

# Hypertherm®

## Powermax45® XP

Professional-grade plasma system for cutting 16 mm thick metal, gouging, and marking.



Capacity	Thickness	Cut speed
	Cutting	
Recommended	16 mm	500 mm/min
	22 mm	250 mm/min
Severance (hand cutting)	29 mm	125 mm/min
Pierce*	12 mm	

\* Pierce rating for handheld use or with automatic torch height control

Capacity	Metal removal rate	Groove profile
	Gouging	
Typical gouge	3,4 kg per hour	3,2 mm D x 6,8 mm W

### Easy-to-use with versatile design

- Small size and light weight provides exceptional portability for a 16 mm 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 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](http://www.hypertherm.com))



Duramax Lock 75° hand torch

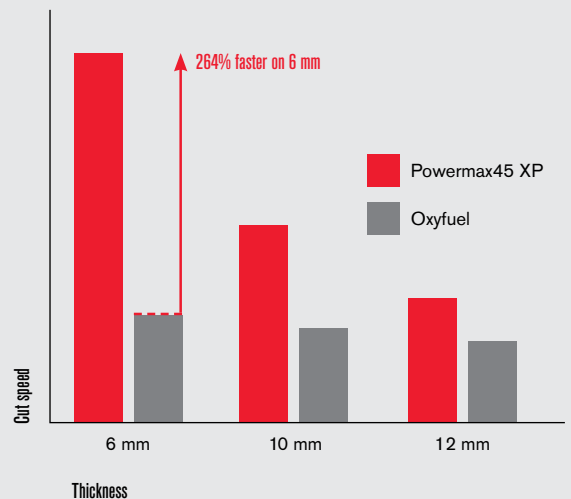


Duramax Lock 15° hand torch



Duramax Lock machine torch

### Relative cut performance on mild steel



## Specifications

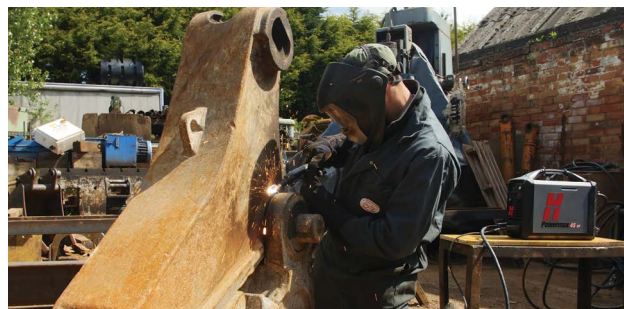
Input voltages ( $\pm 10\%$ )	230 V, 1-PH, 50–60 Hz 400 V, 3-PH, 50–60 Hz
Input current @ 6,5 kW	230 V, 1-PH, 33 A 400 V, 3-PH, 10 A
Output current	10–45 A
Rated output voltage	145 VDC
Duty cycle @ 40° C	50% @ 45 A, 230 V, 1-PH 60% @ 41 A, 230 V, 1-PH 100% @ 32 A, 230 V, 1-PH 50% @ 45 A, 400 V, 3-PH 60% @ 41 A, 400 V, 3-PH 100% @ 32 A, 400 V, 3-PH
Open circuit voltage (OCV)	275 VDC (230 V, CE/CCC) 265 VDC (400 V CE/CCC)
Dimensions with handles	442 mm D; 173 mm W; 357 mm H
Weight with 6,1 m torch	15 kg
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 @ 5,9 bar
Input power cable length	3 m
Power supply type	Inverter – IGBT
Engine drive requirement	12.5 kVA (10 kW) for full 45 A output
Electrical efficiency	88%
Recyclability	100%
Certifications	CCC for use in China. CE, RCM, CU/GOST-TR, UkrSEPRO, and Serbian AAA for use in Europe, Australia, Belarus, Kazakhstan, Russia, Serbia, Ukraine, and other countries where accepted.
Warranty	Power supply: 3-year Torch: 1-year

## Common applications

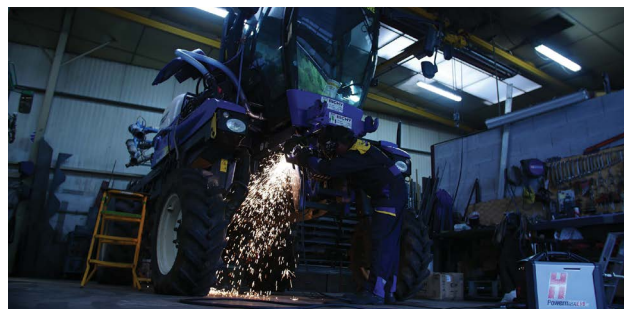
Property/plant maintenance, HVAC and mechanical contracting, general fabrication, plus:



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.

	Voltage configuration	75° hand torch		75° and 15° hand torch	180° full-length machine torch						
		6,1 m lead	15,2 m lead	6,1 m leads	7,6 m lead		10,6 m lead	15,2 m lead			
Power supplies				without remote pendant	with remote pendant	without remote pendant	with I/O cables (no pendant)	with remote pendant	with remote pendant	without remote pendant	with I/O cables (no pendant)
Standard power supply	230 V	088130	088132								
Power supply with CPC port and voltage divider	230 V	088131	088133		088134	088141		088135	088136		
Power supply with CPC port, voltage divider, and serial port	230 V						088139				088140
Standard power supply	400 V	088144	088146								
Power supply with CPC port and voltage divider	400 V	088145	088147		088148	088155		088149	088150		
Power supply with CPC port, voltage divider, and serial port	400 V						088153				088154

## 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
230 V CE/CCC	088093	088106	088107
400 V CE/CCC	088094	088108	088109

### Starter kit consumable options

	Handheld	Mechanized	Mechanized with ohmic retaining cap
Kit	428559	428560	428561

### Torch options

Cable length	Hand torches		Machine torches		Robotic torches		
	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*				

\* without torch disable switch

### Cable options

Cable length	Work cables		Control cables			
	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	223595	128650	228350	023206	223236	223239
15,2 m	223596	128651	228351	023279	223237	223240
22,8 m	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 220955 <sup>1</sup>	220854 or 220953 <sup>2</sup>	220842	220857
FineCut®	Hand	45	220930	220931	220854 or 220953 <sup>2</sup>	220842	220947
	Machine	45		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	420633 <sup>3</sup>	420540 <sup>4</sup>	420536	420635	420634
HyAccess™ cutting	Hand	15–45	420410 <sup>3</sup>	N/A	420413	420408	220857
HyAccess™ gouging	Hand	15–45	420412 <sup>3</sup>	N/A	420413	420408	220857

<sup>1</sup> Deflector for unshielded cutting

<sup>2</sup> Ohmic retaining cap

<sup>3</sup> Nozzle/shield assembly

## 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 Eliminator filter



### Leather torch sheathing

Available in 7,6 m 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 diameter. For optional use as a stand-off guide for straight and bevel cuts.

127102 Basic kit – 38 cm arm, wheels and pivot pin

027668 Deluxe kit – 28 cm 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

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

ISO 9001:2008

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](http://www.hypertherm.com/environment).

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**Hypertherm**<sup>®</sup>  
SHAPING POSSIBILITY™

### 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

