Millermatic® 251

**Quick Specs**

**Industrial Applications**
- Metal Fabrication
- Maintenance and Repair
- Farm
- Light Industrial

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

**Exclusive internal timers:**
- Tip Saver — Weld output shuts off if tip is shorted to work surface.
- Safety shut-off — Weld output will shut off if no arc is detected within 3 seconds after gun trigger is depressed.
- Jog mode — When loading a new roll of wire or if the gun trigger is accidentally pressed, gas will shut off after 1 minute and wire will shut off after 2 minutes saving wire and gas.

**Rated Output**
- 200 Amps at 28 VDC, 60% Duty Cycle
- 250 Amps at 28 VDC, 40% Duty Cycle

**Max. Open-Circuit Voltage**
- 38

**Amperage Range**
- 30 – 300 A

**Wire Feed Speed**
- 25 – 700 IPM (.064 – 17.8 m/min)

**Weight**
- 215 lb (98 kg)

**The Power of Blue.®**

- Consumable compartment and access to wire drive system located under side door.

  Welds materials from 22 gauge up to 1/2 in thick in a single pass.

  **NEW!** Miller’s patent-pending Active Arc Stabilizer™ provides excellent starts proven superior to the competition!

  **Line voltage compensation** for constant output with fluctuations in input power.

  **NEW!** Adjustable run-in control can be individually set for both MIG and spool guns. Controlled on the front panel, this easily accessible feature allows the user to optimize starts to the application.

**Rated Output**

- 200 Amps at 28 VDC, 60% Duty Cycle
- 250 Amps at 28 VDC, 40% Duty Cycle

**Max. Open-Circuit Voltage**
- 38

**Amperage Range**
- 30 – 300 A

**Wire Feed Speed**
- 25 – 700 IPM (.064 – 17.8 m/min)

**Weight**
- 215 lb (98 kg)

**Comes Complete With:**
- Power cord and plug (200/230 V model only)
- 12 ft (3.7 m), 250 amp M-25 MIG gun for .030/.035 in wire
- Work cable and clamp
- Argon mix regulator/flow gauge and hose
- Extra contact tips
- Factory-installed running gear/cylinder rack
- .030/.035 in reversible drive rolls
- Set-up and operation video

**Exclusive internal timers:**
- Tip Saver — Weld output shuts off if tip is shorted to work surface.
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**Industrial, dual-gear-driven, cast aluminum drive system** features no-tool, quick-change reversible drive rolls and an easy-to-set, scaled tension knob.

**Fan-On-Demand™** only operates when needed reducing power consumption and the amount of airborne contaminants pulled through the machine.

**Self-calibrating digital meters** allow presetting of voltage and wire speed, and display actual settings for 5 seconds after you stop welding. With spool gun, wire speed meter displays actual WFS setting—a feature not available on competitive units. Meters also display help messages for troubleshooting purposes.

**Welder/generator is warranted for 3 years, parts and labor. Original main power rectified parts are warranted for 5 years. Gun warranted for 90 days, parts and labor.**

**Made in USA**

**Certified ISO 9001:2000**

**Web Site** www.MillerWelds.com

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**Miller Electric Mfg. Co.**
An Illinois Tool Works Company
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Appleton, WI 54914 USA

**International Headquarters**
Phone: 920-735-4505
USA FAX: 920-735-4134
Canadian FAX: 920-735-4169
International FAX: 920-735-4125

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**Add the optional Spoolmatic® 15A or 30A spool gun for aluminum welding. No extra module to buy or install. And with Miller’s exclusive Gun-On-Demand™ simply pull the trigger for either gun and you’re ready to weld. No wasted time installing modules and using toggle switches.**
Add the optional Push-Pull Module for aluminum wire feed capability. XR™-Edge, XR-A Pistol or XR-A Python guns can be directly connected to the Millermatic 251 with this module.

True push-pull design where the Millermatic drive system provides constant torque to the wire and the gun provides constant wire feed speed.

For XR-A Edge
#195 199 .035 in (0.9 mm)
#195 274 .040 in (1 mm)
#195 200 .047 in (1.2 mm)

For XR-A Pistol
#195 201 .035 in (0.9 mm)
#195 273 .040 in (1 mm)
#195 202 .047 in (1.2 mm)

For XR-A Python
#195 311 .035 in (0.9 mm)
#195 312 .040 in (1 mm)
#195 313 .047 in (1.2 mm)

NEW! XR-A Python Gun 25 ft #195 373
Performs well on thin aluminum.

