Millermatic® 141

Quick Specs

Light Industrial Applications
Light Fabrication
Maintenance and Repair
Auto Body
Farm/Home

Processes
MIG (GMAW)
Flux-Cored (FCAW)

Weld Thickness
24 ga.–3/16 in. steel and 18–14 ga. aluminum

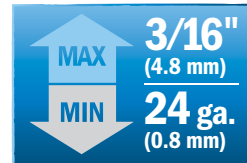**Input Power** 120 V, 20 A, 60 Hz, single-phase

Rated Output 90 A at 18.5 VDC, 20% Duty Cycle
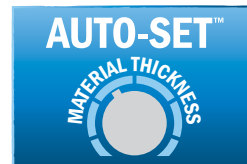40 A at 16 VDC, 100% Duty Cycle, **CSA**

New!

120 VOLT INPUT POWER
Uses common household power

MAX 3/16" (4.8 mm)
MIN 24 ga. (0.8 mm)
Weld capacity

AUTO-SET™
MATERIAL THICKNESS
Quick and easy setup

Auto-Set™ automatically provides the right settings to weld mild steel while **infinite voltage control** allows the flexibility to manually set your own parameters.
• Set the wire diameter, a blue light shows Auto-Set is activated
• Dial in the thickness of what you're welding
• Start welding with the exact parameters you need!

Angled cast-aluminum drive system with calibrated tension knob creates consistent feeding and easy setup for up to 15-foot MIG guns.

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

Auto Spoolgun 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. It's the best-starting machine in the small MIG machine category.

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 and can be set up to weld with .024–.030 inch (0.6–0.8 mm) solid wire and .030–.035 inch (0.8–0.9 mm) flux-cored wire.

Comes complete with:
- Power source
- 6.5-ft. (2 m) power cord with plug
- 10-ft. (3 m), M-100 MIG gun and cable assembly
- 10-ft. (3 m) work cable with clamp
- Argon and AR/CO_2 mix flow gauge regulator with gas hose
- Hobart® spool of .030-in. (0.8 mm) solid wire
- Two contact tips for .030-in. (0.8 mm) wire
- Quick Select™ drive rolls 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
- Material thickness gauge ➤ #229 895
- Velcro cord wraps

Note: Shielding gas and safety equipment not included.

TRUE BLUE® 3 YR. WARRANTY

Welder is warranted for 3 years, parts and labor.
Original main power rectifier parts are warranted for 5 years.
Gun warranted for 90 days, parts only.

Operation Modes

Auto-Set™ Mode
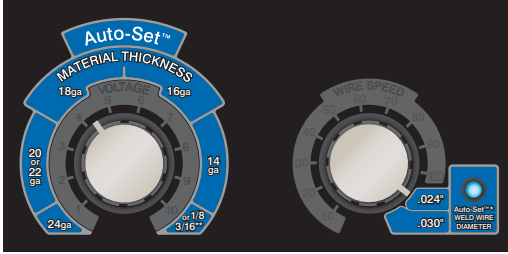
Auto-Set eliminates guesswork and saves you time on setup. Turn wire speed control fully clockwise to select Auto-Set mode, and set the wire diameter to either .024 or .030 in. The Auto-Set light indicates mode is activated. Then select material thickness using the Auto-Set control.

Use Auto-Set when you want the speed, convenience and confidence of pre-set controls. Auto-Set automatically sets your welder to the proper parameters. It's available for welding 24-gauge through 3/16-inch mild steel, and only works with .024 and .030 solid wires and C25 shielding gas (75% Argon, 25% CO_2).

Manual Mode
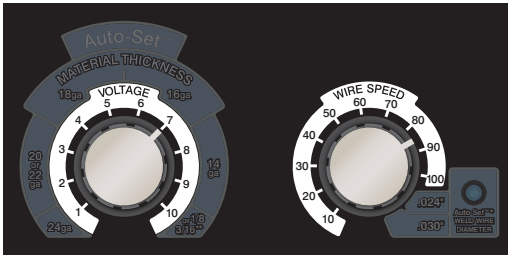
When welding outside of Auto-Set's capabilities, or if you prefer custom parameters, use manual mode. The parameter chart on the inside of the access door is an easy-to-use guide for determining your voltage and wire feed speed settings. Reference the white areas on the controls when welding in manual mode.

