

Spectrum® 375 X-TREME™

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**Air Plasma
Cutting** 

Quick Specs

Industrial Applications

Maintenance
Light Construction
Prototyping
Body Shops
Fabrication
HVAC Ductwork

Process

Air Plasma Cutting

Rated Output

27 A at 92 VDC,
35% Duty Cycle

Cutting Capability

Rated: 3/8 in (10 mm)
Quality: 1/2 in (13 mm)
Sever: 5/8 in (16 mm)

Weight

With torch: 18 lb (8.2 kg)

Required Input Pressure/Flow

4.5 SCFM (128 L/min) at
90 PSI MIN (621 kPa)
120 PSI MAX (828 kPa)

The Power of Blue.®

X-TREME Versatility — Auto-Line™ provides state-of-the-art flexibility to the end user. The Auto-Line circuitry automatically connects to 115–230 VAC, single-phase power, 50/60 Hz, without removing the covers to relink the power source. No longer is there a concern if you have the correct machine for the shop or job site.

New!

X-TREME Protection — X-CASE™ provides ultimate protection during transport and storage. Additional space ideal for MVP plugs, consumable box, as well as gloves, eye protection, etc.

X-TREME Portability — Portable in the shop or at the job site — at 18 lb the shoulder strap allows the end user to easily move from location to location.

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

LED indicators for pressure, power, cup and temperature allow faster troubleshooting, eliminating unnecessary downtime.

Includes **heavy-duty clamp**.

Ergonomic design ICE-27T torch with increased comfort, safety trigger, and improved swirl ring and cup.

Factory pre-set air — no need to adjust the air pressure! The unit automatically regulates the air pressure to the torch.



Comes Complete With:

- ICE-27T hand-held torch with 12 ft (3.7 m) cable
- Heavy-duty work clamp with 12 ft (3.7 m) cable
- X-CASE™ provides protection in transport and storage
- MVP™ plugs 5-15P (115 V, 15 A), 6-50P (230 V, 50 A)
- Consumables box with 3 electrodes, 3 tips and air fitting
- 10 ft (3 m) MVP power cord
- Cable Management System (X-CASE package only)

LVC™ line voltage compensation provides peak performance power under variable conditions (power fluctuations up to ±15%) for steady cuts and cleaner ending cuts.

Gas/air filter/regulator inside the power source provides added protection during transportation. Standard air connection on back panel for easy gas or air hookup.

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



Miller's exclusive **multi-voltage plug (MVP™)** allows connection to 115 or 230 V receptacles without tools — choose the plug that fits the receptacle and connect it to the power cord.

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
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International FAX: 920-735-4125

Web Site
www.MillerWelds.com



Specifications (Subject to change without notice.)

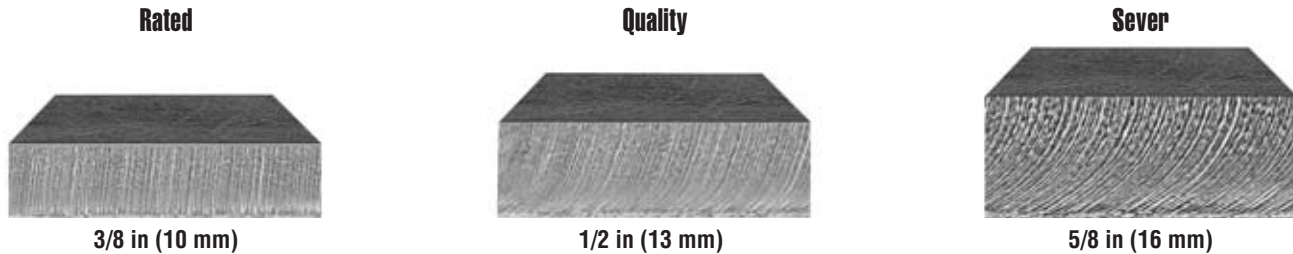


Input Power	Rated Output	Amps Input at Rated Output, 50/60 Hz, 1-Phase	KVA	KW	Plasma Gas	Dimensions	Weight with Torch
240 V	27 A at 92 VDC, 35% duty cycle	13.9	3.4	3.2	Air or Nitrogen only	H: 9 in (229 mm) W: 5-1/2 in (140 mm) D: 13-1/4 in (337 mm)	Net: 18 lb (8.2 kg) Ship: 23 lb (10.5 kg)
120 V (20 A)	27 A at 92 VDC, 20% duty cycle	28.8	3.4	3.2			
120 V (15 A)	20 A at 88 VDC, 35% duty cycle	20.6	2.5	2.3			

*Recommended 30 A branch circuit for maximum performance. Performance on 20 A branch service may be limited due to breaker/line fuse. Reducing unit output amperage will minimize nuisance breaker/line fuse tripping.

