>Electrode Range</td>
</tr>
<tr>
<td>W-225 Modular</td>
<td>WP-225-12-R</td>
<td>Water-cooled</td>
<td>DC: 225 A at 100% duty cycle, AC: 160 A at 100% duty cycle</td>
<td>.020-5/32 in. (0.5–4.0 mm)</td>
</tr>
</tbody>
</table>

**Weldcraft™ W-125 Long Micro**
Formerly known as WP-125L

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

**Small 5-inch torch body** 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.

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

**Most popular consumables**
- 90° Chucks
  - 125C04-90 .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)

<table>
<thead>
<tr>
<th>Model</th>
<th>Braided Rubber, 25 ft. (7.6 m)</th>
<th>Type</th>
<th>Rated Output</th>
<th>Electrode Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>W-125 Long Micro</td>
<td>WP-125L-12-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>
</tr>
</tbody>
</table>
Weldcraft™ Automation Series

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

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

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

Handle the most demanding high-amperage applications (W-500 Automation).

Applications
- Aerospace
- Food/beverage industry
- Pressure vessel fabrication
- Petro/chemical

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

- Air-Cooled Torch 1-Piece Power Cable Connector (pg 121)
  - 195378 50 mm Dinse-style

- Water-Cooled Torch 1-Piece Power Cable Connectors (pg 121)
  - 195377 50 mm Dinse-style
  - 225028 50 mm thread-lock

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

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>
</tr>
</thead>
<tbody>
<tr>
<td>2% Ceriated (EWCe-2)</td>
<td>WC040X7</td>
<td>0.040 (1.0)</td>
</tr>
<tr>
<td></td>
<td>WC111X7</td>
<td>1/16 (1.6)</td>
</tr>
<tr>
<td></td>
<td>WC332X7</td>
<td>3/32 (2.4)</td>
</tr>
<tr>
<td></td>
<td>WC018X7</td>
<td>1/8 (3.2)</td>
</tr>
<tr>
<td></td>
<td>WC532X7</td>
<td>5/32 (4.0)</td>
</tr>
<tr>
<td>2% Lanthanated (EWLa-2)</td>
<td>WL2040X7</td>
<td>0.040 (1.0)</td>
</tr>
<tr>
<td></td>
<td>WL2116X7</td>
<td>1/16 (1.6)</td>
</tr>
<tr>
<td></td>
<td>WL2332X7</td>
<td>3/32 (2.4)</td>
</tr>
<tr>
<td></td>
<td>WL2018X7</td>
<td>1/8 (3.2)</td>
</tr>
<tr>
<td></td>
<td>WL2532X7</td>
<td>5/32 (4.0)</td>
</tr>
<tr>
<td>Pure (CRP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>WP111X7</td>
<td>1/16 (1.6)</td>
</tr>
<tr>
<td></td>
<td>WP332X7</td>
<td>3/32 (2.4)</td>
</tr>
<tr>
<td></td>
<td>WP018X7</td>
<td>1/8 (3.2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5/32 (4.0)</td>
</tr>
<tr>
<td>Rare Earth (EWG)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>WC040X7</td>
<td>0.040 (1.0)</td>
</tr>
<tr>
<td></td>
<td>WL116X7</td>
<td>1/16 (1.6)</td>
</tr>
<tr>
<td></td>
<td>WL332X7</td>
<td>3/32 (2.4)</td>
</tr>
<tr>
<td></td>
<td>WL018X7</td>
<td>1/8 (3.2)</td>
</tr>
<tr>
<td></td>
<td>WL532X7</td>
<td>5/32 (4.0)</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™ TIG Torch Accessories

GL Kits (Gas Lens Kits)
Gas lenses improve the gas coverage of the tungsten during the TIG welding process. They can save you time and money by increasing your weld quality while using less gas. GL kits provide three different-sized gas lenses and consumables in each kit to work with a variety of different applications.

AK Kits (Accessory Kits)
AK kits provide a set of different consumables for Weldcraft torches to tackle a variety of different applications. Kits include nozzles, collets, collet bodies, tungsten and back caps.

Quick Connects
- QRG
  Allows for quick connection and removal of torch shielding gas hoses.
- QRW
  Allows for quick connection and removal of torch coolant hoses.

Cable Covers
- WC-3-10
  10 ft. (3 m)
- WC-3-22
  22 ft. (6.7 m)
- WC-3-48
  48 ft. (14.6 m)
Cable covers protect the welding cables from the day-to-day wear and tear of common welding environments. Available in 10-foot, 22-foot, and 48-foot lengths, these covers can help prevent the frequent replacement of expensive welding cables.

Remote Controls
See pages 120–121 in Accessories section for stock numbers and more information.
- East/west rotary-motion fingertip current/contactor controls.
- North/south rotary-motion fingertip current/contactor controls.
- Foot pedal current/contactor controls.
- Miniature hand current/contactor controls.
- Momentary- and maintained-contact rocker switch for contactor control.
- Momentary-contact switch for contactor controls.
- Remote on/off control.
Transform data into actionable information that drives continuous improvement.

Insight Centerpoint version 10 available. See page 69 for more information.

Choose the Right Welding Intelligence System

Choose the Right Welding Intelligence System

<table>
<thead>
<tr>
<th>For Use With</th>
<th>Factory-Installed</th>
<th>Field-Installed/Activated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requirements</td>
<td>Internet connection (wired/wireless)</td>
<td>14-pin compliant power source (see MillerWelds.com/insight)</td>
</tr>
<tr>
<td>What Capability Do You Need?</td>
<td>Productivity monitoring, Weld parameter verification, Simplicity/basic monitoring, Goal setting, Analytic tools</td>
<td>Prevent/detect missed welds, Minimize overwelding/underwelding, Electronic work instructions, Measure overall equipment effectiveness (OEE)</td>
</tr>
<tr>
<td>Data Storage</td>
<td>Cloud based</td>
<td>Local server or PC</td>
</tr>
</tbody>
</table>

- **Insight Core™**: Continuum™/Auto-Continuum™ (standard)
- **Insight Centerpoint™**: Continuum™/Auto-Continuum™ (optional)
- **Insight ArcAgent™**: ANY welding power source (old or new), ANY brand, ANY welding process

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

Simple, cloud-based welding information management solution that reports operator productivity and deposition, as well as weld parameter verification.

Helps you answer
- Who is your most productive operator?
- What is your most productive welder, station, cell?
- Are your quality risks increasing or decreasing?
- What are your true welding costs?

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

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.

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

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

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

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

How it works

Universal brand capability
With an ArcAgent™ module, you can have the power of Insight Core on any machine from any manufacturer, giving you complete coverage of your facility.

1 Additional stock numbers are available — visit MillerWelds.com/insight.
2 SubArc Digital Series requires Insight Core to SubArc Digital Series Adapter Kit (301295).
3 TIG applications require TIG Filter (301359) to monitor voltage.

Type | Continuum Power Sources | Miller 14-Pin Compliant Power Sources | Universal Adaptability (works with ALL brands/models of power sources)
---|---|---|---
Factory-Installed Insight Core | Continuum 350 (907636) | — | —
| Continuum 500 (907640) | — | — | —
| Auto-Continuum 350 (907655) | — | — | —
| Auto-Continuum 500 (907657) | — | — | —
Field-Installed Insight Core | — | Requires Insight Core 14-pin module (301072) See MillerWelds.com/insight for a list of 14-pin compatible power sources | Requires ArcAgent for Insight Core (951773) with Stud output (951772) with Dinse output

68
**Insight Centerpoint™**

Advanced, real-time operator feedback solution to prevent missed welds, enforce proper weld sequences and ensure consistent weld quality.

**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.

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

*Job tracking.* A browser-based user interface eliminates the need for a PC in the workstation, allowing an operator to easily record everything that goes into creating a part.

**Benefits for everyone in your operation**

- Create a full record of every weld on every part
- Present welders with step-by-step instructions
- Have confidence that parts are properly welded

- Save time inspecting welds
- Identify the impact of non-welding activities
- Keep your welders welding

- Identify the true cost of a welded component
- Collect data to drive decisions
- Stop losing money due to missing or poor welds

For more information:
Call **1-844-463-4328** or email **insight@MillerWelds.com**

**Universal brand capability**

With an ArcAgent™ module, you can have the power of Insight Centerpoint on any machine from any manufacturer, giving you a complete picture of your facility.

1 Additional stock numbers are available — visit MillerWelds.com/insight.
# Product Guide

<table>
<thead>
<tr>
<th>Product</th>
<th>Page</th>
<th>Class</th>
<th>Stick</th>
<th>Flux-core*</th>
<th>AC Tig</th>
<th>DC Tig</th>
<th>PAC</th>
<th>CAC-A</th>
<th>Portability</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 160</td>
<td>71</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>Optional lift eye or running gear</td>
<td>Steel</td>
<td>6,200</td>
<td>30–160 DC</td>
<td>Kohler</td>
<td>Portable, PowerShift technology, inverter stick</td>
<td>Maintenance, construction, repair, service trucks</td>
</tr>
<tr>
<td>Blue Star® 185</td>
<td>71</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>Lift eye, optional running gear or trailer</td>
<td>Steel, stainless aluminum</td>
<td>6,200</td>
<td>60–195 DC</td>
<td>Kohler</td>
<td>Compact</td>
<td></td>
</tr>
<tr>
<td>Bobcat® 200 Air Pak™</td>
<td>73</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>Lift eye, optional running gear or trailer</td>
<td>Steel, stainless aluminum</td>
<td>6,500</td>
<td>30–210 DC</td>
<td>Kohler</td>
<td>Air compressor, battery charge/crank assist, Auto-Speed™, inverter CC/DC</td>
<td>Service trucks, repair, maintenance, farm/ranch</td>
</tr>
<tr>
<td>Bobcat® 225</td>
<td>74</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>Lift eye, optional running gear or trailer</td>
<td>Steel, stainless aluminum</td>
<td>9,500</td>
<td>60–160 AC 40–225 DC</td>
<td>Kohler</td>
<td>Cost-effective AC/DC stick</td>
<td>Maintenance, farm/ranch, construction</td>
</tr>
<tr>
<td>Bobcat® 3 Phase</td>
<td>74</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>Lift eye, optional running gear or trailer</td>
<td>Steel, stainless aluminum</td>
<td>10,000</td>
<td>40–225 AC 40–210 DC</td>
<td>Kohler</td>
<td>Backup power for pivot irrigation</td>
<td>Farm/ranch</td>
</tr>
<tr>
<td>Trailblazer® 302 Air Pak™</td>
<td>78</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>Lift eye, optional running gear or trailer</td>
<td>Steel, stainless</td>
<td>11,000</td>
<td>10–225 AC 10–350 DC</td>
<td>Kohler</td>
<td>AC/DC, CC/CV, air compressor, battery charge/crank assist</td>
<td>Service/maintenance, construction</td>
</tr>
</tbody>
</table>

#### Gas or LP

<table>
<thead>
<tr>
<th>Product</th>
<th>Page</th>
<th>Class</th>
<th>Stick</th>
<th>Flux-core*</th>
<th>AC Tig</th>
<th>DC Tig</th>
<th>PAC</th>
<th>CAC-A</th>
<th>Lift eye, optional running gear or trailer</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>Bobcat® 250</td>
<td>74</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>Lift eye, optional running gear or trailer</td>
<td>Steel, stainless aluminum</td>
<td>9,500</td>
<td>40–250 DC</td>
<td>Kohler</td>
<td>Most popular engine drive, AC/DC, optional EFI</td>
<td>Fab, maintenance, farm/ranch, construction</td>
</tr>
<tr>
<td>Trailblazer® 325</td>
<td>76</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>Lift eye, optional running gear or trailer</td>
<td>Steel, stainless</td>
<td>10,500 (Gas) 10,000 (LP) 10–325 DC (Gas) 10–305 DC (LP)</td>
<td>Kohler</td>
<td>ArcReach® (most models), Auto-Speed**, optional EFI, Excel™ power, battery charge/crank assist</td>
<td>Fab, maintenance, structural, repair, pipe</td>
<td></td>
</tr>
</tbody>
</table>

#### Diesel

<table>
<thead>
<tr>
<th>Product</th>
<th>Page</th>
<th>Class</th>
<th>Stick</th>
<th>Flux-core*</th>
<th>AC Tig</th>
<th>DC Tig</th>
<th>PAC</th>
<th>CAC-A</th>
<th>Lift eye, optional running gear or trailer</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>Bobcat® 200 Air Pak™ Diesel</td>
<td>73</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>Lift eye, optional running gear or trailer</td>
<td>Steel, stainless aluminum</td>
<td>6,500</td>
<td>30–160 DC</td>
<td>Kubota</td>
<td>Air compressor, battery charge/crank assist, Auto-Speed™, inverter CC/DC</td>
<td>Service trucks, repair, maintenance, farm/ranch</td>
</tr>
<tr>
<td>Bobcat® 250 Diesel</td>
<td>74</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>Lift eye, optional running gear or trailer</td>
<td>Steel, stainless aluminum</td>
<td>9,500</td>
<td>40–250 DC</td>
<td>Kubota</td>
<td>Contractor’s choice, AC/DC stick, strong FCAW</td>
<td>Fab, maintenance, farm/ranch, construction</td>
</tr>
<tr>
<td>Trailblazer® 325 Diesel</td>
<td>76</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>Lift eye, optional running gear or trailer</td>
<td>Steel, stainless</td>
<td>10,500</td>
<td>10–325 DC</td>
<td>Kubota</td>
<td>ArcReach®, Auto-Speed®; optional Excel™ power</td>
<td>Fab, maintenance, structural, repair, pipe</td>
</tr>
<tr>
<td>Big Blue® 400 Pro</td>
<td>78</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>Lift eye, optional trailer</td>
<td>Steel, stainless</td>
<td>10,000</td>
<td>20–400 DC</td>
<td>CAT, Kubota, Mitsubishi</td>
<td>Quiet, compact, fuel efficient; optional ArcReach®</td>
<td>Construction, repair</td>
</tr>
<tr>
<td>Big Blue® 400 PipePro®</td>
<td>79</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>Lift eye, optional trailer</td>
<td>Steel, stainless</td>
<td>10,000</td>
<td>20–400 DC</td>
<td>CAT, Mitsubishi</td>
<td>ArcReach®, Line-X® top cover, lift-off service door; optional stainless steel</td>
<td>Cross country pipeline</td>
</tr>
<tr>
<td>Big Blue® 450 Duo CST™</td>
<td>79</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>Lift eye, optional trailer</td>
<td>Steel, stainless</td>
<td>10,000</td>
<td>5–450 DC</td>
<td>Mitsubishi</td>
<td>Dual operator in a compact package</td>
<td>Construction, fabrication, pipe</td>
</tr>
<tr>
<td>Big Blue® 500 Pro</td>
<td>80</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>Lift eye, generally mounted on optional trailer</td>
<td>Steel, stainless</td>
<td>20,000</td>
<td>20–500 DC</td>
<td>Kubota</td>
<td>Quiet, fuel efficient; optional ArcReach®</td>
<td>Construction, repair</td>
</tr>
<tr>
<td>Big Blue® 600 Series</td>
<td>80</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>Lift eye, generally mounted on optional trailer</td>
<td>Steel, stainless</td>
<td>20,000</td>
<td>20–600 DC</td>
<td>Kubota (Pro), Deutz (Air Pak)</td>
<td>Quiet, powerful, fuel efficient; optional ArcReach®; Air Pak™ model has ArcReach® standard and adds air compressor</td>
<td>Construction, repair, maintenance, mining, rail</td>
</tr>
<tr>
<td>Big Blue® 800 Series</td>
<td>81</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>Lift eye, generally mounted on optional trailer</td>
<td>Steel, stainless</td>
<td>20,000</td>
<td>20–800 DC</td>
<td>Deutz</td>
<td>ArcReach® heavy duty, dual operator – Air Pak™ model adds air compressor</td>
<td>Construction, repair, maintenance, mining, rail</td>
</tr>
</tbody>
</table>

### Product Key

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

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

***POWER SHIFT***

Work anywhere convenience. PowerShift technology provides weld capabilities using either the Fusion 160 gasoline engine or 120/240-volt utility power. You'll have the confidence of knowing that you can weld virtually anywhere — outdoors and indoors — with just one machine. The multi-voltage plug (MVP™) makes it easy to connect the welder to either 120- or 240-volt power.

**Easier to transport.** At only 242 pounds, the Fusion 160 is up to 45 pounds less than similar machines, so moving it is easier and faster. Less time is spent waiting, and more work can get done.

**Less rework.** Inverter technology delivers 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.

---

### Specifications

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Kohler with electric start</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Power</td>
<td>Engine power, PowerShift 120 V, PowerShift 240 V</td>
</tr>
<tr>
<td>Welding Mode</td>
<td>CC/DC CC/DC CC/DC</td>
</tr>
<tr>
<td>Welding Process</td>
<td>DC stick DC stick DC stick</td>
</tr>
<tr>
<td>Amperage Range</td>
<td>30–160 30–100 30–160</td>
</tr>
<tr>
<td>Rated Output at 104°F (40°C)</td>
<td>160 A at 26.4 V, 20% duty cycle 110 A at 24.4 V, 100% duty cycle 90 A at 23.8 V, 40% duty cycle</td>
</tr>
<tr>
<td>Single-Phase Generator Power at 104°F (40°C)</td>
<td>Peak: 6,500 watts Continuous: 6,200 watts</td>
</tr>
<tr>
<td>Dimensions</td>
<td>H: 24.75 in. (629 mm) W: 20.625 in. (524 mm) D: 31.25 in. (794 mm)</td>
</tr>
<tr>
<td>Net Weight</td>
<td>242 lb. (110 kg)</td>
</tr>
</tbody>
</table>

---

Blue Star® 185

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.

