



PA 550 H PA 550 HW

PERFORMARC™
ROBOTIC WELDING SYSTEM



(Previously PA 122S)

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 floor space.
- 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, shipped to you completely pre-wired and pre-assembled, eliminates assembly time, getting you up and running in minutes.
- Easy to relocate. Just disconnect utilities, move to the new location and reconnect utilities. It is that simple.
- Integrated operator control panel and full color teach pendant provide full system control, diagnostics and programming capability in one central location.

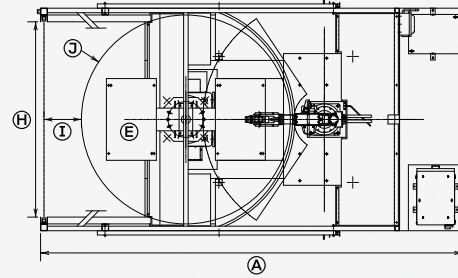
Personal Safety

- 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, UL1740, 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 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.
- Brake releases and servo power indicator lamps on the robot are standard for easier recovery.

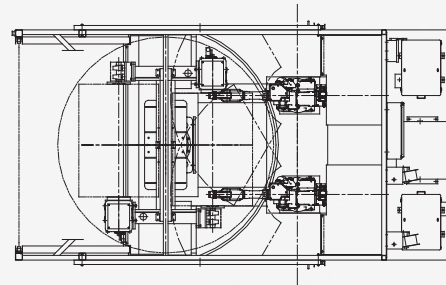
Long Term Support and Reliability

- 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.

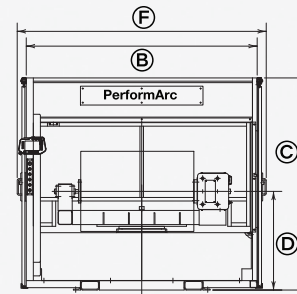
Top View (Standard Single Robot)



Top View (Optional Dual Robot)



Front View



Positioner General Technical Specifications

Main Sweep Axis	
Model	Panasonic 1000 kg Type II
Motor type	Panasonic 2 kW AC Digital Servo
Control type	Robot Servo Control
Rotation time (180 deg index)	≤3.5 sec
Through hole (for utility pass through)	55 mm (2.16")
Secondary Axis (2)	
Model	Panasonic 200 kg Type II Servo Positioner
Motor type	Panasonic 750 W AC Digital Servo
Control type	Robot Servo Control
Payload (per side)	250 kg (550 lb)
Payload offset (from positioner CL)	Please consult manual
Through hole (for utility pass through)	42 mm (1.65")

Robot Options

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

Welder Options

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

Dimensional Specifications*

	PA 550 H	PA 550 HW
Frame length	A 4724 mm (186")	5131 mm (202")
Frame width	B 2489 mm (98")	2896 mm (114")
Frame height	C 2286 mm (90")	2286 mm (90")
Outboard rotation CL from floor	D 1060 mm (41.8")	1072 mm (42.2")
Headstock-tailstock span	E 1219 mm (48")	1524 mm (60")
Cell width including doors	F 2684 mm (105.6")	3099 mm (122")
Fixture rotation diameter	G 863.6 mm (34")	1000 mm (39.37")
Cell front opening (max)	H 2184 mm (86")	2591 mm (102")
Penetration distance (stopping calculation)	I 419 mm (16.5")	419 mm (16.5")
Rotation diameter	J 2336 mm (92")	2743 mm (108")
Shipping weight	3318 kg (7300 lb)	3447 kg (7600 lb)

*Note: All dimensions are approximate.

Standard Specifications

Fully integrated Miller Welding Automation total solution includes:

- Panasonic TA-1400/TA-1400 WG arc welding robot
- Panasonic latest generation 64-bit 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 1000 kg
- Panasonic secondary rotation axis servo positioner 250 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 door for easy torch upkeep
- Arc start retry, arc overlapping, flying arc start/arc lift, 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 entire system (robot, controls, positioner, enclosure)
- No assembly required, up and running shortly after placement
- 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 — 480 VAC 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)
- DTPS (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)



MillerWelds.com/automation

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