

Spectrum® 375 X-TREME™

Air Plasma Cutting 

Quick Specs

Industrial Applications

Maintenance
Light construction
Prototyping
Body shops
Fabrication
HVAC ductwork

Process

Air plasma cutting

Rated Output

30 A at 92 VDC,
40% duty cycle

Cutting Capability

Rated: 3/8 in. (9.5 mm)
Sever: 5/8 in. (15.9 mm)

Weight

With torch: 19 lb. (8.6 kg)

Required Input Pressure/ Flow

5.0 scfm (142 L/min.) at
90 psi minimum (621 kPa)
120 psi maximum (828 kPa)

X-TREME versatility — Auto-Line™ provides state-of-the-art flexibility to the end user. The Auto-Line circuitry automatically connects to 120–240 V, 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 jobsite.

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 jobsite — at 19 pounds the shoulder strap allows the end user to easily move from location to location.

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 retriggering which reduces user hand fatigue.

Heavy-duty work clamp with flexible cable and quick connect.

Compatible with engine-driven welders. Complete cutting capability when powered by an engine-driven welder/generator with a 240 V receptacle of 4 kW or more.



XT30 torch with an ergonomic handle to help prevent operator fatigue and a flexible cable that makes maneuvering easier.

Comes complete with:

- XT30 hand-held torch with 12 ft. (3.7 m) cable
- Heavy-duty work clamp with 12 ft. (3.7 m) flexible cable and quick connect
- X-CASE™ provides protection in transport and storage
- 10 ft. (3 m) MVP™ power cord
- MVP plugs 5-15P (120 V, 15 A), 6-50P (240 V, 50 A)
- Shoulder strap
- Consumables box with 2 electrodes, 2 tips, deflector, and air fitting

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

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

Automatic air regulation compensates for input pressure variation to provide constant recommended torch pressure for optimum cutting performance.



Multi-voltage plug (MVP™) allows connection to 120 or 240 V receptacles without tools — choose the plug that fits the receptacle and connect it to the power cord.



Power source is warranted for three years, parts and labor.
XT torch is warranted for one year, parts only.



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Specifications (Subject to change without notice.)



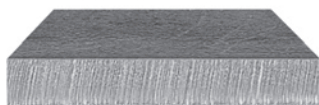
Input Power	Rated Output	Amps Input at Rated Output, 50/60 Hz, 1-Phase	KVA	KW	Plasma Gas	Dimensions	Weight with Torch
240 V	30 A at 92 VDC, 40% duty cycle	14.7	3.5	3.4	Air or nitrogen only	H: 9 in. (229 mm) W: 5.5 in. (140 mm) D: 13.25 in. (337 mm)	Net: 19 lb. (8.6 kg) Ship: 24 lb. (10.9 kg)
120 V (20 A)	27 A at 92 VDC, 35% duty cycle	26.1	3.1	3.1			
120 V (15 A)	20 A at 88 VDC, 60% duty cycle	18.3	2.1	2.1			

*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.

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

Mild Steel Cutting Capability (Thickness to scale.)

Cutting at 30 Amps (120 V, 30 A service with 5-20P MVP or 240 V 6-50P MVP)



1/4 in. (6.4 mm) at 36 ipm



3/8 in. (9.5 mm) at 18 ipm

Note: Recommended maximum piercing capacity for hand-held applications is 3/16 inch (4.8 mm). Maximum sever cut of 5/8 inch (15.9 mm) at 6 ipm.

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

Mild Steel Recommended Cut Speeds at **30 Amps**

Thickness	Approximate Travel Speeds*
1/16 in. (1.6 mm)	240+ ipm (6,096+ mm/min.)
1/8 in. (3.2 mm)	100 ipm (2,540 mm/min.)
3/16 in. (4.8 mm)	63 ipm (1,605 mm/min.)
1/4 in. (6.4 mm)	36 ipm (914 mm/min.)
3/8 in. (9.5 mm)	18 ipm (467 mm/min.)
1/2 in. (12.7 mm)	10 ipm (264 mm/min.)
5/8 in. (15.9 mm)	6 ipm (163 mm/min.)

* Travel speeds are approximately 80% of maximum.

Cutting at 20 Amps (120 V, 15 A service with 5-15P MVP)



1/8 in. (3.2 mm) at 50 ipm



1/4 in. (6.4 mm) at 17 ipm

Note: Recommended maximum piercing capacity for hand-held applications is 1/8 inch (3.2 mm). Maximum sever cut of 3/8 inch (9.5 mm) at 6 ipm.

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

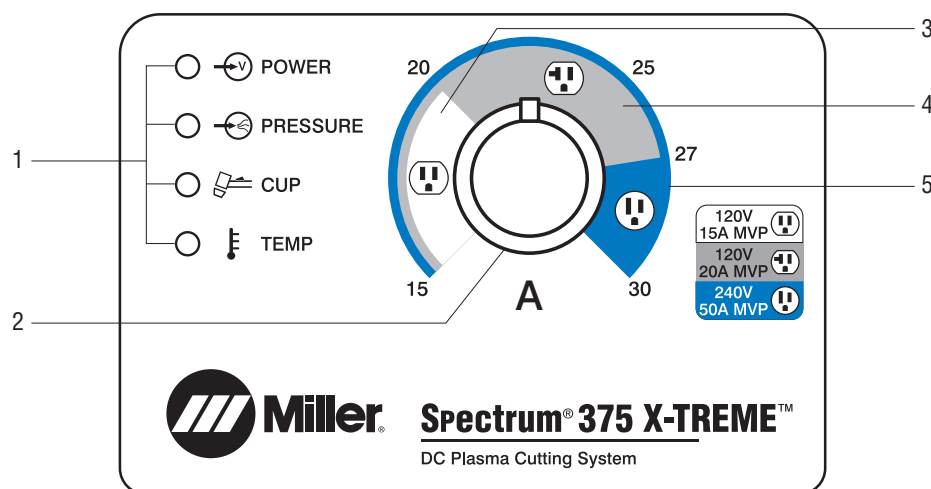
Mild Steel Recommended Cut Speeds at **20 Amps**

