

HyPerformance Plasma HPR400XD

The HPR400XD® delivers the ultimate in HyPerformance® mild steel cutting as well as heavy-duty stainless and aluminum capability.



Superior cut quality and consistency

HyPerformance Plasma cuts fine-feature parts with superior quality and consistency, eliminating the cost of secondary operations.

- HyDefinition® technology aligns and focuses the plasma arc for more powerful precision mild steel cutting up to 80 mm.
- New HDi™ technology delivers HyDefinition cut quality on thin stainless steel from 3 to 6 mm.
- Patented system technologies deliver more consistent cut quality over a longer period of time than other systems available on the market.

Maximized productivity

HyPerformance Plasma combines fast cutting speeds, rapid process cycling, quick changeovers and high reliability to maximize productivity.

Minimized operating cost

HyPerformance Plasma lowers operating costs and improves profitability.

- LongLife® Technology significantly increases consumable life and enables consistent HyDefinition cut quality over the longest period of time.

Unmatched reliability

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

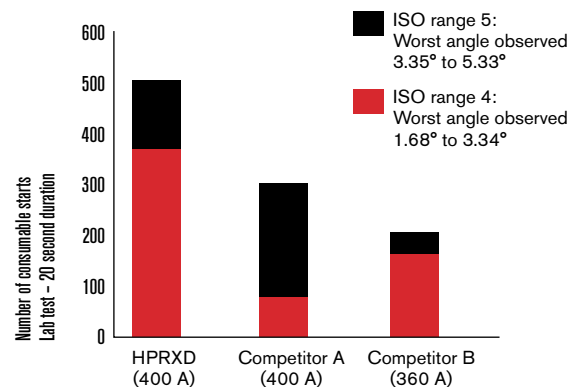
Mild steel cut capacity	
Dross free*	38 mm
Production pierce	50 mm
Maximum cutting capacity	80 mm
Stainless steel cut capacity	
Production pierce	45 mm
Maximum pierce**	75 mm
Severance	80 mm
Aluminum cut capacity	
Production pierce	38 mm
Maximum cutting capacity	80 mm

* 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 (400 A)

25 mm mild steel



Superior cut quality on mild steel and stainless steel



Specifications

Input voltages (3-PH) and currents	VAC	Hz	Amps
	200/208	50/60	262/252
	220	50/60 60	238
	240	50/60	219
	380	50/60	138
	400	50/60	131
	440	50/60	120
	480	60	110
	600	60	88
Output voltage	200 VDC		
Output current	400 A		
Duty cycle	100% at 40°C at 80 kW		
Power factor	0,98 @ 80 kW output		
Maximum OCV	360 VDC		
Dimensions	118 cm H, 88 cm W, 126 cm L		
Weight with torch	851 kg		
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 Manual gas console 8 bar Automatic gas console		

*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.

Operating data

Material	Current (amps)	Thickness (mm)	Approximate cutting speed (mm/min)
Mild steel	30	0.5	5355
		3	1160
		6	665
O ₂ plasma	80†	3	6145
		12	1410
		20	545
Air shield	130†	6	4035
		10	2680
		25	550
O ₂ plasma	260†	10	4440
		20	2170
		32	1135
Air shield	400†	12	4430
		25	2210
		50	795
Stainless steel	60	3	2770
		4	2250
		5	1955
F5 plasma	130†	6	1835
		12	875
		20	305
N ₂ shield	260†	10	2190
		12	1790
		20	1320
H35 and N ₂ plasma*	400†	20	1100
		50	400
		60	280
H35 plasma	400†	20	1810
		50	520
		80	180
N ₂ shield	130	6	2215
		12	1455
		20	815
Aluminum	260	12	4290
		20	1940
		32	940
H35 and N ₂ plasma*	400	12	5190
		50	1000
		80	210

HDi

†Consumables support up to 45° bevel capability.

*H35 and N₂ mixed plasma gas requires the use of an autogas console.

The operating data chart does not list all processes available for the HPR400XD.

Please contact Hypertherm for more information.

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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