U-Groove Aluminum Drive Roll and Accessory Kits

Note: XR-Edge/Pistol kits include U-groove machine drive rolls, nylon wire guides, gun drive rolls and contact tips. XR-A Python kits include U-groove machine drive rolls, nylon wire guides and contact tips.
**Genuine Miller Accessories**

M-25 Replacement Gun
#169 594  10 ft (3 m)
#169 596  12 ft (3.7 m) standard
Gun shipped to run .030 – .035 in (0.8 – 0.9 mm) wire.

Spoolmatic® 15A Spool Gun  #195 156
Spoolmatic® 30A Spool Gun  #130 831
Ideal for aluminum welding jobs. 200 amp, 100% duty cycle, air-cooled, 1 lb spool gun with your choice of 15 ft or (4.6 m) 30 ft (9.1 m) cable assembly. For detailed information, see Spoolmatic literature, Index No. M/1.2.

**Consumables** (Order from Miller Service Parts.)

**For M-25 Gun**

<table>
<thead>
<tr>
<th>Contact Tips</th>
<th>#087 299  .023/.025 in (0.6 mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#000 067  .030 in (0.8 mm)</td>
</tr>
<tr>
<td></td>
<td>#000 068  .035 in (0.9 mm)</td>
</tr>
<tr>
<td></td>
<td>#000 069  .045 in (1.1 mm)</td>
</tr>
<tr>
<td></td>
<td>#187 117  .035 in (0.9 mm) heavy-duty tip</td>
</tr>
<tr>
<td></td>
<td>#187 118  .045 in (1.2 mm) heavy-duty tip</td>
</tr>
<tr>
<td>Tapered Contact Tips</td>
<td>#176 797  .030 in (0.8 mm)</td>
</tr>
<tr>
<td></td>
<td>#176 793  .035 in (0.9 mm)</td>
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<tr>
<td></td>
<td>#176 794  .045 in (1.2 mm)</td>
</tr>
<tr>
<td>Contact Tip Adapter</td>
<td>#169 728</td>
</tr>
<tr>
<td>Replacement Liners</td>
<td>#194 010  .023/.025 in</td>
</tr>
<tr>
<td></td>
<td>#194 011  .030 – .035 in (standard)</td>
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<tr>
<td></td>
<td>#194 012  .035 – .045 in</td>
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</tbody>
</table>

Nozzles

**#200 258 Standard**
1/2 in (13 mm) diameter orifice. Nozzle flush with contact tip.

**#169 726**
5/8 in (16 mm) diameter orifice. Nozzle flush with contact tip.

**#169 727**
5/8 in (16 mm) diameter orifice. Contact tip sticks out of nozzle 1/8 in (3.2 mm).

**#169 724**
1/2 in (13 mm) diameter orifice. Contact tip recessed 1/8 in (3.2 mm) into nozzle.

**#169 725**
5/8 in (16 mm) diameter orifice. Contact tip recessed 1/8 in (3.2 mm) into nozzle.

Spot Nozzles

**#176 238 Flat**
**#176 240 Inside corner**
**#176 242 Outside corner**

Tapered Nozzles

Note: Tapered tips are recommended when using a tapered nozzle.

**#176 243** 3/8 in (9.5 mm) diameter orifice
**#178 386** 11/32 in (8.7 mm) diameter orifice

**Gun Convenience Kit  #195 975**
Contains:
5 – .035 in (0.9 mm) contact tips (#000 068)
5 – .045 in (1.2 mm) contact tips (#000 069)
2 – Tip adapters (#169 728)
1 – Nozzle adapter (#169 729)
3 – O-rings (#170 468)
2 – Shock washers (#169 730)
1 – 5/8 in (16 mm) diameter orifice nozzle (#169 726)

**Millermatic® PSA Adapter  #195 019**
Adapts Miller 24 VAC wire feeders to the Millermatic 251. Call factory for specific applications.

**Millermatic® Protective Cover with Helmet Bag  #195 142**

CO₂ Regulator/Flow Gauge  #212 492
Required if using 100% CO₂ gas. Order from Miller Service Parts.

**Drive Rolls**

Note: Drive roll kits include two drive rolls and an inlet guide.

V-Grooved Drive Roll Kits

**#204 579 .030/.035 in (0.8/0.9 mm) reversible**

**#087 131 .023/.025 in (0.6 mm)**
**#079 594 .030 in (0.8 mm)**
**#079 595 .035 in (0.9 mm)**
**#079 596 .045 in (1.2 mm)**

V-Knurled Drive Roll Kits

**#079 606 .035 in (0.9 mm)**
**#079 607 .045 in (1.2 mm)**
### MIG (GMAW) or Flux Cored (FCAW)

**Basic Equipment**

<table>
<thead>
<tr>
<th>Description</th>
<th>Stock No.</th>
<th>Qty.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shielding Gas Cylinder</td>
<td></td>
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<tr>
<td>Gun</td>
<td></td>
<td></td>
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<tr>
<td>Work</td>
<td></td>
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</tbody>
</table>

