Millermatic® 255

**MIG Power Source,
Wire Feeder and Gun Package**

Quick Specs

Industrial Applications
General fabricators
Contract welding services
Plant maintenance shops

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

Input Power Auto-Line™ 208–240 V, single-phase

Rated Output 230 A at 25.5 V, 60% duty cycle

Amperage Range 20–350 A

Net Weight **Machine only:** 84 lb. (38 kg)
Machine with running gear: 148 lb. (67 kg)

Easy to Use. Versatility. Portability.

THINK SIMPLY. WELD SMARTER.

Built for professionals in the light manufacturing or fabrication segment who want a smaller, versatile welder with intuitive setup to increase efficiencies and productivity. This 250-amp inverter welder is *easy to use* for faster uptime and performance. The *versatility* of this welder to be integrated on running gear, makes it very easy to move around a work cell or it can be quickly disconnected from the running gear enabling *portability*, making it easier to integrate into a work cell or work in confined spaces.

Machine only

Machine with running gear

Easy to Use

AUTO-SET™
MATERIAL THICKNESS

Quick and easy setup

Versatility

MULTIPLE MIG CAPABILITIES

MIG, pulsed MIG, push-pull and spool gun capabilities

Portability

MACHINE ONLY WEIGHS < 84 lb.

Easily integrates into a work cell

TRUE BLUE® 3 YR. WARRANTY

Welder is warranted for three years, parts and labor.
Gun warranted for 90 days, parts only.

Miller.

Certified System™
ISO 9001 Quality

Easy to Use

Pulsed MIG setup screen.

Connection screen for MIG process using C10 gas.

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 backlit Auto-Set and Pulse buttons above the LCD display 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.

Program mode allows easy save and recall of favorite weld settings.

• **Deliver more productivity** by eliminating the need to manually set the parameters.
• **Deliver consistent quality** by welders of all skill levels by using prequalified weld settings.
• **Minimize** supervisor need to intervene.

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

Versatility

MULTIPLE MIG CAPABILITIES

Capabilities include MIG, pulsed MIG and flux-cored welding.

Compatible with push-pull MIG guns. Increases productivity by allowing the use of 12-inch wire spools versus a spool gun's 4-inch spools. Reduces downtime changing wire spools.

AUTO-LINE TECHNOLOGY

For portability and reliability Auto-Line™ allows for any single-phase input voltage hookup (208–240 V) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable power.

Pulsed MIG welding delivers higher quality welds for ALL welders.
- Lower heat input for less distortion on thin materials and better puddle control on out-of-position welds.
- Less spatter minimizes post weld grinding and rework allowing more welding time.
- Perform welding applications that couldn't be done in the past.
- Ideal for MIG welding aluminum and stainless steel.
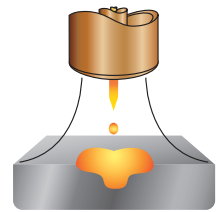
Best For	Standard Spray	Pulsed MIG	Short Circuit
Gap Filling	D	B	A
Low Heat Input	D	B	A
Out-of-Position Welds		A	B
Low Spatter	A	A	C
Thick Metals	A	A	D
Thin Metals		B	A
Increased Travel Speed	A	A	B
Aluminum MIG Welding	C	A	C

HOT ⟶ **COLD**

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.

Portability

MACHINE ONLY WEIGHS 84 lb.

Weight is reduced by more than 50 percent compared to the Millermatic 252.

Optional EZ-Latch™ running gear

EZ-Latch running gears are available in single cylinder and dual cylinder models (included with package or can be ordered separately). Operators no longer need to lift machine AND running gear into the truck. Latches secure machine to running gear. Simply loosen the latch retaining knob and rotate latches to disengage machine from running gear for easy portability. Cylinder racks feature bottle forward technology for increased stability when moving along an incline and running gears have built-in storage for accessories. Dual cylinder model includes an elevated gun and cable rack to keep cables off the floor and tangle free.

Bottle forward technology

Dual cylinder model includes elevated gun and cable rack

Storage solution

Single cylinder running gear

Latches shown in open position without machine and in closed position securing the machine

Dual cylinder running gear

Specifications (Subject to change without notice.)

