

Spectrum® 875

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Air Plasma
Cutting and Gouging 

Quick Specs

Industrial Applications

Construction
Maintenance/Repair
Fabrication

Processes

Air Plasma Cutting
and Gouging

Rated Input

208 or 230 V, 1-Phase

Rated Output

60 A at 140 VDC,
Duty Cycle at 40° C (104° F):
50% (230 V), 40% (208 V)

Cutting Capability

Rated: 7/8 in (22.2 mm)
Sever: 1-1/4 in (31.8 mm)

System Weight

With 20 ft torch: 52 lb (23.6 kg)
With 50 ft torch: 61 lb (27.7 kg)

Required Input Pressure/Flow

6.75 SCFM (191 L/min) at
90 PSI MIN (621 kPa)
120 PSI MAX (828 kPa)

The Power of Blue.®

LVC™ line voltage compensation provides peak performance power under variable input voltage conditions (187–264 V) for steady and cleaner ending cuts.

Wind Tunnel Technology™ prevents abrasive dust and particles from damaging internal components.

Fan-On-Demand™ cooling system operates only when needed. In dirty or dusty environments, this feature reduces the amount of airborne dust/dirt pulled through the unit.

Consumables storage compartment provides convenient access to consumables and parts.

Auto Postflow calculates the length of postflow time based on the amount of cutting time to optimize consumable life and eliminate excessive air usage.

Patented Ultra-Quick Connect™ torch and work cable offers the fastest plasma torch and work cable connection and removal in the industry.

ICE-60T torch offers improved plasma flow characteristics for increased cutting speeds and longer consumable set life.

The ICE-60T torch includes a **drag shield** that permits the operator to drag the torch on the workpiece while cutting at full output, which increases operator comfort and makes template cutting easier.

Cable management straps provide a method for controlling cables during transport or storage.



Spectrum Plasma Cutters offer reliability and performance that others can't match! See more at MillerWelds.com/reliable

New!



Comes Complete With:

- ICE-60T hand-held torch with 20 ft (6 m) or 50 ft (15.2 m) cable. Extra consumables supplied
- Heavy-duty work clamp with 20 ft (6 m) or 50 ft (15.2 m) cable
- 10 ft (3 m) power cord

Auto-Retire™ Technology provides ultimate customer convenience by automatically controlling the pilot arc when cutting expanded metal or multiple pieces of metal. The pilot arc will switch in and out as fast as needed when cutting expanded metal and provides maximum power for cutting thicker metal — all automatically! No need for manual re-triggering which reduces user hand fatigue.

Starts without high-frequency so it will not interfere with or damage controls or computers.

Automatic Air Regulation — For end user convenience, the unit has no pressure gauge or manual regulator knob. The unit automatically adjusts the air pressure to the torch for optimum cutting and gouging. No adjustments necessary.

Can be powered by any Miller engine drive with generator power at or above 10 kW (e.g. Bobcat™) or equivalent competitive equipment. See page 3 for engine drive compatibility and recommended settings.

TRUE BLUE
3YR. WARRANTY

Power source is warranted for 3 years, parts and labor.
ICE torch is warranted for 1 year, parts and labor.

MADE IN **USA**
APPLETON, WI



Miller Electric Mfg. Co.
An Illinois Tool Works Company
1635 West Spencer Street
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

Web Site
www.MillerWelds.com

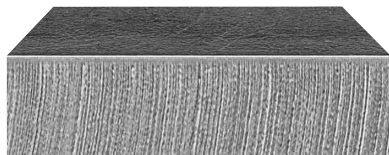


Specifications (Subject to change without notice.)

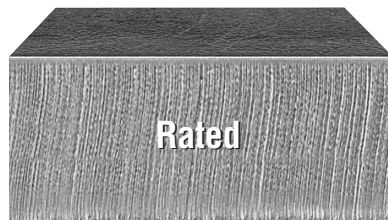


Rated Output	Max. Open-Circuit Voltage	Amps Input at Rated Output, 50/60 Hz, 1-Phase				Plasma Gas	Dimensions	System Weight
		208 V	230 V	KVA	KW			
60 A at 140 VDC, 50% duty cycle (230 V) 40% duty cycle (208 V)	400 VDC	47	42	9.9	9.8	Air or Nitrogen only	H: 13-1/2 in (343 mm) W: 8-3/4 in (222 mm) D: 18-1/2 in (470 mm)	With 20 ft (6.1 m) Torch Net: 52 lb (23.6 kg) Ship: 57 lb (25.9 kg) With 50 ft (15.2 m) Torch Net: 61 lb (27.7 kg) Ship: 66 lb (29.9 kg)

Mild Steel Cutting Capability (Thickness to scale.)



1/2 in (12.7 mm) at 27 IPM



7/8 in (22.2 mm) at 10 IPM

Mild Steel Recommended Cut Speed

Thickness	Approximate Travel Speeds*
1/4 in (6.4 mm)	86 IPM (2184 mm/min)
3/8 in (9.5 mm)	41 IPM (1041 mm/min)
1/2 in (12.7 mm)	27 IPM (686 mm/min)
3/4 in (19.0 mm)	14 IPM (363 mm/min)
7/8 in (22.2 mm)	10 IPM (254 mm/min)

Note: Recommended maximum piercing capacity for hand-held applications is 7/16 in (11 mm).

