

# Millermatic® 141

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

## Quick Specs

### Light Industrial Applications

Light fabrication  
Maintenance and repair  
Auto body  
Farm/home

### Processes

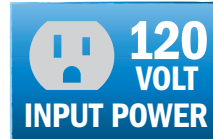
MIG (GMAW)  
Flux-cored (FCAW)

### Weld Thickness

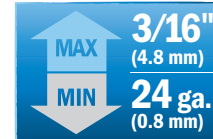
24 ga.–3/16 in. steel and 18–14 ga. aluminum

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

**Rated Output** 90 A at 18.5 VDC, 20% duty cycle  
40 A at 16 VDC, 100% duty cycle



Uses common household power



Weld capacity



Quick and easy setup

## IMPROVED! AccuLock™

Now with **NEW! MDX™-100 MIG gun with AccuLock™ MDX consumable system** featuring a dual-locked, front-loading liner that optimizes wire feedability.

**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.

**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. 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
- 10 ft. (3 m) MDX™-100 MIG gun
- 10 ft. (3 m) work cable with clamp
- 6.5 ft. (2 m) power cord with plug
- Flow gauge regulator and gas hose for argon or AR/CO<sub>2</sub> mix
- 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 ▶ 229895
- Hook-and-loop cord wraps

*Note: Shielding gas and safety equipment not included.*



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



**Miller Electric Mfg. LLC**  
An ITW Welding Company  
1635 West Spencer Street  
P.O. Box 1079  
Appleton, WI 54912-1079 USA

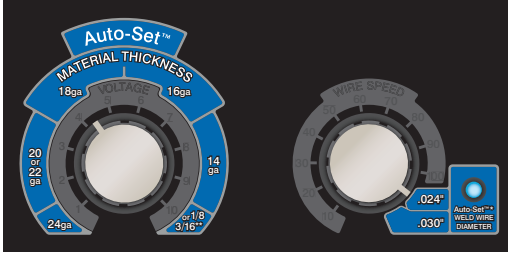
**Equipment Sales US and Canada**  
Phone: 866-931-9730  
FAX: 800-637-2315  
International Phone: 920-735-4554  
International FAX: 920-735-4125

**MillerWelds.com**



# Operation Modes

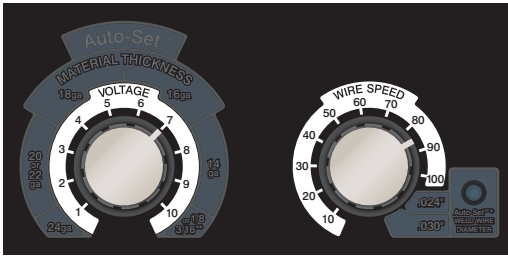
## Auto-Set™ Mode



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<sub>2</sub>).

## 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.



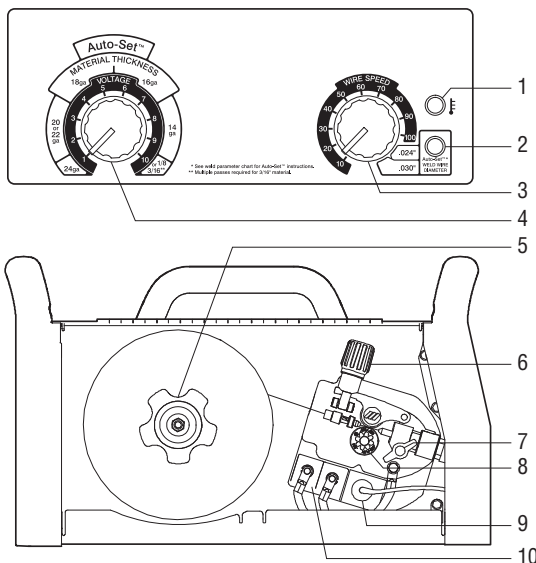
## Specifications (Subject to change without notice.)



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	15	1.7	1.0					

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

## Control Panel

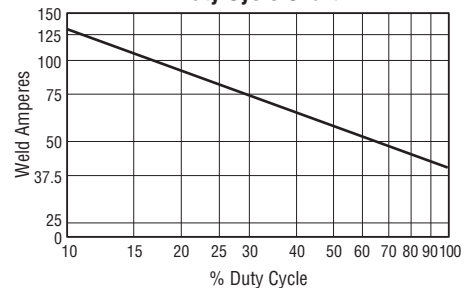


1. Over Temperature Light
2. Auto-Set Light
3. Wire Speed/Wire Diameter Control
4. Voltage/Material Thickness Control
5. Plastic Hub with Retaining Ring for 8-inch Spools (shaft also accepts 4-inch spools)
6. Calibrated Tension Knob
7. T-Knob (secures torch)
8. Drive Roll
9. Trigger Control Connector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

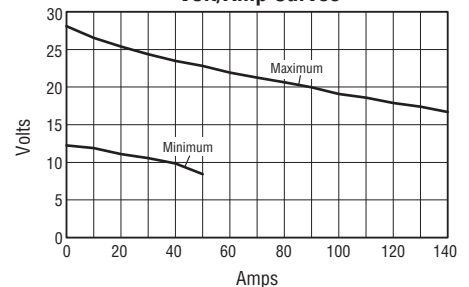
Note: Power switch and gas solenoid are on machine back panel.

