

XPR300®

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



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

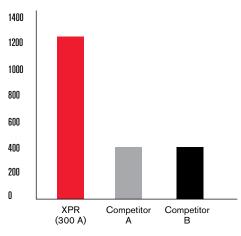
Engineered system optimization and ease of use

- 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
Production pierce capacity	(air shield gas)	45
Enhanced pierce capacity	(argon-assist shield gas)*	50
Severance		80
Stainless steel		
Pierce capacity		38
Severance		75
Aluminum		
Pierce capacity		38
Severance		50

*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 $_{\rm 20\ mm\ mild\ steel}$







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.





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	
Operational ambient temperature range	-10° C-40° C	
Power factor	0,98 @ 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	
	L = 127.28 cm	
	W = 81.70 cm	
Lift points	Top lift eye weight rating 680 kg	
	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.

Console	Cutting gases	Current (A)	Thickness (mm)	Approxima cutting spe (mm/min)
		Mild steel		
	O2 plasma	30	0,5	5348
_	O ₂ shield		3	1153
			5	521
	O2 plasma	50	3	3820
	Air shield		5	2322
_			8	1369
	O2 plasma	80	3	5582
	Air shield		6	3048
Core,			12	1405
CorePlus,	O₂ plasma	130	3	6502
VWI, and	Air shield		10	2680
OptiMix			38	256
	O2 plasma	170	6	5080
	Air shield		12	3061
			25	1175
			60	152
-	O2 plasma	300	12	3940
	Air shield	500	25	1950
-	N₂ shield	300	50	560
		300	80	165
		Stainless stee		103
	N₂ plasma	40	0.8	6100
Core, CorePlus, VWI, and	N_2 plasma N_2 shield	40	3	2683
OptiMix			6	918
Optimix	FE plaama	80	3	
VWI and	F5 plasma N₂ shield	00	6	4248 1916
OptiMix	N ₂ Silielu		12	864
	II Ar N. plaama	170	12	1975
	H ₂ .Ar-N ₂ plasma	170	10	1975
	N_2 shield		38	256
OntiMise	II An Number	200		
OptiMix	H ₂ .Ar-N ₂ plasma	300	12	2038
	N_2 shield		25	1040
			50	387
	N!	000	75	162
VWI and OptiMix	N₂ plasma	300	12	2159
	H_2O shield		25	1302
		Al	50	434
	Air plane -	Aluminum	1 5	4700
Core, CorePlus,	Air plasma	40	1.5	4799
VWI, and OptiMix	Air shield		3	2596
υμιινιχ	N	00	6	911
	N₂ plasma	80	3	3820
	H_2O shield		6	2203
-	N	100	10	956
VWI and OptiMix	N₂ plasma	130	6	2413
	H_2O shield		10	1702
	 .		20	870
	N₂ plasma	300	12	2286
	H_2O shield		25	1302
			50	524
	H_2 -Ar- N_2 plasma	300	12	3810
OptiMix	N ₂ shield		25	2056
		1	50	201

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

For more information, visit: www.hypertherm.com

Hypertherm, HyDefinition, XPR, X-Definition, Vented Water Injection, EasyConnect, QuickLock, Core, CorePlus and Optimix are trademarks of Hypertherm, Inc. and may be registered in the United States and/or other countries. All other trademarks are the properties of their respective owners.

Please visit www.hypertherm.com/patents for more details about Hypertherm Associates patent numbers and types.

© 4/2023 Hypertherm, Inc. Revision 3 87093D





50

391