HYPERTHERM®
A Hypertherm Associates Brand

XPR170®

The XPR170 delivers next generation X-Definition processes from very thin up to mid-range thicknesses.



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.

- Superior stainless steel cut quality
- 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 lower operating costs than previous generation technology
- Dramatic improvement in consumable life on mild steel applications
- Thicker piercing capability than competitive plasma systems

Engineered system optimization and ease of use

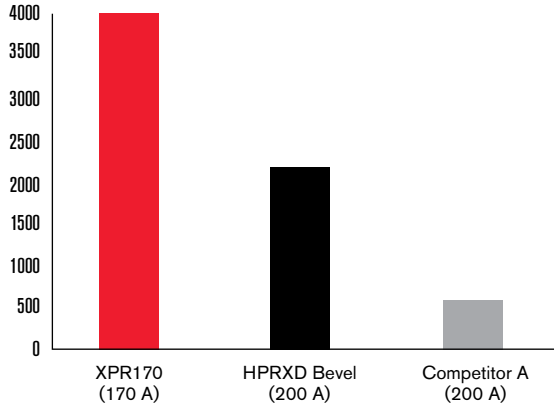
- Ramp down error protection significantly increases realized consumable life
- Automatic system monitoring and specific troubleshooting codes for improved maintenance and service prompts
- EasyConnect™ torch lead and one hand torch-to-receptacle connection for fast and easy change-outs
- QuickLock™ 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)	35	1-3/8
Enhanced pierce capacity	(argon-assist shield gas)*	40	1-9/16
Severance		60	2-3/8
Stainless steel			
Pierce capacity		22	7/8
Severance		38	1-1/2
Aluminum			
Pierce capacity		25	1
Severance		38	1-1/2

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

Number of 20-second starts

12 mm (1/2") 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	170 A
Maximum output power	35.7 kW
Output voltage	50–210 VDC
100% duty arc voltage	210 V
Duty cycle rating	100% at 35.7 kW, 40° C (104° F)
Operational ambient temperature range	-10° C–40° C (14° F–104° F)
Power factor	0.98 @ 35.7 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	30	0.5	5348	0.018	215
	O_2 shield		3	1153	0.135	40
			5	521	3/16	30
	O_2 plasma	50	3	3820	0.105	155
	Air shield		5	2322	3/16	95
			8	1369	5/16	55
	O_2 plasma	80	3	5582	0.105	225
	Air shield		6	3048	1/4	110
			12	1405	1/2	55
	O_2 plasma	130	3	6502	0.135	240
	Air shield		10	2680	3/8	110
			38	256	1-1/2	10
	O_2 plasma	170	6	5080	1/4	200
	Air shield		12	3061	1/2	115
			25	1175	1	45
			60	152	2-3/8	6
Stainless steel						
Core, CorePlus VWI, and OptiMix	N_2 plasma	40	0.8	6100	0.036	240
	N_2 shield		3	2683	0.105	120
			6	918	1/4	32
VWI and OptiMix	F5 plasma	80	3	4248	0.135	140
	N_2 shield		6	1916	1/4	70
			12	864	1/2	34
OptiMix	H_2-Ar-N_2 plasma	170	10	1975	3/8	80
	N_2 shield		12	1735	1/2	65
			38	256	1-1/2	10
VWI and OptiMix	N_2 plasma	170	10	1975	3/8	80
	H_2O shield		20	978	3/4	40
			38	434	1-1/2	17
Aluminum						
Core, CorePlus, VWI, and OptiMix	Air plasma	40	1.5	4799	0.036	240
	Air shield		3	2596	1/8	85
			6	911	1/4	32
VWI and OptiMix	N_2 plasma	80	3	3820	1/8	140
	H_2O shield		6	2203	1/4	80
			10	956	1/2	28
	N_2 plasma	130	6	2413	1/4	95
	H_2O shield		10	1702	3/8	70
			20	870	3/4	35
	N_2 plasma	170	10	1994	3/8	80
	H_2O shield		20	978	3/4	40
			38	434	1-1/2	17
OptiMix	H_2-Ar-N_2 plasma	170	10	3334	3/8	135
	N_2 shield		20	1213	3/4	50
			38	384	1-1/2	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

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