***No. 1 PLASMA POWER SUPPLY HYPERTHERM***

Model *XPR 170 CORE / VWI / OPTIMIX automatic gas console*

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The XPR 170 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 quality 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 connecton for fast and easy change-outs
* QuckLock 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

***Cut thicknesses***

|  |  |  |
| --- | --- | --- |
| MildSteel | **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-seconds 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. .



***Specifications***

|  |  |
| --- | --- |
| Maximum open-circuit voltage | 360 VCC |
| Maximum output current | 170 A |
| Maximum output power | 35,7 kW |
| Output voltage | 50-210 VCC |
| 100% duty arc voltage | 210 V |
| Duty cycle rating | 100% a 35,7 kW, 40 °C |
| Operational ambient temperature range | -10 °C – 40 °C |
| 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 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Consolle | Cutting gases | Current (A) | Thickness (mm) | Approximate cutting speed (mm/min) | Thickness (inch) | Approximate cutting speed (ipm) |
| Mild steel | | | | |  |  |
| Core, VWI and Optimix | O2 Plasma O2 Shield | 30 | 0,5 | 5348 | 0.018 | 215 |
| 3 | 1153 | 0.135 | 40 |
| 5 | 521 | 3/16 | 30 |
| O2 Plasma Air Shield | 50 | 3 | 3820 | 0.105 | 155 |
| 5 | 2322 | 3/16 | 95 |
| 8 | 1369 | 5/16 | 55 |
| O2 Plasma Air Shield | 80 | 3 | 5582 | 0.105 | 225 |
| 6 | 3048 | 1/4 | 110 |
| 12 | 1405 | 1/2 | 55 |
| O2 Plasma Air Shield | 130 | 3 | 6502 | 0.135 | 240 |
| 10 | 2680 | 3/8 | 110 |
| 38 | 256 | 1-1/2 | 10 |
| O2 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, VWI and Optimix | N2  Plasma N2 Shield | 40 | 0,8 | 6100 | 0.036 | 240 |
| 3 | 2683 | 0.105 | 120 |
| 6 | 918 | 1/4 | 32 |
| VWI and Optimix | F5 Plasma N2 Shield | 80 | 3 | 4248 | 0.135 | 140 |
| 6 | 1916 | 1/4 | 70 |
| 12 | 864 | 1/2 | 34 |
| Optimix | H2 -Ar- N2 Plasma  N2 Shield | 170 | 10 | 1975 | 3/8 | 80 |
| 12 | 1735 | 1/2 | 65 |
| 38 | 256 | 1-1/2 | 10 |
| VWI and Optimix | N2  Plasma H2O Shield | 170 | 10 | 1975 | 3/8 | 80 |
| 20 | 978 | 3/4 | 40 |
| 38 | 434 | 1-1/2 | 17 |
| Aluminum | | | | |  |  |
| Core, VWI and Optimix | Air PlasmaAir Shield | 40 | 1,5 | 4799 | 0.036 | 240 |
| 3 | 2596 | 1/8 | 85 |
| 6 | 911 | 1/4 | 32 |
| VWI and Optimix | N2  Plasma H2OShield | 80 | 3 | 3820 | 1/8 | 140 |
| 6 | 2203 | 1/4 | 80 |
| 10 | 956 | 1/2 | 28 |
| N2  Plasma H2OShield | 130 | 6 | 2413 | 1/4 | 95 |
| 10 | 1702 | 3/8 | 70 |
| 20 | 870 | 3/4 | 35 |
| N2  Plasma H2OShield | 170 | 10 | 1994 | 3/8 | 80 |
| 20 | 978 | 3/4 | 40 |
| 38 | 434 | 1-1/2 | 17 |
| Optimix | H2-Ar- N2 Plasma  N2 Shield | 170 | 10 | 3334 | 3/8 | 135 |
| 20 | 1213 | 3/4 | 50 |
| 38 | 384 | 1-1/2 | 15 |

**Note:**

\* Characteristics and type of material may affect burr-free performance.