# Hypertherm<sup>®</sup>

# Powermax45® XP

Professional-grade plasma system for cutting 16 mm (5/8") thick metal, gouging, and marking.



Capacity	Thickness	Cut speed
	Cutting	
Recommended	16 mm (5/8")	500 mm/min (20 ipm)
	22 mm (7/8")	250 mm/min (10 ipm)
Severance (hand cutting)	29 mm (1-1/8")	125 mm/min (5 ipm)
Pierce*	12 mm (1/2")	
	* Pierce rating for handheld use or with aut	tomatic torch height control
Capacity	Metal removal rate	Groove profile
	Gouging	
Typical gouge	3,4 kg (7.5 lbs) per hour	3,2 mm (.12") D x 6,8 mm (.26") W

#### Easy-to-use with versatile design

- Small size and light weight provides exceptional portability for a 16 mm (5/8") rated cutting system.
- Handheld and mechanized usage with CNC interface and FastConnect™ torch connection.
- Patented drag-cutting technology makes it easy to use even for first-time operators.
- Tackle different jobs with multiple, easy-to-use torch and consumable styles.
- No need to change the air pressure. Smart Sense™ technology ensures that it is always correctly set.
- Mark, score and make precision gouges with new low amp process.

# **Maximum productivity**

- Finish jobs faster with cut speeds one and a half times greater than oxyfuel on 6 mm (1/4") mild steel.
- Spend less time on grinding and edge preparation due to superior cut and gouge quality.
- Fast change out of consumables using the new torch disable switch feature.

#### Rugged and reliable

- Duramax® Lock torches are designed for high-impact and heat resistance.
- SpringStart™ technology ensures consistent starting and a more reliable torch.
- Hypertherm Certified™ reliability ensures performance in the most demanding environment.

#### **Duramax Lock standard torch styles**

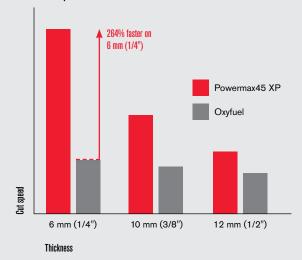
(for more torch options, see www.hypertherm.com)







# Relative cut performance on mild steel



## **Specifications**

Specifications	
Input voltages (± 10%)	200-240 V, 1-PH, 50-60 Hz 480 V, 3-PH, 50-60 Hz
Input current @ 6,5 kW	200–240 V, 1-PH, 39/32 A 480 V, 3-PH, 9.4 A
Output current	10-45 A
Rated output voltage	145 VDC
Duty cycle @ 40° C (104° F)	50% @ 45 A, 200-240 V, 1-PH 60% @ 41 A, 200-240 V, 1-PH 100% @ 32 A, 200-240 V, 1-PH 50% @ 45 A, 480 V, 3-PH 60% @ 41 A, 480 V, 3-PH 100% @ 32 A, 480 V, 3-PH
Open circuit voltage (OCV)	275 VDC
Dimensions with handles	442 mm (17.4") D; 173 mm (6.8") W; 357 mm (14.1") H
Weight with 6,1 m (20') torch	14 kg (31 lbs.)
Gas supply	Cutting: air (clean, dry and oil-free), nitrogen, F5 Gouging: air (clean, dry and oil-free), nitrogen, F5 Marking: air (clean, dry and oil-free), argon
Recommended gas inlet flow rate/ pressure	188 l/min (400 scfh) @ 5,9 bar (90 psi)
Input power cable length	3 m (10')
Power supply type	Inverter - IGBT
Engine drive requirement	12.5 kVA (10 kW) for full 45 A output
Electrical efficiency	88%
Recyclability	100%
Certifications	CSA-certified for use in the Americas and Asia, except China
Warranty	Power supply: 3-year Torch: 1-year

# **Common applications**

Property/plant maintenance, HVAC and mechanical contracting, general fabrication, plus:



Construction



Maintenance and repair



Agricultural and farm equipment maintenance

# **Ordering information**

Below are common system configurations which include a power supply, torch, and work cable. Additional configurations are available or a custom configuration can be made. See the next page for details.