CC/CV | DC | 1 Phase

| Welding Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz				Wire Feed Speed	Wire Type and Diameter	Max. Open-Circuit Voltage	Dimensions	Net Weight
		208 V	240 V	KVA	KW					
20−350 A	230 A at 25.5 V, 60% duty cycle	31.4	27.1	16	12.8	50−800 ipm (1.3−20.3 m/min.)	Solid/stainless steel: .023−.045 in. (0.6–1.2 mm) Flux-cored: .030−.045 in. (0.8–1.2 mm) Aluminum: .035−.047 in. (0.9–1.2 mm)	87 VDC	**Machine only** H: 19.24 in. (489 mm) W: 13.75 in. (349 mm) D: 26.25 in. (667 mm) **Machine with running gear** H: 32 in. (813 mm) W: 13.75 in. (349 mm) D: 45 in. (1,143 mm)	**Machine only** 84 lb. (38 kg) **Machine with running gear** 148 lb. (67 kg)

CSA *Certified by Canadian Standards Association to both the Canadian and U.S. Standards.*

Control Panel
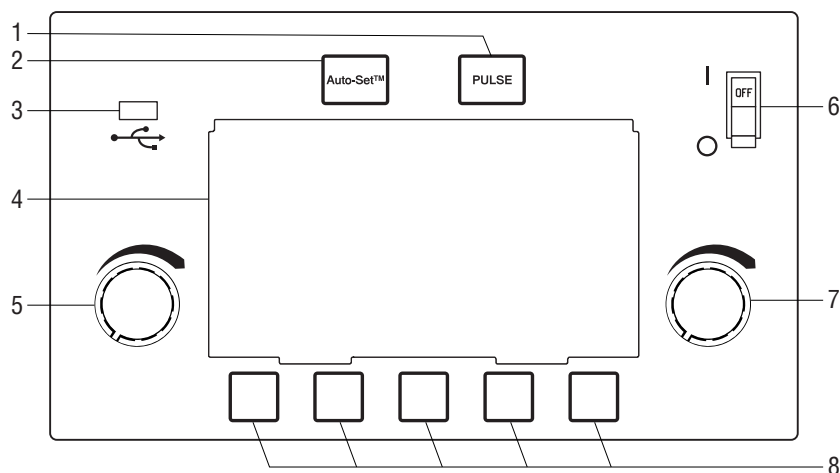
1. Pulse Button

2. Auto-Set Button

3. USB Port

4. Color LCD Display

5. Left Adjustment Knob
(Adjusts voltage, arc length or parameter values depending on mode.)

6. Power Switch

7. Right Adjustment Knob
(Adjusts wire feed speed or parameter values depending on mode.)

8. Soft Keys
(Multiple functions depending on screen displayed.)

Performance Data

MIG Duty Cycle Chart
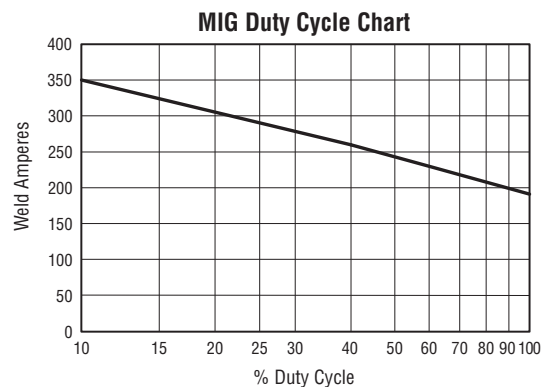
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Millermatic® 255 Packages

**907734
Machine only**

Comes complete with:

- Power source with 10 ft. (3 m) power cord
- 15 ft. (4.5 m) 300-amp Bernard® BTB MIG Gun for .035/.045 in. (0.9/1.2 mm) wire
- 10 ft. (3 m) work cable with clamp and 50 mm Dinse-style connector
- Flow gauge regulator and gas hose for argon or AR/CO_2 mix
- Extra contact tips
- .035/.045 in. (0.9/1.2 mm) reversible drive rolls
- Chain to secure gas cylinder
- Material thickness gauge

**951766
Machine with
running gear
package**

Comes complete with:

- Power source with 10 ft. (3 m) power cord
- 15 ft. (4.5 m) 300-amp Bernard® BTB MIG Gun for .035/.045 in. (0.9/1.2 mm) wire
- 10 ft. (3 m) work cable with clamp and 50 mm Dinse-style connector
- Flow gauge regulator and gas hose for argon or AR/CO_2 mix
- Extra contact tips
- .035/.045 in. (0.9/1.2 mm) reversible drive rolls
- EZ-Latch™ single-cylinder running gear
- Chain to secure gas cylinder
- Material thickness gauge

Genuine Miller® Accessories

**EZ-Latch™ Single Cylinder Running Gear
301449**
Running gear with a single cylinder rack and storage compartment. Latches secure machine to cart. Simply rotate latches to disengage machine from cart for easy portability.

**EZ-Latch™ Dual Cylinder Running Gear
951769**
Similar to above, but with a dual cylinder rack which allows operator to easily store two gas cylinders. Includes elevated gun and cable rack (shown below) to keep cables off the floor and tangle free.