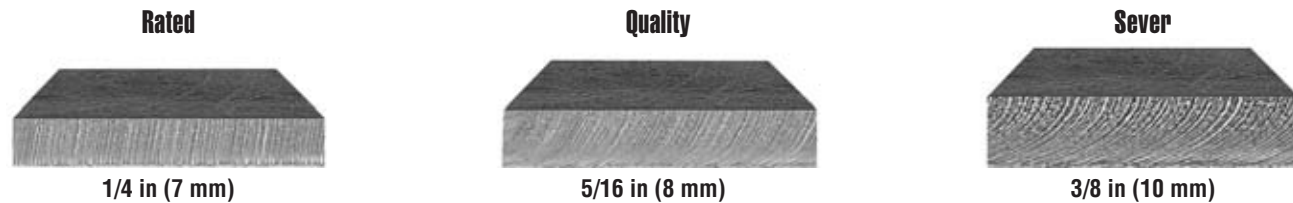
Mild Steel Cutting Capability (Thickness to scale.)

Cutting at 27 Amps (115 V, 20 A service with 5-20P MVP or 230 V 6-50P MVP)



Note: Recommended maximum piercing capacity for hand-held applications is 3/16 in (4.8 mm).

Cutting at 20 Amps (115 V, 15 A service with 5-15P MVP)



Rated Cutting Capacity

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

Note: Recommended maximum piercing capacity for hand-held applications is 1/8 in (3.2 mm).

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

Maximum Quality Cutting Capacity

Good-quality cut achieved at lower speeds.

Sever Cut Capacity

Maximum cut achieved in ideal conditions.

Cutting Performance

Mild Steel

Maximum Cutting Speeds at 27 Amps Output

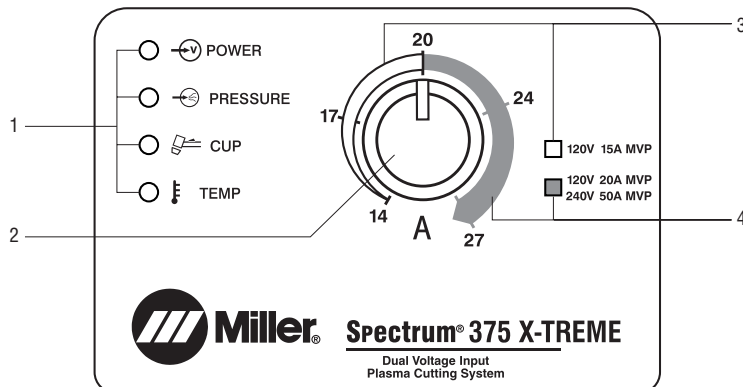
Thickness	Approximate Travel Speeds*
16 ga (1.5 mm)	188 IPM (4775 mm/min)
3/16 in (4.8 mm)	40 IPM (1016 mm/min)
1/4 in (6.4 mm)	24 IPM (610 mm/min)
3/8 in (9.5 mm)	14 IPM (256 mm/min)
1/2 in (12.7 mm)	6 IPM (152 mm/min)

Maximum Cutting Speeds at 20 Amps Output

Thickness	Approximate Travel Speeds*
16 ga (1.5 mm)	162 IPM (4115 mm/min)
3/16 in (4.8 mm)	26 IPM (660 mm/min)
1/4 in (6.4 mm)	18 IPM (457 mm/min)
3/8 in (9.5 mm)	7 IPM (178 mm/min)

* Travel speeds are approximately 80% of maximum.

Control Panel



1. Status and Troubleshooting Lights
2. Output Control
3. Range for 120 V, 15 A, 5-15 P, MVP™
4. Range for 120 V, 20 A, 5-20 P, MVP™ or 230 V, 50 A, 6-50 P, MVP™



Engine Drive Compatibility

Equipment	Generator Power Watts (Continuous)	Steel Cut (Approximate)	Spectrum Output Amp Setting
Bobcat™ 225	9500	3/8 in	27 A, 240 V, full KVA plug
Bobcat™ 250	9500	3/8 in	27 A, 240 V, full KVA plug
Trailblazer® 302	9500	3/8 in	27 A, 240 V, full KVA plug
Trailblazer® Pro 350 D	12,000	3/8 in	27 A, 240 V, full KVA plug
PRO 300	12,000	3/8 in	27 A, 240 V, full KVA plug
Blue Star® 185	5500	3/8 in	27 A, 240 V, full KVA plug

Genuine Miller Accessories



X-CASE™ #300 184

Sturdy case provides ultimate protection for transport and storage. Also

features convenient top carrying handle and side recessed hand grips. Store the Spectrum® 375 X-TREME™, accessories and gear in this generous case to be ready to go at any time. Dimensions: 13 in H x 10-1/2 in W x 30-5/8 in D (330 x 267 x 778 mm).



