HYPERTHERM®
A Hypertherm Associates Brand

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

- Significantly reduced operating costs than previous generation technology
- Increased cut speeds on thicker materials
- Dramatic improvement in consumable life on mild steel applications
- Thicker piercing capability than competitive plasma systems

Engineered system optimization and ease of use

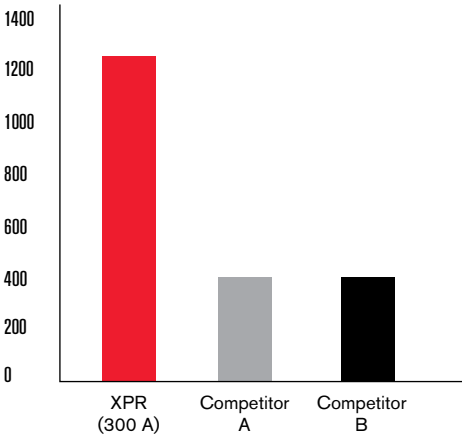
- Ramp down error protection significantly increases realized consumable life
- Reduces the impact of catastrophic electrode blowouts which can damage the torch at high current levels
- Automatic system monitoring and specific troubleshooting codes for improved maintenance and service prompts
- EasyConnect™ 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 network mode for multiple system monitoring and service

Mild steel		mm	inches
Production pierce capacity	(air shield gas)	45	1-3/4
Enhanced pierce capacity	(argon-assist shield gas)*	50	2
Severance		80	3-1/8
Stainless steel			
Pierce capacity		38	1-1/2
Severance		75	3
Aluminum			
Pierce capacity		38	1-1/2
Severance		50	2

*Argon-assist technology for thicker piercing is available with CorePlus, VWI and OptiMix gas consoles.

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

20 mm (3/4") mild steel





Process control and delivery

Four gas connect 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.

CorePlus, VWI, and Optimix gas connect consoles provide a source of argon gas which can be used for significantly improved marking and extended capacity piercing in some applications.


Core™ console


CorePlus™ console


Vented Water Injection™ (VWI) console


OptiMix™ console

Specifications

Maximum open-circuit voltage	360 VDC
Maximum output current	300 A
Maximum output power	66.5 kW
Output voltage	50–222 VDC
100% duty arc voltage	222 V
Duty cycle rating	100% at 66.5 kW, 40° C (104° F)
Operational ambient temperature range	-10° C–40° C (14° F–104° F)
Power factor	098 @ 66.5 kW
Cooling	Forced air (Class F)
Insulation	Class H
EMC emissions classification (CE models only)	Class A
IP Rating	IP21
Unit dimensions	H = 124.76 cm (49.12") L = 127.28 cm (50.11") W = 81.70 cm (32.17")
Lift points	Top lift eye weight rating 680 kg (1,500 lb.)
	Bottom lift truck slots

Hypertherm Associates' quality management system is registered to the International Standard ISO 9001: 2015.

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.

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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Console	Cutting gases	Current (A)	Thickness (mm)	Approximate cutting speed (mm/min)	Thickness (in.)	Approximate cutting speed (ipm)
Mild steel						
Core, CorePlus, VWI, and OptiMix	O_2 plasma O_2 shield	30	0.5 3 5	5348 1153 726	0.018 0.135 3/16	215 40 30
	O_2 plasma Air shield	50	3 5 8	3820 2322 1369	0.105 3/16 5/16	155 95 55
	O_2 plasma Air shield	80	3 6 12	5582 3048 1405	0.105 1/4 1/2	225 110 55
	O_2 plasma Air shield	130	3 10 38	6502 2680 256	0.135 3/8 1-1/2	240 110 10
	O_2 plasma Air shield	170	6 12 25 60	5080 3061 1175 152	1/4 1/2 1 2-3/8	200 115 45 6
	O_2 plasma Air shield	300	12 25	3940 1950	1/2 1	155 75
	N_2 shield	300	50 80	560 165	2 3	21 7
Stainless steel						
Core, CorePlus, VWI, and OptiMix	N_2 plasma N_2 shield	40	0.8 3 6	6100 2683 918	0.036 0.105 1/4	240 120 32
VWI and OptiMix	F5 plasma N_2 shield	80	3 6 12	4248 1916 864	0.135 1/4 1/2	140 70 34
OptiMix	H_2Ar-N_2 plasma N_2 shield	170	10 12 38	1975 1735 256	3/8 1/2 1-1/2	80 65 10
	H_2Ar-N_2 plasma N_2 shield	300	12 25 50 75	2038 1040 387 162	1/2 1 2 3	80 40 15 6
VWI and OptiMix	N_2 plasma H_2O shield	300	12 25 50	2159 1302 434	1/2 1 2	85 50 15
Aluminum						
Core, CorePlus, VWI, and OptiMix	Air plasma Air shield	40	1.5 3 6	4799 2596 911	0.036 1/8 1/4	240 85 32
VWI and OptiMix	N_2 plasma H_2O shield	80	3 6 10	3820 2203 956	1/8 1/4 1/2	140 80 28
	N_2 plasma H_2O shield	130	6 10 20	2413 1702 870	1/4 3/8 3/4	95 70 35
	N_2 plasma H_2O shield	300	12 25 50	2286 1302 524	1/2 1 2	90 50 20
OptiMix	H_2-Ar-N_2 plasma N_2 shield	300	12 25 50	3810 2056 391	1/2 1 2	150 80 15

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

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Environmental stewardship is one of Hypertherm Associates' core values. www.hyperthermassociates.com/environment

100% Associate-owned

Greener Cuts