

# XPR300®

The most significant advance in mechanized plasma cutting technology redefines what plasma can do.



The XPR advances HyDefinition<sup>®</sup> cut quality by blending new technology with refined processes for next generation, X-Definition<sup>™</sup> 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<sup>™</sup> (VWI)

### Optimized productivity and reduced operating costs

- Significantly reduced operating costs than previous generation technology
- Increased cut speeds on thicker materials
- Dramatic improvement in consumable life on mild steel applications
- Thicker piercing capability than competitive plasma systems

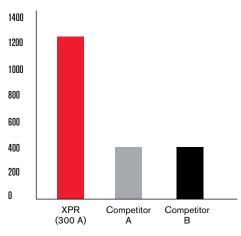
### Engineered system optimization and ease of use

- Ramp down error protection significantly increases realized consumable life
- 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<sup>™</sup> 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 |
|----------------------------|----------------------------|----|
| Production pierce capacity | (air shield gas)           | 45 |
| Enhanced pierce capacity   | (argon-assist shield gas)* | 50 |
| Severance                  |                            | 80 |
| Stainless steel            |                            |    |
| Pierce capacity            |                            | 38 |
| Severance                  |                            | 75 |
| Aluminum                   |                            |    |
| Pierce capacity            |                            | 38 |
| Severance                  |                            | 50 |

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

## Number of 20-second starts with 5% ramp-down errors $_{\rm 20\ mm\ mild\ steel}$







### **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.





OptiMix<sup>™</sup> console

### **Specifications**

| Maximum open-circuit voltage                     | 360 VDC                           |  |
|--|-----------------------------------|--|
| Maximum output current                           | 300 A                             |  |
| Maximum output power                             | 66,5 kW                           |  |
| Output voltage                                   | 50-222 VDC                        |  |
| 100% duty arc voltage                            | 222 V                             |  |
| Duty cycle rating                                | 100% at 66,5 kW, 40° C            |  |
| Operational ambient temperature range            | -10° C-40° C                      |  |
| Power factor                                     | 0,98 @ 66,5 kW                    |  |
| Cooling  | Forced air (Class F)              |  |
| Insulation                                       | Class H                           |  |
| EMC emissions classification<br>(CE models only) | Class A                           |  |
| IP Rating  | IP21                              |  |
| Unit dimensions                                  | H = 124.76 cm                     |  |
|  | L = 127.28 cm                     |  |
|  | W = 81.70 cm                      |  |
| Lift points                                      | Top lift eye weight rating 680 kg |  |
|  | 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.

| Console                     | Cutting<br>gases                         | Current<br>(A) | Thickness<br>(mm) | Approxima<br>cutting spe<br>(mm/min) |
|-----------------------------|--|----------------|-------------------|--------------------------------------|
|                             |  | Mild steel     |                   |                                      |
|                             | O2 plasma                                | 30             | 0,5               | 5348                                 |
| _                           | O <sub>2</sub> shield                    |                | 3                 | 1153                                 |
|                             |  |                | 5                 | 521                                  |
|                             | O2 plasma                                | 50             | 3                 | 3820                                 |
|                             | Air shield                               |                | 5                 | 2322                                 |
| _                           |  |                | 8                 | 1369                                 |
|                             | O2 plasma                                | 80             | 3                 | 5582                                 |
|                             | Air shield                               |                | 6                 | 3048                                 |
| Core,                       |  |                | 12                | 1405                                 |
| CorePlus,                   | O₂ plasma                                | 130            | 3                 | 6502                                 |
| VWI, and                    | Air shield                               |                | 10                | 2680                                 |
| OptiMix                     |  |                | 38                | 256                                  |
|                             | O2 plasma                                | 170            | 6                 | 5080                                 |
|                             | Air shield                               |                | 12                | 3061                                 |
|                             |  |                | 25                | 1175                                 |
|                             |  |                | 60                | 152                                  |
| -                           | O2 plasma                                | 300            | 12                | 3940                                 |
|                             | Air shield                               | 500            | 25                | 1950                                 |
| -                           | N₂ shield                                | 300            | 50                | 560                                  |
|                             |  | 300            | 80                | 165                                  |
|                             |  | Stainless stee |                   | 103                                  |
|                             | N₂ plasma                                | 40             | 0.8               | 6100                                 |
| Core, CorePlus,<br>VWI, and | $N_2$ plasma $N_2$ shield                | 40             | 3                 | 2683                                 |
| OptiMix                     |  |                | 6                 | 918                                  |
| Optimix                     | FE plaama                                | 80             | 3                 |                                      |
| VWI and                     | F5 plasma<br>N₂ shield                   | 00             | 6                 | 4248<br>1916                         |
| OptiMix                     | N <sub>2</sub> Silielu                   |                | 12                | 864                                  |
|                             | II Ar N. plaama                          | 170            | 12                | 1975                                 |
|                             | H <sub>2</sub> .Ar-N <sub>2</sub> plasma | 170            | 10                | 1975                                 |
|                             | $N_2$ shield                             |                | 38                | 256                                  |
| OntiMise                    | II An Number                             | 200            |                   |                                      |
| OptiMix                     | H <sub>2</sub> .Ar-N <sub>2</sub> plasma | 300            | 12                | 2038                                 |
|                             | $N_2$ shield                             |                | 25                | 1040                                 |
|                             |  |                | 50                | 387                                  |
|                             | N!                                       | 000            | 75                | 162                                  |
| VWI and<br>OptiMix          | N₂ plasma                                | 300            | 12                | 2159                                 |
|                             | $H_2O$ shield                            |                | 25                | 1302                                 |
|                             |  | Al             | 50                | 434                                  |
|                             | Air plane -                              | Aluminum       | 1 5               | 4700                                 |
| Core, CorePlus,             | Air plasma                               | 40             | 1.5               | 4799                                 |
| VWI, and<br>OptiMix         | Air shield                               |                | 3                 | 2596                                 |
| υμιινιχ                     | N  | 00             | 6                 | 911                                  |
|                             | N₂ plasma                                | 80             | 3                 | 3820                                 |
|                             | $H_2O$ shield                            |                | 6                 | 2203                                 |
| -                           | N  | 100            | 10                | 956                                  |
| VWI and<br>OptiMix          | N₂ plasma                                | 130            | 6                 | 2413                                 |
|                             | $H_2O$ shield                            |                | 10                | 1702                                 |
|                             | <b></b> .                                |                | 20                | 870                                  |
|                             | N₂ plasma                                | 300            | 12                | 2286                                 |
|                             | $H_2O$ shield                            |                | 25                | 1302                                 |
|                             |  |                | 50                | 524                                  |
|                             | $H_2$ -Ar- $N_2$ plasma                  | 300            | 12                | 3810                                 |
| OptiMix                     | N <sub>2</sub> shield                    |                | 25                | 2056                                 |
|                             |  | 1              | 50                | 201                                  |

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

#### 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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