# Hypertherm<sup>®</sup>

# 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

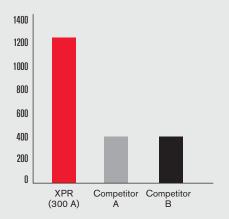
#### Engineered system optimization and ease of use

- 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<sup>™</sup> 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'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.

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	Cutting	Current	thickness	approximate cutting speed	thickness	Approximate cutting		
Console	gases	(A)	(mm)	(mm/min)	(in.)	speed (ipm)		
Mild steel								
	O <sub>2</sub> plasma	30	0.5	5348	0.018"	215		
	O <sub>2</sub> shield		3	1153	0.135"	40		
	0 nlasma	00	5 3	521	3/16"	30		
	O <sub>2</sub> plasma Air shield	80	6	5582 3048	0.105" 1/4"	225 110		
	All Siliciu		12	1405	1/4"	55		
	O <sub>2</sub> plasma	130	3	6502	0.135"	240		
Core,	Air shield		10	2680	3/8"	110		
VWI, and	7.11. 01.1101.0		38	256	1-1/2"	10		
OptiMix	O <sub>2</sub> plasma	170	6	5080	1/4"	200		
•	Air shield		12	3061	1/2"	115		
			25	1175	1"	45		
			50	267	2"	10		
	$0_2$ plasma	300	12	3940	1/2"	155		
	Air shield		25	1950	1"	75		
			50	560	2"	21		
			80	165	3-1/8"	7		
0	N. I	40	Stainless s		0.000	040		
Core,	N <sub>2</sub> plasma	40	0.8	6100	0.036"	240		
VWI, and OptiMix	N <sub>2</sub> shield		3	2683	0.105"	120 32		
Opulviix	EE ploomo	80	6 3	918 4248	1/4"	140		
VWI and	F5 plasma N <sub>2</sub> shield	00	ა 6	4246 1916	0.135 1/4"	70		
OptiMix	เพร จากเฮเน		12	864	1/2"	34		
	H <sub>2</sub> -Ar-N <sub>2</sub>	.=-						
	plasma	170	10	1975	3/8"	80		
	N <sub>2</sub> shield		12	1735	1/2"	65		
			38	256	1-1/2"	10		
OptiMix	H <sub>2</sub> -Ar-N <sub>2</sub> plasma N <sub>2</sub> shield	300	12	2038	1/2"	80		
			25	1040	1" 2"	40		
			50 75	387 162	2 3"	17 6		
	N <sub>2</sub> plasma	300	12	2159	1/2"	85		
VWI and	H <sub>2</sub> O shield	000	25	1302	1"	50		
OptiMix	1120 omora		50	403	2"	15		
			Aluminu		_			
Core,	Air plasma	40	1.5	4799	0.036	240		
VWI, and	Air shield	-	3	2596	1/8"	85		
OptiMix			6	911	1/4"	32		
VWI and OptiMix	N <sub>2</sub> plasma	80	3	3820	1/8"	140		
	$H_2O$ shield		6	2203	1/4"	80		
			10	956	1/2"	28		
	N <sub>2</sub> plasma	130	6	2413	1/4"	95		
	H <sub>2</sub> O shield		10	1702	3/8"	70		
	NI	000	20	870	3/4"	35		
	•	300	12	2286	1/2"	90		
	H <sub>2</sub> O shield		25 50	1302 524	1" 2"	50 20		
	H <sub>2</sub> -Ar-N <sub>2</sub>							
OptiMix	plasma	300	12	3810	1/2"	150		
	N <sub>2</sub> shield		25	2056	1"	80		
				004	011	4-		

Cut chart Approximate Cut chart <u>Approximate</u>

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

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