# Hypertherm<sup>®</sup>

## 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

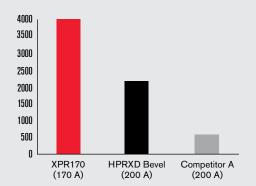
#### Engineered system optimization and ease of use

- Ramp down error protection significantly increases realized consumable life
- Automatic system monitoring and specific troubleshooting codes for improved maintenance and service prompts
- EasyConnect<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
- Compatible with IoT



Mild steel		mm	inches
Pierce capacity	(argon-assist shield gas)	40	1-9/16
	(standard air shield gas)	35	1-3/8
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

#### Number of 20-second starts





#### **Process control and delivery**

Three 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.



Cutting

O<sub>2</sub> plasma

 $0_2$  shield

O<sub>2</sub> plasma

Air shield

O<sub>2</sub> plasma

Air shield

O<sub>2</sub> plasma

Air shield

 $0_2$  plasma

Air shield

N₂ plasma

N<sub>2</sub> shield

F5 plasma

Core,

VWI, and

**OptiMix** 

Core. VWI, and

**OptiMix** 

Current (A)

30

50

80

130

170

40

80

Mild steel

0.5

3

5

3

5

8

3

6

12

3

10

38

6

12

25

60

0.8

3

6

3

Stainless steel

5348

1153

521

3820

2322

1369

5582

3048

1405

6502

2680

256

5080

3061

1175

152

6100

2683

918

4248

0.018

0.135

3/16

0.105

3/16

5/16

0.105

1/4

1/2

0.135

3/8

1-1/2

1/4

1/2

1

2-3/8

0.036

0.105

1/4

0.135

215

40

30

155

95

55

225

110

55

240

110

10

200

115

45

6

240

120

32

140

Core™ 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		
Lift points	Top lift eye weight rating 454 kg (1,000 lb.)		
	Bottom lift truck slots		

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

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.

Environmental stewardship is one of Hypertherm's core values, and it is critical to our success and our customers' success. We are striving to reduce the environmental impact of everything we do. For more information: www.hypertherm.com/environment.



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VWI and	i o piasilia	00	, J	7270	0.100	170	
OptiMix	$N_2$ shield		6	1916	1/4	70	
			12	864	1/2	34	
OptiMix	H₂-Ar-N₂ plasma	170	10	1975	3/8	80	
	N₂ shield		12	1735	1/2	65	
			38	256	1-1/2	10	
VWI and OptiMix	$N_2$ plasma	170	10	1975	3/8	80	
	H₂O shield		20	978	3/4	40	
Optimix			38	434	1-1/2	17	
Aluminum							
Core, 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	N₂ plasma	80	3	3820	1/8	140	
	H₂O shield		6	2203	1/4	80	
			10	956	1/2	28	
	$N_2$ plasma	130	6	2413	1/4	95	
	H₂O shield		10	1702	3/8	70	
			20	870	3/4	35	
	N₂ plasma	170	10	1994	3/8	80	
	H₂O shield		20	978	3/4	40	
			38	434	1-1/2	17	
OptiMix	H₂-Ar-N₂ plasma	170	10	3334	3/8	135	
	N₂ shield		20	1213	3/4	50	
			38	384	1-1/2	15	
This does not	represent a com	plete list of p	rocesses or th	icknesses that are	available		



