



## PLASMAWORLD II-100 HD

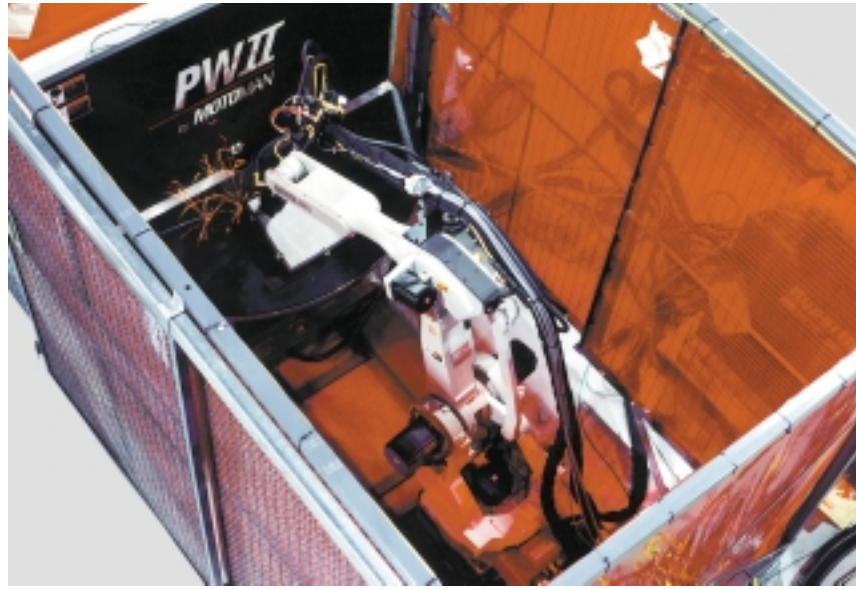
PlasmaWorld® II-100 HD is a fully integrated, standardized robotic cutting solution that offers high production output and near laser quality cuts with approximately one-fourth the capital investment of a laser system.

The PWII-100 HD features a UP20 six-axis robot, a powerful XRC controller with dedicated plasma cutting application software, a fully-integrated, high tolerance plasma cutting (HTPAC) package, a 180° rotary positioner, operator interface, and a safety environment that meets ANSI/RIA standards. The HTPAC package includes a high-definition plasma cutting power source and robotic torch, specifically designed for high-productivity robotic applications.

### ROBOT/CONTROLLER

The six-axis, articulated UP20 robot – with its compact, high-performance design – is ideal for fast 3-D cutting. A second robot can be added to double production (PWII-120 HD).

The 32-bit XRC robot controller, with RISC (Reduced Instruction Set Computing) distributed architecture and powerful digital servo drives, gives Motoman robots high speed and high path accuracy. Programming is simple and



*PlasmaWorld II-100 HD*

quick with the XRC's menu-driven software, ergonomically-designed programming pendant, and specific keys for cutting instructions.

### HTPAC PACKAGE

Motoman's HTPAC package produces superior-quality cuts at speeds over 100 inches per minute (depending on metal thickness), and cuts mild steel, aluminum, and copper. Cut edges are straight, smooth, square and virtually dross-free, eliminating secondary finishing operations. Cuts produced also reduce kerf width by approximately 50 percent.

