Hypertherm®

XPR300™

The most significant advance in mechanized plasma cutting technology redefines what plasma can do.

Industry leading cut quality – X-Definition

The XPR advances HyDefinition® cut quality by blending new technology with refined processes for next generation, X-Definition™ cutting on mild steel, stainless steel and aluminum.

- Consistent ISO range 2 results on thin mild steel and extended range 3 cut quality on thicker mild steel and stainless steel
- Superior results on aluminum using Vented Water Injection™ (VWI)

Optimized productivity and reduced operating costs

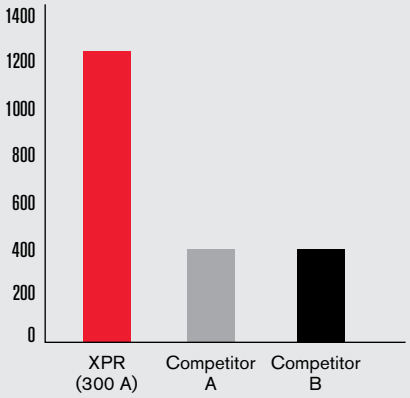
- Operating costs reduced by over 50%
- Up to 15% higher cut speeds on thicker materials
- Consumable life increases of over 40%
- 20% thicker piercing on stainless steel and 30% thicker on mild steel

Engineered system optimization and ease of use

- Increases consumable life 3 times that of competitor's systems by eliminating the impact of ramp down errors
- Reduces the impact of catastrophic electrode blowouts which can damage the torch at high current levels
- Automatic system monitoring and specific troubleshooting codes for improved maintenance and service prompts
- EasyConnect™ torch lead and one hand torch-to receptacle connection for fast and easy change-outs
- QuickLock™ electrode for easy consumable replacement
- WiFi in the power supply can connect to mobile devices and LAN for multiple system monitoring and service

Mild steel		mm	inches
Pierce capacity	(argon-assist)	50 mm	2
	(standard O_2)	45 mm	1-3/4
Severance		80 mm	3-1/8
Stainless steel			
Pierce capacity		38 mm	1-1/2
Severance		75 mm	3
Aluminum			
Pierce capacity		38 mm	1-1/2
Severance		50 mm	2"

Number of 20-second starts with 5% ramp-down errors



Process control and delivery

Three GasConnect console options offer unmatched mild steel cut quality with each console delivering successively enhanced cutting capabilities on stainless steel and aluminum. All consoles can be fully controlled through the CNC for high productivity and ease of use.

Core™ console

Vented Water Injection™ (VWI) console

OptiMix™ console

Specifications

Maximum open-circuit voltage	360 VDC
Maximum output current	300 A
Maximum output power	63 kW
Output voltage	50–210 VDC
100% duty arc voltage	210 V
Duty cycle rating	100% at 63 kW, 40° C (104° F)
Operational ambient temperature range	-10° C–40° C (14° F–104° F)
Power factor	0.98 @ 63 kW
Cooling	Forced air (Class F)
Insulation	Class H
EMC emissions classification (CE models only)	Class A
Lift points	Top lift eye
Bottom lift truck slots	Lift eye weight rating 680 kg (1,500 lb.)

Hypertherm is ISO 9001: 2008 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.

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

Console	Cutting gases	Current (A)	Cut chart thickness (mm)	Approximate cutting speed (mm/min)	Cut chart thickness (in.)	Approximate cutting speed (ipm)
Mild steel						
Core, VWI, and OptiMix	O_2 plasma O_2 shield	30	0.5	5348	0.018"	215
			3	1153	0.135"	40
			5	521	3/16"	30
	O_2 plasma Air shield	80	3	5582	0.105"	225
			6	3048	1/4"	110
			12	1405	1/2"	55
	O_2 plasma Air shield	130	3	6502	0.135"	240
			10	2680	3/8"	110
			38	256	1-1/2"	10
	O_2 plasma Air shield	170	6	5080	1/4"	200
			12	3061	1/2"	115
			25	1175	1"	45
			50	267	2"	10
	O_2 plasma Air shield	300	12	3940	1/2"	155
			25	1950	1"	75
			50	560	2"	21
			80	165	3-1/8"	7
Stainless steel						
Core, VWI, and OptiMix	N_2 plasma N_2 shield	40	0.8	6100	0.036"	240
			3	2683	0.105"	120
			6	918	1/4"	32
VWI and OptiMix	F5 plasma N_2 shield	80	3	4248	0.135	140
			6	1916	1/4"	70
			12	864	1/2"	34
OptiMix	H_2-Ar-N_2 plasma N_2 shield	170	10	1975	3/8"	80
			12	1735	1/2"	65
			38	256	1-1/2"	10
	H_2-Ar-N_2 plasma N_2 shield	300	12	2038	1/2"	80
			25	1040	1"	40
			50	387	2"	17
			75	162	3"	6
VWI and OptiMix	N_2 plasma H_2O shield	300	12	2159	1/2"	85
			25	1302	1"	50
			50	403	2"	15
Aluminum						
Core, VWI, and OptiMix	Air plasma Air shield	40	1.5	4799	0.036	240
			3	2596	1/8"	85
			6	911	1/4"	32
VWI and OptiMix	N_2 plasma H_2O shield	80	3	3820	1/8"	140
			6	2203	1/4"	80
			10	956	1/2"	28
	N_2 plasma H_2O shield	130	6	2413	1/4"	95
			10	1702	3/8"	70
			20	870	3/4"	35
	N_2 plasma H_2O shield	300	12	2286	1/2"	90
			25	1302	1"	50
			50	524	2"	20
OptiMix	H_2-Ar-N_2 plasma N_2 shield	300	12	3810	1/2"	150
			25	2056	1"	80
			50	391	2"	15

This does not represent a complete list of processes or thicknesses that are available

Hypertherm®
SHAPING POSSIBILITY™