



PA 1100 HW

PERFORMARC™
ROBOTIC WELDING SYSTEM



(Previously PA 132S)

Extremely High Productivity per Square Foot

- High-production, small-footprint system. A second robot can be added, theoretically doubling throughput with no additional floor space required.
- Easy-to-slide teach access doors keep the system slim and allow for tight stacking to maximize production while minimizing required floorspace.
- The outboard Panasonic servo positioner allows the parts to be rotated into the desired welding position, maximizing torch access and welding quality.
- Can be coupled with optional Panasonic TAWERS™ robotic solutions for greater production throughput.
- Can be coupled with optional Auto-Access® E with INSIGHT™ weld data monitoring system to provide comprehensive feedback on welding activity and productivity.
- Utilize standard Panasonic AC servo motors for high performance indexing, load balancing and quick stopping capability.

Manufacturing Flexibility

- A fully welded frame, pre-wired and pre-assembled then shipped to you in three sections utilizing quick assembly and connection capabilities.
- Integrated operator control panel and full color teach pendant provide full system control, diagnostics and programming capability in one central location.
- Large rotation diameter and heavy payload capacity allow low-mid-high volumes to be welded in single, multiple or progressive fixtures, providing a flexible platform for changing production needs.
- Wide cell entrance and open overhead construction at the load/unload station allow fixtures or parts to be changed easily by crane or forklift.

Personal Safety

- Designed to the most rigorous safety standards, ensuring that your investment is not only productive, but safe for your employees (ANSI RIA 15.06-1999, UL 1740, NFPA 79 and CSA Z434 compliant).
- L-shaped light curtains at tested penetration distances, interlocked safety gates, dual channel safety circuit, rotating arc flash barrier, auxiliary axis servo disconnect and solid sheet metal wall panels are included in the safety features.
- Utilizes servo disconnect technology, which removes drive power during fixture loading to prevent unexpected motion of the outboard axis.

Long Term Support and Reliability

- PerformArc systems have been setting the standard in the welding industry for quality, reliability and productivity since 1996.
- Your PerformArc system is backed by Miller — you can count on us to be there for you today and tomorrow.
- 24/7/365 hotline provides customer service and parts support.

Dimensional Specifications*

Frame length	A	5309 mm (209")
Frame width	B	3085 mm (121.5")
Frame height	C	2337 mm (92")
Outboard rotation CL from floor	D	1009 mm (39.7")
Headstock-tailstock span	E	1524 mm (60")
Cell width including doors	F	3280 mm (129")
Fixture rotation diameter	G	1016 mm (40")
Cell front opening (max)	H	2285 mm (90")
Penetration distance (stopping calculation)	I	457.2 mm (18")
Rotation diameter	J	2926 mm (115")
Shipping weight		3181 kg (7000 lb)

*Note: All dimensions are approximate.

Standard Specifications**Fully integrated MWA total solution includes:**

Panasonic 64-bit 6 kg arc welding robot
 Panasonic controller with teaching pendant utilizing Windows® CE
 Auto-Access® inverter arc welder
 Miller 4 drive roll wire feeder (dependent on your application)
 Tregaskiss® 500 A air-cooled welding torch
 Panasonic high speed main indexing servo positioner Panasonic RDH-3000
 Panasonic secondary rotation axis servo positioner Type II 500 kg (2)
 Miller designed and manufactured total productivity system

System features include:

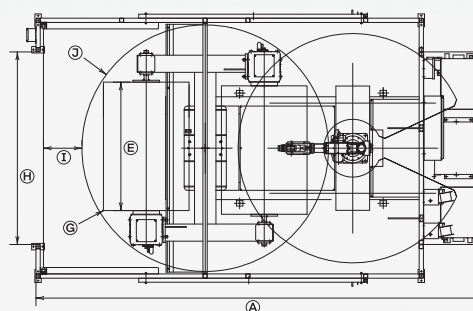
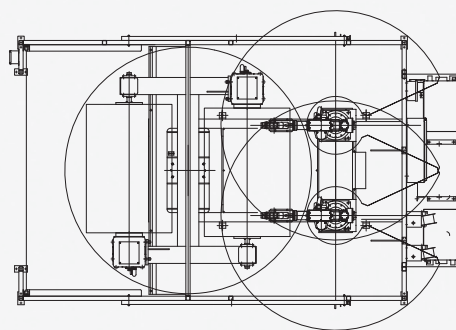
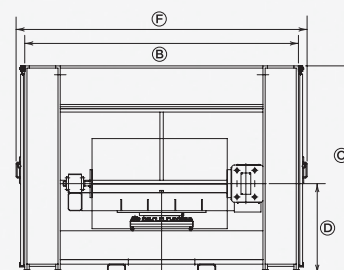
Integrated operator interface (E-Stop, Auto, Servo On, Mode Select, Table Load/Unload, Start)
 (2) Full open sliding doors for easy access to the teaching area
 TCP pointer and resident TCP check program
 Tip change monitor and maintenance program for easy torch upkeep
 Arc start retry, arc overlapping, flying arc start, password protection
 Resume function, shifting functions, online help function

General system information:

Integrated safety environment including (2) light curtains, (2) interlocked sliding teach access doors, arc screen barrier on main indexer, hard stop limits on robot and aux axis servo power disconnect at operator station during load/unload
 Common mounting base for the robot, welder, controls and 3 axis positioner
 Easy to move (forklift access from front and rear of cell)
 Designed for compliance to industry safety standards:
 ANSI RIA 15.06-1999, UL 1740, NFPA 79, CSA Z434

Recommended System Options

Smartstart training and installation package
 Input power (208, 230, 575 VAC 3 phase — 480VAC standard)
 BCD job select switch
 Operator task lights (1 at load position/1 at teach position)
 Nozzle reaming station
 Remote axis jog (unlimited positional jog at operator load station)
 Through arc seam tracking
 High voltage touch sensing
 Water cooled torch package
 Ethernet card
 PC tools (program viewer/editor/program management software)
 DTSP (simulation and off line programming software)
 WPMGR (Welding Process Manager) protection software
 Arc data monitor and oscilloscope software: includes data logging (WG Series Robots only)
 Automated electrical stickout control (WG Series Robots only)

Top View**Top View (Optional Dual Robot)****Front View****Positioner General Technical Specifications****Main sweep axis**

Model	Panasonic PA-3000RDH
Motor type	Panasonic 3.5 kW AC Digital Servo
Control type	Robot Servo Control
Rotation time (180 deg index)	t=3.0 sec
Through hole (for utility pass through)	120 mm (4.7")

Secondary axis (2)

Model	Panasonic 500 kg Type II
Motor type	Panasonic 1 kW AC Digital Servo
Control type	Robot Servo Control
Payload (per side)	500 kg (1100 lb)
Payload offset (from positioner CL)	Please consult manual
Through hole (for utility pass through)	55 mm (2.16")

Robot Options

TA-1400WG	TA-1800WG
TA-1400G2	TA-1800G2
TA-1600WG	Dual Robot
TA-1600G2	

Welder Options

Auto-Access 300 (Pulse/CV)	GB2-350 (CV)
Auto-Access 450 (Pulse/CV)	HM3-500 (Pulse/CV)
Auto-Access 675 (Pulse/CV)	GX (CV)
BP2-300 (TIG)	



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