Hypertherm®

Powermax85®

Professional-grade plasma metal cutting and gouging system for handheld cutting 1" and mechanized piercing 3/4".

Capacity	Thickness	Cut speed
	Cutting	
Recommended	1"	20 ipm
	1-1/4"	10 ipm
Severance (hand cutting)	1-1/2"	5 ipm
Pierce*	3/4"	
	* Pierce rating for handheld use or with auton	natic torch height control
Capacity	Metal removal rate	Groove profile
	Gouging	
Typical gouge	19.5 lbs per hour	.23" D x .28" W

Maximum productivity

- Finish jobs faster with cut speeds two and a half times greater than oxyfuel on 1/2" mild steel.
- Spend less time on grinding and edge preparation due to superior cut and gouge quality.

Easy-to-use for cutting and gouging

- No need to change the air pressure. Smart Sense™ technology ensures that it is always correctly set.
- Drag cut at full output with a patented shield that reduces dross buildup for smoother cutting.
- Tackle different jobs with multiple, easy-to-use torch styles.

Low operating costs

- Reduce costs with long consumable life and more uptime.
- High power efficiency lowers energy consumption.

Built and tested to withstand the harshest conditions

- Duramax® 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)

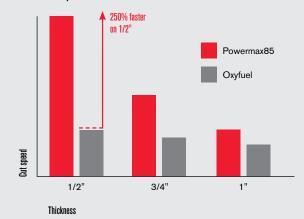








Relative cut performance on mild steel



Specifications

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Input voltages	200–480 V, 1-PH, 50/60 Hz 200–600 V, 3-PH, 50/60 Hz
Kilowatt output	12.2 kW
Input current @ 12.2 kW	200/208/240/480 V, 1-PH 70/68/58/29 A 200/208/240/480/600 V, 3-PH 42/40/35/18/17 A
Output current	25-85 A
Rated output voltage	143 VDC
Duty cycle @ 104° F	60% @ 85 A, 230-600 V, 3-PH 60% @ 85 A, 480 V, 1-PH 50% @ 85 A 240 V, 1-PH 50% @ 85 A, 200-208 V, 3-PH 40% @ 85 A, 200-208 V, 1-PH 100% @ 66 A, 230-600 V, 1/3-PH
Open circuit voltage (OCV)	305 VDC
Dimensions with handles	19.7" D; 9.2" W; 17.9" H
Weight w/25' torch	71 lbs.
Gas supply	Clean, dry, oil-free air or nitrogen
Recommended gas inlet flow rate/pressure	Cutting: 400 scfh, 6,7 scfm @ 85 psi Gouging: 450 scfh, 7,5 scfm @ 70 psi
Input power cable length	10'
Power supply type	Inverter - IGBT
Engine drive requirement	20 kW for full 85 A output
Certifications	CSA-certified for use in the Americas and Asia, except 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.

	75° 75° ar hand torch hand				180° full-length machine torch				180° full-length machine torch and 75° hand torch			
	25'		50'	25'	50'	25' 50'				25'		
Power supplies		With Eliminizer filter and cover		rem	nout note dant	with remote pendant	without remote pendant or cables	with I/O cables (no pendant)	with remote pendant	without remote pendant	with I/O cables (no pendant)	with remote pendant
Standard power supply	087108	087111	087109									
Power supply with CPC port and voltage divider	087113		087114	087144	087145	087115	087132		087116	087137		087135
Power supply with CPC port, voltage divider, and serial port							087164	087138			087140	



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	
200-600 V CSA	087067	087104	087105	

Starter kit consumable options

	Handheld	Mechanized	Mechanized with ohmic retaining cap
Kit	228966	228967	228968

Torch options

	Hand t	orches	Machine	torches	Robotic torches			
Cable length	75°	15°	180°	Mini 180°	45°	90°	180°	
15'			059476	059481				
25'	059473	059470	059477	059482	059464	059465	059466	
35'			059478	059483				
50'	059474	059471	059479	059484	059585	059586	059587	
75'	059475	059472	059480					

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	
25'	223035	223203	223209	128650	228350	023206	223048	223236	223239
50'	223034	223204	223210	128651	228351	023279	123896	223237	223240
75'	223033	223205	223211	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	
Drog outting	Hand	45	220941	220818	220854	220842	220857	
Drag-cutting	пани	65	220819	220010	220004	220042	220837	
		85	220816					
Market and Market	45	220941	220817 or 2209551	220854 or 220953 ²	220842	220857		
Wechanizeu	Mechanized Machine	65	220819	220017 01 220933	220034 01 220333	220042	220037	
		85	220816					
FineCut®	Hand	45	220930	220931	220854 or 220953 ²	220842	220947	
FILLEGUL	Machine	40	220930	220948	220034 01 220933	220042	220541	
Max control gouging	Hand/machine	25-85	220797	420480	220854	220842	220857	
Max removal gouging	Hand/machine	25-85	220797	220798	220854	220842	220857	

¹ Deflector for unshielded cutting ² Ohmic retaining cap

Recommended Hypertherm genuine accessories



Hyamp™ helmet

Premium auto-dim shade 8-12 with large 7.92 square inch viewing area for cutting, welding and gouging. Includes clear safety shields, pouch and sticker sheet. ANSI Z87.1, CSA Z94.3, CE

017031



Air filtration kit

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

228570 Filter plus cover for Powermax65/85

011092 Replacement filter element for Eliminizer

228624 Cover only for Powermax65/85



Leather torch sheathing

Available in 25' sections, this option provides additional protection for torch leads against burn-through and abrasion.

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. Made in USA

Greener

127301 Cover, Powermax85



Wheel/gantry kits

Complete, pre-assembled kits for added mobility.

229370 Powermax65/85 wheel kit 229569 Powermax65/85 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. Made in USA

017025 Medium

017026 Large

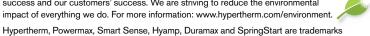
017027 X-Large

017028 2X-Large

Engineered and assembled in the USA

ISO 9001:2008

Environmental stewardship is one of Hypertherm's core values, and it is critical to our success and our customers' success. We are striving to reduce the environmental



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