---

### Specifications

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Kohler</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Power</td>
<td>Gasoline Engine KOHLER CH440 13.4 hp at 3,600 rpm One-cylinder, four-cycle, OHV, air-cooled</td>
</tr>
<tr>
<td>Welding Mode</td>
<td>CC/DC CC/DC</td>
</tr>
<tr>
<td>Welding Process</td>
<td>DC stick/TIG DC stick/TIG</td>
</tr>
<tr>
<td>Amperage Range</td>
<td>60–195</td>
</tr>
<tr>
<td>Rated Output at 104°F (40°C)</td>
<td>185 A at 25 V, 20% duty cycle 150 A at 25 V, 100% duty cycle</td>
</tr>
<tr>
<td>Single-Phase Generator Power at 104°F (40°C)</td>
<td>Peak: 6,500 watts Continuous: 6,200 watts</td>
</tr>
<tr>
<td>Dimensions</td>
<td>H: 24.75 in. (629 mm) W: 20.625 in. (524 mm) D: 31.25 in. (794 mm)</td>
</tr>
<tr>
<td>Net Weight</td>
<td>296 lb. (134 kg)</td>
</tr>
</tbody>
</table>
### Sound Levels (at 23 feet)

<table>
<thead>
<tr>
<th></th>
<th>Bobcat 225 (page 74)</th>
<th>Bobcat 250 (page 74)</th>
<th>Trailblazer 325 (page 76)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>At Maximum Load/At 150 Amps</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sound Quality</strong></td>
<td>73.5 dB/72 dB</td>
<td>72.5 dB/72 dB</td>
<td>74 dB/65 dB</td>
</tr>
<tr>
<td><strong>Fuel System</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Typical Runtime per 12-Gallon Tank</strong>*</td>
<td>13 hours</td>
<td>13/15.5 hours with EFI</td>
<td>Up to 21 hours with options</td>
</tr>
<tr>
<td><strong>Efficiency</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Type</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Delivery</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Generator</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Peak Watts</strong></td>
<td>11,000 watts</td>
<td>11,000/12,000 watts with EFI</td>
<td>12,000 watts</td>
</tr>
<tr>
<td><strong>Clean Power Quality</strong></td>
<td>Very good/Excellent</td>
<td>Very good/Excellent with voltage control near maximum</td>
<td>Independent weld and generator power with no interaction between tools and welding arc</td>
</tr>
<tr>
<td><strong>Power While Welding</strong></td>
<td>Fair/Good</td>
<td>Good — Easier to fine-tune with arc voltage control near maximum</td>
<td>Excel power available</td>
</tr>
<tr>
<td><strong>Excel™ Power Generator</strong></td>
<td>120 V, 60 Hz at all engine speeds</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Weld Performance

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stick</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>MIG — Wire (solid/FCAW), Steel</strong></td>
<td>Fair (.035 in.)</td>
<td>Good (.035-1/16 in.)</td>
<td>Excel (0.23-1/16 in.)</td>
</tr>
<tr>
<td><strong>MIG — Wire, Aluminum w/Spool Gun</strong></td>
<td>Fair/Good</td>
<td>Good (add WC-115A with contactor)</td>
<td>Excellent (add WC-24)</td>
</tr>
<tr>
<td><strong>DC TIG (steel)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>AC Weld</strong></td>
<td>60-160 amps</td>
<td>40-250 amps</td>
<td>Add Dynasty* (page 54)</td>
</tr>
</tbody>
</table>

### Key Features

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Digital Meters</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Maintenance Displays</strong></td>
<td>Hours/Oil change</td>
<td>Hours/Oil change/Fuel</td>
<td>Hours/Oil change/Fuel/rpm</td>
</tr>
<tr>
<td><strong>Battery Charge/Crank Assist</strong></td>
<td>-</td>
<td>-</td>
<td>12 and 24 volt available</td>
</tr>
<tr>
<td><strong>14-pin Receptacle</strong></td>
<td>-</td>
<td>-</td>
<td>With Auto Remote Sense**</td>
</tr>
</tbody>
</table>

**Bobcat™/Trailblazer®/Big Blue®**

### Air Pak® Comparison — Which is Right for You?

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Compressed Air</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Bobcat 200 Air Pak</strong></td>
<td>30 cfm, 175 psi</td>
<td>31 cfm, 180 psi</td>
<td>60 cfm, 100 psi</td>
</tr>
<tr>
<td><strong>Battery Charge/Crank Assist</strong></td>
<td>12 and 24 volt</td>
<td>12 and 24 volt</td>
<td>-</td>
</tr>
<tr>
<td><strong>Generator Power</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Single-phase</strong></td>
<td>Peak: 8,000 watts</td>
<td>Peak: 13,000 watts</td>
<td>Peak: 15,000 watts</td>
</tr>
<tr>
<td></td>
<td>Continuous: 6,500 watts</td>
<td>Continuous: 11,000 watts</td>
<td>Continuous: 12,000 watts</td>
</tr>
<tr>
<td><strong>Three-phase</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Weld Output Range</strong></td>
<td>30–210 amps (CV/DC, 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><strong>Fuel Type</strong></td>
<td>Gas/Diesel</td>
<td>Gas</td>
<td>Diesel</td>
</tr>
<tr>
<td><strong>Size</strong></td>
<td>29.78 x 20 x 44.61 in. (gas)</td>
<td>28 x 20 x 59.625 in. (gas)</td>
<td>46 x 28.5 x 69.5 in. (gas)</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>514 lb. (gas), 618 lb. (fuel)</td>
<td>771 lb.</td>
<td>2,040 lb.</td>
</tr>
</tbody>
</table>

**ArcReach technology standard**
Bobcat™ 200 Air Pak™

Quiet, fuel-efficient all-in-one that maintains power capabilities in a compact, lightweight footprint and is backed by industry-leading reliability and performance.

Maximize available payload. Reduce weight by up to 600 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. Potentially save more than $50,000 over ten years from increased fuel efficiency, decreased maintenance costs and increased asset life.

Advanced Auto-Speed™ technology automatically adjusts engine speed to match weld and battery charge demands — reducing fuel consumption, maintenance costs and noise for more efficient jobsites.

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 30 cfm at 175 psi, 100 percent duty cycle, continuous air output.

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

6,500-watt generator power to support jobsite tools, lights, and high-demand applications like plasma cutters and TIG welders.

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

Model/Stock Number  Welding Mode  Welding Process  Amp/Volt Ranges  Rated Weld Output at 104°F (40°C)  Single-Phase Generator Power at 104°F (40°C)  Dimensions  Net Weight
---  ---  ---  ---  ---  ---  ---  ---
Gasoline
Bobcat 200 Air Pak (907771) Kohler  CC/DC  DC stick/TIG  30-210 A  120 A at 25 V, 100% duty cycle 140 A at 26 V, 60% duty cycle 210 A at 28 V, 20% duty cycle  Peak: 8,000 watts  Continuous: 6,500 watts  H: 24.25 in. (616 mm)  W: 20 in. (508 mm)  D: 47.25 in. (1,200 mm)  514 lb. (233 kg)
Bobcat 200 Air Pak Diesel (907780) Kubota  CC/DC  DC stick/TIG  30-210 A  120 A at 25 V, 100% duty cycle 140 A at 26 V, 60% duty cycle 210 A at 28 V, 20% duty cycle  Peak: 8,000 watts  Continuous: 6,500 watts  H: 28.875 in. (734 mm)  W: 20 in. (508 mm)  D: 47.25 in. (1,200 mm)  618 lb. (280 kg)

Diesel

These specifications are subject to change without notice and do not represent an offer to sell. Refer to the latest literature for the latest information.

---

IMPROVED! Bobcat 200 Air Pak (gas) now with Auto-Speed technology and multiprocess weld capabilities.

NEW! Bobcat 200 Air Pak Diesel

Light industrial

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

1 With voltage-sensing feeder.
2 Two-piece TIG torch recommended.

Most popular accessories
- ArcReach® SuitCase® Feeders (pg 18)
- Spoolmate™ 200  300497 (pg 27)
- Spoolmatic® 30A  130831 (pg 28)
- Spectrum® 375 X-TREME™ (pg 90)
- Multi-Terrain Running Gear  301460
- Full KVA Adapter Cord  300517
- Protective Cover (pg 116)
- HWY-Mid Frame Trailer  301438
- Battery Charge/Jump Cables with Plug  300422
- Air Compressor Oil Heater  301448
- Spool Gun Extension Hose and Cable Kit  132228
- Visit MillerWelds.com or your distributor for other Miller® options and accessories.
Bobcat™ Series Gas, LP and Diesel

The legendary Bobcat welder/generator is reliable, powerful and durable. One of the smallest and lightest in its class.

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.

Stronger generator power

11,000 watts (12,000 on Bobcat 250 with EFI) of 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.

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

Quieter and better sound

Up to 33 percent sound reduction.
Significant improvements in sound level and quality offer better jobsite communication, which provides a more efficient working environment for you and your crew. Bobcat welder/generators have rotated the engine toward the front to create more efficient airflow, resulting in significantly quieter operation. Now you can start your job earlier in the day and end it later, as well as work around hospitals, businesses, and residential areas.

More portable, uses less truck space

Smaller and lighter. Up to 17 percent less cubic space and weighing up to 100 pounds less than other welder/generators in their class – means moving Bobcat welder/generators is faster and easier, for maximum productivity. Bobcat welder/generators take up less space on trucks and trailers – leaving more room on your truck for other equipment and tools. Plus, they’re easier to move safely around jobsites – even with weld cables and running gear attached.
Gas or LP

*Electric fuel pump recommended for operation at altitudes above 5,000 feet.

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.

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™ 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.

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.

Bobcat™ 250 (Gas, LP or Diesel) See literature ED/4.4 (Gas/LP) and ED/4.34 (Diesel)

Multiprocess engine-driven welder/generator capable of carbon arc gouging features a larger stabilizer for less spatter and smoother arc. Ideal welder/generator for maintenance/repair, construction, farm/ranch or as a stand-alone generator.

Convenient front panel fuel gauge.

More precise amperage settings with wider range for optimal stick/fux-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.

*Electric fuel pump recommended for operation at altitudes above 5,000 feet.

**Processes**
- AC/DC stick (SMAW)
- MIG (GMAW) * Flux-cored (FCAW)*
- AC2/DC TIG (GTAW)
- Air carbon arc cutting and gouging (CAC-A)3 (rated 3/16 in. carbons)

1With voltage-sensing feeder.

2With Dynasty® 210 Series.

3Bobcat 250 models only.

**Engines**

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

Note: Engines are warranted separately by engine manufacturer.

**Most popular accessories**
- ArcReach® SuitCase® Feeders (pg 18)
- Dynasty® 210 Series (pg 54)
- Spectrum® 625 X-TREME™ (pg 90)
- Multi-Terrain Running Gear (pg 116)
- Off-Road Running Gear (pg 116)
- Protective Cage with Cable Holders (pg 116)
- Hose and LP Tank Mounting Assembly (pg 116)
- Remote Oil Drain/Filter Kit (pg 116)
- All-Purpose Running Gear (pg 116)
- Full KVA Adapter Cord 300517 (pg 116)
- Protective Cover (pg 116)
- HWY-Mid Frame Trailer 301438 (pg 117)
- GFCI Panel Mount 120 VAC Duplex Kit 300975
- Electric Fuel Pump Kit 300976 (for gas models only)
- Recommended for operation at altitudes above 5,000 feet
- Spark Anistor Kit 300924 (for gas models only)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.
Trailblazer® Series Gas, LP and Diesel

See lit. ED/4.75 (Gas/LP) and ED/4.8 (Diesel)

Trailblazer welder/generators deliver unbeatable arc performance providing the smoothest, most stable arc in the industry. Trailblazer-exclusive Auto-Speed™ technology (now with 1,800 rpm level on diesel model) delivers superior runtimes, increased fuel efficiency, and improved welder/generator performance.

ArcReach® remote control technology

Standard on most models (see page 77 chart) — 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

Unbeatable arc performance

Dynamic DIG™ technology automatically adjusts the amount of current required to clear a short. Delivers a smoother, more consistent arc that can be tailored to match the application, material, fit-up and welder technique.

Increased performance at high altitude

Electric fuel pumps are now standard on all EFI models leading to better performance when operating at altitudes of 5,000 feet or greater.

More productive jobsites

Quieter jobsites are 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 jobsite. Trailblazer-exclusive Auto-Speed technology responds to weld requirements by automatically adjusting engine speed to a corresponding rpm level 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.
**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 for maximum fuel-efficiency.

**Excel power**

Excel power delivers a full 2,400 watts (20 A) of 120-volt inverter-based, pure sine wave power at all speeds, including idle. Unlike competitive machines that provide auxiliary power only at 3,600 rpm (max), 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.

**Battery charge/crank assist (option on gas models)**

Reduce downtime with battery charge/crank assist capability. Designed and recommended for mechanics or anyone 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.

---

### Heavy industrial

<table>
<thead>
<tr>
<th>Processes</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stick (SMAW)</td>
<td>MIG (GMAW)</td>
</tr>
<tr>
<td>Flux-cored (FCAW)</td>
<td>DC TIG (GTAW)</td>
</tr>
<tr>
<td>RMD**</td>
<td>Pulsed MIG (GMAW-P)</td>
</tr>
<tr>
<td>Air carbon arc cutting and gouging (CAC-A) (rated 3/16 in. carbons)</td>
<td>With wire feeder.</td>
</tr>
</tbody>
</table>

**Engines**

**Gas**

- Kohler CH730
  - 23.5 hp at 3,600 rpm

**LP**

- Kohler CH730LP
  - 23.5 hp at 3,600 rpm

- Twin-cylinder, four-cycle, overhead valve, industrial, air-cooled

**EPA Tier 4 Final Diesel**

- Kubota D902
  - 24.8 hp at 3,600 rpm

- Three-cylinder, industrial, liquid-cooled

Note: Engines are warranted separately by engine manufacturer.

**Most popular accessories**

- SuitCase® Feeders (pg 18/46)
- ArcReach® Smart Feeder 951733 (pg 18/46) (for ArcReach models only)
- ArcReach® Stick/TIG Remote 301325 (pg 46) (for ArcReach models only)
- Spoolmatic® 30A/HC-24 Control 130831/137549 (pg 28/122)
- Multi-Terrain Running Gear (pg 116)
- Off-Road Running Gear (pg 116)
- Protective Cage with Cable Holders (pg 116)
- Hose and LP Tank Mounting Assembly (pg 116)
- All-Purpose Running Gear (pg 116)
- Full KVA Adapter Cord (pg 116)
- Protective Cover (pg 116)
- HWY-Mid Frame Trailer (pg 117)
- Electric Fuel Pump Kit 300976 (for gas models only) Recommended for operation at altitudes above 5,000 feet
- 25 ft. Battery Charge/Jump Cables with Plug 300422 (for Trailblazer 325 EFI 907798004 only)

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

---

### Specifications

**Dimensions**

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Welding Mode</th>
<th>Welding Process</th>
<th>Amp/Volt Ranges</th>
<th>Single-Phase Generator Power at 104°F (40°C)</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>H: 28 in.</td>
<td>CC/DC</td>
<td>Stick/TIG</td>
<td>10–305 A (LP)</td>
<td>10,500 watts (LP)</td>
<td>475 lb.</td>
</tr>
<tr>
<td>W: 20 in. (508 mm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D: 40.5 in. (1,029 mm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Options and Accessories

- 500S (757 lb.)
- 575S (928 lb.)
- 620S (1,065 lb.)
- 675S (1,180 lb.)
- 775S (1,400 lb.)
- 825S (1,540 lb.)
- 900S (1,800 lb.)
- 1,000S (2,000 lb.)
- 1,200S (2,400 lb.)
- 1,500S (3,000 lb.)
- 1,750S (3,500 lb.)
- 2,000S (4,000 lb.)

**LP Models**

- ArcReach-equipped models
- Non-ArcReach models

**Kohler with Excel power and battery charge/crank assist (option on gas models)**

**Non-ArcReach models**

- ArcReach-equipped models
- Non-ArcReach models

**Kohler with GFCI and Excel power**

**Kohler with Excel power**

**Kohler with GFCI**

**Kohler with GFCI and Excel power**

**Kohler w/Excel power and battery charge/crank assist**

**Gas or LP**

- 325 Diesel
- 325 EFI

**LPG**

- 325 EFI

**Weight**

- Gas: 460 lb. (209 kg)
- LP: 475 lb. (215 kg)

**Net Weight**

- 620 lb. (281 kg)
**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/crank assist.

**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 with no storage tank and runs many tools at idle speed. Provides 100 percent deliverable air, rated at an industry-high 104 degrees Fahrenheit. Front panel adjustment and automatic overpressure shutdown with indication. 30,000-hour life expectancy 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. Convenent front panel access.

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

---

**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® technology** automatically adjusts the amount of current required to clear a short. Delivers a smoother, more consistent arc that can be tailored to match the application, material, fit-up and welder technique.

