

Hypertherm®

HyPerformance® Plasma HPR800XD®

The HPR800XD extends the versatility of HyPerformance Plasma to provide the most expansive process range and thickest stainless steel and aluminum cutting capacity available on the market

Hypertherm has spent more than four decades developing over 75 patented plasma technologies to provide customers with exceptional performance they can count on. With thousands of HyPerformance Plasma systems sold around the world, the HPR product family has become the plasma system of choice for customers who demand the most consistent cut quality, highest productivity, lowest operating cost and unmatched reliability.

Operating data

Mild steel cut capacity

Dross free	38 mm (1½")
Production (pierce)	50 mm (2")
Severance (edge starts)	80 mm (3.2")

Stainless steel cut capacity

Production (pierce)	75 mm (3")
Severance (edge starts)	160 mm (6¼")

Aluminum cut capacity

Production (pierce)	75 mm (3")
Severance (edge starts)	160 mm (6¼")

Key advantages

Thick stainless steel and aluminum cutting capacity

Patent pending PowerPierce™ technology enables 75 mm (3") production piercing capacity and 160 mm (6¼") severance of stainless steel and aluminum to meet the most demanding cutting requirements.

Expansive process range delivers extended versatility

Building on the HPR400XD, the HPR800XD uses all HyPerformance Plasma processes from 30 to 400 amps for marking, beveling and cutting mild steel, stainless steel and aluminum. This versatility is extended to thick stainless steel and aluminum, up to 800 amps.

Maximized productivity and improved profitability

Patented LongLife® and HyDefinition® technologies deliver more consistent cut quality over a longer period of time. HyPerformance Plasma combines this consistency with fast cutting speeds and quick changeovers to maximize productivity and improve profitability.

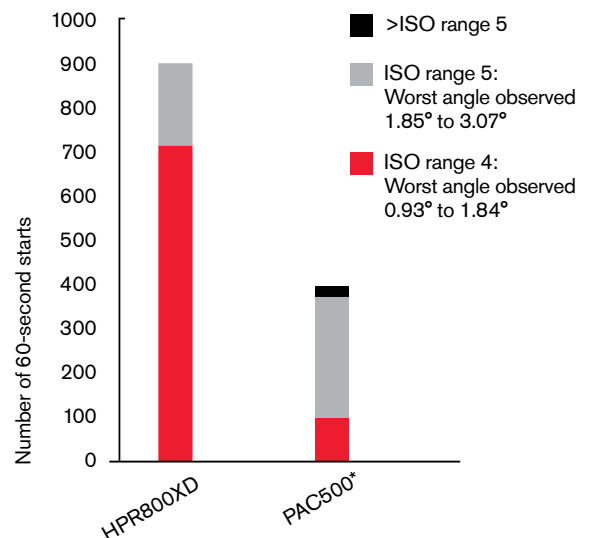
Unmatched reliability

Extensive testing, backed by more than four decades of experience, guarantees Hypertherm quality you can count on.



Cut quality over life (800 A)

75 mm (3") stainless steel



*Discontinued Hypertherm plasma system

Specifications

		Per power supply		Chiller
Input voltages	VAC	Hz	Amps	Amps
	200/208	50/60	262/252	30
	220	50/60	238	30
	240	60	219	30
	380	50/60	138	20
	400	50/60	131	20
	440	50/60	120	20
	480	60	110	15
	600	60	88	12
Output voltage	200 VDC			
Output current	800 A			
Duty cycle	100% at 40° C (104° F) at 160 kW			
Maximum OCV	360 VDC			
Dimensions per power supply	118 cm (46.4") H, 88 cm (34.7") W, 126 cm (49.7") L			
Chiller	170.2 cm (67") H, 87.6 cm (34.5") W, 137.2 cm (54") L			
Weight per power supply	851 kg (1877 lbs)			
Chiller	449 kg (990 lbs)			
Gas supply				
Plasma gas	O ₂ , N ₂ , F5*, H35**, Air, Ar			
Shield gas	N ₂ , O ₂ , Air, Ar			
Gas pressure	8.3 bar (120 psi) Manual gas console 8.0 bar (115 psi) Automatic gas console			

* F5 = 5% H, 95% N₂
** H35 = 35% H, 65% Ar



- Hypertherm is ISO 9001:2000 certified.
- Hypertherm full-system warranty – complete coverage for two years on all system components and one year on the torch and leads.

Hypertherm®

Cut with confidence™

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Operating data

Material	Current (amps)	Thickness (mm)	Approximate cutting speed (mm/min.)	Thickness (inches)	Approximate cutting speed (ipm)		
Mild steel	30	0.5	5355	.018	215		
		3	1160	.135	40		
		6	665	1/4	25		
O ₂ plasma	80†	3	6145	.135	180		
		6	3045	1/4	110		
		20	545	3/4	25		
O ₂ plasma	130†	6	4035	1/4	150		
		10	2680	3/8	110		
		25	550	1	20		
Air shield	260†	10	4440	3/8	180		
		20	2170	3/4	90		
		64	195	2 1/2	8		
O ₂ plasma	400†	12	4430	1/2	170		
		25	2210	1	85		
		50	795	2	30		
Air shield		80	180	3	10		
		Stainless steel	45	1	5740	.036	240
				2.5	2510	.105	90
6	845			1/4	30		
F5 plasma	80	4	2180	.135	105		
		6	1225	1/4	45		
		10	560	3/8	25		
N ₂ shield	130†	10	980	3/8	40		
		12	820	1/2	30		
		25	260	1	10		
H35 plasma	260†	12	1710	1/2	65		
		20	1085	3/4	45		
		25	785	1	30		
N ₂ shield	400†	20	1810	3/4	75		
		40	720	1 1/2	30		
		80	190	3	10		
H35 plasma	600†	40	721	1 1/2	29		
		60	492	2 1/2	18		
		100	187	4	7		
N ₂ plasma	600†	40	970	1 1/2	40		
		60	434	2 1/2	16		
		80	305	3	12		
N ₂ shield	800†	75	464	3	18		
		125	155	5	6		
		160	100	6 1/4	4		
Aluminum	45	1.5	4420	.048	220		
		4	2575	.135	110		
		6	1690	1/4	60		
Air plasma	130†	12	1455	1/2	55		
		20	940	3/4	40		
		25	540	1	20		
Air shield	260†	12	5160	1/2	190		
		20	2230	3/4	90		
		50	390	2	14		
H35 plasma	400†	20	2420	3/4	100		
		40	1190	1 1/2	50		
		80	210	3	10		
N ₂ shield	600†	50	1302	2	50		
		60	839	2 1/2	30		
		100	378	4	14		
H35 plasma	600†	50	1048	2	40		
		60	832	2 1/2	30		
		80	600	3	26		
N ₂ shield	800†	75	907	3	35		
		160	179	6 1/4	7		

Note: Take care in comparison: Competitors often show maximum cutting speeds, rather than speeds that deliver the best cuts, as shown above. Cut speeds listed above deliver best cut quality for a given process, but cut speeds can be up to 50% faster.

The operating data chart does not list all processes available for the HPR800XD. Please contact Hypertherm for more information.

† Consumables support up to 45° bevel capability.