

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
- XPR automated gouging minimizes or eliminates grinding compared to carbon arc gouging producing weld-ready parts faster with wider, deeper, and cleaner gouge profiles

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
- The web interface tool can be accessed via Wi-Fi and Ethernet LAN in the power supply for system monitoring and service
- Built-in IIoT via Ethernet LAN and MTConnect® enables remote data access for smarter monitoring from anywhere in the world
- Manual Set-Mode is ideal for straightforward applications like gouging and off-table beveling; it retains your last setup for faster, repeatable workflows and simplifies set up and operations without the need for CNC/PLC integration

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.

Specifications

OptiMix™ console

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 = 124.8 cm (49.12") L = 123.8 cm (48.75") W = 84.2 cm (33.14")
Lift points	Top lift eye weight rating 680 kg (1,500 lb.) Bottom lift truck slots

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	5348	0.018	215	
			3	1153	0.135	40	
			5	521	3/16	30	
	O ₂ plasma Air shield	50	3	3820	0.105	155	
			5	2322	3/16	95	
			8	1369	5/16	55	
	O ₂ plasma Air shield	80	3	5582	0.105	225	
			6	3048	1/4	110	
			12	1405	1/2	55	
	O ₂ plasma Air shield	130	3	6502	0.135	240	
			10	2680	3/8	110	
			38	256	1-1/2	10	
	O ₂ plasma Air shield	170	6	5080	1/4	200	
			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 N ₂ shield	40	0.8	6100	0.036	240
3				2683	0.105	120	
6				918	1/4	32	
VWI and OptiMix	F5 plasma N ₂ shield	80	3	4248	0.135	140	
			6	1916	1/4	70	
			12	864	1/2	34	
VWI and OptiMix	N ₂ plasma H ₂ O shield	170	10	1975	3/8	80	
			20	978	3/4	40	
			38	434	1-1/2	17	
OptiMix	H ₂ -Ar-N ₂ plasma N ₂ shield	170	10	1975	3/8	80	
			12	1735	1/2	65	
			38	256	1-1/2	10	

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 ₂ O shield		6	2203	1/4	80
			10	956	1/2	28
	N ₂ plasma	130	6	2413	1/4	95
	H ₂ O shield		10	1702	3/8	70
			20	870	3/4	35
	N ₂ plasma	170	10	1994	3/8	80
	H ₂ O 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