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

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

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

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

---

**Heavy industrial**

**Processes**
- AC/DC stick (SMAW)
- MIG (GMAW)1
- Flux-cored (FCAW)2
- AC2/DC3 TIG (GTAW)2
- Air carbon arc cutting and gouging (CAC-A) (rated 3/16 in. carbons, capable 1/4 in. carbons)
  1With wire feeder.
  2With Dynasty® 210 Series.
  3Two-piece TIG torch recommended.

**Gasoline engine**
- Kohler CN750: 27 hp at 3,600 rpm
- V-twin-cylinder, four-cycle, overhead valve, industrial, air-cooled

Note: Engine is warranted separately by engine manufacturer.

**Most popular accessories**
- SuitCase® Feeders (pg 18)
- Spoolmatic® 30A/RC-24 Control 130831/137549 (pg 28/122)
- 25 ft. Battery Charge/Jump Cables with Plug 300422

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

---

**Heavy industrial**

**Processes**
- Stick (SMAW)
- MIG (GMAW)1
- Flux-cored (FCAW)2
- DC TIG (GTAW)
- RMD2 Pulsed MIG (GMAW-P)2
- Air carbon arc cutting and gouging (CAC-A) (rated 3/16 in. carbons)
  1With wire feeder.
  2ArcReach models only with ArcReach Smart Feeder.

**Diesel engines**
- EPA Tier 4 Final choices
  - Caterpillar C1.5T: 24.7 hp at 1,800 rpm Turbo-charged, three-cylinder, industrial, liquid-cooled
  - Kubota V1505: 20.2 hp at 1,800 rpm Four-cylinder, industrial, liquid-cooled
  - Mitsubishi S4L2: 24.7 hp at 1,800 rpm Four-cylinder, industrial, liquid-cooled

Note: Engines are warranted separately by engine manufacturer.

**Most popular accessories**
- SuitCase® Feeders (pg 18/46)
- ArcReach® Smart Feeder (pg 18/46)3
- ArcReach® Stick/TIG Remote (pg 46)2
- Protective Cover 195301 (pg 116)

For ArcReach models only.

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

---

**Stock Number**

- **Gasoline**
  - Kohler with GFCI and electric fuel pump (907549001)
  - Kubota with ArcReach (907732001) (907731) Mitsubishi with ArcReach (907733)

- **Air Compressor**
  - Rotary screw with electric clutch for on/off, oil change intervals of 500 hours

- **Welding**
  - CC/DC SticK/Tig
  - CV/DC MIG/FCAW

- **Amperage/Voltage**
  - 20–400 A

- **Rated Weld Output**
  - 300 A at 32 V, 100% duty cycle (CAC-A) (rated 3/16 in. carbons, capable 1/4 in. carbons)

- **Rated Weld Output at 104°F (40°C)**
  - 280 A at 32 V, 100% duty cycle

- **Rated Weld Power at 104°F (40°C)**
  - 1,000 watts

- **Dimensions**
  - H: 26.25 in. (667 mm)
  - W: 20 in. (508 mm)

- **Net Weight**
  - 771 lb. (350 kg)

---

*Electric fuel pump recommended for operation at altitudes above 5,000 feet.
Steel requirements for the most demanding pipeline jobs. downhill stick arc characteristics, as well as MIG/flux-cored capabilities, to meet high-strength steel requirements for the most demanding pipeline jobs.

**ArcReach**

Standard on all models. Remote control of the power source without a control cord. See page 76 for more information.

Dynamic DIG™ technology automatically adjusts the amount of current required to clear a short. Delivers a smoother, more consistent arc that can be tailored to match the application, material, fit-up and welder technique.

**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 ArcReach technology, digital meters with SunVision™ automatic idle, adjustable Hot Start™ output contactor control, 120-volt block heater, engine coolant temperature gauge and lift-off service door. Also available with optional stainless steel enclosure.

**Processes**
- Stick (SMAW) ▶️ MIG (GMAW)¹
- Flux-cored (FCAW) ▶️ DC TIG (GTAW)
- RMD² ▶️ Pulsed MIG (GMAW-P)²
- Air carbon arc cutting and gouging (CAC-A) (rated 1/4 in. carbons)

¹With wire feeder.
²With ArcReach Smart Feeder.

**Diesel engines**
- EPA Tier 4 Final choices
  - Caterpillar C1.5T: 24.7 hp at 1,800 rpm
  - Mitsubishi S4L2: 24.7 hp at 1,800 rpm

**Most popular accessories**
- ArcReach® Smart Feeder (pg 18/46)
- ArcReach® Stick/TIG Remote (pg 46)
- Dynasty® 210 Series (pg 54)
- Full KVA Adapter Cord 300517 (pg 116)
- Single-Phase Full KVA Plug Kit 119172 (pg 116)
- Protective Cover 195301 (pg 116)
- HW-Mid Frame Trailer 301438 (pg 116)
- Wireless Remote Hand Control/Wireless Antenna Kit 300430/300749 (pg 121)

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

**Big Blue® 400 PipePro**

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

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

**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.

**Processes**
- Stick (SMAW) ▶️ DC TIG (GTAW)
- Air carbon arc cutting and gouging (CAC-A) (rated 3/16 in. carbons)

**Diesel engine**
- EPA Tier 4 Final
- Mitsubishi S4L2: 24.7 hp at 1,800 rpm

**Most popular accessories**
- Full KVA Adapter Cord 300517 (pg 116)
- Single-Phase Full KVA Plug Kit 119172 (pg 116)
- Protective Cover 195301 (pg 116)
- HW-Mid Frame Trailer 301438 (pg 117)
- Wireless Remote Hand Control/Wireless Antenna Kit 300430/300749 (pg 121)
- Spark Arrestor Kit 195012

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

**Big Blue® 450 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.

**Processes**
- Stick (SMAW) ▶️ DC TIG (GTAW)
- Air carbon arc cutting and gouging (CAC-A) (rated 1/4 in. carbons)

**Diesel engine**
- EPA Tier 4 Final

**Most popular accessories**
- Full KVA Adapter Cord 300517 (pg 116)
- Single-Phase Full KVA Plug Kit 119172 (pg 116)
- Protective Cover 195301 (pg 116)
- HW-Mid Frame Trailer 301438 (pg 117)
- Wireless Remote Hand Control/Wireless Antenna Kit 300430/300749 (pg 121)
- Spark Arrestor Kit 195012

Visit MillerWelds.com or your distributor for other Miller® options and accessories.
Big Blue® 500 Pro and 600 Series
See literature ED/11.0 (500) and ED/11.5 (600)

Clean, quiet, multiprocess machines designed to give welders the output they need for heavy-duty applications on construction and fabrication sites.

Electronic engine display simultaneously displays fuel level, engine hours, coolant temperature, oil pressure, battery volts, and engine rpm. Also tracks oil change and 500-hour life expectancy. Independent on/off control for applications not requiring compressed air—allows greater fuel savings and longer compressor service intervals.

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

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

Deluxe and Air Pak models add ArcReach, a polarity reversing switch and a vandalism lockout kit (protects control panel and receptacles).

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.

**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)

**Diesel engines**
- EPA Tier 4 Final choices
- 500 and 600 Pro: Kubota V2403
  - 48.9 hp at 1,800 rpm
- 600 Air Pak: Deutz TD2.9 L4
  - 65.7 hp at 1,800 rpm

**Most popular accessories**
- SuitCase® Feeders (pg 18/46)
- ArcReach® Smart Feeder (pg 18/46)
- ArcReach® Stick/TIG Remote (pg 46)
- Dynasty 210® Series (pg 54)
- Full KVA Adapter Cord (pg 116)
- Full KVA Plug Kit (pg 116)
- Protective Cover (pg 116)
- Desiccant Air Dry System 300430/300749 (pg 121)

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

**Dimensions**

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Welding Mode/Process</th>
<th>Amp/Volt Ranges</th>
<th>Generator Power at 104°F (40°C)</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Big Blue 500 Pro</strong></td>
<td>CC/DC (Stick/TIG)</td>
<td>20-500 A</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>1,750 lb. (794 kg)</td>
</tr>
<tr>
<td><strong>Big Blue 600 Air Pak</strong></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>H: 46 in. (1,168 mm) W: 28.5 in. (724 mm) D: 69.5 in. (1,765 mm)</td>
<td>600 Pro: 1,750 lb. (794 kg) 600 Air Pak: 2,040 lb. (925 kg)</td>
</tr>
</tbody>
</table>

**Oil Capacity**

- Air Pak: 4 qt. (3.79 L)

**Heavy industrial**

<table>
<thead>
<tr>
<th>Processes</th>
<th>Diesel engines</th>
<th>Most popular accessories</th>
<th>Ingersoll Rand CESS 01 Air Compressor (Air Pak model only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stick (SMAW)</td>
<td>EPA Tier 4 Final choices</td>
<td>500 and 600 Pro: Kubota V2403</td>
<td>Rotary screw with electric clutch for on/off, oil change intervals of 500 hours, life expectancy of 30,000 hours</td>
</tr>
<tr>
<td>MIG (GMAW)</td>
<td>600 Air Pak: Deutz TD2.9 L4</td>
<td>600 Air Pak: Deutz TD2.9 L4</td>
<td>Idling: 40 cfm (1.13 m³/min.) Working: 60 cfm (1.70 m³/min.)</td>
</tr>
<tr>
<td>Flux-cored (FCAW)</td>
<td>65.7 hp at 1,800 rpm Turbo-charged, four-cylinder, industrial, liquid-cooled</td>
<td>65.7 hp at 1,800 rpm Turbo-charged, four-cylinder, industrial, liquid-cooled</td>
<td>100 psig (7 bar) 100%</td>
</tr>
<tr>
<td>DC TIG (GTAW)</td>
<td></td>
<td></td>
<td>4 qt. (3.79 L)</td>
</tr>
<tr>
<td>RMD® Pulsed MIG (GMAW-P)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air carbon arc cutting and gouging (CAC-A)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Big Blue® 800 Series

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

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

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.

Dynamic DIG® technology automatically adjusts the amount of current required to clear a short. Delivers a smoother, more consistent arc that can be tailored to match the application, material, fit-up and welder technique.

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 extra Miller® inverter-based power sources for additional welding arcs!

Standard features include ArcReach technology, digital meters with SunVision,” automatic idle, 120-volt block heater and vandalism lockout kit (protects control panel and receptacles).

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.

*Big Blue 800 Duo Air Pak has welder truck specific models available — visit MillerWelds.com or your distributor.

**Processes**
- Stick (SMAW) • MIG (GMAW)¹
- Flux-cored (FCAW)¹ • DC TIG (GTAW)
- RMD²• Pulsed MIG (GMAW-P)²
- Air carbon arc cutting and gouging (CAC-A) (rated 1/2 in. carbons)
- Stud (1/2 in.)
- With wire feeder.
- With ArcReach Smart Feeder.

**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® Feeders (pg 18/46)
- ArcReach® Smart Feeder (pg 18/46)
- ArcReach® Stick/TIG Remote (pg 46)
- Dynasty 210® Series (pg 54)
- Full KVA Adapter Cord 300517 (pg 116)
- Full KVA Plug Kit (pg 116)
- 119172 Single-phase
- 254140 Three-phase
- 301113 Protective Cover (pg 116)
- HW-229 Trailer 301338 (pg 117)
- Wireless Remote Hand Control®
- Wireless Antenna Kit 300430/300749 (pg 121)
- Desicant Air Dry System (Air Pak model only)

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

**Heavy industrial**

<table>
<thead>
<tr>
<th>Model/Stock Number*</th>
<th>Diesel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big Blue 800 Duo Pro</td>
<td>See literature ED/14.0</td>
</tr>
<tr>
<td>(907751) Deutz</td>
<td></td>
</tr>
<tr>
<td>Big Blue 800 Duo Air Pak</td>
<td></td>
</tr>
<tr>
<td>(907752) Deutz</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingersoll Rand CE55 G1 Air Compressor</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Air Pak model only)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rotary screw with electric clutch for on/off, oil change intervals of 500 hours, life expectancy of 30,000 hours</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Welding Mode/Process</th>
<th>Output Mode</th>
<th>Amp/ Volt Ranges</th>
<th>Rated Output at 100% Duty Cycle at 104°F (40°C)</th>
<th>Generator Power at 104°F (40°C)</th>
<th>Duty Cycle</th>
<th>Oil Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC/DC (Stick/TIG)</td>
<td>Separate (dual outputs)</td>
<td>20–400 A</td>
<td>400 A at 36 V (each side)</td>
<td>Three-phase</td>
<td>Peak: 27,000 watts Continuous: 20,000 watts Single-phase</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>Paralleled (combined)</td>
<td>40–800 A</td>
<td>700 A at 44 V, 800 A at 38 V</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CV/DC (MIG/FCAW)</td>
<td>Separate (dual outputs)</td>
<td>14–50 V</td>
<td>400 A at 34 V (each side)</td>
<td>Single-phase</td>
<td>Peak: 15,000 watts Continuous: 12,000 watts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Paralleled (combined)</td>
<td>14–50 V</td>
<td>750 A at 40 V, 800 A at 38 V</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Dimensions**
- H: 46 in. (1,168 mm)
- W: 28.5 in. (724 mm)
- D: 69.5 in. (1,765 mm)

**Net Weight**
- Duo Pro: 1,869 lb. (848 kg)
- Duo Air Pak: 2,095 lb. (968 kg)
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.

Two DC power source models and one AC/DC power source model. Power sources have sufficient power capacity to cover applications from traditional DC single-arc to multi-wire tandem welding. In the case of electroslag welding or other high-current demand, two or more power sources can easily be paralleled (both DC and AC/DC machines).

Low-voltage accessory operation and improved environmental protection. The Digital Series accessories are powered with 24 VAC control voltage from the power source. All power sources, interface controls and wire drives are IP23 rated providing a high level of protection for harsh environments.

Easy to integrate. Our SubArc power sources are easy to integrate by using a standard Modbus® connection.

All power sources feature thermal overload protection, line voltage compensation and Fan-On-Demand.™

*While idling.

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Amperage Range (CC Mode)</th>
<th>Voltage Range (Sub Arc Mode)</th>
<th>Rated Output</th>
<th>Amps Input at Rated Output, 60 Hz</th>
<th>Max Open-Circuit Voltage</th>
<th>Dimensions (Includes lift eye, but not strain relief)</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>SubArc DC 650 Digital (907622)</td>
<td>50–815 A</td>
<td>20–44 V</td>
<td>650 A at 44 V, 100% duty cycle</td>
<td>126</td>
<td>75 Vpk</td>
<td>H: 30 in. (762 mm) W: 23 in. (584 mm) D: 38 in. (965 mm)</td>
<td>593 lb. (269 kg)</td>
</tr>
<tr>
<td>SubArc DC 1000 Digital (907624)</td>
<td>100–1,250 A</td>
<td>20–44 V</td>
<td>1,000 A at 44 V, 100% duty cycle</td>
<td>180</td>
<td>68 Vpk</td>
<td>H: 43 in. (1,092 mm) W: 28 in. (711 mm) D: 48 in. (1,219 mm)</td>
<td>682 lb. (309 kg)</td>
</tr>
<tr>
<td>SubArc AC/DC Digital (907620)</td>
<td>300–1,250 A</td>
<td>20–44 V</td>
<td>1,000 A at 44 V, 100% duty cycle</td>
<td>–</td>
<td>93 Vpk</td>
<td>H: 43 in. (1.092 mm) W: 28 in. (711 mm) D: 48 in. (1.219 mm)</td>
<td>1,187 lb. (536 kg)</td>
</tr>
</tbody>
</table>
SubArc Interface Control

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.

SubArc Remote Operator Interface

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.

Miller recommends

Customers count on Hobart® to provide an exceptional level of expertise and commitment in developing unique filler metal and flux solutions with them to meet current and future challenges.

Rely on Hobart for submerged arc applications and all your welding needs.

Visit HobartBrothers.com or your local distributor to learn more.
SubArc Wire Drive 400 Digital Low Voltage

SubArc Wire Drive 400 Digital Low Voltage is a standard-speed, right-angle wire drive assembly.

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Input Power</th>
<th>Input Power Cord</th>
<th>Rating</th>
<th>Wire Feed Speed</th>
<th>Wire Diameter Capacity</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>300938</td>
<td>38 VDC</td>
<td>4 ft. (1.2 m)</td>
<td>1/5 hp, 85 rpm</td>
<td>30–400 ipm (0.8–10.2 m/min.)</td>
<td>3/32–3/16 in. (2.4–4.8 mm)</td>
<td>26 lb. (11.8 kg)</td>
</tr>
</tbody>
</table>

Most popular accessories

- Motor Extension Cables (pg 119)
  - 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 119)
  - Single-Wire Straightener 199733 (pg 119)
  - Twin-Wire Straightener 301160 (for twin-wire torches only) (pg 119)
- Manual Single Slide (pg 119)

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

SubArc Torches

SubArc Torches

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Rated Output</th>
<th>Wire Diameter Capacity</th>
<th>Single/Twin</th>
<th>Torch Body Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>OBT 600 (043923)</td>
<td>600 A at 100% duty cycle</td>
<td>1/16–5/32 in. (1.6–4.0 mm)</td>
<td>Single</td>
<td>10.25 in. (260.4 mm)</td>
</tr>
<tr>
<td>OBT 1200 (043900)</td>
<td>1,200 A at 100% duty cycle</td>
<td>1/16–5/32 in. (1.6–4.0 mm)</td>
<td>Single</td>
<td>17.25 in. (438.2 mm)</td>
</tr>
<tr>
<td>1200-Amp Twin-Wire Torch (301144) Long</td>
<td>1,200 A at 100% duty cycle</td>
<td>3/64–3/32 in. (1.2–2.4 mm)</td>
<td>Twin</td>
<td>16.97 in. (431 mm)</td>
</tr>
</tbody>
</table>

Most popular accessories

- OBT 600 Torch Body Extensions (pg 119)
  - 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 119)
- Contact Tips (pg 119)

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

SubArc Flux Hopper

SubArc Flux Hopper

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 hookup of any flux-hopper-mounted recovery system.

