Hypertherm®

HyPerformance® Plasma HPR800XD®

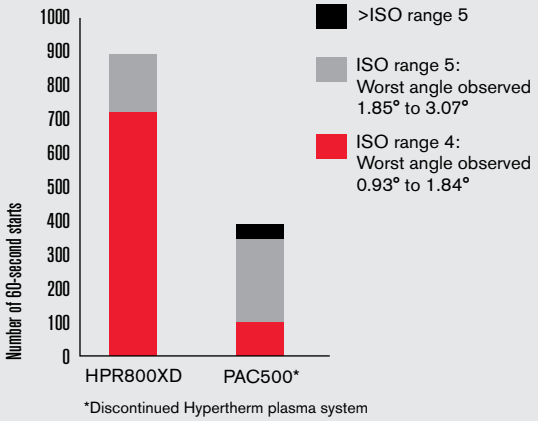
The HPR800XD delivers all the mild steel capability of the HPR400XD and adds the thickest stainless steel and aluminum cutting on the market today.

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.

Cut quality over life (800 A)

75 mm (3") stainless steel



*Discontinued Hypertherm plasma system

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

Superior cut quality on mild steel and stainless steel

Specifications

Input voltages (3-PH) and currents	VAC	Hz	Per power supply Amps	Chiller 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			
Power factor	0.98 @ 160 kW output			
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 bar (115 psi) Automatic gas console			

* F5 = 5% H, 95% N_2
**H35 = 35% H, 65% Ar

Cut with confidence

- Hypertherm is ISO 9001: 2000 registered.
- Hypertherm's full-system warranty provides complete coverage for one year on the torch and leads and two years on all other system components.
- Hypertherm's 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.

One of Hypertherm's long-standing core values is a focus on minimizing our impact on the environment. Doing so is critical to our, and our customers', success. We are always striving to become better environmental stewards; it is a process we care deeply about.

Greener Cuts

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Hypertherm®
Cut with confidence®

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
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	1955	3/16	80
		6	1635	1/4	60
H35 and N_2 plasma*	130†	6	1835	1/4	70
N_2 shield		12	875	1/2	30
		20	305	3/4	15
H35 and N_2 plasma*	260†	6	3980	1/4	150
N_2 shield		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
		60	280	2-1/2	10
H35 and N_2 plasma*	400†	20	1810	3/4	75
N_2 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 N_2 plasma*	400	12	5190	1/2	200
N_2 shield		50	1000	2	40
		80	210	3	10
N_2 plasma	600	50	1048	2	40
N_2 shield		60	832	2-1/2	30
		80	600	3	26
H35 plasma	800	75	907	3	35
N_2 shield		160	179	6-1/4	7

HDi

†Consumables support up to 45° bevel capability.
*H35 and N_2 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.