### Ordering Information

<table>
<thead>
<tr>
<th>Equipment and Options</th>
<th>Stock No.</th>
<th>Description</th>
<th>Qty.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Millermatic® 251</strong></td>
<td>#903 868</td>
<td>200(208)/230 V, 60 Hz</td>
<td></td>
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<td></td>
<td>#903 869</td>
<td>230/460/575 V, 60 Hz</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Millermatic® 251 Packages</strong></td>
<td>#951 007</td>
<td>200(208)/230 V, 60 Hz w/ Spoolmatic 30A, dual cylinder rack, regulator and hose</td>
<td></td>
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<tr>
<td></td>
<td>#951 009</td>
<td>230/460/575 V, 60 Hz w/ Spoolmatic 30A, dual cylinder rack, regulator and hose</td>
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<tr>
<td><strong>Guns</strong></td>
<td></td>
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<tr>
<td>M-25 Gun</td>
<td>#169 594</td>
<td>10 ft (3 m), .030 – .035 in (0.8 – 0.9 mm)</td>
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<td></td>
<td>#169 596</td>
<td>12 ft (3.7 m), .030 – .035 in (0.8 – 0.9 mm)</td>
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<tr>
<td>Spoolmatic® 15A</td>
<td>#195 156</td>
<td>Spool gun for aluminum</td>
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<tr>
<td>Spoolmatic® 30A</td>
<td>#130 831</td>
<td>Spool gun for aluminum</td>
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<tr>
<td><strong>Push-Pull Module Option</strong></td>
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<tr>
<td>Millermatic 251 Push-Pull Module</td>
<td>#195 324</td>
<td>For use with Millermatic 251, effective with serial #LE152159</td>
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<tr>
<td>XR-A Edge Gun</td>
<td>#181 534</td>
<td>15 ft (4.6 m)</td>
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<td></td>
<td>#181 535</td>
<td>30 ft (9 m)</td>
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<tr>
<td>XR-A Pistol Gun</td>
<td>#198 127</td>
<td>15 ft (4.6 m)</td>
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<tr>
<td></td>
<td>#198 128</td>
<td>30 ft (9 m)</td>
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<tr>
<td><strong>NEW!</strong> XR-A Python Gun</td>
<td>#195 373</td>
<td>25 ft (7.6 m)</td>
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</tr>
<tr>
<td>U-Groove Aluminum Drive Roll and Accessory Kit</td>
<td>#195 199</td>
<td>For XR-A Edge Gun, .035 in (0.9 mm)</td>
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<td></td>
<td>#195 274</td>
<td>For XR-A Edge Gun, .040 in (1 mm)</td>
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<td></td>
<td>#195 200</td>
<td>For XR-A Edge Gun, .047 in (1.2 mm)</td>
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<td></td>
<td>#195 201</td>
<td>For XR-A Pistol Gun, .035 in (0.9 mm)</td>
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<td></td>
<td>#195 273</td>
<td>For XR-A Pistol Gun, .040 in (1 mm)</td>
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<td></td>
<td>#195 202</td>
<td>For XR-A Pistol Gun, .047 in (1.2 mm)</td>
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<td></td>
<td>#195 311</td>
<td>For XR-A Python Gun, .035 in (0.9 mm)</td>
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<td></td>
<td>#195 312</td>
<td>For XR-A Python Gun, .040 in (1 mm)</td>
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<td></td>
<td>#195 313</td>
<td>For XR-A Python Gun, .047 in (1.2 mm)</td>
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<td><strong>Accessories</strong></td>
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<tr>
<td>Dual Cylinder Rack</td>
<td>#042 758</td>
<td>Field</td>
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<td>Millermatic PSA Adapter</td>
<td>#195 019</td>
<td>Adapts any 24 VAC wire feeder to the Millermatic 251</td>
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<td>Protective Cover with Helmet Bag</td>
<td>#195 142</td>
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<td>CO₂ Regulator/Flow Gauge</td>
<td>#212 492</td>
<td>Required if using 100% CO₂ gas. Order from Miller Service Parts</td>
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<td>Electrode Wire</td>
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<tr>
<td>Shielding Gas Cylinder</td>
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<tr>
<td>Helmet/Gloves/Scratch Brush</td>
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<td><strong>Consumables</strong> (Order from Miller Service Parts.)</td>
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<td>Replacement Liners</td>
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<tr>
<td>Nozzles/Spot Nozzles/Tapered Nozzles</td>
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<tr>
<td>Gun Convenience Kit</td>
<td>#193 975</td>
<td>Includes tips, nozzle, O-rings, washers, etc for M-25 gun</td>
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<td><strong>Date:</strong></td>
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**Total Quoted Price:**

Distributed by:

Miller