Includes slag screen to capture fused slag particles from entering the flux hopper.
### SubArc 3-Wheel Tractor

See literature AD/7.7

**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

See literature AD/7.6

**Self-contained system** for pressure vessel, pipe and general welding applications. Houses a power source, column and boom on a mobile platform.

**Built-in fork pockets and caster wheels** allow welding system to be brought to the joint.

**Easy positioning of 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** provides 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.

---

#### Packages include
- SubArc 3-Wheel Tractor
- SubArc Tractor Interface Digital
- SubArc Wire Drive 400 Digital Low Voltage
- 10 lb. (4.5 kg) capacity flux hopper with manual valve
- 60 lb. (27 kg) wire reel
- OBT 600 torch
- Wire straightener

#### Required power source
- SubArc Digital Series (pg 82)

#### Most popular accessories
- SubArc Control Cables (pg 119)
- Contact Tips (pg 119)
- Drive Rolls (pg 119)

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

---

#### Systems include
- Portable column and boom
- SubArc Digital power source
- SubArc Interface Digital and control cable
- SubArc Wire Drive 400 Digital Low Voltage
- 25 lb. (11.3 kg) capacity flux hopper with valve
- 60 lb. (27 kg) wire reel and support assembly
- OBT 600 torch (650 system) or OBT 1200 torch (1000 system)
- Wire straightener
- Manual slide

#### Most popular accessories
- 14-pin Insight Core™ Module 301072 (pg 68)
  Requires Insight Core to SubArc Digital Series Adapter Kit (301295)
- Insight ArcAgent™ Auto 301346 (pg 69)
- Contact Tips (pg 119)
- Drive Rolls (pg 119)

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 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.

For more information:
Call 1-844-IND-HEAT (1-844-463-4328)
or email InductionSales@MillerWelds.com
One ProHeat™ System — Four 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 treatment 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 setup and movement for maintaining and adhering to preheat and interpass temperatures
- 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
- Optional infrared temperature sensor can read the temperature on the moving part — from 212 to 750 degrees Fahrenheit (100–400°C)
- Optional travel detect system can be used for setting different heating rates/ramps based on workpiece speed travel — when no movement is detected the system turns off the output preventing damage to workpiece and rolling inductor

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 inches (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 Cables See literature IN/14.0
Preheating applications up to 392 degrees Fahrenheit (200°C).

- Air-cooled cables are available in lengths of 30 foot (9.1 m), 50 foot (15.2 m) or 80 foot (24.4 m) for flexible configurations
- Designed with flexibility and efficiency in mind, the air-cooled cables can be wrapped into coils of various shapes and sizes to fit almost any induction preheating application, without the need for cooler and coolant
- Air-cooled cables provide the same flexibility as liquid-cooled cables for preheating
Engineered for Simplicity. Built for Durability.

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

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

For more information see pages 25–26, or contact your local welding distributor or Bernard directly.

BernardWelds.com

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 pages 34–35 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.
**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 highly thermal conductive metals such as aluminum, cutting capacities may be reduced up to 30 percent compared to mild steel.

### Product Guide

<table>
<thead>
<tr>
<th>Product Guide</th>
<th>Page</th>
<th>Class</th>
<th>Gouging</th>
<th>Piercing</th>
<th>Rated Output/ Duty Cycle</th>
<th>Rated Cutting Thickness*</th>
<th>Max. Sever</th>
<th>Thickness</th>
<th>Mild Steel</th>
<th>Stainless Steel</th>
<th>Aluminum</th>
<th>Special Features</th>
<th>Typical Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spectrum® 375 X-TREME™</td>
<td>90</td>
<td>Light Industrial</td>
<td>Yes</td>
<td>Yes</td>
<td>30 A at 40%</td>
<td>3/8 in.</td>
<td>3/8 in.</td>
<td>1/4 in.</td>
<td>5/8 in.</td>
<td>Auto-Line™ (120–240 V), MVP™ plugs, Auto-Refire™ automatic air regulation, only 19 lb., XT30 torch</td>
<td>HVAC, maintenance, light construction, hobbyist, auto restoration, fabrication</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spectrum® 625 X-TREME™</td>
<td>90</td>
<td>Industrial</td>
<td>Yes</td>
<td>Yes</td>
<td>40 A at 60%</td>
<td>5/8 in.</td>
<td>1/2 in.</td>
<td>3/8 in.</td>
<td>7/8 in.</td>
<td>Auto-Line™ (120–240 V), MVP™ adapters, Auto-Refire™ automatic air regulation, only 21 lb., XT40 torch</td>
<td>Maintenance, light construction, body shops, prototyping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spectrum® 875</td>
<td>90</td>
<td>Heavy Industrial</td>
<td>Yes</td>
<td>Yes</td>
<td>60 A at 50%</td>
<td>7/8 in.</td>
<td>7/8 in.</td>
<td>5/8 in.</td>
<td>1-1/4 in.</td>
<td>Auto-Refire™ automatic air regulation, only 49 lb., XT60 or XT60M torch</td>
<td>Construction, maintenance/repair, fabrication</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spectrum® 875 Auto-Line™</td>
<td>90</td>
<td>Industrial</td>
<td>Yes</td>
<td>Yes</td>
<td>208: 60 A at 40%</td>
<td>3/8 in.</td>
<td>7/8 in.</td>
<td>5/8 in.</td>
<td>1-1/4 in.</td>
<td>Auto-Line™ (208–575 V), Auto-Refire™ automatic air regulation, only 54 lb., XT60 or XT60M torch</td>
<td>Construction, maintenance/repair, fabrication</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Engine-Driven Welder/Generator

<table>
<thead>
<tr>
<th>Continuous Generator Power</th>
<th>Spectrum 375 X-TREME Steel Cut / Output Amp Setting**</th>
<th>Spectrum 625 X-TREME Steel Cut / Output Amp Setting**</th>
<th>Spectrum 875 / 875 Auto-Line Steel Cut / Output Amp Setting**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fusion 160 and Blue Star® 185</td>
<td>6,200 watts</td>
<td>3/8 in. / 30 A</td>
<td>Not recommended</td>
</tr>
<tr>
<td>Bobcat® 200 Air Pak™</td>
<td>5,500 watts</td>
<td>3/8 in. / 30 A</td>
<td>Not recommended</td>
</tr>
<tr>
<td>Bobcat® 225, 250, 3 Phase</td>
<td>9,500 watts</td>
<td>3/8 in. / 30 A</td>
<td>5/8 in. / 40 A</td>
</tr>
<tr>
<td>Trailblazer® Series</td>
<td>10,500 watts</td>
<td>3/8 in. / 30 A</td>
<td>5/8 in. / 40 A</td>
</tr>
<tr>
<td>Big Blue® 400 Pro, 400 PipePro® and 450 Duo CST™</td>
<td>10,000 watts</td>
<td>3/8 in. / 30 A</td>
<td>5/8 in. / 40 A</td>
</tr>
<tr>
<td>Big Blue® 500 Pro, 600 Series and 800 Series</td>
<td>1-phase: 12,000 watts</td>
<td>3/8 in. / 30 A</td>
<td>5/8 in. / 40 A</td>
</tr>
<tr>
<td>3-phase: 20,000 watts</td>
<td>3/8 in. / 30 A</td>
<td>5/8 in. / 40 A</td>
<td></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 literature sheets.
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. Machine torch capabilities are available with Spectrum 875/875 Auto-Line™ models only.

### Spectrum Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>X-TREME 875 Auto-Line</th>
<th>Spectrum 875/875 Auto-Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto-Line (120–240 V)</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Auto-Line (208–575 V)</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>MVP® plug/adapters</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Ultra-Quick Connect</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>torch with flexible cable</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Quick connect flexible work cable</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>with clamp</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Built-in gas/air filter</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>and regulator</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Auto-Refire</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Auto postflow</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Auto air regulation</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>and regulator</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Auto-Refire™ provides ultimate</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>convenience by automatically</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>controlling the pilot arc when</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>cutting expanded metal or multiple</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>pieces of metal.</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Automatic air regulation</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>compensates for input pressure</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>variation to provide constant</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>recommended torch pressure for</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>optimum cutting performance.</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Built-in gas/air filter and regulator</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Provides air filtration of airborne</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>particles five microns and larger.</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Additional filtration and water</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>separation recommended.</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>LVC™ line voltage compensation</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>provides peak performance power</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>under variable input voltage</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>conditions for clean, steady</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>cuts.</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Wind Tunnel Technology™ prevents</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>abrasive dust and particles from</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>damaging internal components.</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Fan-On-Demand™ cooling system only</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>operates when needed, reducing</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>power consumption and keeping</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>internal components cleaner.</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Quick connect flexible work cable</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>with heavy-duty clamp.</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

### Steel/Stainless/Aluminum Rated Cutting Capacity

<table>
<thead>
<tr>
<th>Steel/Stainless/Aluminum</th>
<th>3/8 in. (9.5 mm)</th>
<th>5/8 in. (15.9 mm)*</th>
<th>7/8 in. (22.2 mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spectrums</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X-TREME</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>625 X-TREME</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>875/875 Auto-Line</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

*Stainless: 1/2 in. (12.7 mm) for Spectrum 875 X-TREME.

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.

Automatic air regulation compensates for input pressure variation to provide constant recommended torch pressure for optimum cutting performance.

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 power consumption and keeping internal components cleaner.

Quick connect flexible work cable with heavy-duty clamp.

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.

### Models/ Packages

<table>
<thead>
<tr>
<th>Model</th>
<th>Hand-Held Torch Packages</th>
<th>Long Body Machine Torch Packages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spectrum 375 X-TREME (907529)</td>
<td>12 ft. (3.7 m)</td>
<td>20 ft. (6.1 m)</td>
</tr>
<tr>
<td>Spectrum 625 X-TREME (907579) (907579001)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Spectrum 875 (907583) (907583001)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Spectrum 875 Auto-Line (907584) (907584001)</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>
375 X-TREME model includes XT30 hand-held torch with ergonomic design and flexible cable.

625 X-TREME model includes Ultra-Quick Connect™ XT40 hand-held torch with ergonomic design and flexible cable.

---

**Spectrum® 375 X-TREME™/625 X-TREME™**

**AUTO-LINE Technology**

Allows for any input voltage hookup (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 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™**

**AUTO-LINE Technology**

Spectrum 875 Auto-Line model allows for any input voltage hookup (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.

**Machine torch capable.** Both Spectrum 875 models can be ordered with a long body machine torch or can be converted to use a machine torch with optional automation kits. Machine torches are NOT included in automation kits and must be ordered separately (see page 118).

---

### Spectrom®875/875 Auto-Line™

<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><strong>Spectrum 375 X-TREME</strong></td>
<td>Single-phase</td>
<td>120 V (15 A): 20 A at 88 VDC, 60% duty cycle 120 V (20 A): 27 A at 92 VDC, 35% duty cycle 240 V: 30 A at 92 VDC, 60% duty cycle</td>
<td>18.3</td>
<td>2</td>
<td>2</td>
<td>5.0 cfm (142 L/min.) at 90 psig (621 kPa)</td>
<td>H: 9 in. (229 mm)</td>
<td>12 lb. (5.4 kg)</td>
</tr>
<tr>
<td><strong>Spectrum 625 X-TREME</strong></td>
<td>Single-phase</td>
<td>120 V (15 A): 20 A at 88 VDC, 60% duty cycle 120 V (20 A): 27 A at 91 VDC, 35% duty cycle 240 V: 40 A at 92 VDC, 60% duty cycle</td>
<td>27.6</td>
<td>6</td>
<td>6</td>
<td>6.0 cfm (170 L/min.) at 90 psig (621 kPa)</td>
<td>H: 9 in. (229 mm)</td>
<td>12 lb. (5.4 kg)</td>
</tr>
<tr>
<td><strong>Spectrum 875 Auto-Line</strong></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>230 V: 42</td>
<td>9</td>
<td>9</td>
<td>6.75 cfm (191 L/min.) at 90 psig (621 kPa)</td>
<td>H: 13.5 in. (343 mm)</td>
</tr>
<tr>
<td><strong>Spectrum 875 Auto-Line</strong></td>
<td>Three-phase</td>
<td>230–380 V: 60 A at 140 VDC, 50% duty cycle 380–575 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>230 V: 25</td>
<td>230 V: 15</td>
<td>6.75 cfm (191 L/min.) at 90 psig (621 kPa)</td>
<td>H: 13.5 in. (343 mm)</td>
<td>20 ft. (6.1 m)</td>
</tr>
<tr>
<td><strong>Spectrum 875 Auto-Line</strong></td>
<td>Single-phase</td>
<td>208 V: 60 A at 140 VDC, 40% duty cycle 230 V: 60 A at 140 VDC, 40% duty cycle 230 V: 50 A at 140 VDC, 100% duty cycle</td>
<td>208 V: 47</td>
<td>230 V: 42</td>
<td>9</td>
<td>9</td>
<td>6.75 cfm (191 L/min.) at 90 psig (621 kPa)</td>
<td>H: 13.5 in. (343 mm)</td>
</tr>
</tbody>
</table>
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 94 for optional Hard Hat® regulator guards designed to help prevent broken gauges.

<table>
<thead>
<tr>
<th>Stock</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>Number</td>
<td></td>
<td>Pressure or Flow</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HTP2</td>
<td>Oxygen</td>
<td>30-100-540 100 psig (7 bar)</td>
<td>3,000 psig (207 bar)</td>
<td>9/16-18 RH</td>
<td>CGA 540</td>
</tr>
<tr>
<td></td>
<td>Acetylene</td>
<td>30-15-510 15 psig (1 bar)</td>
<td>400 psig (28 bar)</td>
<td>9/16-18 LH</td>
<td>CGA 510</td>
</tr>
<tr>
<td>HTP5</td>
<td>Oxygen</td>
<td>30-100-540 100 psig (7 bar)</td>
<td>3,000 psig (207 bar)</td>
<td>5/8”-18 RH</td>
<td>CGA 580</td>
</tr>
<tr>
<td></td>
<td>Acetylene</td>
<td>30-15-300 15 psig (1 bar)</td>
<td>400 psig (28 bar)</td>
<td>5/8”-18 RH</td>
<td>CGA 580</td>
</tr>
</tbody>
</table>

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.
Regulators

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.

---

**Heavy-duty model features**
1. Rugged aluminum protective housing
   - Protects flow tubes from damage while offering unobstructed view of flow reading.
2. Extra-long flow tube
   - Expanded scales are easy to read and accurate within five percent of full reading. Can be attached to regulators or pipeline installations.
3. Shatter-resistant multi-scale flow tube
   - Made of shatter-resistant polycarbonate resin and features easy-to-read scales for CO², argon, argon/CN mix and helium.
4. Auto-reset pressure-relief valve
   - Protects regulator from damage due to high-pressure surge. Relief valve will release excessive pressure and automatically reset.
5. Sure Seat™ dual-filtered seat assembly
   - Protects high-pressure seat from debris for reliable operation and long service life.

**Economy model features**
6. Built-in rupture disc
   - Reduces possibility of flow tube damage due to high-pressure surge. Must be replaced if ruptured — not auto-resetting.
7. Shatter-resistant triple-scale flow tube
   - Made of shatter-resistant polycarbonate resin and can be rotated to position desired scale for easy reading. Scaled for CO², argon and argon/CN mix, and helium.
8. Precision flow-adjustment valve
   - Allows easy adjustment to desired setting.

