

HyPerformance Plasma HPR800XD

The HPR800XD[®] delivers all the mild steel capability of the HPR400XD[®] and adds the thickest stainless steel and aluminum cutting on the market today.

Mild steel cut capacity	
Dross free*	38 mm (1-1/2")
Production pierce	50 mm (2")
Maximum cutting capacity	80 mm (3.2")
Stainless steel cut capacity	
Production pierce	75 mm (3")
Maximum pierce**	100 mm (4")
Severance	160 mm (6-1/4")
Aluminum cut capacity	
Production pierce	75 mm (3")
Maximum cutting capacity	160 mm (6-1/4")

* Feature and material type can influence dross free performance.

**Maximum pierce requires use of an autogas console and controlled motion process.

See technical documentation for details.

Unrivaled stainless steel performance, from very thin to very thick

New HDi[™] technology delivers HyDefinition[®] cut quality from 3 mm to 6 mm (12 gauge to 1/4"), optimized gas mixing provides superior results from 6 mm to 80 mm (1/4" to 3.2") and patented PowerPierce[™] technology enables industry leading piercing and cutting capability on very thick stainless steel.

Impressive process range and versatility

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

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 five decades of experience, guarantees Hypertherm Associates quality you can count on.





Superior cut quality on mild steel and stainless steel



Specifications

Input voltages (3-PH) and currents			Per power supply	Chiller		
	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	800 A				
Duty cycle	100% at 40°	100% at 40°C (104°F) at 160 kW				
Power factor	0.98 @ 160	0.98 @ 160 kW output				
Maximum OCV	360 VDC	360 VDC				
Dimensions						
per power supply	118 cm (46.	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)					
	443 KY (990	i ins)				
Gas supply Plasma gas	0 N E5* I	135** Air Ar				
Shield gas	0₂, N₂, F5*, H35**, Air, Ar N₂, O₂, Air, Ar					
Gas pressure	8.3 bar (120 psi) Manual gas console					
	8 bar (115 psi) Automatic gas console					
*F5= 5% H. 95% N.			•			

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



Cut with confidence

- Hypertherm Associates is ISO 9001: 2000 registered.
- Hypertherm Associates' full-system warranty provides complete coverage for one year on the torch and leads and two years on all other system components.
- Hypertherm plasma power supplies are engineered to deliver industry leading energy efficiency and productivity with power efficiency ratings of 90% or greater and power factors up to 0.98. Extreme energy efficiency, long consumable life, and lean manufacturing lead to the use of fewer natural resources and a reduced environmental impact.

For more information, visit: www.hypertherm.com

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Please visit www.hypertherm.com/patents for more details about Hypertherm Associates patent numbers and types.

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			Approximate		Approximate	
	Current	Thickness	cutting speed	Thickness	cutting speed	
Material	(amps)	(mm)	(mm/min)	(inches)	(ipm)	
Mild steel	30	0.5	5355	.018	215	
O ₂ plasma		3	1160	.135	40	
O_2 shield		6	665	1/4	25	
O_2 plasma	80 ⁺	3	6145	.135	180	
Air shield		12	1410	1/2	50	
		20	545	3/4	25	
O_2 plasma	130†	6	4035	1/4	150	
Air shield		10	2680	3/8	110	
		25	550	1	20	
O_2 plasma	260†	10	4440	3/8	180	
Air shield		20	2170	3/4	90	
		32	1135	1-1/2	35	
O_2 plasma	400 ⁺	12	4430	1/2	170	
Air shield		25	2210	1	85	
		50	795	2	30	
		80	180	3	10	
Stainless steel	60	3	2770	0.105	120	
F5 plasma		4	2250	0.135	95	
N_2 shield		5 6	1955 1635	3/16 1/4	80 60	E
H35 and N₂ plasma*	130†	6	1835	1/4	70	-
N_2 shield	100'	12	875	1/4	30	
		20	305	3/4	15	
H35 and N_2 plasma*	260 [†]	6	3980	1/4	150	
N_2 shield	200	12	1790	1/2	65	
		20	1320	3/4	55	
H35 plasma	400 ⁺	20	1100	3/4	45	
N ₂ shield		50	400	2	15	
2		60	280	2-1/2	10	
H35 and N ₂ plasma*	400 ⁺	20	1810	3/4	75	
N, shield		50	520	2	20	
		80	180	3	10	
H35 plasma	800 ⁺	75	464	3	18	
N ₂ shield		125	155	5	6	
-		160	100	6-1/4	4	
Aluminum	130	6	2215	1/4	85	
H35 and N_2 plasma*		12	1455	1/2	55	
N ₂ shield		20	815	3/4	35	
N_2 plasma*	260	12	4290	1/2	160	
Air shield		20	1940	3/4	80	
		32	940	1-1/4	40	
H35 and $\rm N_{\scriptscriptstyle 2}$ plasma*	400	12	5190	1/2	200	
N ₂ shield		50	1000	2	40	
		80	210	3	10	
N₂ plasma	600	50	1048	2	40	
N_2 shield		60	832	2-1/2	30	
1105		80	600	3	26	
H35 plasma	800	75	907	3	35	
N ₂ shield		160	179	6-1/4	7	

†Consumables support up to 45° bevel capability.

Operating data

* H35 and N, mixed plasma gas requires the use of an autogas console.

The operating data chart does not list all processes available for the HPR800XD.

Please contact Hypertherm for more information.

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Environmental stewardship is one of Hypertherm Associates' core values. www.hyperthermassociates.com/environment

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