**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 to easily store two gas cylinders. Gun and cable rack keeps cables off the floor and tangle free. *(Included with EZ-Latch dual cylinder running gear.)*

Protective Cover   301521
Features side pocket.

**Argon/Mixed Gas Regulator and Gas Hose
195050**

MIG Gun

**Bernard® BTB Replacement MIG Gun
Q3015AB8VMC** 15 ft. (4.5 m)
Industrial 300-amp MIG gun for .035/.045 in. (0.9/1.2 mm) wire.

Spool Guns

**Spoolmatic® 15A Spool Gun   195156
Spoolmatic® 30A Spool Gun   130831**
Ideal for aluminum welding jobs. Air-cooled, one-pound spool gun with 15-foot (4.6 m) or 30-foot (9.1 m) cable assembly. Rated at 200 amps at 100 percent duty cycle. For detailed information, see Spoolmatic literature M/1.73.

Spoolmate™ 200 Spool Gun   300497
Reliable and economical spool gun perfect for hobbyists and light fabricators who weld aluminum. Handles .030–.035 inch (0.8–0.9 mm) aluminum wires and .023–.035 inch (0.6–0.9 mm) steel/stainless steel wires. Rated at 160 amps, 60 percent duty cycle with 20-foot cable assembly. For detailed information, see Spoolmate literature M/1.47.

Optional Spoolmate™ 200 Head Tubes
300591 45-degree head tube
300592 9-inch extension head tube
243385 5-inch head tube

Push-Pull Gun

XR-Aluma-Pro™ Push-Pull Gun
300000 15 ft. (4.6 m)
300001 25 ft. (7.6 m)
Air-cooled gooseneck-style gun for .030–.047 inch (0.8–1.2 mm) aluminum. Rated at 200 amps at 100 percent duty cycle.

**U-Grooved Aluminum Drive Roll and
Accessory Kits for XR-Aluma-Pro Push-Pull Gun**
195311 .035 in. (0.9 mm)
195312 .040 in. (1 mm)
195313 .047 in. (1.2 mm)
Kits include Millermatic U-grooved drive rolls, nylon wire guides and contact tips.

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Consumables

For Bernard® MIG Gun

Centerfire™ Contact Tips *(10 per package)*
T-023   .023 in. (0.6 mm)
T-030   .030 in. (0.8 mm)
T-035   .035 in. (0.9 mm)
T-039   .039 in. (1.0 mm) steel and for
             .035 in. (0.9 mm) aluminum
             or stainless wires or metal cored
T-045   .045 in. (1.2 mm)
T-047AL .047 in. (1.2 mm) aluminum wire only
T-052   .052 in. (1.3 mm) steel and for
             .047 in. (1.2 mm) aluminum
             or stainless wires or metal cored

Nozzle   N-5800C
Screw-on copper, 5/8 in. orifice, flush

Nozzle Insulator Cap   10012

Diffuser   D-1
Large Centerfire gas diffuser

Replacement Jump Liners
QJL-2330   .023–.030 in. (0.6–0.8 mm)
QJL-3545   Std., .035–.045 in. (0.9–1.2 mm)
415-25   Phosphorous bronze liner for
                .047 in. (1.2 mm) aluminum wire

Replacement Liners
43015   .023–.030 in. (0.6–0.8 mm)
44115   Std., .035–.045 in. (0.9–1.2 mm)
415-45-03   Plastic liner for .047 in. (1.2 mm)
                aluminum wire

For Spoolmatic® Spool Guns and XR™ Push-Pull Guns

For Aluminum Wire

FasTip™ Contact Tips *(25 per package)*
206186   Heavy-duty, .030 in. (0.8 mm)
206187   Heavy-duty, .035 in. (0.9 mm)
206188   Heavy-duty, .040 in. (1.0 mm)
206189   Heavy-duty, 3/64 in. (1.2 mm)
206191   Heavy-duty, 1/16 in. (1.6 mm)

209026   Tapered, .030 in. (0.8 mm)
209027   Tapered, .035 in. (0.9 mm)
209029   Tapered, 3/64 in. (1.2 mm)
206030   Tapered, 1/16 in. (1.6 mm)

Screw-On Nozzles
199610   Brass, 1/2 in. orifice, tapered
199611   Brass, 3/4 in. orifice, straight
199612   Brass, 3/4 in. orifice, straight HD
199613   Brass, 5/8 in. orifice, tapered
199614   Brass, 5/8 in. orifice, tapered HD

