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Air Plasma Cutting and Gouging



Spectrum[®] 3080

Quick Specs Industrial Applications Heavy Fabrication Manufacturing **Processes** Air Plasma Cutting and Gouging Rated Output 80 A at 140 VDC, 60% Duty Cycle, 3-Phase 80 A at 140 VDC, 40% Duty Cycle, 1-Phase

 Cutting Capability
 Rated — 7/8 in (22 mm)

 Quality — 1-1/4 in (32 mm)
 Sever — 1-1/2 in (38 mm)

Plasma Gas Flow/Pressure 7.2 CFM (207 L/min) at 80 PSI (483 kPa)

Weight 74 lb (33.6 kg)

The Power of Blue.

Auto-Link[®] automatically links unit to the primary input voltage being applied — 208, 230 or 460 volts (±10%), single- or three-phase. (Not included on CE model.)

Consumables storage compartment provides convenient access to consumables and parts.

Wind Tunnel Technology[™] prevents abrasive dust and particles from damaging internal components. Also, the **Fan-On-Demand**[™] cooling system only operates when needed. In dirty or dusty environments, this feature reduces the amount of airborne dust/dirt pulled through the unit.

Miller's rugged **ICE-80C torch** include an epoxy cup that outlives typical ceramic parts and is virtually unbreakable. Hand-held and machine-held torch models available.

The ICE torch includes a **drag shield** that attaches to the cup and holds the tip 1/8 in (3.2 mm) off the workpiece. This permits the operator to drag the torch on the workpiece while cutting at full output, which increases operator comfort and makes template cutting easier.

Superior gouging capability provides an extremely long gouging arc for those hard-to-reach, heavy applications. Plasma arc gouging produces less dust, smoke and other harmful environmental hazards compared to carbon arc gouging.





Power source is warranted for 3 years, parts and labor. ICE torches are warranted for one year, parts and labor.



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Comes Complete With:

- ICE-80C hand-held torch with 25 ft (7.6 m) or 50 ft (15.2 m) cable, or ICE-80CM machine-held torch with 50 ft (15.2 m) cable. Extra consumables supplied
- 20 ft (6.1 m) work cable with clamp
- 10 ft (3 m) power cord

Portable powerful package that cuts up to 1-1/4 in (32 mm) but weighs only 74 lb (33.6 kg).

Trigger hold switch allows cutting arc control without triggering. Provides convenience and comfort by enabling operator to keep clear of extremely hot areas while gouging or cutting for long periods of time.

Built-in gas/air filter/regulator is housed inside the power source for protection from transportation damage. A standard air connection is also provided on the back panel for easy gas or air hookup.

Postflow cooling circuit cools the consumables and torch with postflow air after you release the trigger. This feature extends life of torch and consumables.

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



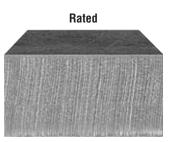
Specifications (Subject to change without notice.)



Rated Output	Max. Open- Circuit Voltage	Amps 230 V	Input at 400 V	Rated O 460 V	utput, { KVA	50/60 Hz KW	Rated Cutting Capacity	Plasma Gas	Plasma Gas Flow/ Pressure	Dimensions	Net Weight
80 A at 140 VDC, 60% duty cycle, 3-Phase	350 VDC	35	19	18	14.1	13.4	7/8 in (22 mm)	Air or Nitrogen	7.2 CFM (207 L/min)	H: 17 in (432 mm) W: 12-1/2 in (318 mm)	74 lb (33.6 kg)
80 A at 140 VDC, 40% duty cycle, 1-Phase		63	—	_	14.6	13.9	at 10 IPM	only	at 80 PSI (483 kPa)	D: 24 in (610 mm)	

Cutting Capability (Thickness to scale.)

MILD STEEL



7/8 in (22 mm)*

Rated Cutting Capacity

10 inches per minute (minimum speed at which an operator achieves a smooth, steady cut using a hand-held torch).



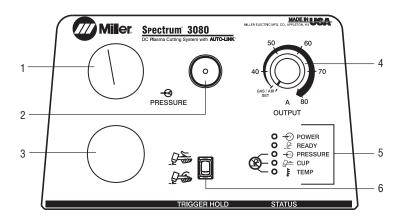
1-1/4 in (32 mm)*

Maximum Quality Cutting Capacity Good-quality cut achieved at lower speeds. Sever

1-1/2 in (38 mm)*

Sever Cut Capacity Maximum cut achieved in ideal conditions. **Using shielded consumables.*

Control Panel



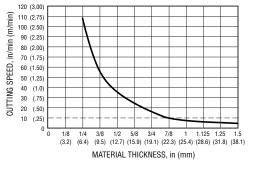
- 1. Gas/Air Pressure Gauge
- 2. Gas/Air Pressure Adjustment Control
- **3.** Torch Connection Receptacle
- 4. Output Control
- **5.** Status and Troubleshooting Lights
- 6. Trigger Hold Switch

Cutting Performance

To determine the maximum rated cutting thickness, follow the dashed line from the 10 IPM (inches per minute) point on the cutting chart. The point at which this line intersects the cutting curve determines the maximum recommended production cutting thickness of the unit.

