

# Hypertherm®

New

## 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 automatic 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 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

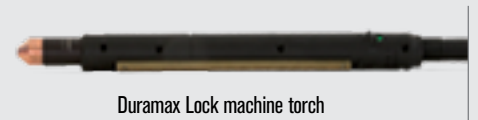
(for more torch options, see [www.hypertherm.com](http://www.hypertherm.com))



Duramax Lock 75° hand torch

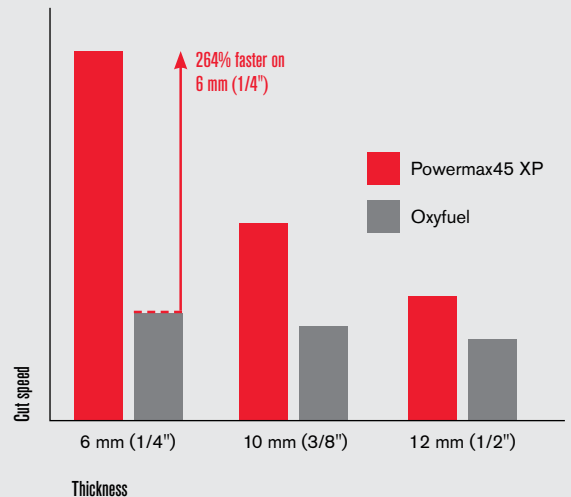


Duramax Lock 15° hand torch



Duramax Lock machine torch

### Relative cut performance on mild steel



## Specifications

Input voltages (± 10%)	CSA 200-240 V, 1-PH, 50-60 Hz CE/CCC 230 V, 1-PH, 50-60 Hz 400 V, 3-PH, 50-60 Hz
Input current @ 6,5 kW	CSA 200-240 V, 1-PH, 39/32 A CE/CCC 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 (104° F)	CSA 50% @ 45 A, 200-240 V, 1-PH 60% @ 41 A, 200-240 V, 1-PH 100% @ 32 A, 200-240 V, 1-PH CE/CCC 50% @ 45 A, 230 V, 1-PH 60% @ 41 A, 230 V, 1-PH 100% @ 32 A, 230 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 (200-240 V, CSA/CE/CCC and 480 V, CSA) 265 VDC (400 V CE/CCC)
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	CSA 14 kg (31 lbs.) CE/CCC 15 kg (33 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. 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 the standard 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								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			
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)	with remote pendant	
Standard power supply	200-240 V CSA	088112	088114										
Power supply with CPC port and voltage divider	200-240 V CSA	088113	088115	088124	088116	088121		088117	088118	088122			088123
Power supply with CPC port, voltage divider, and serial port	200-240 V CSA						088119					088120	
Standard power supply	230 V CE/CCC	088130	088132										
Power supply with CPC port and voltage divider	230 V CE/CCC	088131	088133		088134	088141		088135	088136				
Power supply with CPC port, voltage divider, and serial port	230 V CE/CCC						088139					088140	
Standard power supply	400 V CE/CCC	088144	088146										
Power supply with CPC port and voltage divider	400 V CE/CCC	088145	088147		088148	088155		088149	088150				
Power supply with CPC port, voltage divider, and serial port	400 V CE/CCC						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
200–240 V CSA	088092	088104	088105
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 (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 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		220948			220857
Max control gouging	Hand/ Machine	25–45	420419	220798	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

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

<sup>2</sup> Ohmic retaining cap

## 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 (25') sections, this option provides additional protection for torch leads against burn-through and abrasion.

024548 Brown leather

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 Powermax45 XP kit

ISO 9001:2008

Environmental stewardship is a core value of Hypertherm. Our Powermax products are engineered to meet and exceed global environmental regulations including the RoHS directive.



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