Specifications (Subject to change without notice.)

CV DC 1 Phase

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
		120 V	KVA	KW					
30 – 140 A	90 A at 18.5 VDC, 20% Duty Cycle	20	3.0	2.45	15 – 360 IPM (0.4 – 9.1 m/min.)	Solid: .024 – .030 in. (0.6 – 0.8 mm) Stainless: .024 – .030 in. (0.6 – 0.8 mm) Flux-Cored: .030 – .035 in. (0.8 – 0.9 mm)	30	H: 12.5 in. (318 mm) W: 11.25 in. (286 mm) D: 20.5 in. (521 mm)	51 lb. (23.1 kg)
	40 A at 16 VDC, 100% Duty Cycle, **CSA**	15	1.7	1.0					

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

Control Panel
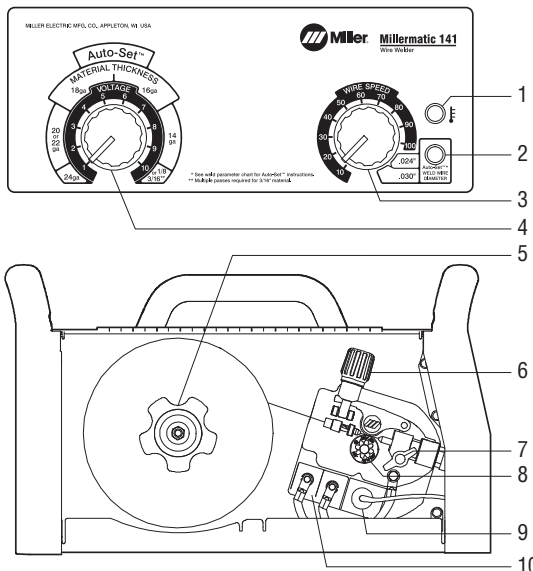
1. Over Temperature Light
2. Auto-Set Light
3. Wire Speed/Wire Diameter Control
4. Voltage/Material Thickness Control
5. Plastic Hub with Retaining Ring for 8-inch Spools (shaft also accepts 4-inch spools)
6. Calibrated Tension Knob
7. T-Knob (secures torch)
8. Drive Roll
9. Trigger Control Connector
10. Polarity Changeover Terminals

Note: Power switch and gas solenoid are on machine back panel.

Performance Data

DUTY CYCLE CHART

VOLT/AMP CURVES
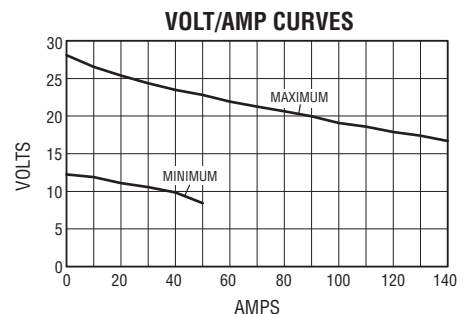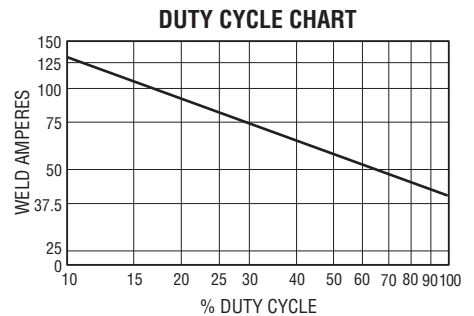
Miller.

Genuine Miller® Accessories

Spoolmate™ 100 Spool Gun #300 371
Direct-connect spool gun for Multimatic 200 and all Millermatic 140, 141, 180, 190, and 211 models. Handles .030–.035 inch (0.8–0.9 mm) aluminum (4043 only) and .023–.035 inch (0.6–0.9 mm) steel/stainless steel wires. Rated at 135 amps, 30 percent duty cycle. Includes 12-foot (3.7 m) cable assembly and custom carrying case.

Replacement/Optional MIG Gun
M-100 (Standard)
#248 282 10 ft. (3 m)
M-150 (Optional)
#249 040 12 ft. (3.7 m)
#249 041 15 ft. (4.5 m)
All ship with liner #194 011.