Dee the next page for details.												
		75 hand		75° and 15° hand torch		180° full-length machine torch					180° full- length machine torch and 75° hand torch	
		6,1 m (20') lead	15,2 m (50') lead	6,1 m (20')) leads	7,6 m (25') lead		10,6 m (35') lead	15,2 m (50') lead			6,1 m (20') and 7,6 m (25') leads	
Power supplies	Voltage configuration			without remote pendant	with remote pendant	without remote pendant	with 1/0 cables (no pendant)	with remote pendant	with remote pendant	without remote pendant	with I/O cables (no pendant)	with remote pendant
Standard power supply	200-240 V	088112	088114									
Power supply with CPC port and voltage divider	200-240 V	088113	088115	088124	088116	088121		088117	088118	088122		088123
Power supply with CPC port, voltage divider, and serial port	200-240 V						088119				088120	
Standard power supply	480 V	088126	088128									
Power supply with CPC port and voltage divider	480 V	088127	088129									

# **Custom configurations** (select power supply, torch, consumable kit, work cable, and other components)

# Power supply options

	Standard power supply	Power supply with CPC port and voltage divider	Power supply with CPC port, voltage divider, and serial port
200-240 V CSA	088092	088104	088105
480 V CSA	088095	088110	088111

# Starter kit consumable options

	Handheld	Mechanized	Mechanized with ohmic retaining cap
Kit	428559	428560	428561

# Torch options

	Hand torches		Machine	e torches	Robotic torches			
Cable length	75°	15°	180°	Mini 180°	45°	90°	180°	
4,5 m (15')			059476*	059481*				
6,1 m (20')	088164	088162						
7,6 m (25')			088167	059482*	059464*	059465*	059466*	
10,6 m (35')			088168	059483*				
15,2 m (50')	088165	088163	088169	059484*				
22,8 m (75')	059475*	059472*	059480*					

<sup>\*</sup> without torch disable switch

# Cable options

	Work cables		Control cables						
Cable length	Hand clamp	Remote pendant	CNC, spade connector, divided voltage	CNC, spade connector, no divided voltage	RS-485 Serial comm, unterminated	RS-485 Serial comm, D-sub			
7,6 m (25')	223595	128650	228350	023206	223236	223239			
15,2 m (50')	223596	128651	228351	023279	223237	223240			
22,8 m (75')	223127	128652							

# Torch consumable parts

Nozzles and electrodes are available in various quantities. Contact your distributor for more information.

Consumable type	Torch type	Amperage	Nozzle	Shield/ Deflector	Retaining cap	Electrode	Swirl ring
Drag-cutting	Hand	45	220941	220818	220854	220842	220857
Mechanized	Machine	45	220941	220817 or 220955¹	220854 or 220953 <sup>2</sup>	220842	220857
Hand	Hand	45	00000	220931	220854 or 220953 <sup>2</sup>	220842	220947
FineCut®	Machine	45	220930	220955 or 220948 <sup>2</sup>			
Max control gouging	Hand/Machine	26-45	420419	420480	220854	220842	220857
Precision gouging	Hand/Machine	10-25	420415	420414	220854	220842	220857
Marking	Hand/Machine	10-25	420415	420542	220854 or 220953 <sup>2</sup>	220842	220857
FlushCut™	Hand/Machine	30-45	420633³	420540⁴	420536	420635	420634
HyAccess™ cutting	Hand	15-45	420410³	N/A	420413	420408	220857
HyAccess™ gouging	Hand	15-45	420412³	N/A	420413	420408	220857

Deflector for unshielded cutting
Ohmic retaining cap
Nozzle/shield assembly

<sup>&</sup>lt;sup>4</sup> Retaining ring

# Recommended Hypertherm genuine accessories



#### **Face shield**

Clear face shield with flip-up shade for cutting and grinding. Safety shield included. ANSI Z87.1, CSA Z94.3, CE

127239 Face shield shade 6 127103 Face shield shade 8



#### Air filtration kit

A ready-to-install kit with a 1-micron filter and an auto drain moisture separator protects against contaminated air.

128647 Eliminizer filter



### Leather torch sheathing

Available in 7,6 m (25') sections, this option provides additional protection for torch leads against burn-through and abrasion.

024877 Black leather with Hypertherm logos



### Circle cutting guides

Quick and easy set up for accurate circles up to 70 cm (28") diameter. For optional use as a stand-off guide for straight and bevel cuts.

127102 Basic kit – 38 cm (15") arm, wheels and pivot pin

027668 Deluxe kit – 28 cm (11") arm, wheels, pivot pin, anchor base and plastic case



#### Rolling tool bag

This rugged bag transports the Powermax45 XP with extra room for torches, consumables, accessories, and other gear. 50 cm x 44 cm x 32 cm (19.5" x 17.5" x 12.5")

017060 Rolling tool bag



#### System dust covers

Made from a flame-retardant vinyl, a dust cover will protect your Powermax® system for years.

**127219** Cover, Powermax45 and 45 XP



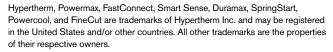
#### Essential consumable kit

Essential kits provide an assortment of standard consumables in a convenient case for organizing and reordering.

851510 Handheld kit 851511 Mechanized kit

851512 Mechanized ohmic kit

Environmental stewardship is one of Hypertherm's core values, and it is critical to our success and our customers' success. We are striving to reduce the environmental impact of everything we do. For more information: www.hypertherm.com/environment.



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