

# 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 maximizes uptime.

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



85° hand torch



15° hand torch

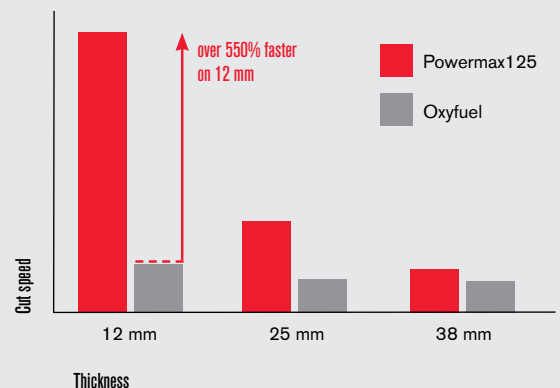


180° mini machine torch



180° full-length machine torch

Relative cut performance on mild steel



## Specifications

Input voltages	CCC	380 V, 3-PH, 50/60 Hz	
	CE	400 V, 3-PH, 50/60 Hz	
Kilowatt output	21,9 kW		
Input current @ 21,9 kW	380 V, 3-PH, 38 A		
	400 V, 3-PH, 36 A		
Output current	30-125 A		
Rated output voltage	175 VDC		
Duty cycle @ 40° C	100% @ 125 A, 380/400 V, 3-PH		
Open circuit voltage (OCV)	380 V CCC	290 VDC	
	400 V CE	305 VDC	
Dimensions with handles	592 mm D; 274 mm W; 508 mm H		
Weight w/7,6 m torch	380 V	45,2 kg	
	400 V	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		
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. CCC for use in China.		
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.

	Voltage configuration	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 (25')	15,2 m (50')	7,6 m (25')	15,2 m (50')	7,6 m (25')		15,2 m (50')		15,2 m/7,6 m (50'/25')		
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	380 V CCC <sup>1</sup>	059556	059557		059558	059583			059584		059559	
	400 V CE	059526	059527	059528	059572	059530		059531			059529	
Power supply with CPC port, voltage divider, and arial port	380 V CCC <sup>1</sup>					059560			059561			
	400 V					059532	059534		059533	059535		

<sup>1</sup> Does not include a power cord.



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

### Power supply<sup>1</sup> options

	Power supply with CPC port and voltage divider	Power supply with CPC port, voltage divider, and serial port
380 V CCC	059490	059491
400 V CE	059486	059487

<sup>1</sup> Does not include a power cord.

### 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			Long torches			
	85°	15°	180°	Mini 180°	45°	90°	180°	2', 45°	2', 90°	4', 45°	4', 90°
15'			059519	059514							
25'	059492	059495	059520	059515	059564	059565	059566	059562	059563	059567	059568
35'			059521	059516							
50'	059493	059496	059522	059517				059579	059580	059581	059582
75'	059494	059497	059523								

### 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	
25'	223292	223298	223295	128650	228350	023206	223048	223236	223239	
50'	223293	223299	223296	128651	228351	023279	123896	223237	223240	
75'	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 220997	220971
	Machine						
Gouging	Hand	30-125	420001	420112	220977	220997	220971
	Machine						

<sup>2</sup> Ohmic retaining cap

# Recommended Hypertherm genuine accessories



## Hyamp™ deluxe circle cutting guide

Quick and easy setup for accurate circles up to 70 cm diameter. For use with the Powermax125®.

017053 Hyamp deluxe kit



## Leather torch sheathing

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

024548 Brown leather

024877 Black leather with Hypertherm logos



## Wheel/gantry kits

Complete, pre-assembled kits for added mobility or mounting on a cutting table gantry.

229467 Powermax105/125 wheel kit

229570 Powermax105/125 gantry kit



## Air filtration kit

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

228890 Filter plus cover for Powermax105/125

011092 Replacement filter element for Eliminer

101215 Cover only for Powermax105/125



## System dust covers

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

127360 Cover, Powermax125



## Hyamp cutting and gouging gloves

Insulated for heavy duty applications. Fire resistant goatskin leather and suede. Padded areas for extra heat and abrasion protection.

017025 Medium

017026 Large

017027 X-Large

017028 2X-Large

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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**Cut with confidence®**