Cable Management System #228 941

Controls cables while in transit. Adjustable nylon web straps with quick-release clips and Velcro® straps keep cables bundled together. System quickly screws onto Spectrum® 375 X-TREME™ case. *Order from Miller Service Parts.*



ICE-27T Consumable Kit #222 939

Consumable kit includes 5 electrodes, 5 tips, 1 swirl ring,

1 retaining cup, 1 o-ring and silicone grease. *Order from Miller Service Parts.*



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.



Adapter Cord, Full KVA #300 158 Field NEMA 14-50P to NEMA 6-50R. Adapts engine drive 120/240 V plug to Spectrum® 240 V plug.



In-Line Air Filter Kit #228 926

Mounts to the back of the Spectrum® 375 X-TREME™, 375, 625, 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. *Order from Miller Service Parts.*

In-Line Air Filter Replacement Element #228 928

Includes 1 replacement filter for in-line filter #228 926. *Order from Miller Service Parts.*



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 palm and abrasion-resistant pig split back sewn with Kevlar® thread.



Metalworker Gloves

#227 817 Small
#227 818 Medium
#227 819 Large
#227 820 X-Large

Designed for the daily

demands of the metalworker and material handler. Padded, goatskin palm with textured G-Grip™ patch for excellent grip. Neoprene wrist with Velcro® closure for improved fit. NOT intended for use while welding.

MVP™ Adapter Plugs

Order from Miller Service Parts.



#219 258

For Power Cable 6-50P (230 V/50 A).
Included with machine.



#219 261

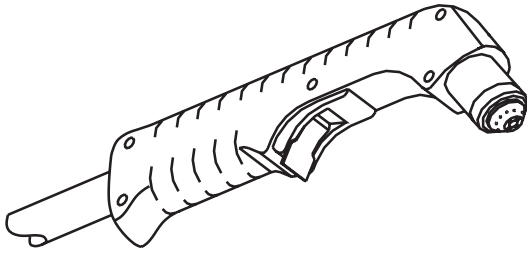
For Power Cable 5-15P (115 V/15 A).
Included with machine.



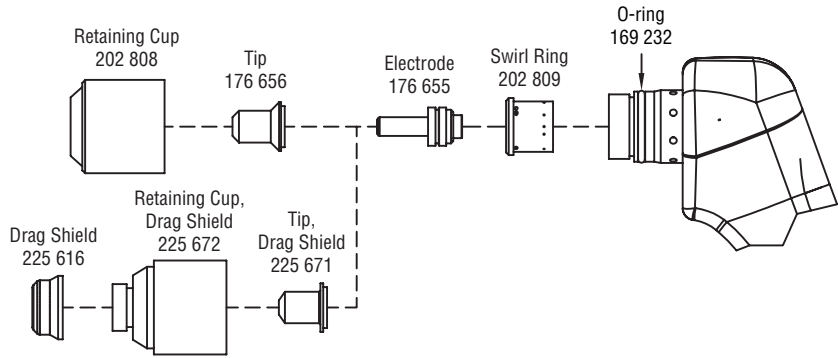
#219 259

For Power Cable 5-20P (115 V/20 A). Optional.

Replacement Torch and Consumables



ICE-27T Hand-Held 12 ft (3.7 m) Torch #225 615



Ordering Information

Power Source and Options	Stock No.	Description	Qty.	Price
Spectrum® 375 X-TREME™ with X-CASE™	#907 339	115–230 VAC, 50/60 Hz, with ICE-27T 12 ft (3.7 m) hand-held torch and X-CASE™		
Spectrum® 375 X-TREME™ (only)	#907 303	115–230 VAC, 50/60 Hz, with ICE-27T 12 ft (3.7 m) hand-held torch		
X-CASE™ (only)	#300 184	Carrying case for Spectrum® 375 X-TREME™		
Replacement Torch and Consumables				
ICE-27T Hand-Held Torch	#225 615	12 ft (3.7 m). <i>Order from Miller Service Parts</i>		
Consumables		See page 3		
Accessories				
Cable Management System	#228 941	Field. <i>Order from Miller Service Parts</i>		
ICE-27T Consumables Kit	#222 939	Includes 5 electrodes, 5 tips, 1 swirl ring, 1 retaining cup, 1 o-ring and silicone grease. <i>Order from Miller Service Parts</i>		
Silicone Grease	#169 231			
Plasma Standoff Roller Guide	#194 883			
Plasma Circle-Cutting Guide	#195 981			
Suction/Magnetic Pivot Base	#195 979			
Adapter Cord, Full KVA	#300 158	Adapts engine drive 120/240 V plug to Spectrum® 240 V plug		
In-Line Air Filter Kit	#228 926	<i>Order from Miller Service Parts</i>		
In-Line Air Filter Replacement Element	#228 928	<i>Order from Miller Service Parts</i>		
MIG Gloves		See page 3		
Metalworker Gloves		See page 3		
MVP™ Adapter Plugs		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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