Hypertherm®

Powermax45® XP

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

New

Capacity	Thickness	Cut speed
	Cutting	
Recommended	5/8"	20 ipm
	7/8"	10 ipm
Severance (hand cutting)	1-1/8"	5 ipm
Pierce*	1/2"	

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

Capacity	Metal removal rate	Groove profile
	Gouging	
Typical gouge	7.5 lbs per hour	.12" D x .26" W

Easy-to-use with versatile design

- Small size and light weight provides exceptional portability for a 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 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.
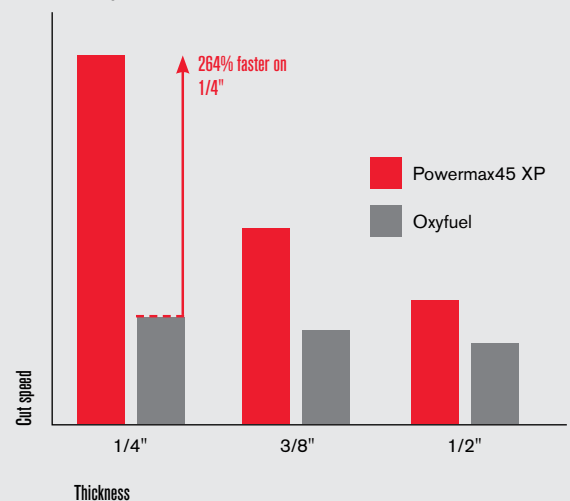
Rugged and reliable

- 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)

Duramax Lock 75° hand torch

Duramax Lock 15° hand torch

Duramax Lock machine torch

Relative cut performance on mild steel

264% faster on 1/4"

Powermax45 XP

Oxyfuel

Cut speed

1/4"   3/8"   1/2"

Thickness

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	17.4" D; 6.8" W; 14.1" H
Weight with 20' torch	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	400 scfh @ 85 psi
Input power cable length	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, fire and rescue, general fabrication, plus:

HVAC and Mechanical contracting

Educational institutions

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.

Power supplies	Voltage configuration	75° hand torch 20' lead	75° hand torch 50' lead	75° and 15° hand torch 20' leads without remote pendant	180° full-length machine torch 25' lead with remote pendant	180° full-length machine torch 25' lead without remote pendant	180° full-length machine torch 25' lead with I/O cables (no pendant)	180° full-length machine torch 35' lead with remote pendant	180° full-length machine torch 50' lead with remote pendant	180° full-length machine torch 50' lead without remote pendant	180° full-length machine torch 50' lead with I/O cables (no pendant)	180° full-length machine torch and 75° hand torch 20' and 25' leads 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 torches		Robotic torches		
Cable length	75°	15°	180°	Mini 180°	45°	90°	180°
15'			059476*	059481*			
20'	088164	088162					
25'			088167	059482*	059464*	059465*	059466*
35'			088168	059483*			
50'	088165	088163	088169	059484*			
75'	059475*	059472*	059480*				

* 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
25'	223595	128650	228350	023206	223236	223239
50'	223596	128651	228351	023279	223237	223240
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[1]	220854 or 220953[2]	220842	220857
FineCut®	Hand	45	220930	220931	220854 or 220953[2]	220842	220947
	Machine	45		220948			220857
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[2]	220842	220857

[1] Deflector for unshielded cutting
[2] 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 Eliminizer filter

Leather torch sheathing

Available in 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 28" diameter. For optional use as a stand-off guide for straight and bevel cuts.

127102 Basic kit – 15" arm, wheels
        and pivot pin
027668 Deluxe kit – 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. 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

Engineered and assembled in the USA

ISO 9001:2008

Greener Cuts™

Hypertherm®
SHAPING POSSIBILITY™