Hypertherm[®]

Powermax 105®

Professional-grade plasma metal cutting and gouging system for handheld cutting 1-1/4" and mechanized piercing 7/8".

Capacity	Thickness	Cut speed
	Cutting	
Recommended	1-1/4"	20 ipm
	1-1/2"	10 ipm
Severance (hand cutting)	2"	5 ipm
Pierce*	7/8"	
	* Pierce rating for handheld use or with automa	tic torch height control
Capacity	Metal removal rate	Groove profile
	Gouging	
Typical gouge	21.7 lbs per hour	.25" D x .29" W

Maximum productivity

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

Low operating costs

- Reduce costs with long consumable life and more uptime.
- 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.
- 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.

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)

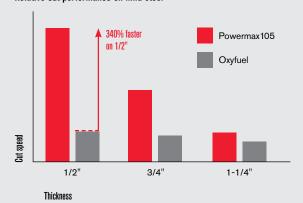








Relative cut performance on mild steel



Specifications

Specifications	
Input voltages	200-600 V, 3-PH, 50/60 Hz
Kilowatt output	16.8 kW
Input current @ 16.8 kW	200/208/240/480/600 V, 3-PH 58/56/49/25/22 A
Output current	30–105 A
Rated output voltage	160 VDC
Duty cycle @ 104° F (40° C)	70% @ 105 A, 240 V, 3-PH 80% @ 105 A, 480-600 V, 3-PH 100% @ 94 A, 480-600 V, 3-PH 100% @ 88 A, 240 V, 3-PH
Open circuit voltage (OCV)	300 VDC
Dimensions with handles	23.3" D; 10.8" W; 20.0" H
Weight w/25' torch	100 lbs
Gas supply	Clean, dry, oil-free air or nitrogen
Recommended gas inlet flow rate/ pressure	Cutting: 460 scfh, 7.7 scfm @ 85 psi Gouging: 480 scfh, 8.0 scfm @ 70 psi
Input power cable length	10'
Power supply type	Inverter - IGBT
Engine drive requirement	30 kW for full 105 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° har	d torch	75° and 15°	hand torch	nand torch 180° full-length machine torch						180° full-length machine torch and 75° hand torch
	25'	50'	25'	50'		25'		50'			25'
				nout note	with without with I/O remote remote cables		with remote	without remote	with I/O cables	with remote	
Power supplies				dant	pendant	pendant	(no pendant)	pendant	pendant	(no pendant)	pendant
Standard power supply	059374	059375									
Power supply with CPC port and voltage divider	059376	059377	059382	059383	059378	059380		059379	059381		059384
Power supply with CPC port, voltage divider and serial port							059386			059387	



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	059370	059371	059372	

Starter kit consumable options

	 Handheld	Mechanized	Mechanized with ohmic retaining cap
Kit	228849	228848	228969

Torch options

	Hand torches		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				
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, dividedvoltage	RS-485 Serial comm, unterminated	RS-485 Serial comm, D-sub
25'	223254	223287	223284	128650	228350	023206	223048	223236	223239
50'	223255	223288	223285	128651	228351	023279	123896	223237	223240
75'	223256	223289	223286	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
		45	220941		000054	220842	220994
Dung quitting	Hand	65	220819	220818			
Drag-cutting	пани	85	220816		220854		
		105	220990	220992			
	Machine	45	220941		000054 0000502	220842	
Machaniand		65	220819	220817 or 220955¹			220994
Mechanized		85	220816		220854 or 220953 ²		
		105	220990	220993 or 220955¹			
FinaCut®	Hand	45	220930	220931	220854 or 220953 ²	220842	220947
FineCut®	Machine			220948			220994
Coucina	Hand	20 105	000001	220798	220854	220842	000004
Gouging	Machine	30-105	220991				220994

Deflector for unshielded cutting
Ohmic retaining cap

Recommended Hypertherm genuine accessories



Hyamp™ helmet

Premium auto-dim shade 8-12 with large 7.92 square inches 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

228890 Filter plus cover for Powermax105/125

011092 Replacement filter element for Eliminizer

101215 Cover only for Powermax105/125



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



System dust covers

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

127360 Cover, Powermax105



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. 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 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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