

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 100 patented plasma technologies to provide customers with exceptional performance they can count on. With over 20 thousand HyPerformance Plasma systems in use around the world, the HPRXD 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.

Key advantages

Unrivalled 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.



Operating data

Mild steel cut capacity

Dross free*	38 mm (1½")
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 (6¼")

Aluminum cut capacity

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

* Feature and material type can influence dross free performance.

** Maximum pierce requires use of controlled motion process.
See technical documentation for details.



Specifications

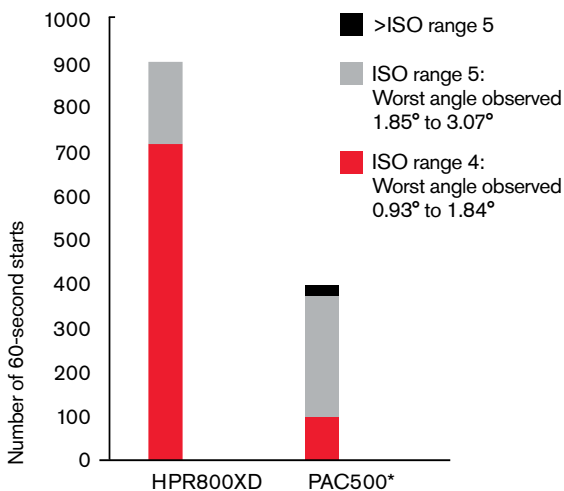
			Per power supply	Chiller
Input voltages	VAC	Hz	Amps	Amps
	200/208	50/60	262/252	30
	220	50/60	238	30
	240	60	219	30
	380	50/60	138	20
	400	50/60	131	20
	440	50/60	120	20
	480	60	110	15
	600	60	88	12
Output voltage	200 VDC			
Output current	800 A			
Duty cycle	100% at 40° C (104° F) at 160 kW			
Power 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 8.0 bar (115 psi) Automatic gas console			

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



Cut quality over life (800 A)

75 mm (3") stainless steel



*Discontinued Hypertherm plasma system

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.



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
	80	3	6145	.135	180
		12	1410	1/2	50
		20	545	3/4	25
	130†	6	4035	1/4	150
		10	2680	3/8	110
		25	550	1	20
	260†	10	4440	3/8	180
		20	2170	3/4	90
		32	1135	1 1/2	35
Stainless steel	60	3	2770	0.105	120
		4	2250	0.135	95
		5	1955	3/16	80
		6	1635	1/4	60
	130†	6	1835	1/4	70
		12	875	1/2	30
		20	305	3/4	15
	260†	6	3980	1/4	150
		12	1790	1/2	65
		20	1320	3/4	55
	400†	20	1100	3/4	45
		50	400	2	15
		60	280	2 1/2	10
	400†	20	1810	3/4	75
		50	520	2	20
		80	180	3	10
	800†	75	464	3	18
		125	155	5	6
		160	100	6 1/4	4
Aluminum	130†	6	2215	1/4	85
		12	1455	1/2	55
		20	815	3/4	35
	260†	12	4290	1/2	160
		20	1940	3/4	80
		32	940	1 1/4	40
	400†	12	5190	1/2	200
		50	1000	2	40
		80	210	3	10
	600†	50	1048	2	40
		60	832	2 1/2	30
		80	600	3	26
H35 plasma N ₂ shield	800†	75	907	3	35
		160	179	6 1/4	7

HDI

† Consumables support up to 45° bevel capability.

H35 and N₂/N₂ require 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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