---

<table>
<thead>
<tr>
<th>Model</th>
<th>Stock Number</th>
<th>Gas</th>
<th>Flow Range</th>
<th>Max. Inlet Pressure</th>
<th>Outlet Connection</th>
<th>Inlet Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy-Duty Flowmeter Regulators</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></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 320</td>
</tr>
<tr>
<td>22-80-580</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>23-50-580</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 320</td>
</tr>
<tr>
<td>35-30-580</td>
<td></td>
<td>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>Heavy-Duty Flowmeters</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 male</td>
</tr>
<tr>
<td>Economy Flowmeter Regulators</td>
<td></td>
<td>Argon</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>H2051B-580</td>
<td></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>H2051B-580H</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>Economy Flowmeters</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>H2231A</td>
<td>Multi-scale</td>
<td>Argon, helium, CO₂</td>
<td>Depends on gas</td>
<td>50 psig (3 bar) recommended</td>
<td>5/8”-18 RH external</td>
<td></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>31-50-580</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></td>
<td>31-50-580H</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></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

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 1.875-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>Model</th>
<th>Max. Delivery Pressure</th>
<th>Max. Inlet Pressure</th>
<th>Outlet Connection</th>
<th>Inlet Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>823</td>
<td>500 psig</td>
<td>6,000 psig</td>
<td></td>
<td></td>
</tr>
<tr>
<td>824</td>
<td>1,000 psig</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>825</td>
<td>2,000 psig</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>826</td>
<td>4,000 psig</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>827</td>
<td>6,000 psig</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>Max. Delivery Pressure</th>
<th>Max. Inlet Pressure</th>
<th>Outlet Connection</th>
<th>Inlet Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>252</td>
<td>100 psig</td>
<td>3,500 psig</td>
<td></td>
<td></td>
</tr>
<tr>
<td>254</td>
<td>200 psig</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>255</td>
<td>350 psig</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>256</td>
<td>500 psig</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>Max. Delivery Pressure</th>
<th>Max. Inlet Pressure</th>
<th>Outlet Connection</th>
<th>Inlet Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>16391 (without pressure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>switch)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16347-3 (with pressure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<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”-20 external flair fitting</td>
<td>CGA 580</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Pressure Switch Option 1</th>
<th>Pressure Switch Option 2</th>
<th>Pressure Switch Option 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>16391</td>
<td>825-66</td>
<td>00</td>
<td>00 1/4” FNP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>00 1/4” FNP</td>
<td>09 CGA 580 (inert)</td>
</tr>
<tr>
<td>16347-3</td>
<td>825-66</td>
<td>66 Stainless steel</td>
<td>26 CGA 347 stainless</td>
</tr>
<tr>
<td></td>
<td></td>
<td>needle valve with 1/4” NPT</td>
<td>5,500 psig</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>27 CGA 677 stainless</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7,500 psig</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>28 CGA 680 stainless</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5,500 psig</td>
</tr>
</tbody>
</table>
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 a 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 a 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 a 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 a 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

Most popular accessories
- Circle Cutter Guide 16229
- Flashback Arrestor Set (oxy and fuel) H743 Torch mount
  H753 Regulator mount
- Safety Glasses
  (see page 108 for more styles) 235661 Blue frame/shade 3
  235657 Blue frame/shade 5
- Safety Gloves (pg 110)
  Visit MillerWelds.com or your distributor for other Miller® options and accessories.

---

**Gas Axe Extra Heavy-Duty Cutting Torches**

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Head Angle in Degrees</th>
<th>Length Inches (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC925</td>
<td>75</td>
<td>21 (533)</td>
</tr>
<tr>
<td>SC929</td>
<td>90</td>
<td>21 (533)</td>
</tr>
<tr>
<td>SC933</td>
<td>75</td>
<td>36 (914)</td>
</tr>
<tr>
<td>SC939</td>
<td>90</td>
<td>36 (914)</td>
</tr>
<tr>
<td>SC930</td>
<td>180</td>
<td>36 (914)</td>
</tr>
<tr>
<td>SC945</td>
<td>75</td>
<td>48 (1,219)</td>
</tr>
<tr>
<td>SC949</td>
<td>90</td>
<td>48 (1,219)</td>
</tr>
<tr>
<td>SC940</td>
<td>180</td>
<td>48 (1,219)</td>
</tr>
<tr>
<td>SC965</td>
<td>75</td>
<td>72 (1,829)</td>
</tr>
<tr>
<td>SC969</td>
<td>90</td>
<td>72 (1,829)</td>
</tr>
<tr>
<td>SC960</td>
<td>180</td>
<td>72 (1,829)</td>
</tr>
</tbody>
</table>

**Heavy-Duty Cutting Torches**

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Head Angle in Degrees</th>
<th>Length Inches (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC175</td>
<td>75</td>
<td>17 (432)</td>
</tr>
<tr>
<td>SC179</td>
<td>90</td>
<td>17 (432)</td>
</tr>
<tr>
<td>SC225</td>
<td>75</td>
<td>21 (533)</td>
</tr>
<tr>
<td>SC225S</td>
<td>75</td>
<td>21 (533)</td>
</tr>
<tr>
<td>SC229</td>
<td>90</td>
<td>21 (533)</td>
</tr>
<tr>
<td>SC229S</td>
<td>90</td>
<td>21 (533)</td>
</tr>
<tr>
<td>SC220</td>
<td>180</td>
<td>21 (533)</td>
</tr>
<tr>
<td>SC365</td>
<td>75</td>
<td>36 (914)</td>
</tr>
<tr>
<td>SC369</td>
<td>90</td>
<td>36 (914)</td>
</tr>
<tr>
<td>SC360</td>
<td>180</td>
<td>36 (914)</td>
</tr>
</tbody>
</table>

**Heavy-Duty Combination Torches**

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Head Angle in Degrees</th>
<th>Length Inches (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC205</td>
<td>75</td>
<td>12.5 (318)</td>
</tr>
<tr>
<td>SC209</td>
<td>90</td>
<td>12.5 (318)</td>
</tr>
<tr>
<td>WH200A</td>
<td>Handle</td>
<td>7.5 (191)</td>
</tr>
</tbody>
</table>

**Medium-Duty Combination Torches**

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Head Angle in Degrees</th>
<th>Length Inches (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC505</td>
<td>75</td>
<td>11.25 (286)</td>
</tr>
<tr>
<td>MC509</td>
<td>90</td>
<td>11.25 (286)</td>
</tr>
<tr>
<td>WH100</td>
<td>Handle</td>
<td>7 (178)</td>
</tr>
</tbody>
</table>

**Standard-Duty Combination Torches**

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Head Angle in Degrees</th>
<th>Length Inches (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC309</td>
<td>90</td>
<td>8.5 (216)</td>
</tr>
<tr>
<td>AW1A</td>
<td>Handle</td>
<td>5.75 (146)</td>
</tr>
</tbody>
</table>

**Machine Torches**

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Head Angle in Degrees</th>
<th>Length Inches (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC781A</td>
<td>75</td>
<td>15.5 (394)</td>
</tr>
<tr>
<td>SC772A</td>
<td>90</td>
<td>13.75 (349)</td>
</tr>
<tr>
<td>SC770</td>
<td>90</td>
<td>13.75 (349)</td>
</tr>
<tr>
<td>SC770</td>
<td>90</td>
<td>8 (203)</td>
</tr>
</tbody>
</table>
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 a three-year warranty
- Heavy-duty torches with a 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 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 a 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 a 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 medium-duty Series 40” regulators with a three-year warranty and Hard Hat® gauge/regulator guards
- HBS outfits include medium-duty Series 30” regulators with a three-year warranty, torch-mount flashback arrestors for added safety, plus hose, lighter, safety glasses and tip cleaner
- HBS outfits cut 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

*Acetylene regulator has CGA 300 inlet fitting.

Heavy-duty torch tips

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Max. Metal Thickness (inches)</th>
<th>Cutting Jet Drill Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>HBA-40510</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HBA-40300*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HBA-30510</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HBA-30300*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HBA-30510LP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC12-0</td>
<td>3/16 (5)</td>
<td>68</td>
</tr>
<tr>
<td>SC12-1</td>
<td>3/8 (10)</td>
<td>62</td>
</tr>
<tr>
<td>SC12-2</td>
<td>5/8 (16)</td>
<td>56</td>
</tr>
<tr>
<td>SC12-3</td>
<td>1-1/4 (32)</td>
<td>54</td>
</tr>
<tr>
<td>SC12-4</td>
<td>2 (51)</td>
<td>51</td>
</tr>
<tr>
<td>SC12-5</td>
<td>4 (102)</td>
<td>45</td>
</tr>
<tr>
<td>SC12-6</td>
<td>8 (203)</td>
<td>41</td>
</tr>
<tr>
<td>SC12-7</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 (inches)</th>
<th>Cutting Jet Drill Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC50-0</td>
<td>3/16 (5)</td>
<td>68</td>
</tr>
<tr>
<td>SC50-1</td>
<td>3/8 (10)</td>
<td>62</td>
</tr>
<tr>
<td>SC50-2</td>
<td>5/8 (16)</td>
<td>56</td>
</tr>
<tr>
<td>SC50-3</td>
<td>1-1/4 (32)</td>
<td>54</td>
</tr>
<tr>
<td>SC50-4</td>
<td>2 (51)</td>
<td>51</td>
</tr>
<tr>
<td>SC50-5</td>
<td>4 (102)</td>
<td>45</td>
</tr>
<tr>
<td>SC50-6</td>
<td>8 (203)</td>
<td>41</td>
</tr>
<tr>
<td>SC50-7</td>
<td>12 (305)</td>
<td>32</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>
</tbody>
</table>

Propane/Natural Gas Gouging

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Max. Metal Thickness (inches)</th>
<th>Cutting Jet Drill Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC23-0</td>
<td>3/16 (5)</td>
<td>68</td>
</tr>
<tr>
<td>SC23-1</td>
<td>3/8 (10)</td>
<td>62</td>
</tr>
<tr>
<td>SC23-2</td>
<td>5/8 (16)</td>
<td>56</td>
</tr>
<tr>
<td>SC23-3</td>
<td>1-1/4 (32)</td>
<td>54</td>
</tr>
<tr>
<td>SC23-4</td>
<td>2 (51)</td>
<td>51</td>
</tr>
<tr>
<td>SC23-5</td>
<td>4 (102)</td>
<td>45</td>
</tr>
<tr>
<td>SC23-6</td>
<td>8 (203)</td>
<td>41</td>
</tr>
<tr>
<td>SC23-7</td>
<td>12 (305)</td>
<td>32</td>
</tr>
</tbody>
</table>

Heavy Fabrication, construction, pipeline, maintenance/repair, rail and truck repair

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 a three-year warranty
- Heavy-duty torches with a 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 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 kits are available with cutting, welding and heating tips OR with multiple cutting tips.
- Heavy-duty torches with a 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

Combination torch and tip kits (acetylene or LP)

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 a 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 medium-duty Series 40” regulators with a three-year warranty and Hard Hat® gauge/regulator guards
- HBS outfits include medium-duty Series 30” regulators with a three-year warranty, torch-mount flashback arrestors for added safety, plus hose, lighter, safety glasses and tip cleaner
- HBS outfits cut 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

*Acetylene regulator has CGA 300 inlet fitting.

Cutting torch outfits (acetylene)

Heavy-duty cutting torch, heavy-duty regulators, 25 ft. (7.6 m) hose, lighter, safety glasses, tip cleaner and flashback arrestors
Heavy fabrication, construction, pipeline, maintenance/repair, rail and truck repair

Heavy-duty cutting torch, medium-duty regulators, 25 ft. (7.6 m) hose, lighter, safety glasses, tip cleaner and flashback arrestors
Heavy fabrication, construction, pipeline, maintenance/repair, rail and truck repair

Heavy-duty cutting torch, medium-duty regulators, 20 ft. (6.1 m) hose, lighter, safety glasses, tip cleaner and flashback arrestors
Heavy fabrication, construction, pipeline, maintenance/repair, rail and truck repair

Heavy-duty cutting torch, heavy-duty regulators, 25 ft. (7.6 m) hose, lighter, safety glasses, tip cleaner and flashback arrestors
Heavy fabrication, construction, pipeline, maintenance/repair, rail and truck repair

Visit MillerWelds.com or your distributor for additional tips, options and accessories.
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 a three-year warranty
- Medium-duty torches with a five-year warranty
- Torch-mount flashback arrestors for added safety
- 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 a 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 a three-year warranty
- Medium-duty torches with a 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 a three-year warranty and standard-duty torch with a five-year warranty

---

**Medium-duty torch tips**

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Max. Metal Thickness (mm)</th>
<th>Cutting Jet Drill Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC12-00</td>
<td>3/16 (5)</td>
<td>68</td>
</tr>
<tr>
<td>MC12-0</td>
<td>3/8 (10)</td>
<td>62</td>
</tr>
<tr>
<td>MC12-1</td>
<td>5/8 (16)</td>
<td>55</td>
</tr>
<tr>
<td>MC12-2</td>
<td>1 (25)</td>
<td>54</td>
</tr>
<tr>
<td>MC12-3</td>
<td>2 (51)</td>
<td>51</td>
</tr>
<tr>
<td>MC12-4</td>
<td>4 (102)</td>
<td>45</td>
</tr>
<tr>
<td>MC12-5</td>
<td>6 (152)</td>
<td>41</td>
</tr>
<tr>
<td>MC60-1</td>
<td>5/8 (16)</td>
<td>55</td>
</tr>
<tr>
<td>MC60-2</td>
<td>1-1/4 (32)</td>
<td>54</td>
</tr>
<tr>
<td>MC60-3</td>
<td>2 (51)</td>
<td>51</td>
</tr>
<tr>
<td>MC60-4</td>
<td>4 (102)</td>
<td>45</td>
</tr>
<tr>
<td>MC13-3</td>
<td>3/8 (10) wide, 1/4 (6)</td>
<td>deep</td>
</tr>
</tbody>
</table>

**Note:** Tips above fit medium- and standard-duty torches.

**Acetylene Cutting**
- MC12-00: 3/16 (5) Btu
- MC12-0: 3/8 (10) Btu
- MC12-1: 5/8 (16) Btu
- MC12-2: 1 (25) Btu
- MC12-3: 2 (51) Btu
- MC12-4: 4 (102) Btu
- MC12-5: 6 (152) Btu

**Propane/Natural Gas Cutting**
- MC60-1: 5/8 (16) Btu
- MC60-2: 1-1/4 (32) Btu
- MC60-3: 2 (51) Btu
- MC60-4: 4 (102) Btu

**Acetylene Welding**
- MW201: 1/32 in. (0.7 mm)
- MW203: 5/64 in. (1.9 mm)
- MW205: 1/8 in. (3 mm)
- MW207: 3/16 in. (5 mm)
- MW209: 3/8 in. (10 mm)

**Acetylene Heating**
- MT603: 40,000 Btu
- MT605: 73,000 Btu
- MT610: 129,000 Btu

Visit MillerWelds.com or your distributor for additional tips, options and accessories.
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 and money and also 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”-18 RH internal</td>
<td>5/8”-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 CO₂/helium</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”-18 RH internal</td>
<td>5/8”-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 CO₂/helium</td>
</tr>
<tr>
<td></td>
<td>Hydrogen</td>
<td>0–0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Argon/oxygen Argon/CO₂</td>
</tr>
<tr>
<td>299-014-1C</td>
<td>Argon</td>
<td>80–100%</td>
<td>10–180 scfh</td>
<td>50 psig (3.5 bar)</td>
<td>105–115 psig (7.3–7.9 bar)</td>
<td>5/8”-18 RH internal</td>
<td>5/8”-18 RH internal</td>
<td>Argon/CO₂</td>
</tr>
<tr>
<td></td>
<td>Oxygen</td>
<td>0–20%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Argon/helium Nitrogen/hydrogen</td>
</tr>
</tbody>
</table>

Register Your New Welder

Complete registration as soon as possible — it’s quick and easy.

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/register
Safety products designed to protect welders and enhance their long-term performance

The Miller focus has always been welding — understanding welders, their pain points and the safety products used to protect them within their work environments. As your single-source solution for welding environment control products that fulfill each level of OSHA’s hierarchy of controls, we will help you get maximum productivity out of each welder while keeping them comfortable and improving compliance. Our complete line of Weld Environment, Head and Face, and Hand and Body protection is designed to protect and perform in demanding welding, cutting and grinding applications.

Fume Extractors

Our 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. Visit MillerWelds.com/filtair for more information.

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.
FILTAIR® MWX Series and Capture 5

See literature AY/3.0 (MWX) and AY/3.5 (Capture 5)

Mobile fume extraction systems easily positioned near the weld area and designed specifically for welding. Disposable or cleanable filter models for multiple applications.

Features common to all models

Source capture. Designed to draw weld fume away from the welder’s breathing zone and keep the facility clean.

Superior filters. The MERV 15 rating of our FilTek XL filters provides superior filtering of up to 95 percent of weld fume particulate. They outlast, out-filter, and outperform all the rest.

Class-leading suction power of 875/900 cfm is Accu-Rated™ at the hood to better capture weld fumes and provide a cleaner environment.

Durable aluminum pre-assembled extraction arm with external adjustments for better airflow and longer life.

Self-cleaning models additional features

Upgrade to self-cleaning models for high arc-on time, extracting from heavy fume processes, or when welding aluminum or galvanized materials.

Unrivaled filtering performance. Weld fume particles are captured with a cleanable filter and safely deposited 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.

Capture 5 model additional features

EXCLUSIVE! ZoneFlow™ technology. Extends the capture zone up to five feet versus 12 to 18 inches with conventional source capture arms. See page 102 for more information.

Minimizes downtime with fewer fume extractor adjustments. With increased capture area, arm interactions are dramatically minimized.

