

Hypertherm®

HyPerformance® Plasma HPR400XD®

The HPR400XD is the fastest, thickest and most versatile HyPerformance Plasma system available on the market

Hypertherm has spent more than four decades developing over 75 patented plasma technologies to provide customers with exceptional performance they can count on. With thousands of HyPerformance Plasma systems sold around the world, the HPR 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.

Operating data

Mild steel cut capacity

Dross free	38 mm
Production (pierce)	50 mm
Severance (edge starts)	80 mm

Stainless steel cut capacity

Production (pierce)	45 mm
Severance (edge starts)	80 mm

Aluminum cut capacity

Production (pierce)	38 mm
Severance (edge starts)	80 mm

Key advantages

Superior cut quality and consistency

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

- Patented HyDefinition® technology aligns and focuses the plasma arc for more powerful precision cutting up to 80 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.

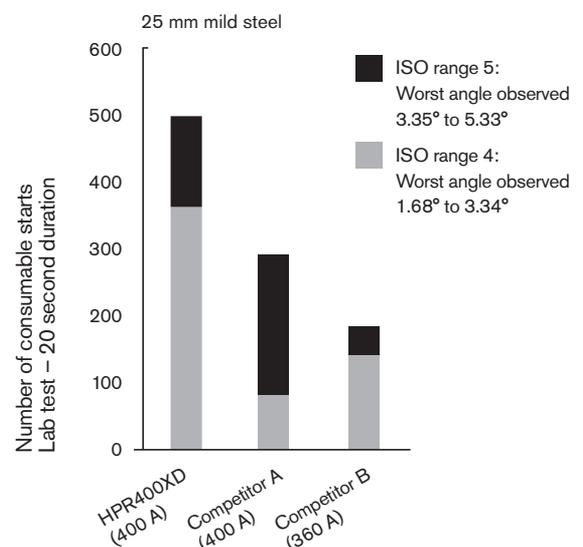
- Patented LongLife® technology significantly increases consumable life and enables consistent HyDefinition cut quality over the longest period of time.

Unmatched reliability

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



Cut quality over life (400 A)



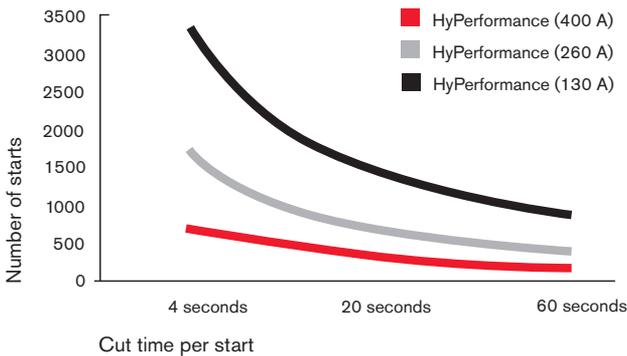
Specifications

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		
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	8,3 bar Manual gas console 8,0 bar Automatic gas console		

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



Longer consumable life



- Hypertherm is ISO 9001:2000 certified.
- Hypertherm full-system warranty – complete coverage for two years on all system components and one year on the torch.

Hypertherm®

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Operating data

Virtually dross-free cutting capacity – mild steel 38 mm
Production pierce capacity – mild steel 50 mm
Maximum cutting capacity (edge start) – mild steel 80 mm

Material	Current (amps)	Thickness (mm)	Approximate cutting speed (mm/min.)	
Mild steel	30	0,5	5355	
		O ₂ plasma	3	1160
		O ₂ shield	6	665
	80	O ₂ plasma	3	6145
		Air shield	6	3045
			20	545
	130†	O ₂ plasma	6	4035
		Air shield	10	2680
			25	550
	200	O ₂ plasma	6	5248
		Air shield	12	3061
			25	1167
50	254			
260†	O ₂ plasma	10	4440	
	Air shield	20	2170	
		64	195	
400†	O ₂ plasma	12	4430	
	Air shield	25	2210	
		50	795	
80		180		
Stainless steel	45	1	5740	
		F5 plasma	2,5	2510
		N ₂ shield	6	845
	80	F5 plasma	4	2180
		N ₂ shield	6	1225
			10	560
	130†	H35 plasma	10	980
		N ₂ shield	12	820
			25	260
	200	H35 plasma	10	1620
		N ₂ shield	12	1450
			20	820
260†	H35 plasma	12	1710	
	N ₂ shield	20	1085	
		25	785	
50		270		
400†	H35 and N ₂ plasma	20	1810	
	N ₂ shield	40	720	
		80	190	
Aluminum	45	1,5	4420	
		Air plasma	4	2575
		Air shield	6	1690
	130†	H35 plasma	12	1455
		N ₂ shield	20	940
			25	540
	200	H35 plasma	10	4400
		N ₂ shield	12	3800
			20	1450
	260†	H35 plasma	12	5160
		N ₂ shield	20	2230
			50	390
400†	H35 plasma	20	2420	
	N ₂ shield	40	1190	
		80	210	

Note: Take care in comparison: Competitors often show maximum cutting speeds, rather than speeds that deliver the best cuts, as shown above. Cut speeds listed above deliver best cut quality for a given process, but cut speeds can be up to 50% faster.

The operating data chart does not list all processes available for the HPR400XD. Please contact Hypertherm for more information.

† Consumables support up to 45° bevel capability.