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.

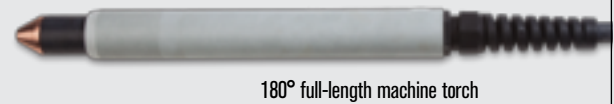Duramax Hyamp standard torch styles
(for more torch options, see www.hypertherm.com)
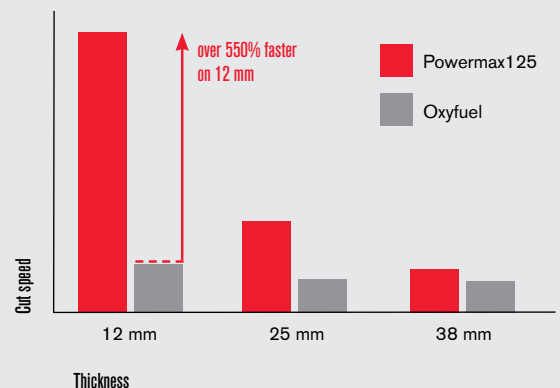
85° hand torch

15° hand torch

180° mini machine torch

180° full-length machine torch

Relative cut performance on mild steel

over 550% faster on 12 mm

Powermax125

Oxyfuel

Cut speed

12 mm   25 mm   38 mm

Thickness

Specifications

Input voltages	400 V, 3-PH, 50/60 Hz
Kilowatt output	21,9 kW
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.

Power supplies	85° hand torch 7,6 m	85° hand torch 15,2 m	85° and 15° hand torch 7,6 m (without remote pendant)	85° and 15° hand torch 15,2 m (without remote pendant)	180° full-length machine torch 7,6 m with remote pendant	180° full-length machine torch 7,6 m without remote pendant	180° full-length machine torch 7,6 m with I/O cables (no pendant)	180° full-length machine torch 15,2 m with remote pendant	180° full-length machine torch 15,2 m without remote pendant	180° full-length machine torch 15,2 m with I/O cables (no pendant)	180° full-length machine torch and 85° hand torch 15,2 m/7,6 m 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

	Hand torches		Machine torches		Robotic torches			Long torches			
Cable length	85°	15°	180°	Mini 180°	45°	90°	180°	2', 45°	2', 90°	4', 45°	4', 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								

Cable options

	Work cables			Control cables					
Cable length	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[1]	220997	220971
		65	420169	420168			
		125/105	220975	220976			
FineCut®	Hand Machine	45	420151	420152	220977 or 420156[1]	420159 220997	220971
Gouging	Hand Machine	30–125	420001	420112	220977	220997	220971

[1] 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

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 Eliminizer
101215 Cover only for Powermax105/125

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

System dust covers

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

127360 Cover, Powermax125

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

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

Hypertherm®
SHAPING POSSIBILITY™