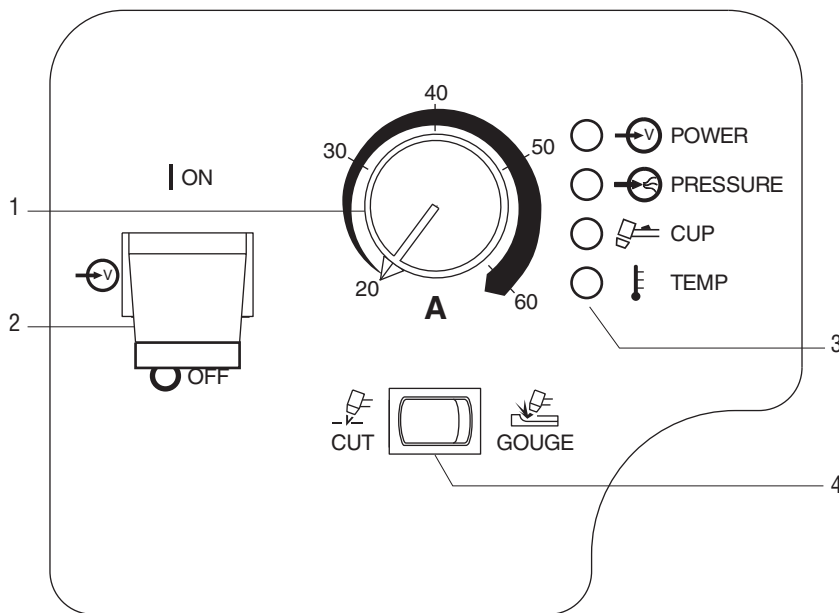
Maximum Sever cut of 1-1/4 in (32 mm) at 3 IPM.

For aluminum and other metals with high thermal conductivity, cutting capabilities will be derated as much as 30%.

* Travel speeds are approximately 80% of maximum.

Rated cut capacity is based on traveling approximately 10 inches per minute to achieve a steady, precise cut. This is the key rating that should meet or exceed your typical cutting thickness requirements.

Control Panel



1. Output Control
2. Power Switch
3. Status and Troubleshooting Lights
4. Process Control

Engine Drive Compatibility

Equipment	Generator Power	Mild Steel Cut Capacity (Approximate)	Spectrum Output Amp Setting
Bobcat™ 250, Trailblazer® 302 & 275 DC	11 kW	1/2 in	45 A, 240 V, full KVA plug
Bobcat™ 225	10.5 kW	1/2 in	45 A, 240 V, full KVA plug
PipePro® 304, PRO 300	12 kW	5/8 in	50 A, 240 V, full KVA plug
Big 40® CC/CV	15 kW (optional)	7/8 in	60 A, 240 V, full KVA plug
Big Blue® 500 CC/CV	20 kW (optional)	7/8 in	60 A, 240 V, full KVA plug

Note: LP powered machines need to be derated by 15%.

Genuine Miller Accessories



No. 30B Economy Running Gear and Cord Wrap #300 511

Economical running gear with angle for easy front panel access provides storage for gloves and tools.



Protective Cover #300 388

Mildew-resistant, odor-free, waterproof cover protects your machine's finish. Cable management pouches provide storage for 20 ft (6.1 m) torch and work cables.



Female Receptacle



Adapter Cord, Full KVA #300 158

NEMA 14-50P to NEMA 6-50R. Adapts engine drive 120/240 V plug to Spectrum® 240 V plug.



RTI Filter and Bracket Kit #300 491

Dryer will remove water, dirt and oil as small as one micron with 99.9% efficiency. Can be mounted on plasma cutter or on wall. Install as close as possible to point of air consumption.

Miller Service Parts Accessories

The following accessories must be ordered from Miller Service Parts.

RTI Replacement Filter Element #212 771

For kit #300 491.



ICE-60T Consumable Kit #239 086

Consumable kit includes 3 standard

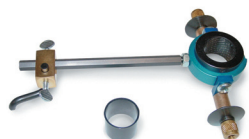
electrodes, 3 standard tips, 2 extended tips, 1 gouge tip, 1 gouge shield, 1 drag shield, 1 retaining cup, 3 o-rings and silicone grease.



Plasma Standoff Roller Guide #194 883

Helps maintain recommended standoff distance

to maximize cutting performance and improve tip life.



Plasma Circle-Cutting Guide #195 981

Cut straight lines or circles up to 12 inch diameter with ease.



Suction/Magnetic Pivot Base #195 979

Add this to your cutting guide for convenient attachment to all flat surfaces. The extended arm accommodates holes up to 30 inch diameter.



