Hypertherm®

HyPerformance® Plasma HPR400XD®

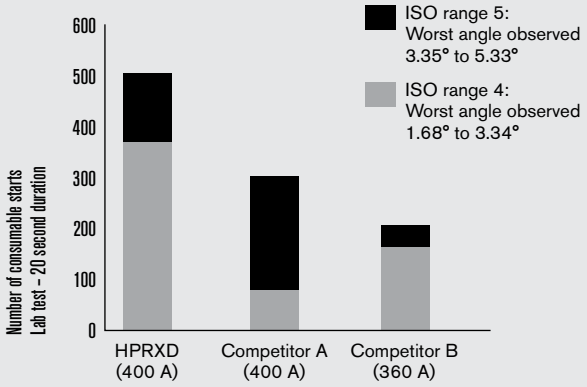
The HPR400XD delivers the ultimate in HyPerformance mild steel cutting as well as heavy-duty stainless and aluminum capability.

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 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.

Superior cut quality on mild steel and stainless steel

PLASMASERV

Specifications

Input voltages (3-PH) and currents	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 @ 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% 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.

Operating data

Material	Current (amps)	Thickness (mm)	Approximate cutting speed (mm/min)
Mild steel O_2 plasma O_2 shield	30	0.5 3 6	5355 1160 665
O_2 plasma Air shield	80†	3 12 20	6145 1410 545
O_2 plasma Air shield	130†	6 10 25	4035 2680 550
O_2 plasma Air shield	260†	10 20 32	4440 2170 1135
O_2 plasma Air shield	400†	12 25 50 80	4430 2210 795 180
Stainless steel F5 plasma N_2 shield	60	3 4 5 6	2770 2250 1955 1635
H35 and N_2 plasma* N_2 shield	130†	6 12 20	1835 875 305
H35 and N_2 plasma* N_2 shield	260†	10 12 20	2190 1790 1320
H35 plasma N_2 shield	400†	20 50 60	1100 400 280
H35 and N_2 plasma* N_2 shield	400†	20 50 80	1810 520 180
Aluminum H35 and N_2 plasma* N_2 shield	130	6 12 20	2215 1455 815
N_2 plasma* Air shield	260	12 20 32	4290 1940 940
H35 and N_2 plasma* N_2 shield	400	12 50 80	5190 1000 210

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 HPR400XD. Please contact Hypertherm for more information.

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

Hypertherm®
SHAPING POSSIBILITY™