<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</th>
</tr>
</thead>
<tbody>
<tr>
<td>MWX-S (Self-Cleaning) (951510)</td>
<td>990 cfm (425 L/sec.)</td>
<td>10 in. (254 mm)</td>
<td>Approximately 77 dBA at 5 ft. (1.5 m)</td>
<td>3 hp, 3,450 rpm</td>
<td>208/230 V, 1-phase, 60 Hz at 13.5 A</td>
<td>460 V, 3-phase, 60 Hz at 3.7 A</td>
<td>H: 43 in. (1,092 mm) W: 36 in. (915 mm) D: 48 in. (1,219 mm)</td>
<td>620 lb. (282 kg) with 12 ft. arm</td>
</tr>
<tr>
<td>MWX-D (Disposable Filter) (951507)</td>
<td>990 cfm (425 L/sec.)</td>
<td>10 in. (254 mm)</td>
<td>Approximately 77 dBA at 5 ft. (1.5 m)</td>
<td>3 hp, 3,450 rpm</td>
<td>208/230 V, 1-phase, 60 Hz at 13.5 A</td>
<td>460 V, 3-phase, 60 Hz at 3.7 A</td>
<td>H: 43 in. (1,092 mm) W: 36 in. (915 mm) D: 48 in. (1,219 mm)</td>
<td>513 lb. (233 kg)</td>
</tr>
<tr>
<td>Capture 5 (Self-Cleaning) (951659)</td>
<td>990 cfm (425 L/sec.)</td>
<td>10 in. (254 mm)</td>
<td>Approximately 77 dBA at 5 ft. (1.5 m)</td>
<td>3 hp, 3,450 rpm</td>
<td>208/230 V, 1-phase, 60 Hz at 13.5 A</td>
<td>460 V, 3-phase, 60 Hz at 3.7 A</td>
<td>H: 43 in. (1,092 mm) W: 36 in. (915 mm) D: 48 in. (1,219 mm)</td>
<td>620 lb. (282 kg) with 12 ft. arm</td>
</tr>
</tbody>
</table>
FILTAIR® SWX Series

See literature AY/3.2 (SWX)

Stationary fume extraction systems wall- or column-mounted next to the weld area and designed specifically for welding. Disposable or cleanable filter models for multiple applications.

Features common to all models

Source capture. Designed to draw weld fume away from the welder’s breathing zone and keep the facility clean.

Superior filters. The MERV 15 rating of our FilTek XL filters provides superior filtering of up to 95 percent of weld fume particulate. They outlaw, out-filter, and outperform all the rest.

Class-leading suction power of 875 cfm is Accu-Rated™ at the hood to better capture weld fumes and provide a cleaner environment.

Durable aluminum pre-assembled extraction arms. Choose from three different arm styles:
- Telescoping arms fit small booth spaces and telescope from 3 to 4.5 feet
- Standard arms cover larger spaces and are available in 7-, 10-, and 12-foot versions
- ZoneFlow arms (self-cleaning models only) extend the capture zone up to 5 feet and are available in 10- and 12-foot versions

Self-cleaning models additional features

Upgrade to self-cleaning models for high arc-on time, extracting from heavy fume processes, or when welding aluminum or galvanized materials.

Unrivaled filtering performance. Weld fume particles are captured with a cleanable filter and safely deposited 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.

ZoneFlow™ arm additional features

EXCLUSIVE! ZoneFlow technology. Extends the capture zone up to five feet versus 12 to 18 inches with conventional source capture arms. See page 102 for more information.

Minimizes downtime with fewer fume extractor adjustments. With increased capture area, arm interactions are dramatically minimized.

Model/Stock Number

<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-D (Disposable Filter)</td>
<td>(951619) Telescoping arm</td>
<td>875 cfm (413 L/sec.)</td>
<td>8 in. (203 mm)</td>
<td>Standard: Approximately 75 dBA at 5 ft. (1.5 m)</td>
<td>1 hp, 3,450 rpm</td>
<td>Blower motor: 115 V, 1-phase, 60 Hz at approximately 11.9 A</td>
<td>SWX-D H: 33 in. (838 mm)</td>
<td>SWX-D H: 29 in. (737 mm)</td>
</tr>
<tr>
<td>SWX-S (Self-Cleaning Model)</td>
<td>(951620) Telescoping arm</td>
<td>490 sq. ft. (45.52 sq. m)</td>
<td>10 ft. (305 mm)</td>
<td>12 ft. standard arm (951515)</td>
<td>12 ft. ZoneFlow arm (951760)</td>
<td>12 ft. ZoneFlow arm (951516)</td>
<td>95 lb. (43 kg)</td>
<td></td>
</tr>
</tbody>
</table>

SWX-D (disposable filter) model shown with telescoping arm.

SWX-S (self-cleaning filter) model shown with 12 ft. ZoneFlow extraction arm.

Welding Safety and Health
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.

**Improves operating efficiency.** Creates a cleaner shop with less downtime spent cleaning equipment.

**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 fan, filter differential, and 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.

**FiTek 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.

**Small size and fewer filters.** One FiTek XL filter replaces up to three cartridge-style filters increasing efficiency, reducing extractor size and lowering operational costs.

**ZoneFlow™ arm additional features**

**EXCLUSIVE! ZoneFlow technology.** Extends capture zone up to five feet versus 12 to 18 inches with conventional source capture arms. See below for more information.

Minimizes downtime with fewer fume extractor adjustments. With increased capture area, arm interactions are dramatically minimized.

---

**ZoneFlow™ Technology**

The capture zone redefined. Innovative, extended-capture fume extraction system designed specifically for welding.

ZoneFlow technology extends the capture zone up to five feet deep and four feet wide (versus up to 18 inches from conventional source capture extractors). The increased capture zone reduces arm interactions so operators can keep welding, increasing arc-on time and productivity. Miller exclusive ZoneFlow technology is standard on the FILTAIR Capture 5, and optional on the FILTAIR SWX Series and FILTAIR 4000–12000 models (see pages 100, 101 and above).

---
FILTAIR® 4000–12000 Accessories

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 and 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).
- **ZoneFlow™ arms** are designed to cover larger spaces and are available in 10- and 12-foot versions. ZoneFlow arms extend the capture zone up to five feet versus 12 to 18 inches with conventional source capture arms. 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>(300980) 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>ZoneFlow Arm with Motor Control Box</td>
<td>(951810) 10 ft. arm</td>
<td>(951756) 10 ft. arm</td>
</tr>
<tr>
<td></td>
<td>(951811) 12 ft. arm</td>
<td>(951759) 12 ft. arm</td>
</tr>
<tr>
<td>Arm Mounting Bracket and Ducting Kit</td>
<td>(300952)</td>
<td>(300771)</td>
</tr>
</tbody>
</table>

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, as well as 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

Call us toll-free at 866-931-9730 or email us at FILTAIR@millerwelds.com for information and requests for quotes on custom-engineered solutions to fit your needs.

Cleaner Air with FilTek® XL Filters

The FilTek XL filter’s higher MERV rating means unrivaled filtering performance.

**MERV Comparison**

<table>
<thead>
<tr>
<th>Applicable Weld Fume MERV Rating Categories</th>
<th>Particle Size Range Efficiency %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.3 to 1 μm</td>
</tr>
<tr>
<td>10</td>
<td>Not Rated</td>
</tr>
<tr>
<td>11</td>
<td>Not Rated</td>
</tr>
<tr>
<td>12</td>
<td>Not Rated</td>
</tr>
<tr>
<td>13</td>
<td>&lt;75%</td>
</tr>
<tr>
<td>14</td>
<td>75–85%</td>
</tr>
<tr>
<td>15 Miller® FilTek XL</td>
<td>85–95%</td>
</tr>
<tr>
<td>16</td>
<td>≥95%</td>
</tr>
<tr>
<td>HEPA</td>
<td>≥99.97%</td>
</tr>
<tr>
<td>Weld Fume Composition</td>
<td>75–95%</td>
</tr>
</tbody>
</table>

1. American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) 52.2
3. HEPA filters are depth loading and have high restrictions to airflow, reducing system performance versus FilTek XL filters.
4. Jenkins, Pierce, Edgar, Particle Size Distribution of GMAW and FCAW

Filters are rated on a MERV scale, which measures filter efficiency based on particle count. MERV ratings range from 1 to 16, with 16 being the best at filtering small particles — such as those found in weld fumes.

Filters in common air filtration systems often have MERV ratings from 7 to 11. FilTek XL filters are rated at class-leading MERV 15 to capture up to 95 percent of weld fume particulates.
Respiratory

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 (PAPR) reduces lower back strain and fatigue.

Lightweight versatile C50 air regulator (SAR) can be positioned horizontally or vertically to naturally align with body movements.

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 reduces breathing tube snags in work cell.

Two lightweight lithium-ion batteries (PAPR) included with each package eliminate downtime.

C50 air regulator (SAR) supplies down to 50-degree Fahrenheit (28°C) Grade-D air under your hood, heightening productivity and relieving heat stress. Performance under different applications may vary. 360-degree swivel air hose connection alleviates hose coiling, reducing potential trip hazards.

PAPR Powered Air-Purifying Respirator  See literature AY/4.1

Available packages:

- With T94-R™ helmet (external grind control)
  - 264573 With auto-darkening lens assembly
- With T94i-R™ helmet (integrated clear grind shield)
  - 264575 With auto-darkening lens assembly
- With hard hat and Titanium 9400™ helmet (external grind control)
  - 259385 With auto-darkening lens assembly
- With hard hat and Titanium 9400i™ helmet (integrated clear grind shield)
  - 261659 With auto-darkening lens assembly

T94-R™ helmet upgrade kit (for use with existing PAPR system)
- 279870 Includes T94-R helmet assembly, breathing tube, breathing tube cover and flowmeter

T94i-R™ helmet upgrade kit (for use with existing PAPR system)
- 279871 Includes T94i-R helmet assembly, breathing tube, breathing tube cover and flowmeter

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

- HEPA filter provides up to 99.97 percent filtration of airborne particles
- NIOSH 42 CFR 84 certified, assigned protection factor of 25

SAR Supplied Air Respirator  See literature AY/4.3

Available packages:

- With T94i-R™ helmet (integrated clear grind shield)
  - 951800 With auto-darkening lens assembly and 25 ft. straight air hose
  - 951801 With auto-darkening lens assembly and 100 ft. straight air hose
  - 951802 With auto-darkening lens assembly and 25 ft. coiled air hose
  - 951803 With auto-darkening lens assembly and 100 ft. coiled air hose
  - 264871 With auto-darkening lens assembly (air hose not included)

T94i-R™ helmet upgrade kit (for use with existing SAR system)
- 279871 Includes T94i-R helmet assembly, breathing tube, breathing tube cover and flowmeter

A complete SAR system consists of C50 air regulator, belt assembly, flowmeter, breathing tube, breathing tube cover, tool bag, T94i-R helmet assembly and air hose (see available packages at left).

- NIOSH 42 CFR 84 certified, assigned protection factor of 25
- To provide a NIOSH-approved respiratory system, the SAR with T94i-R must be used with Miller® helmet, hoses, connectors, filters and other components recommended by the manufacturer

Also available

BreatheAir™ Portable Box
- 275983 Two person, 10 ppm alarm
- 275985 Four person, 10 ppm alarm

Supplies Grade-D breathing air while monitoring for CO.

Monitor Calibration Kit
- 275988 10 ppm

A complete SAR system consists of C50 air regulator, belt assembly, flowmeter, breathing tube, breathing tube cover, tool bag, T94i-R helmet assembly and air hose (see available packages at left).

- NIOSH 42 CFR 84 certified, assigned protection factor of 25
- To provide a NIOSH-approved respiratory system, the SAR with T94i-R must be used with Miller® helmet, hoses, connectors, filters and other components recommended by the manufacturer
Respiratory

LPR-100™ OV Half Mask Respirator
See literature AY/4.5
ML00996 Respirator with P100 organic vapor filters
(small/medium)
ML00997 Respirator with P100 organic vapor filters
(medium/large)
Filters and accessories
SA00820 P100/OV filters (one pair)
285686 Protective hard carrying case
261086 Quantitative fit-test kit adapter
- Low-profile design fits under T94™ and Digital Elite™ Series welding helmets and provides maximum field of vision
- P100/OV filters provide up to 99.97 percent filtration of specific organic vapors and airborne particulates
- NIOSH 42 CFR 84 certified, assigned protection factor of 10

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)
283374 Protective hard carrying case
261086 Quantitative fit-test kit adapter
- Low-profile design fits under T94™, Digital Elite™ and Classic Series welding helmets and provides maximum field of vision
- P100 filters provide up to 99.97 percent filtration of airborne particles
- Nuisance level OV relief filters are designed for use with organic vapor concentrations not exceeding OSHA’s PELs or other applicable government occupational exposure limits, whichever is lower
- NIOSH 42 CFR 84 certified, assigned protection factor of 10

N95 Disposable Mask Respirator
See literature AY/4.8
267334-2 Respirator (2 pack)
267334 Respirator (10 pack)
267335-2 Respirator with nuisance level OV relief
(2 pack)
267335 Respirator with nuisance level OV relief
(10 pack)
- Flame-retardant outer layer designed for welding applications
- N95 filters provide up to 95 percent filtration of airborne particles
- Nuisance level OV relief filters are designed for use with organic vapor concentrations not exceeding OSHA’s PELs or other applicable government occupational exposure limits, whichever is lower
- NIOSH 42 CFR 84 certified, assigned protection factor of 10

MillerWeldsStore.com

The Power of Blue
MillerWelds.com

Buy Miller® Gear Online. Shirts, hats, mugs, banners and more!
### Welding Helmets

See chart above for feature availability.

<table>
<thead>
<tr>
<th>T94™</th>
<th>T94™</th>
<th>Digital Infinity™</th>
<th>Digital Elite™</th>
<th>Digital Performance™</th>
<th>Classic VSI™</th>
<th>Classic VS</th>
<th>Classic FS#10 Flip-Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viewing Area</td>
<td>9.2 sq. in.</td>
<td>9.2 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>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Integrated Grind Shield</td>
<td>Yes</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Yes</td>
<td>—</td>
<td>Yes</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>4</td>
<td>3</td>
<td>3</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>1/12,000 second</td>
<td>1/20,000 second</td>
<td>1/20,000 second</td>
<td>1/20,000 second</td>
<td>1/20,000 second</td>
<td>1/12,000 second</td>
<td>1/3,600 second</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>23 oz. (652 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>

### T94™ Series

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

- **Matte silver finish** reflects ambient heat, keeping the user cooler.
- **Four operating modes** for ultimate versatility: weld, cut, grind and X-Mode™.
- **Half shade settings** for precise lens adjustment.
- **Simplistic digital lens interface** allows for easy adjustment with or without gloves.
- **Shade 5.0 side windows** enhance peripheral vision, amplifying sense of surroundings.
- **Largest viewing area.** Digital Infinity™ Series helmets feature a 13.4-square-inch viewing area allowing for a wide range of view.
- **ClearLight™ Lens Technology** optimizes contrast and clarity in welding and light states. 1/1/1/2 optical clarity rating allows for a lighter light state while not welding, maximizing safety and productivity.
- **AutoSense™** eliminates issues related to setting helmet sensitivity by allowing the welder to push and hold the AutoSense button to automatically set the helmet sensitivity for their environment.
- **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.

#### Best-in-class comfort for all-day wearability

Lightweight, well-balanced design reduces neck torque, minimizing operator fatigue and strain, leading to an increase in comfort.

- **4% LIGHTER** for reduced fatigue
- **14% BETTER BALANCE** for elevated comfort
- **17% LESS TORQUE** for reduced neck strain

Statistics above compare T94™ to previous model.

##### Helmet Lighting Accessory

281361
- Provides additional lighting in low-light environments for T94 Series helmets
- Includes two lights (one for each side) and all required mounting hardware

---

T94™ 260483
T94™ 260482

**Chiseled shell design** provides optimal skin coverage while easily accommodating a Miller® Half Mask Respirator.

**Gen IV premium headgear** with four-point flexible design provides a secure fit, while avoiding major pressure points within the head, maximizing all-day wear. Customizable fit with seamless tilt, distance and tightness adjustments.

**InfoTrack™ 2.0** monitors arc time and arc count.
Digital Infinity™ Series  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 ultimate comfort.

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

MP-10™ Helmet  Best-in-class traditional passive shade 10 lens helmet.
Helmet Accessories

Gen 3.5 Headgear 284218
- Ergonomic design with 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 265315 T94 Series
222003 Titanium, Infinity™, Elite™, Performance™ and Classic Series, and MP-10™
- Compatible with most fibre Metal and MSA hats. Other brands may fit depending on size and shape. Helmet and hat not included

Weld-Mask™ See literature AY/40.0
Compact auto-darkening lenses allow users to weld in spaces where access with traditional welding helmets is limited. Close-fitting soft eye covering provides total darkness for precision welding. Face shield and flame-retardant head cover provide coverage for UV/IR rays and applications with limited spatter.