## Performance Data

Duty Cycle Chart



Volt/Amp Curves



## Genuine Miller® Accessories



### MDX™-100 MIG Gun 1770028

100-amp MIG gun with Miller® AccuLock™ MDX consumables for .030–.035 in. (0.8–0.9 mm) wire. Includes 10 ft. (3 m) cable assembly.

- Install AccuLock contact tips with a single turn.
- AccuLock liner locks at front and back of gun to align with contact tip and power pin for a flawless wire feed path.
- Durable, ergonomic handle with overmolding improves grip and comfort.
- Ball-and-socket handle with rear swivel for increased gun maneuverability while reducing welder fatigue.



### Spoolmate™ 100 Spool Gun 300371

Direct-connect spool gun 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.



### Running Gear/ Cylinder Rack 301239

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 (951601) and receive the Millermatic 141 and running gear/cylinder rack (301239) packaged together!*



### Dual Cylinder Rack Conversion Kit and Tool Holder 301454

Converts running gear/cylinder rack (301239) from a single cylinder cart to a dual cylinder cart. Top bracket holds a variety of tools including a welder, adjustable wrench, screwdrivers, chipping hammer, wire brush and filler rod.



### Protective Cover 301262

## Consumables

### For MDX™-100 MIG Gun

#### Miller® AccuLock™ MDX Consumables

Smaller consumables and components to access hard-to-reach weldments.

#### Contact Tips (10 per package)

<b>T-M023</b>	.023 in. (0.6 mm)
<b>T-M030</b>	.030 in. (0.8 mm)
<b>T-M035</b>	.035 in. (0.9 mm)
<b>T-M045</b>	.045 in. (1.2 mm)
<b>T-M047</b>	3/64 in. (1.2 mm)

#### Nozzles

<b>NS-M1200B</b>	Brass, 1/2 in. ID, flush
<b>NS-M1200C</b>	Copper, 1/2 in. ID, flush
<b>NS-MFLX</b>	Gasless nozzle

#### Diffuser D-M100

#### Monocoil Replacement Liners (10 ft.)

<b>LM1A-10</b>	.023/.025 in. (0.6 mm)
<b>LM2A-10</b>	.030/.035 in. (0.8/0.9 mm)
<b>LM3A-10</b>	.035/.045 in. (0.9/1.2 mm)

*Note: Miller® FasTip™, M-Series and Bernard Centerfire™ diffusers and consumables are NOT compatible with MDX Series guns.*

### For Spoolmate™ 100 Spool Gun



#### Contact Tips (5 per package)

<b>199730</b>	.024 in. (0.6 mm)
<b>186419</b>	.030 in. (0.8 mm)
<b>186406</b>	.035 in. (0.9 mm)



#### Nozzle 186405



#### Drive Roll (1) 186413

For .030/.035-inch (0.8/0.9 mm) wire.



#### Push Roll (1) 186414

For .030/.035-inch (0.8/0.9 mm) wire.

### For Millermatic® 141



#### Quick Select™ Drive Roll 261157

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.

#### V-Knurled Dual-Groove Drive Roll 202926

For .030/.035-inch (0.8/0.9 mm) or .045-inch (1.2 mm) flux-cored wire.

# Ordering Information

Power Source and Options	Stock No.	Description	Qty.	Price
<b>Millermatic® 141</b>	<b>907612</b>	120 V, 60 Hz		
<b>Millermatic® 141</b> with Running Gear/Cyl Rack	<b>951601</b>	Power source packaged with 301239 running gear/cylinder rack		
<b>Guns</b>				
MDX™-100 Gun	<b>1770028</b>	10 ft. (3 m), .030–.035 in (0.8–0.9 mm) wire		
Spoolmate™ 100 Spool Gun	<b>300371</b>	12 ft. (3.7 m). Includes custom carrying case		
<b>Accessories</b>				
Running Gear/Cylinder Rack	<b>301239</b>			
Dual Cylinder Rack Conversion Kit and Tool Holder	<b>301454</b>			
Dual Cylinder Rack Cart	<b>951770</b>	Includes running gear/cylinder rack 301239 and dual cylinder rack conversion kit 301454. Must be assembled together		
Protective Cover	<b>301262</b>			
Material Thickness Gauge	<b>229895</b>			
Flow Gauge Regulator for Argon or AR/CO <sub>2</sub> Mix	<b>31-50-580-6</b>	Replacement standard regulator		
Flow Gauge Regulator for CO <sub>2</sub>	<b>31-50-320</b>	Required if using 100 percent CO <sub>2</sub> gas		
Flux-cored Wire				
Solid Wire				
Shielding Gas Cylinder				
Helmet/Gloves/Scratch Brush				
<b>Consumables</b>				
Contact Tips		See page 3		
Nozzles		See page 3		
Diffuser		See page 3		
Monocoil Replacement Liners		See page 3		
Drive Rolls		See page 3		

Date:

Total Quoted Price:

Distributed by:

