Hypertherm®

HyPerformance[®] Plasma HPR400x0[®]

The HPR400XD delivers the ultimate in mild steel plasma cutting performance with the versatility to deliver industry leading stainless steel cut quality

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

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



Operating data

38 mm
50 mm
80 mm
45 mm
75 mm
80 mm
38 mm
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.

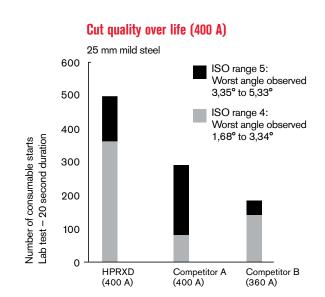


Specifications

Input voltages	VAC	Hz	Amps		
	200/208	50/60	262/252		
	220	50/60	238		
	240	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 @ 80kW output				
Maximum OCV	360 VDC				
Dimensions	118 cm H, 88 cm W, 126 cm L				
Weight	851 kg				
Gas supply					
Plasma gas	O ₂ , N ₂ , F5*, H35**, Air, Ar				
Shield gas	N_{2}, O_{2}, Air, Ar				
Gas pressure	2				
ene produio	8,3 bar Manual gas console 8,0 bar 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.

Greener Cuts

 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.



Material	Current (amps)	Thickness (mm)	Approximate cutting speed (mm/min)	
Mild steel	30	0,5	5355	1
O ₂ plasma		3	1160	
O_2^2 shield		6	665	
O ₂ plasma	80	3	6145	1
Air shield		12	1410	
		20	545	
O ₂ plasma	130†	6	4035	1
Air shield		10	2680	
		25	550	
O ₂ plasma	260 ⁺	10	4440	
Air shield		20	2170	
		32	1135	
O ₂ plasma	400 ⁺	12	4430	
Air shield		25	2210	
		50	795	
		80	180	
Stainless steel	60	3	2770	
		4	2250	ļ
F5 plasma		5	1955	E
N ₂ shield		6	1635	
H35 and N ₂	130 ⁺	6	1835	
plasma N ₂ shield		12	875	
-		20	305	
H35 and N ₂	260 ⁺	10	2190	
plasma		12	1790	
N ₂ shield		20	1320	
H35 plasma	400†	20	1100	
N ₂ shield		50	400	
		60	280	
H35 and N ₂	400†	20	1810	
plasma N ₂ shield		50	520	
-		80	180	
Aluminum	130 ⁺	6	2215	
H35 and N ₂		12	1455	
plasma N ₂ shield		20	815	
N_2 plasma	260 ⁺	12	4290	1
Air shield	200	20	1940	
		32	940	
H35 and N ₂	400 ⁺	12	5190	1
plasma		50	1000	
N ₂ shield		80	210	
L	1	I	1	

† 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 HPR400XD. Please contact Hypertherm for more information.



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