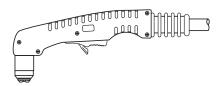
Note: The rating is based on 10 IPM because this is the minimum speed at which the operator achieves a smooth, steady cut when using a hand-held torch.

CUTTING SPEED VS. MATERIAL THICKNESS

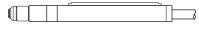




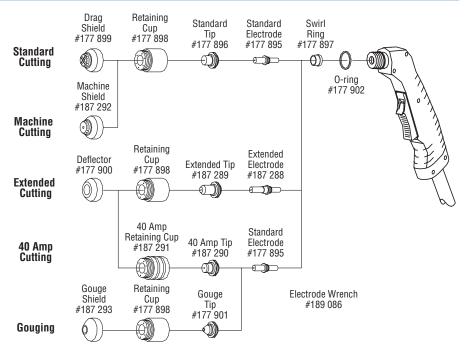
Replacement Torch and Consumables



ICE-80C Hand-held Torch #176 830 25 ft (7.6 m) **#176 832** 50 ft (15.2 m)



ICE-80CM Machine-held Torch #176 834 50 ft (15.2 m)



Genuine Miller Accessories

Cable Covers

#118 677 15 ft (4.6 m) torch **#118 678** 30 ft (9 m) torch Protect hose and cables. Feature nonconductive zipper and are easily removed if necessary.

Remote Pendant Control #180 605

Provides remote start and stop of the arc for the ICE-80CM machine-held torch.



Motor Guard Air Filter #042 306

This filter is equipped with a mounting bracket that allows installation on the top, side, or rear panel of most plasma cutters. The filter is

equipped with a 1/4 in NPT port to match the fittings on most plasma systems; it has a rated airflow of over 45 SCFM.

Replacement Filter Element #042 312 Carton of four filters for use with motor guard air filter **#042 306**. Order from Miller Service Parts.



Plasma Circle-Cutting Guide #195 981 ICE 25C, 50C, 55C, 80C Cut straight lines or circles up to 12" 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" diameter.



No. 30A Economy Cart with Cord Wrap #195 093

For Spectrum Thunder, 375 Cutmate, 2050 and 3080. This economical running gear provides mobility with an angle for easy front panel access and extra storage space.

RTI Filter/Air Dryer #195 188

Mounts to the back of most plasma cutters. Features include a heavy-duty metal bowl, automatic drain and easy spin-off of elements. Filter is equipped with a 1/4 in NPT port to match the fittings on most plasma systems.

RTI Replacement Filter Element #212 771 Order from Miller Service Parts.



Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
Spectrum® 3080 Single-/Three-phase, 208/230/460 V Note: Each Spectrum unit includes extra consumables (2 standard electrodes, 2 standard tips, 1 ext. electrode, 1 ext. tip and 1 deflector).	#903 793-01-2* #903 793-01-3* #903 793-02-1*	With 25 ft (7.6 m) ICE-80C hand-held torch With 50 ft (15.2 m) ICE-80C hand-held torch With 50 ft (15.2 m) ICE-80CM machine-held torch (Machine torch package includes remote pendant control #180 605)		
Spectrum® 3080 Three-phase, 400 V CE Note: Each Spectrum unit includes extra consumables (2 standard electrodes, 2 standard tips, 1 ext. electrode, 1 ext. tip and 1 deflector).	#903 795-01-1** #903 795-01-2** #903 795-02-1**	With 25 ft (7.6 m) ICE-80C hand-held torch With 50 ft (15.2 m) ICE-80C hand-held torch With 50 ft (15.2 m) ICE-80CM machine-held torch		
Replacement Torches				
ICE-80C Hand-held Torch	#176 830 #176 832	25 ft (7.6 m) 50 ft (15.2 m)		
ICE-80CM Machine-held Torch	#176 834	50 ft (15.2 m)		
Torch Consumables	See page 3			
Accessories				
Cable Covers	#118 677 #118 678	15 ft (4.6 m) 30 ft (9 m)		
Remote Pendant Control	#180 605			
Motor Guard Air Filter	#042 306			
Replacement Filter Element	#042 312	Order from Miller Service Parts		
Plasma Circle-Cutting Guide	#195 981	ICE 12C, 25C, 50C, 55C, 80C		
Suction/Magnetic Pivot Base	#195 979			
No. 30A Economy Cart	#195 093			
RTI Filter/Air Dryer	#195 188			
RTI Filter Replacement Element	#212 771	Order from Miller Service Parts		
Miscellaneous				
Bottled Air				
3/8 in Diameter Air Hose				
Air Hose Fittings				

Date:

Total Quoted Price:

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

** CC 50/60 Hz models with CE Specifications are manufactured according to the Standards IEC-974-1 and EN-60974-1.



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