199615   Copper, 1/2 in. orifice, tapered
199616   Copper, 3/4 in. orifice, straight
199617   Copper, 3/4 in. orifice, straight HD
198855   Copper, 5/8 in. orifice, tapered
199618   Copper, 5/8 in. orifice, tapered HD
207313   Copper, 5/8 in. orifice, tapered 15/16 OD
209035   Copper, 3/8 in. orifice, tapered
209036   Copper, 1/2 in. orifice, tapered

Bernard® Centerfire™ "T" Series Contact Tips
T-035AL .035 in. (0.9 mm)
T-047AL .047 in. (1.2 mm)
T-062AL 1/16 in. (1.6 mm)

Bernard® Centerfire™ Small Nozzles
NS-5818B   Brass, 5/8 in. ID, 1/8 in. tip recess
NS-1218B   Brass, 1/2 in. ID, 1/8 in. tip recess
NS-1218C   Copper, 1/2 in. ID, 1/8 in. tip recess
NS-1200B   Brass, 1/2 in. ID, flush tip
NST-3818B   Brass, 3/8 in. ID, 1/8 in. tip recess

For Spoolmate™ 200 Spool Gun

Note: Spoolmate 200 spool gun ships with (2) .030 in. and (2) .035 in. contact tips and (1) nozzle.

For Standard Heavy-Duty Head Tube

Contact Tips *(5 per package)*
199387 .030 in. (0.8 mm)
199388 .035 in. (0.9 mm)

Nozzle   050622

For Optional Head Tubes
Note: The same consumables are used on 45-degree, 5-inch, and 9-inch extension head tubes.

Contact Tips *(5 per package)*
199730 .024 in. (0.6 mm)
            (requires V-knurled drive roll **136135**)
186419 .030 in. (0.8 mm)
186406 .035 in. (0.9 mm)

Nozzle   186405

For Millermatic 255

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

V-Grooved Drive Roll Kits (solid wire)
204579 .030 and .035 in. (0.8 and 0.9 mm)
combination (reversible)
087131 .024 in. (0.6 mm)
079594 .030 in. (0.8 mm)
079595 .035 in. (0.9 mm)
079596 .045 in. (1.2 mm)

V-Knurled Drive Roll Kits (flux-cored or difficult-to-feed wire)
079606 .035 in. (0.9 mm)
079607 .045 in. (1.2 mm)
079608 .052 in. (1.3 mm)

U-Grooved Drive Roll Kits (aluminum wire)
044749 .035 in. (0.9 mm)
079599 .047 in. (1.2 mm)

Ordering Information

Power Source and Options	Stock No.	Description	Qty.	Price
Millermatic® 255	**907734**	208−240 V, 60 Hz		
Millermatic® 255 with Running Gear	**951766**	208−240 V, 60 Hz with single cylinder running gear		
Accessories				
EZ-Latch™ Single Cylinder Running Gear	**301449**	Running gear with single cylinder rack		
EZ-Latch™ Dual Cylinder Running Gear	**951769**	Running gear with dual cylinder rack and elevated gun and cable rack		
EZ-Latch™ Dual Cylinder Rack with Elevated Gun and Cable Rack	**301481**	Upgrade single cylinder rack to dual *(included with EZ-Latch dual cylinder running gear)*		
Protective Cover	**301521**	Features side pocket		
Argon/Mixed Gas Regulator and Gas Hose	**195050**			
MIG Guns				
Bernard® BTB Replacement MIG Gun	**Q3015AB8VMC**	15 ft. (4.5 m), 300 A, .035/.045 in. (0.9/1.2 mm) wire		
Spoolmatic® 15A Spool Gun	**195156**	15 ft. (4.6 m), 200 A, .030−.047 in. (0.8−1.2 mm) for aluminum wire		
Spoolmatic® 30A Spool Gun	**130831**	30 ft. (9 m), 200 A, .030−.047 in. (0.8−1.2 mm) for aluminum wire		
Spoolmate™ 200 Spool Gun	**300497**	20 ft. (6 m), 160 A, .030−.035 in. (0.8−0.9 mm) for aluminum wire, .023−.035 in. (0.6−0.9 mm) for steel/stainless steel wire		
Optional Spoolmate™ 200 Head Tubes		See page 6		
XR-Aluma-Pro™ Gun (air-cooled)	**300000** **300001**	15 ft. (4.6 m), 300 A at 100% duty cycle, .030−.047 in. (0.8−1.2 mm) for alum. wire 25 ft. (7.6 m), 300 A at 100% duty cycle, .030−.047 in. (0.8−1.2 mm) for alum. wire		
Consumables				
Contact Tips		See page 7		
Replacement Liners		See page 7		
Nozzles		See page 7		
Drive Rolls		See page 7 for gun drive rolls and machine drive rolls		

Date: **Total Quoted Price:**

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