Millermatic Protective Cover   #301 262

Running Gear/ Cylinder Rack #301 239
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.

Purchase the Millermatic 141 package (#951 601) and receive the Millermatic 141 and Running Gear/Cylinder Rack (#301 239) packaged together!

Consumables (Order from Miller Service Parts.)

For M-100/M-150 Gun

Contact Tips
#087 299 .024 in. (0.6 mm)
#000 067 .030 in. (0.8 mm)
#000 068 .035 in. (0.9 mm)
#000 069 .045 in. (1.2 mm)

Contact Tip Adapter   #169 716

Replacement Liners
#194 010 .024 in.
#194 011 .030 – .035 in. (standard)
#194 012 .035 – .045 in.
15-foot length — trim to size needed.

Nozzle   #169 715
1/2-inch (13 mm) diameter orifice. Nozzle flush with contact tip (standard).

Gasless Flux-Cored Nozzle   #226 190
For use with self-shielding flux-cored wires. Improves visibility, eases access in tight corners, protects tip adapter/gas diffuser from spatter and from shorting to the workpiece. For use with the M-100 gun.

Drive Rolls

Quick Select™   #261 157
For .024-inch (0.6 mm) or .030/.035-inch (0.8/0.9 mm) solid wire, and .030/.035-inch (0.8/0.9 mm) flux-cored wire.

Dual Groove, V-Knurled   #202 926
For .030/.035-inch (0.8/0.9 mm) or .045-inch (1.2 mm) flux-cored wire.

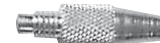**M-Series Gun Consumable Kits**
#234 607 .024 in. (0.6 mm)
#234 608 .030 in. (0.8 mm)
#234 609 .035 in. (0.9 mm)
Each kit contains ten contact tips, one nozzle, and one contact tip adapter.

For Spoolmate™ 100 Spool Gun

Contact Tips (5 per package)
#199 730 For .024-inch (0.6 mm) wire.
#186 419 For .030-inch (0.8 mm) wire.
#186 406 For .035-inch (0.9 mm) wire.

Nozzle   #186 405

Drive Roll (1) #186 413
For .030/.035-inch (0.8/0.9 mm) wire.

Push Roll (1) #186 414
For .030/.035-inch (0.8/0.9 mm) wire.

Ordering Information

Power Source and Options	Stock No.	Description	Qty.	Price
Millermatic® 141 **Millermatic® 141** with Running Gear/Cyl Rack	#907 612 #951 601	120 V, 60 Hz Power source packaged with #301 239 Running Gear/Cylinder Rack		
Guns				
Spoolmate™ 100 Spool Gun	#300 371	12 ft. (3.7 m). Includes custom carrying case		
M-100 Gun (Standard)	#248 282	10 ft. (3 m), .030–.035 in. (0.8–0.9 mm)		
M-150 Gun (Optional)	#249 040 #249 041	12 ft. (3.7 m), .030–.035 in. (0.8–0.9 mm) 15 ft. (4.5 m), .030–.035 in. (0.8–0.9 mm)		
Accessories				
Protective Cover	#301 262			
Running Gear/Cylinder Rack	#301 239			
Material Thickness Gauge	#229 895			
Flux-Cored Wire				
Solid Wire				
Shielding Gas Cylinder				
Helmet/Gloves/Scratch Brush				
Available Through Miller Service Parts				
Argon and AR/CO_2 Mix Flow Gauge Regulator	#268 546	Replacement standard regulator		
CO_2 Flow Gauge Regulator	#212 492	Required if using 100 percent CO_2 gas		
Contact Tips		See page 3		
Contact Tip Adapter		See page 3		
Replacement Liners		See page 3		
Nozzles		See page 3		
Gasless Flux-Cored Nozzle	#226 190			
Drive Rolls		See page 3		
M-Series Gun Consumable Kits	#234 607 #234 608 #234 609	.024 in. (0.6 mm) .030 in. (0.8 mm) .035 in. (0.9 mm)		

Date:　　　　　　　　　　　　　　　　　　　　　　　**Total Quoted Price:**

Distributed by:

Miller

The Power of Blue®