Torch Cable Cover Kits

#239 642 20 ft (6.1 m)
#231 867 25 ft (7.6 m)
#231 868 50 ft (15.2 m)



In-Line Air Filter Kit #228 926

Mounts to the back of the Spectrum® 375 X-TREME™, 375, 625 X-TREME™, 875, 2050, 1000, 1251.

Includes male and female 1/4 in NPT quick disconnect

fittings and hose for easy on/off connection. The replaceable filter element filters to .85 microns.

In-Line Air Filter Replacement Element #228 928

For in-line filter #228 926.

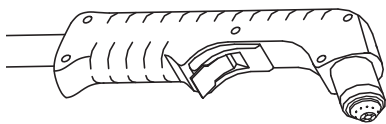


Miller MIG Gloves

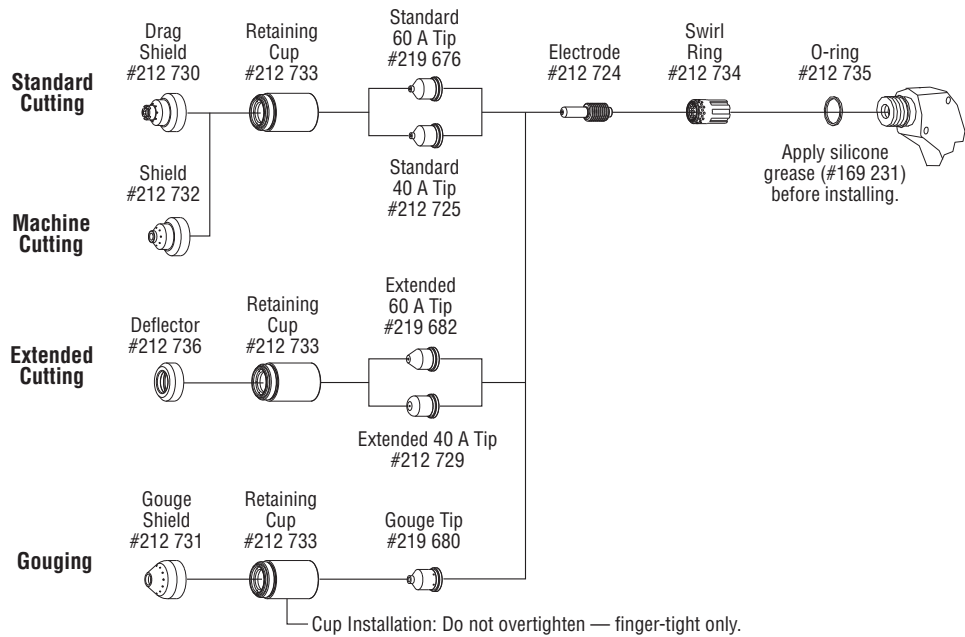
#227 821 Small
#227 822 Medium
#227 823 Large
#227 824 X-Large

For medium-duty MIG welding and metalworking tasks. Combination of durable top grain cowhide for abrasion-resistant pig split back sewn with Kevlar® thread.

Replacement Torch and Consumables



ICE-60T Hand-Held Torch
#234 132 20 ft (6.1 m)
#234 134 50 ft (15.2 m)



Ordering Information

Power Source and Options	Stock No.	Description	Qty.	Price
Spectrum® 875 208/230V, Single-phase <i>Note: Each Spectrum unit includes extra consumables (2 standard electrodes, 2 standard tips, 1 extended tip and 1 deflector).</i>	#907 390-01-1* #907 390-01-2*	With ICE-60T, 20 ft (6.1 m) hand-held torch With ICE-60T, 50 ft (15.2 m) hand-held torch		
Replacement Torches				
ICE-60T Hand-Held Torch	#234 132 #234 134	20 ft (6.1 m). <i>Order from Miller Service Parts</i> 50 ft (15.2 m). <i>Order from Miller Service Parts</i>		
Consumables		See above. <i>Order from Miller Service Parts</i>		
Accessories				
No. 30B Economy Cart	#300 511			
Protective Cover	#300 388			
Adapter Cord, Full KVA	#300 158	Adapts engine drive 120/240 V plug to Spectrum® 240 V plug		
RTI Filter and Bracket	#300 491			
RTI Filter Replacement Element	#212 771	For kit #300 491. <i>Order from Miller Service Parts</i>		
ICE-60T Consumable Kit	#239 086	<i>Order from Miller Service Parts</i>		
Plasma Standoff Roller Guide	#194 883	<i>Order from Miller Service Parts</i>		
Plasma Circle-Cutting Guide	#195 981	<i>Order from Miller Service Parts</i>		
Suction/Magnetic Pivot Base	#195 979	<i>Order from Miller Service Parts</i>		
Torch Cable Cover Kits		See page 3. <i>Order from Miller Service Parts</i>		
In-Line Air Filter Kit	#228 926	<i>Order from Miller Service Parts</i>		
In-Line Air Filter Replacement Element	#228 928	For in-line filter #228 926. <i>Order from Miller Service Parts</i>		
Miller MIG Gloves		See page 3. <i>Order from Miller Service Parts</i>		

Date:

Total Quoted Price:

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

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