Weld-Mask 267370
- Shades 5, 7, 9, 11 and 13 for use with MIG, TIG, stick, and gas welding and cutting
- Extremely lightweight (8 oz.), virtually eliminates neck strain

Weld-Mask 2 280982
- Ideal for industrial or construction environments – can be worn under a hard hat with a Miller® Half Mask Respirator and select safety glasses
- Shades 5–13 for use with MIG, TIG, stick, and gas welding and cutting
- X-Mode™ electromagnetically senses the weld to eliminate sunlight interference and continuously detects the arc even if sensors are blocked
- Wide, singular lens provides unmatched auto-darkening range of visibility

Weld-Mask 2 Lighting Accessory 281188
- Snaps onto brow of Weld-Mask 2 model to provide additional lighting in low-light environments

Weld-Mask Hard Hat Adapters 285757
- Snaps onto sides of most slotted hard hats to secure Weld-Mask

Safety Glasses

See literature AY/46.0

Classic
- 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
- Shade 3 and 5 IR lenses are for cutting, brazing or soldering

Spark

Slag

Spatter

Gen I

Safety and Cutting Glasses Chart

<table>
<thead>
<tr>
<th>Frame Style (Color)</th>
<th>Clear Lenses</th>
<th>I/O Lenses</th>
<th>Shade 3 Lenses</th>
<th>Shade 5 Lenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classic (Black)</td>
<td>272187</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Spatter™ (Black)</td>
<td>272191</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Spark™ (Black/Blue)</td>
<td>272190</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Slag™ (Black)</td>
<td>272201</td>
<td>272202</td>
<td>–</td>
<td>272205</td>
</tr>
<tr>
<td>Gen I (Black)</td>
<td>–</td>
<td>–</td>
<td>235662</td>
<td>235658</td>
</tr>
</tbody>
</table>
Welding Apparel

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

Indura® Cloth Jacket
(See size chart)
- 9-ounce Indura® flame-resistant cotton (flame resistance guaranteed for life of jacket)
- Pre-shrunk fabric

Classic Cloth Jacket
(See size chart)
- 9-ounce flame-resistant navy cotton
- Pre-shrunk fabric
- Fold-in sleeve snaps
- Finished hems and reinforced stitching

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>
</tr>
</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>
</tr>
<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>
</tr>
<tr>
<td>Combo Jacket</td>
<td>–</td>
<td>–</td>
<td>231081</td>
<td>231083</td>
<td>231084</td>
<td>231085</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Indura Cloth Jacket</td>
<td>–</td>
<td>258097</td>
<td>258098</td>
<td>258100</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<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>

Welding Safety and Health

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
- Upper arm elastic band

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

**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 Gloves**
- Reflective insulation on back reduces heat impact
- Moisture-wicking fleece and foam insulation
- Pig split leather palm, 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, back and cuff

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

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

---

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

<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>263333</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>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>279875*</td>
<td>279876*</td>
</tr>
<tr>
<td>MIG (Cowhide)</td>
<td>—</td>
<td>271890*</td>
<td>271891*</td>
</tr>
<tr>
<td>TIG</td>
<td>279897*</td>
<td>279898*</td>
<td>279899*</td>
</tr>
<tr>
<td>Work</td>
<td>266041*</td>
<td>266042*</td>
<td>266043*</td>
</tr>
</tbody>
</table>

---

**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.
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.

## ArcStation™ 60SX Fully Loaded

The 60SX Fully Loaded is perfect for the welder who needs a tough workbench for the fab shop or the home garage.

- **30 x 60 inch size tabletop** provides double the work surface of the 30FX.
- **3/8-inch X-pattern steel tabletop** allows trouble-free clamping.
- **Durable 1/8-inch steel frame with cross bar and heavy-duty tabletops** provide a sturdy area for welding or metalworking.
- **Adjustable leveling feet** keep workbench rock-steady.
- **Comes customized with a wide range of handy accessories** to make this the ultimate workbench (see at right for replacement accessories).

## ArcStation™ 30FX

When portability or space-savings is a concern, the ArcStation 30FX 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 optional 6-inch X-clamp (300613) to make this the ultimate portable workbench.**

### Specifications

<table>
<thead>
<tr>
<th>Model/Stock Number</th>
<th>Steel Top</th>
<th>Load Capacity</th>
<th>Dimensions</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>60SX Fully Loaded (951793)</td>
<td>(1) 29 x 29 x 3/8 in. solid, (1) 29 x 29 x 3/8 in. X-pattern</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>
<tr>
<td>30FX (300837)</td>
<td>(1) 29 x 29 x 3/16 in. X-pattern</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>
</tbody>
</table>

For more detailed information, visit MillerWelds.com/arcstation.
OpenBook provides FREE interactive online training resources, educational materials and tracking tools. These materials allow welding instructors to assign and deliver welding content, create quizzes, download welding labs, monitor student participation, and assess and report student progress and performance. Visit OpenBook.MillerWelds.com for details.

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.

Customize your classroom
- Implement materials that fit your curriculum and learning objectives, including:
  - e-Learning modules
  - Weld lab activities
  - Course builder
  - Quiz builder
  - Lab builder
- Track individual student progress
- All material aligns with AWS standards

Motivate and engage students
- Interactive, stimulating learning includes videos and activities
- Quick, digestible segments
- Mobile friendly
  - Easy to access homework from anywhere
  - Students can check grades and status
- Ideal for high school and post-secondary welding programs

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

From our FREE OpenBook™ training software, to our AugmentedArc® augmented reality welding system and LiveArc™ welding performance management system, we provide solutions to meet all of your welding training needs.


AugmentedArc® Augmented Reality Weld Training

See literature TS/2.0

The industry’s most realistic welding simulation solution for classroom training.

Optimize instructor efficiency by using the Teacher software to create a virtual classroom with customized curriculum, quizzes and weld exercises.

Real-time feedback is provided on users’ technique to help 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 saving wire, gas and workpieces in this simulation environment, while allowing students to define their welding skills before live arc welding.

Build a larger, more-skilled welding workforce when computer-savvy individuals are drawn to welding education programs that increase their success.

**AugmentedArc system comes complete with**
- AugmentedArc simulator
- Teachers software
- Black Infinity® AR helmet with premium headgear
- AugmentedArc router
- MIG gun with AR nozzle
- SMAW stinger
- TIG torch with AR nozzle
- Two electrode/filler rods with AR tips
- Work stand for out-of-position applications

**Optional components**
- **TIG Foot Pedal Kit** 286033
  - Includes TIG foot pedal, connection cable and adapter cable
- AugmentedArc Controller 301395
  - For multiple system connectivity
- Heavy-duty Transportation Cases 951775
  - Protects complete system during transportation or storage — one case holds the simulator and the other holds accessories

**LiveArc™ Welding Performance Management System**

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

Better and more cost effective training with faster results. Benefit from both weld simulation and the real-world experience of live arc welding with instant, valuable feedback on welding technique to quickly help build skills.

**Motion-tracking technology** measures the operator’s adherence to preset technique parameters. Cameras track the movement of LEDs embedded in the MIG SmartGun and SMAW SmartStinger during pre-weld simulations and live welds; the system then delivers visual feedback on the operator’s performance via the LiveArc system’s main display.

**LiveArc GMAW/FCAW system comes complete with**
- Computer with Intel core i7, 128 GB SSD, fanless cooling, and HDMI port for connection to most secondary monitors (not included)
- 21.5 HD LCD touch screen monitor
- SmartGun with 15 ft. (4.6 m) cable
- Calibration tool
- Two table clamps
- Removable arm extension with C-clamp assembly for out-of-position 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

### AugmentedArc System Specifications

**Stock Number** (951833)

<table>
<thead>
<tr>
<th>Input Power</th>
<th>Voltage/Ampere Selection</th>
<th>Welding Positions</th>
<th>Polarity Selection</th>
<th>Shielding Gas Selection</th>
<th>Wire Speed Selection</th>
<th>Base Material Selection</th>
<th>Workpiece Selection</th>
<th>Stick Electrode Selection</th>
<th>Diameter Selection</th>
<th>Simulator Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FCAW: 10–38 V 50–425 A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SMAW: 50–425 A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GTAW: 50–425 A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### LiveArc System Specifications

**Stock Number** (907714)

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Input Power</th>
<th>Processes</th>
<th>Positions</th>
<th>Multi-Pass</th>
<th>Rated Output</th>
<th>Electrode Diameter</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>(907714001)</td>
<td>120 V, 60 Hz</td>
<td>GMAW, GMAW-S, GMAW-P, FCAW-G, SMAW</td>
<td>2F–4F, 1G–4G</td>
<td>Limited groove applications</td>
<td>SmartGun: 400 A at 60% duty cycle (mixed gases)</td>
<td>SmartGun: Up to 5/64 in. (2.0 mm)</td>
<td>H: 77.5 in. (1,969 mm) W: 46 in. (1,168 mm) D: 31 in. (787 mm)</td>
<td>GMAW/FCAW system: 240 lb. (108.8 kg) GMAW/FCAW/SMAW system: 527 lb. (239 kg)</td>
</tr>
<tr>
<td>(907714)</td>
<td></td>
<td>SMAW</td>
<td>2F–4F, 1G–4G</td>
<td></td>
<td>SmartStinger: 250 A at 60% duty cycle</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Only available at approved distributors!*

---

**Figures and diagrams related to the text above.**
Attaches to the work and/or weld cables and plugs into the cable. Kit includes one Tweco-style male plug which attaches to the work area.

**Dinse/Tweco Adapter 042465**

One-piece adapter with Dinse-style male plug (to power source) on one end and Tweco or Cam-Lok female receptacle (for weld cable connection) on other end.

**Dinse/Cam-Lok Adapter 042466**

One-piece adapter with Dinse-style male plug (to power source) on one end and Tweco or Cam-Lok female receptacle (for weld cable connection) on other end.

**Universal Cart and Cylinder Rack 042934**

For Invision 352 MPa, XMT 350, CST, Maxstar, Dynasty and Syncrowave. These power sources are equipped with Dinse- or Tweco-style connectors for secondary connections. Power sources are shipped with Dinse-style female receptacle (for weld cable connection) on other end.

**Running Gear/Cylinder Rack 301239**

For Millermatic 141/211, Multimatic 200/215 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.

- 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 and keeps cables off the floor and tangle free. Elevated Gun and Cable Rack (300335) is also available separately for use with factory-installed single-cylinder rack.

**EZ-Latch™ Single Cylinder Running Gear 301449**

For Millermatic 255 and Multimatic 255. Running gear with a single-cylinder rack and storage compartment. Machine is secured to cart by latches that rotate to disengage machine for easy portability.

**EZ-Latch™ Dual Cylinder Rack Running Gear 951769**

For Millermatic 255 and Multimatic 255. Similar to above, but with a dual-cylinder rack and elevated gun/cable rack to keep cables off the floor and tangle free. EZ-Latch Dual Cylinder Rack with Elevated Gun and Cable Rack (301481) is also available separately for use with EZ-Latch Single Cylinder Running Gear above.

**Feeder Cart 143282**

A low-profile, creeper cart which allows the operator to easily move the feeder around the work area.

**Tweco®/Dinse Adapter 210061**

One-piece adapter with Tweco-style male plug (to power source) on one end and Dinse-style female receptacle (for weld cable connection) on other end.

**Tweco®-Style Connector 191981**

Accepts #1/0 to #2/0 AWG cable. Kit includes one Tweco-style male plug which attaches to the work and/or weld cables and plugs into the Tweco-style receptacles on the power source.

**Dinse/Tweco Adapter 042465**

Dinse/Cam-Lok Adapter 042466

One-piece adapter with Dinse-style male plug (to power source) on one end and Tweco or Cam-Lok female receptacle (for weld cable connection) on other end.

**Cable Connectors and Adapters**

**Also see Torch and Weld Cable Connectors in TIG Accessories on page 121.**

- For AlumaFeed system, Invision 352 MPa, XMT 350, CST, Maxstar, Dynasty and Syncrowave. These power sources are equipped with Dinse- or Tweco-style connectors for secondary connections. Power sources are shipped with Dinse-style female receptacle (for weld cable connection) on other end.

**Dinse-Style Connector Kits 042418**

Accepts #4 to #1/0 AWG cable

**042533**

Accepts #1/0 to #2/0 AWG cable

- Kits include one male Dinse-style plug which attaches to the work and/or weld cables and plugs into the Dinse-style receptacles on the power source.

**Extension Kit for Dinse-Style Cable Connectors 042419**

Accepts #4 to #1/0 AWG cable

- Used to adapt or extend weld and/or work cables. Kit includes one male Dinse-style plug and one in-line female Dinse-style receptacle.

**Extensions for Dinse-Style Cable Connectors 134460**

Male Dinse-style plug

**136600**

Female Dinse-style receptacle

- Used to adapt or extend weld and/or work cables. Accepts #1/0 to #2/0 AWG cable.

**Engine Drive Accessories 116–117**

- Big Blue Accessories • Blue Star Accessories
  - Bobcat and Trailblazer Accessories
  - Generator Accessories • Protective Covers • Trailers
  - Auto-Latch Accessories
  - Remote Controls and Wireless Remote Controls 119–121

**Extension Kits 120–121**

- Kits • Protective Case/Covers • Remote Controls
  - Torch and Weld Cable Connectors
  - Spool Adapter • Spool Gun Controls and Kits
  - Turntable Assembly • Wire Straightener

**Load Banks 117**

**MIG Accessories 117**

- Machine and Gun Accessory Kits • Protective Covers
- Plasma Cutter Accessories 118
  - Automation Kits • Cables and Cable Covers
  - Cutting Guides • Filters • Plugs and Cords
  - Protective Case • Torches

**Polarity Switches/Controls 119**

**Remote Controls and Wireless Remote Controls 119–121**

**Stick Accessory Kits 119**

**Submerged Arc Accessories 119**

- Cables • Torch Accessories
  - Wire Drive Assembly Accessories
- TIG Accessories 120–121
  - Kits • Protective Case/Covers • Remote Controls
  - Torch and Weld Cable Connectors

**Wire Feeder Accessories 122**

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

**Automated MIG**

For adapters and drive motors, visit MillerWelds.com.

**Coolant Flow Switch 195461**

For water-cooled guns. To ensure coolant is flowing in the system.

- A lack of coolant flow may cause damage to water-cooled guns.
- Module allows wiring into the peripheral connector port. 50-foot (15.2 m) cable with connector and separate shell connector for simple modification to desired length in the field. Quarter-turn quick connection.

**Carts, Cylinder Racks and Running Gear**

**Also see Engine Drive Accessories on page 116.**

**Feeder Cart 143282**

A low-profile, creeper cart which allows the operator to easily move the feeder around the work area.

**Universal Cart and Cylinder Rack 042934**

For Invision 352 MPa, XMT 350, CST, Diversion, 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 200/215 and Diversion. Heavy-duty construction with 8-inch rubber rear wheels, convenient front handles, cable holders and plastic consumable box. For gas cylinders no greater than 7 inches (178 mm) in diameter or 65 pounds (29.5 kg) in weight.

**Dual Cylinder Rack Conversion Kit and Tool Holder 301453**

- For AlumaFeed system, Invision 352 MPa, XMT 350, CST, Diversion, 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.

**EZ-Latch™ Single Cylinder Running Gear 301449**

For Millermatic 255 and Multimatic 255. Running gear with a single-cylinder rack and storage compartment. Machine is secured to cart by latches that rotate to disengage machine for easy portability.

**EZ-Latch™ Dual Cylinder Rack Running Gear 951769**

For Millermatic 255 and Multimatic 255. Similar to above, but with a dual-cylinder rack and elevated gun/cable rack to keep cables off the floor and tangle free. EZ-Latch Dual Cylinder Rack with Elevated Gun and Cable Rack (301481) is also available separately for use with EZ-Latch Single Cylinder Running Gear above.

**Dual Cylinder Rack 195299**

For Millermatic 350P/350P Aluminum. Replaces single-cylinder rack.
**Coolmate Coolant Systems**

**Coolmate 1.3**  
**Model:** Coolmate 1.3  
**Voltage:** 115 V, 60 Hz  
**Features:**  
- For Invision, Dimension 650, and XMT with single- or dual-wire feeders.  
- Small footprint and easily maneuverable, with a dual-cylinder rack low enough that you do not have to lift bottles.  
- Durable, heavy-duty ergonomic handles are designed for comfort.

**Coolmate 3.5**  
**Model:** Coolmate 3.5  
**Voltage:** 115 V, 60 Hz  
**Features:**  
- For Invision, Dimension 650, and XMT with single- or dual-wire feeders.  
- Small footprint and easily maneuverable, with cylinder rack low enough that you do not have to lift bottles.

**Coolmate 4**  
**Model:** Coolmate 4  
**Voltage:** 115 V, 60 Hz  
**Features:**  
- For Maxstar 400/800 and Dynasty 400/800. Industrial, 3.5-gallon cooler designed for water-cooled torches rated up to 600 amps*.

**Coolant**

**Low-Conductivity Coolant (clear, pre-mixed)**  
**Model:** Coolant 3.5  
**Features:**  
- 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)**  
**Model:** Coolant 4  
**Features:**  
- Primarily used in push-pull systems where aluminum is in coolant path/circuit and high frequency is NOT used.

---

**Table: Specifications**

<table>
<thead>
<tr>
<th>Model</th>
<th>Motor Input Voltage</th>
<th>Maximum Current Draw</th>
<th>Maximum Cooling Capacity</th>
<th>IEC Cooling Capacity</th>
<th>Tank Capacity</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coolmate 1.3</td>
<td>115 V, 60 Hz</td>
<td>4.7 A (60 Hz)</td>
<td>3,400 W (11,900 Btu/hr.)</td>
<td>1,100 W (4,640 Btu/hr.)</td>
<td>1.3 gal. (4.9 L)</td>
<td>H: 11.25 in. (286 mm) W: 10.38 in. (264 mm) D: 24 in. (619 mm)</td>
<td>43 lb. (20 kg)</td>
</tr>
<tr>
<td>Coolmate 3</td>
<td>115 V, 50/60 Hz</td>
<td>5.9 A (50 Hz), 4.7 A (60 Hz)</td>
<td>3,820 W (13,000 Btu/hr.)</td>
<td>1,420 W (5,680 Btu/hr.)</td>
<td>3 gal. (11.4 L)</td>
<td>H: 13.25 in. (337 mm) W: 12.25 in. (311 mm) D: 23.25 in. (589 mm)</td>
<td>40 lb. (18 kg)</td>
</tr>
<tr>
<td>Coolmate 3.5</td>
<td>115 V, 50/60 Hz</td>
<td>5.9 A (50 Hz), 4.7 A (60 Hz)</td>
<td>4,140 W (14,000 Btu/hr.)</td>
<td>1,660 W (6,660 Btu/hr.)</td>
<td>3.5 gal. (13.2 L)</td>
<td>H: 11.75 in. (298 mm) W: 15.75 in. (400 mm) D: 26 in. (660 mm)</td>
<td>64 lb. (29 kg)</td>
</tr>
<tr>
<td>Coolmate 4</td>
<td>115 V, 50/60 Hz</td>
<td>5.9 A (50 Hz), 4.7 A (60 Hz)</td>
<td>5,500 W (18,000 Btu/hr.)</td>
<td>1,780 W (6,070 Btu/hr.)</td>
<td>4 gal. (15 L)</td>
<td>H: 16.25 in. (413 mm) W: 15.25 in. (387 mm) D: 18.75 in. (476 mm)</td>
<td>38 lb. (17 kg)</td>
</tr>
</tbody>
</table>
**Engine Drive Accessories**

*Also see Trailers on page 117.*

### Big Blue Accessories

- **Cable Holder** [403946](#) For Big Blue 500 Pro/600 Series/800 Series.
- **Vandalism Lockout Kit** [395802 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 200 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.

- **Remote Oil Drain and Filter Kit** [300923 Field](#)
  - For gas Bobcat and Trailblazer (except Air Pak models).
  - Front mount for Kohler engines makes servicing easy when engine drive is mounted in tight spots.

### Bobcat and Trailblazer Accessories (Diesel)

- **Off-Road Running Gear** [300912](#)
  - Inner tubes
  - 300913 Never Flat™ tires
  - 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.

- **Remote Oil Drain and Filter Kit** [300923 Field](#)
  - For gas Bobcat and Trailblazer (except Air Pak models).

- **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).
  - Includes four heavy-duty 15-inch tires, two 8-inch rubber swivel casters and a heavy-duty handle. Recommended for all surfaces and applications and is easy to move around the jobsite.

- **Protective Cage with Cable Holders** [300473](#)
  - For Trailblazer 302 Air Pak.
  - Rugged cage with cable holders protects your investment.

### Gas Cylinder Mounting Assembly (Diesel)

- **Gas Cylinder Mounting Assembly** [300918](#)
  - For gas Bobcat and Trailblazer (except Air Pak models).
  - Designed for use with Running Gear, Protective Cage, or by itself.
  - Includes base tray with bottle bracket, vertical support rack and safety chain.

### Generator Accessories

- **Twist Lock Adapter Cord** [301489](#) For Fusion. L14-30R to NEMA 6-50R. Adapts engine drive 120/240-volt 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.

### Protective Covers

- **Protective Covers**
  - Heavy-duty, water- and mildew-resistant covers protect and maintain the finish of the welder.

- **Protective Cover** [300919](#) and [195301](#) shown.

- **Protective Cover** [301245](#) For Fusion and Blue Star.

- **Protective Cover** [301475](#) For gas Bobcat 200 Air Pak without Running Gear.

- **Protective Cover** [301476](#) For gas Bobcat 200 Air Pak with Running Gear.

- **Protective Cover** [301531](#) For diesel Bobcat 200 Air Pak without Running Gear.

- **Protective Cover** [301532](#) For diesel Bobcat 200 Air Pak with Running Gear.

- **Protective Cover** [300919](#) For gas Bobcat and Trailblazer (except Air Pak models) without Protective Cage or Running Gear.

- **Protective Cover** [300920](#) For gas Bobcat and Trailblazer (except Air Pak models) with Protective Cage or Running Gear.

- **Protective Cover** [301099](#) For diesel Bobcat 250 and Trailblazer 325 without Protective Cage or Running Gear.

- **Protective Cover** [300379](#) For Trailblazer 302 Air Pak.

- **Protective Cover** [195301](#) For Big Blue 400 Pro/400 PipePro/450 Duo CST.

- **Protective Cover** [301495](#) For Big Blue 500 Pro/600 Pro with Kubota.

- **Protective Cover** [301113](#) For Big Blue 600 Air Pak/800 Series with Deutz.
includes analog meters for both AC and DC output with load switches, providing a maximum capacity of 350 amps.

13-foot (4 m) 115-volt power cord and has seven 50-amp jacks for external metering connections. It comes with a 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.

Heavy-duty 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.

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.

MIG Accessories

Machine and Gun Accessory Kits

Industrial MIG 4/0 Kit (with lugs) 300390 300957

For single-wire feeders. For dual-wire 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-style connectors) 300940 300956

For single-wire feeders. For dual-wire feeders. Same as above except weld and work cables have Dinse-style connector on one end instead of lug.

MIGmatic™ M-Series Gun Consumable Kits 234607 234608 234609

For M-100/M-150 guns. Kits include ten contact tips, one tip adapter, one standard nozzle and a consumable storage box.

Protective Covers

301262 For Millermatic 141/211 and Multimatic 215.

301524 For Multimatic 220 AC/DC.

301521 For Millermatic 255 and Multimatic 255. Features side pocket.

Plasma Cutter Accessories

Automation Kits

Automation Kits for Spectrum 875 and 875 Auto-Line
301156 For Spectrum 875.
301157 For Spectrum 875 Auto-Line.
Upgrades hand-held torch packages to add machine torch capabilities. Automation kit for Spectrum 875 Auto-Line (301157) includes a remote pendant control for manual on/off. Machine torches are NOT included in kits and must be ordered separately.

Cables and Cable Covers

Flexible Work Cable 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 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).


MVP® Adapters

254328
For connection to 6-50P receptacle (240 V, 50 A).
254330
For connection to 5-15P receptacle (120 V, 15 A).
254331
For connection to 5-20P receptacle (120 V, 20 A).

For Spectrum 625 X-TREME. Allows connection of machine to 120- or 240-volt receptacles without tools – just choose the adapter cord that fits the receptacle.

Full KVA Adapter Cord 300517
NEMA 14-50P to NEMA 6-50R. Adapts engine drive 120/240-volt plug to common Millermatic and Spectrum 240-volt plug.

230-Volt Extension Cord 770644
20-foot (6.1 m) NEMA 6-50P to NEMA 6-50R heavy-duty extension cord. 8-gauge cord has lighted ends that show power is on and a molded integrated strain relief.

Protective Case

X-CASE 300184
For Spectrum 375 X-TREME/625 X-TREME.

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
260633 12 ft. (3.7 m) XT40
260635 20 ft. (6.1 m) XT40
For Spectrum 875 and 875 Auto-Line
249953 20 ft. (6.1 m) XT60
249954 50 ft. (15.2 m) XT60

Spectrum 875 and 875 Auto-Line Plasma Cutter Machine Torches
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
253520 For XT30 torch. Includes five electrodes, five tips, one swivel ring, one retaining cup, one o-ring and silicone grease.
253521 For XT40 torch. Includes five electrodes, five 40-amp tips, three 30-amp tips, one 40-amp drag shield, one deflector, one o-ring, one swivel ring, one retaining cup, one 40-amp gauge tip, one gouge shield and silicone grease.
256033 For XT60 torch. Includes three standard electrodes, three standard tips, one drag shield, one deflector, one o-ring, one swivel ring, one retaining cup, one gouge tip, one 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 120 and 121.

PRHC-14 Hand Control 195511
For all solid-state power sources after serial number JK674521. Complete current or voltage control brings 120 volts of GFCI power to work area in a single cord. Housed in a durable and light aluminum case and includes 125-foot (38 m) cord with plugs.

Stick Accessory Kits

No. 2 Stick Cable Sets
195196 15 ft. (4.6 m)
300836 50 ft. (15 m)
Consists of either 15- or 50-foot electrode cable with holder and work cable with clamp. 200 A, 100% duty cycle.

2/0 Stick Cable Sets
173851 50 ft. (15 m), 350 A
043952 100/50 ft. (30/15 m), 300 A
Consists of either 50- or 100-foot 2/0 electrode cable with holder and 50-foot work cable with clamp. 100% duty cycle.

Weld Cables
195457 2/0 cable with electrode holder, 400 A
195458 2/0 cable with work clamp, 400 A
301387 1/0 cable with electrode holder, 250 A
Consists of a stud/Tweco® adapter and 10-foot (3 m) weld cable with a Tweco male connector and either an electrode holder or work clamp.

2/0 Weld Cable Extensions
195456 50 ft. (15 m)
195455 100 ft. (30 m)
Extends weld cables (195457, 195458 and 301387).

Submerged Arc Accessories

Cables
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)
263368025 25 ft. (7.6 m)
263368050 50 ft. (15 m)
263368080 80 ft. (4.4 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)
043968 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 199026 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)

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)

Single-Wire Straightener 199733
For OBT 600 and OBT 1200 single-wire torches. For 1/16–5/32 inch (1.6–4.0 mm) wire.

Twin-Wire Straightener 301160
For 1200-amp twin-wire torch only. Single adjustment.

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 m). Not recommended for tandem.

Wire Reel 108008
Supports 60-pound (27 kg) coil of wire. Requires Spool Support Assembly (119438).
**TIG Accessories**

**Kits**

- **A-200 torch with RCCS-14 kit shown.**

**Contractor Kit**

- 301309 A-150 torch with RFCS-14 HD foot pedal
- 301311 A-150 torch with RCCS-14 fingertip
- 301359 A-200 torch with RFCS-14 HD foot pedal
- 301355 A-200 torch with RCCS-14 fingertip

For Maxstar 210/280 and Dynasty 210/280. All-in-one TIG/stick welding kit comes with either a Weldcraft™ A-150 or A-200 TIG torch, RFCS-14 HD foot control OR RCCS-14 fingertip control, 200-amp stick electrode holder and 300-amp work clamp with 15-foot (4.6 m) cables, flow gauge regulator with 12-foot (3.7 m) gas hose, gas hose coupler, AK1C torch accessory kit, and TIG torch connector.

**RCCS-14 kit shown.**

**RCCS-RJ45**

For Maxstar 161 models.

**RCCS-6M**

For Multimatic 255 contractor kit shown.

- **RCCS-6M HD** (6-pin plug)
  - 195183 13.25 ft. (4 m) cord with plug
  - 195504 20 ft. (6 m) cord with plug
  - For Maxstar 161 STL/STH and Multimatic 200.
  - 194744 20 ft. (6 m) cord with plug
  - Heavy-duty foot pedal current/contactor control provides increased stability and durability from larger base and heavier cord. Reconfigurable cord can exit front, back or either side of the pedal for flexibility.

- **RFCS-6M HD** (6-pin plug)
  - 195183 13.25 ft. (4 m) cord with plug
  - 195504 20 ft. (6 m) cord with plug
  - For Maxstar 161 STL/STH and Multimatic 200.

**12-inch**

- 10-Pin to 14-Pin Adapter Cord 301545
  - For Multimatic 255
  - Allows standard 14-pin remote controls to be used with the Multimatic 255.

**Protective Covers**

- **X-CASE 301429**
  - For Maxstar 161 models.

**Protective covers (300579) and (301382) shown.**

- **300579** For Diversion.
- **301381** For Maxstar 210.
- **301382** For Maxstar 280 and Dynasty 210/280.
- **195142** For Syncrowave 210.

**Remote Controls**

- **14-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.

**10-Pin to 14-Pin Adapter Cord 301545**

- **For Multimatic 255**
  - Allows standard 14-pin TIG remote controls to be used with the Multimatic 255.

- **RCCS-6M (6-pin plug)**
  - 301118 13.25 ft. (4 m) cord with plug
  - For Maxstar 161 STL/STH and Multimatic 200.

**RCCS-RJ45**

- 300432 14-pin foot control or fingertip control to a 6-pin plug.

**RCCS-14 (14-pin plug)**

- 151086 26.5 ft. (8 m) cord with plug
  - For Multimatic 255.

- 194744 20 ft. (6 m) cord with plug
  - For Multimatic 255.

**RFCS-14 HD (14-pin plug)**

- 194744 20 ft. (6 m) cord with plug
  - For Multimatic 255.

**RFCS-RJ45**

- 300432 14-pin foot control or fingertip control to a 6-pin plug.

**RFCS-6M HD (6-pin plug)**

- 195183 13.25 ft. (4 m) cord with plug
  - For Maxstar 161 STL/STH.

**RFCS-6M**

- 195183 13.25 ft. (4 m) cord with plug
  - For Maxstar 161 STL/STH.

**RFCS-RJ45**

- 300432 14-pin foot control or fingertip control to a 6-pin plug.

**RPC-14**

- 187208 26.5 ft. (8 m) cord with plug
  - For Multitig 255.

**RPC-14**

- 187208 26.5 ft. (8 m) cord with plug
  - For Multitig 255.

**RPC-14**

- 187208 26.5 ft. (8 m) cord with plug
  - For Multitig 255.

**RPC-14**

- 187208 26.5 ft. (8 m) cord with plug
  - For Multitig 255.

**RPC-14**

- 187208 26.5 ft. (8 m) cord with plug
  - For Multitig 255.

**RPBS-14**

- 300666 25-foot (7.6 m) cord with plug.

**RMS-6M**

- 195269 13.25 ft. (4 m) cord with plug
  - For Maxstar 161 STL/STH.

**RMS-14**

- 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.

**RMS-14**

- 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.

**RMS-14**

- 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.

**RMS-14**

- 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.

**RMS-14**

- 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**

- 300666 25-foot (7.6 m) cord with plug.

**RPBS-14**

- 300666 25-foot (7.6 m) cord with plug.

**RPBS-14**

- 300666 25-foot (7.6 m) cord with plug.

**RPBS-14**

- 300666 25-foot (7.6 m) cord with plug.

**RPBS-14**

- 300666 25-foot (7.6 m) cord with plug.

**RPBS-14**

- 300666 25-foot (7.6 m) cord with plug.

**RPBS-14**

- 300666 25-foot (7.6 m) cord with plug.

**RPBS-14**

- 300666 25-foot (7.6 m) cord with plug.

**RPBS-14**

- 300666 25-foot (7.6 m) cord with plug.

**RPBS-14**

- 300666 25-foot (7.6 m) cord with plug.

**RPBS-14**

- 300666 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.

Features:
- Easy to reposition the pedal for comfort and speed.
- 1Except A-200 (WP26) torches. 2A-80 (WP24) torches require 24-S adapter.

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.

Easy to install receiver plugs directly into the 14-pin receptacle of Miller® machines.

Easily programmable. Control can be quickly and easily paired with any other Miller 14-pin wireless receiver. (Control is preprogrammed when purchased with the receiver.)

Hand control

Hand control is designed specifically for 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.

Accessories

Torch and Weld Cable Connectors

Wire-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 300.
  - Used with all Weldcraft™ water-cooled torches.

Wireless Remote Compatible

Look throughout this catalog for the icon above signifying compatibility with a wireless remote. For a complete power source compatibility list visit, MillerWelds.com/wireless.
**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, and 70 Series (except MPa Plus) feeders. For 14-pin remote controls and 24 VAC wire feeders. 14-pin plug to a 14-pin socket. (Not for 115-volt XR feeders.)*

#### 11-Conductor Cables
- **247831025** 25 ft. (7.6 m)
- **247831050** 50 ft. (15 m)
- **247831080** 80 ft. (24.4 m)
  
  *For XR-AlumaFeed and MPa Plus feeders. Eleven conductors to support contactor control and remote voltage control on all Miller® electronic constant-voltage (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)
  
  *For HDC and WC-115 weld controls. 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 (3 m) interconnecting cord 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

#### Spool Gun Extension Hose and Cable Kits
- **132228** 25 ft. (7.6 m)
- **132229** 50 ft. (15 m)
  
  *For Spoolmate 200, 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
- **141580** For .035–.045 inch (0.9–1.1 mm) wire.
- **141581** For 1/16–1/8 inch (1.6–3.2 mm) wire.

### Engineered for Simplicity. Built for Durability.

**Design the perfect MIG guns for all your welds!**

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

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

For additional information, please contact your local welding distributor.

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

BernardWelds.com 1-855-MIGWELD (644-9353)
Finding the right filler metal solution for your welding needs is critical in an industry that is about getting the job done right. Filler metals are more than just a component of welding—they are the tie that binds science and people. The right solutions. Solutions to make our world more secure. More dynamic. More of what you need.

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

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

Visit HobartBrothers.com for more information.
Get connected

- **eNewsletters**
  Get informative email newsletters written for do-it-yourselfers, professionals, instructors and safety specialists.

- **Protect Your Investment**
  Register your product as a precaution against theft or loss.

- **Owners Club**
  Join for exclusive product previews, welding tips, project ideas and more.

Stay connected

- **Video Library**
  Get the how-to tips and guidance you need to tackle even the most challenging welding and cutting applications.

- **Project Gallery**
  Find inspiration and share welding projects for home or work.

- **Discussion Forums**
  Connect with other welders to harness the collective intelligence of the welding community.

MillerWelds.com
Your trusted destination for welding resources, helpful support and high-performance products for all of your projects.
Together, we build connections.

Distributed By:

Miller
The Power of Blue®

© 2020 Miller Electric Mfg. LLC