

# Hypertherm®

## Powermax125®

Professional-grade plasma metal cutting and gouging system for handheld cutting 38 mm and mechanized piercing 25 mm.



Capacity	Thickness	Cut speed
Cutting		
Recommended	38 mm	457 mm/min
	44 mm	250 mm/min
Severance (hand cutting)	57 mm	125 mm/min
Pierce*	25 mm	

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

Capacity	Metal removal rate	Groove profile*
Gouging		
Typical gouge	12,52 kg/hr	4,3 mm–7,9 mm D x 6,1 mm–9,9 mm W

\* Actual groove profile varies with torch angle, arc stretch, and technique

### Maximum productivity

- Finish jobs faster with cut speeds 5 times greater than oxyfuel on 12 mm mild steel.
- Spend less time on grinding and edge preparation due to superior cut and gouge quality.
- Maximize your cutting time with 100% duty cycle.

### Low operating costs

- Reduce costs with consumable life up to four times longer than other systems in this amperage range.
- Electrode end-of-life detection protects the torch and workpiece from damage by automatically stopping power when the electrode is overused.

### Easy-to-use for cutting and gouging

- No need to change the air pressure. Smart Sense™ technology ensures that it is always correctly set.
- Tackle different jobs with multiple, easy-to-use torch styles.

### Built and tested to withstand the harshest conditions

- Duramax™ Hyamp torches are designed for high-impact and heat resistance.
- SpringStart™ technology ensures consistent starting and a more reliable torch.
- Low maintenance for maximum uptime.

### Duramax standard torch styles

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



85° hand torch



15° hand torch

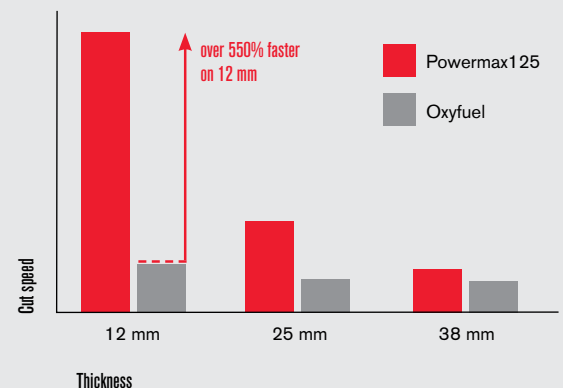


180° mini machine torch



180° full-length machine torch

### Relative cut performance on mild steel



## Specifications

Input voltages	400 V, 3-PH, 50/60 Hz
Input current @ 21,9 kW	400 V, 3-PH, 36 A
Output current	30-125 A
Rated output voltage	175 VDC
Duty cycle @ 40° C	100% @ 125 A, 400 V, 3-PH
Open circuit voltage (OCV)	305 VDC
Dimensions with handles	592 mm D; 274 mm W; 508 mm H
Weight w/7,6 m torch	48,9 kg
Gas supply	Clean, dry, oil-free air or nitrogen
Recommended gas inlet flow rate/pressure	Cutting: 260 l/min @ 5,9 bar Gouging: 212 l/min @ 4,1 bar
Input power cable length	3 m
Power supply type	Inverter - IGBT
Engine drive requirement	40 kW for full 125 A output
Certifications	CE, C-Tick, CU/GOST, Ukr, and Serbian – for use in Europe, Australia, Belarus, Kazakhstan, Russia, Serbia, Ukraine, and other countries where accepted.
Warranty	Power supplies have a 3-year warranty and torches a 1-year warranty



## Ordering information

Below are the standard system configurations, which include a power supply, torch and work cable. Additional mechanized configurations are listed on our web site.

	85° hand torch		85° and 15° hand torch		180° full-length machine torch						180° full-length machine torch and 85° hand torch
	7,6 m	15,2 m	7,6 m	15,2 m	7,6 m			15,2 m			
Power supplies			without remote pendant	with remote pendant	without remote pendant	with I/O cables (no pendant)	with remote pendant	without remote pendant	with I/O cables (no pendant)	with remote pendant	
Power supply with CPC port and voltage divider	059526	059527	059528	059572	059530			059531			059529
Power supply with CPC port, voltage divider, and serial port						059532	059534		059533	059535	



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

**Power supply options**

	Power supply with CPC port and voltage divider	Power supply with CPC port, voltage divider, and serial port
400 V CE	059486	059487

**Starter kit consumable options**

	Handheld	Mechanized	Mechanized with ohmic retaining cap
Kit	428099	428100	428101

**Torch options**

Cable length	Hand torches		Machine torches		Robotic torches <sup>1</sup>			Long torches <sup>1</sup>			
	85°	15°	180°	Mini 180°	45°	90°	180°	0,6 m, 45°	0,6 m, 90°	1,2 m, 45°	1,2 m, 90°
4,5 m			059519	059514							
7,6 m	059492	059495	059520	059515	059564	059565	059566	059562	059563	059567	059568
10,7 m			059521	059516							
15,2 m	059493	059496	059522	059517				059579	059580	059581	059582
22,8 m	059494	059497	059523								

<sup>1</sup> Available Q1 2014.

**Cable options**

Cable length	Work cables				Control cables				
	Hand clamp	C-style clamp	Ring terminal	Remote pendant	CNC, spade connector, divided voltage	CNC, spade connector, no divided voltage	CNC, D-sub connector, divided voltage	RS-485 Serial comm, unterminated	RS-485 Serial comm, D-sub
7,6 m	223292	223298	223295	128650	228350	023206	223048	223236	223239
15,2 m	223293	223299	223296	128651	228351	023279	123896	223237	223240
22,8 m	223294	223300	223297	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	Swirl ring	Electrode
Drag-cutting	Hand	45	420158	420172	220977	220997	220971
		65	420169	420172			
		125	220975	420000			
Mechanized	Machine	45	420158	420168	220977 or 420156 <sup>2</sup>	220997	220971
		65	420169	420168			
		125/105	220975	220976			
FineCut®	Hand	45	420151	420152	220977 or 420156 <sup>2</sup>	420159	220971
	Machine					220997	
Gouging	Hand	30-125	420001	420112	220977	220997	220971
	Machine						

<sup>2</sup> Ohmic retaining cap

### Recommended Hypertherm genuine accessories

- Hypertherm plasma cutting gloves, 127169
- Powermax125 wheel kit, 229467
- Powermax125 gantry kit, 229570
- System storage dust cover, 127360
- Eliminer filter and cover, 228890
- Replacement filter element for Eliminer, 011092
- Torch lead cover, black, 024877



Wheel kit



Leather torch sheathing



System dust cover



Air filtration 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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