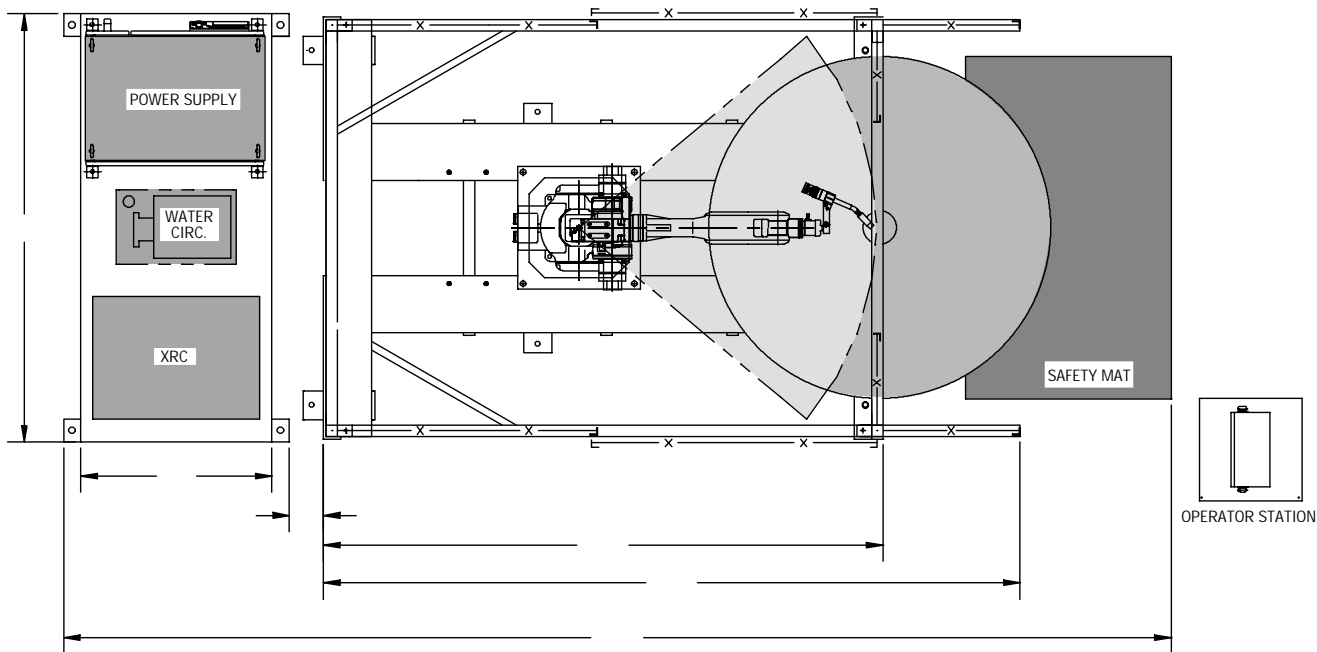
Optional plasma cutting heads are available to provide high-definition cutting and height control.

### PART POSITIONING

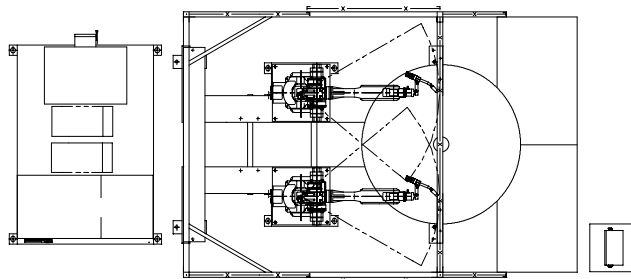
The heavy-duty MR-300 HD positioner is a 2-position, 180° rotary positioner that completes an index in 4 seconds, fully loaded at 300 kg (661.5 pounds) per side. Its protective arc screen allows the operator to safely load and unload parts outside the robot work envelope. To simplify setup, the positioner is designed with a center hole in the tabletop for tooling utilities.

### ARM YOURSELF

...with a PWII-100 HD, Motoman's proven technology that offers a fast, powerful and far less expensive alternative to laser cutting.



Dual robot option  
(shown right)  
Dimensional differences  
are noted in parenthesis  
in the above diagram.



All dimensions are in millimeters.  
Dimensions for reference only.

## SPECIFICATIONS

UP20 Robot	20 kg (44.1 lb.) payload In-line, 6-axis, articulated design 1,658 mm (62.28") reach at P point High-speed air cut time ±0.08 mm (0.003") repeatability
XRC Controller	Interfaced with plasma cutting package Expanded programming pendant Cutting application software Direct input of cutting parameters Concurrent I/O Digital servo drives
Operator Control Station	Servo ON Master Job Start E-Stop Robot Hold Alarm Reset Dual push button cycle index

PlasmaWorld II-100 HD HTPAC Cutting Package	Hypertherm plasma cutting torch Torch breakaway Hypertherm HD3070 microprocessor controlled power source Plasma cutting interface Long-life consumables "Easy Setup" common mounting platform
MR-300 Positioner	1,524 mm (60") tabletop diameter 300 kg (661.5 lb.) per side capacity 432 x 914 x 889 mm (17 x 36 x 35 inch) maximum tooling size 4-second sweep time at full load
Total Safety Environment	Redundant electrical interlocks Single-point operator control Safety mats to inhibit positioner indexing Barrier guarding Protective arc curtains Dual palm cycle start buttons

## CONFIGURATION OPTIONS

- Additional UP20 robot (PWII-120 HD); features dual robot control (DR2C)
- UP50 robot (use with ProfileStar cutting head)

## PLASMA CUTTING OPTIONS

- ProfileStar™ cutting head
- FormCut enhanced cutting software
- Automatic voltage control height sensor
- Enhanced operator control station
- Serial communication between XRC and remote PC
- FDE for Windows®
- External axis control

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