Thickness	Approximate Travel Speeds*
1/16 in. (1.6 mm)	158 ipm (4,014 mm/min.)
1/8 in. (3.2 mm)	50 ipm (1,260 mm/min.)
3/16 in. (4.8 mm)	33 ipm (833 mm/min.)
1/4 in. (6.4 mm)	17 ipm (427 mm/min.)
5/16 in. (7.9 mm)	8 ipm (203 mm/min.)
3/8 in. (9.5 mm)	6 ipm (163 mm/min.)

* Travel speeds are approximately 80% of maximum.

Rated cut capacity is based on traveling approximately 15 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. 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™
5. Range for 240 V, 50 A, 6-50 P, MVP™

Genuine Miller® Accessories



X-CASE™ 300184

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 (H x W x D): 13 x 10.5 x 30.625 in. (330 x 267 x 778 mm).



Female Receptacle

Full KVA Adapter Cord 300517 Field NEMA 14-50P to NEMA 6-50R. Adapts engine drive 120/240 V plug to Spectrum 240 V plug.



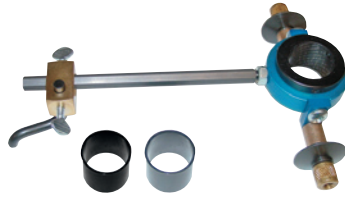
XT30 Consumable Kit 253520

Consumable kit includes 5 electrodes, 5 tips, 1 swirl ring, 1 retaining cup, 1 o-ring and silicone grease.

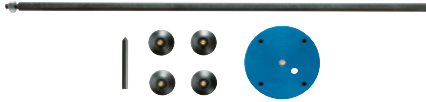


Plasma Standoff Roller Guide 253054

Helps maintain recommended standoff distance to maximize cutting performance and improve tip life.



Plasma Circle-Cutting Guide 253055
Cut straight lines or circles up to 12-inch diameter with ease.



Suction/Magnetic Pivot Base 195979
Add this to your cutting guide for convenient attachment to all flat surfaces. The extended arm accommodates holes up to 30-inch diameter.



In-Line Air Filter Kit 228926

Mounts to the back of the Spectrum 375 X-TREME. Includes male and female 1/4-inch NPT quick disconnect fittings and hose for easy on/off connection. The replaceable element filters

to .85 microns for removal of 99.9 percent of water, dirt and oil.

In-Line Air Filter Replacement Element 228928

For in-line filter 228926.



Flexible Work Cable 263799 12 ft. (3.7 m)
263800 20 ft. (6.1 m)
Work cable with quick connect and heavy-duty clamp.

Safety Glasses (shade 5 lenses, recommended)



235658 Black frame
235657 Blue frame
235659 Orange frame
272205 Slag™ black frame
272209 Slag™ white frame

Form-fitting orbital eye coverage with increased

MVP™ Plugs



219258

For power cable 6-50P (240 V/50 A). Included with machine.



219261

For power cable 5-15P (120 V/15 A). Included with machine.



219259

For power cable 5-20P (120 V/20 A). Optional.

XT30 Torch and Consumables

XT30 Hand-Held 12-foot (3.7 m) Torch 249949

O-ring 249969

Swirl Ring 249931

Electrode 249926

Tip 249927

Retaining Cup 249932

Drag Shield 249930

Deflector 249933

Large laser-etched 30 A tip for easy reading.

Robust tip front end design optimizes arc performance and tip life.

Retaining cup design provides increased cutting visibility and quick turn for easy consumable change.

Drag shield protects tip for long life and easy template cutting.

Trigger guard protects against inadvertent arc initiation.

80-degree handle provides natural arm and elbow positioning while cutting.

No-slip grip for easy control and torch dexterity.

Ergonomic design with unique thumb guide and finger grip contours.

Strain relief is durable and corrosion resistant, and **exclusive flexible cable** has improved bend radius.

Ordering Information

Power Source	Stock No.	Description	Qty.	Price
Spectrum® 375 X-TREME™ with X-CASE™	907529	120–240 V, 50/60 Hz, with 12 ft. (3.7 m) XT30 hand-held torch and X-CASE		
Replacement Torch and Consumables				
XT30 Hand-Held Torch	249949	12 ft. (3.7 m)		
Consumables		See above		
Accessories				
X-CASE™ (only)	300184	Carrying case for Spectrum 375 X-TREME		
Full KVA Adapter Cord	300517	Adapts engine drive 120/240 V plug to Spectrum 240 V plug		
XT30 Consumable Kit	253520	Includes 5 electrodes, 5 tips, 1 swirl ring, 1 retaining cup, 1 o-ring and silicone grease		
Silicone Grease	252951			
Plasma Standoff Roller Guide	253054			
Plasma Circle-Cutting Guide	253055			
Suction/Magnetic Pivot Base	195979			
In-Line Air Filter Kit	228926			
In-Line Air Filter Replacement Element	228928			
Safety Glasses		See page 3		
MVP™ Adapter Plugs		See page 3		

Date: _____ **Total Quoted Price:** _____

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