

SP225H

HIGH-SPEED, HOLLOW-ARM DESIGN

KEY BENEFITS

Hollow-arm design offers improved cable routing and reduced wear

Harness is sized for spot guns used on aluminum parts

Single robot-to-controller cable connection enables fast setup

High-speed robot motion reduces air-cut time for spot gun

Flexible wrist motion range simplifies programming of complicated parts

SPECIFICATIONS

225 kg payload

2,702 mm horizontal reach

3,393 mm vertical reach

0.05 mm repeatability

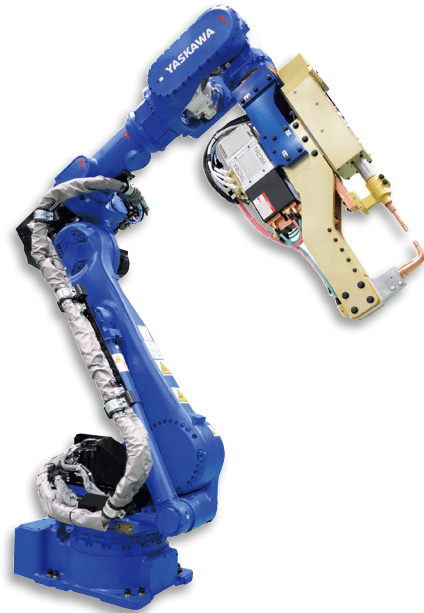
APPLICATION

Spot Welding

Material Handling

CONTROLLER

YRC1000



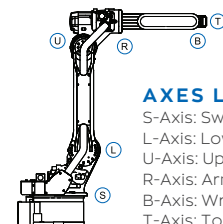
- Powerful, six-axis robot features exceptionally fast axis speeds and acceleration to reduce air-cut time and increase production output.
- Hollow upper arm reduces interference while simplifying programming.
- Wide wrist motion range improves spot gun positioning and application flexibility.
- Slim design allows for reaching into confined parts as well as close proximity placement of robots for high-density workcells.
- Integrated spot harness in hollow arm provides optimal cable protection and reduces downtime.
- Servo gun and DC timer technology optimized for productivity and quality.
- Spot monitoring and waveform graphing helps check and troubleshoot welding conditions.
- Controller connectivity provides simple wiring to spot timers.
- Robot pendant application for programming Medar® and Nadex® brand timers.
- Cable installation tube facilitates fieldbus routing through the S-axis.
- Single power and control cable reduces wiring time and increases work efficiency.
- Spot harness connections
 - Connections from base to upper arm
 - DeviceNet signal and power
 - Connections from base to wrist (gun)
 - Servo motor and encoder
 - Air hose (3) 8.5 mm ID
 - Water hose (4) 8.5 mm ID
 - Weld power (2) 35 mm², (1) 14 mm²
 - Transformer thermostat (3) 0.75 mm²
 - User I/O (9) twisted pair + (1) 0.3 mm²
- Modular robot harness design for improved diagnostics and maintenance.
- Home position data can be saved without battery connection for easy maintenance.
- The SP225H has an IP65-rated wrist and an IP54 body standard.
- Available without harness for material handling applications
- Compact YRC controller utilizes the lightweight standard teach pendant with intuitive programming.

SPECIFICATIONS



- YASKAWA**

Item	Unit	SP225H
Controlled axes		6
Maximum payload	kg	225
Repeatability	mm	0.05
Horizontal reach	mm	2,702
Vertical reach	mm	3,393
Weight	kg	1,110
Internal user I/O cable		17 conductors w/ ground
Internal user air line		(1) 3/8" connection
Power requirements		380-480 VAC
Power rating	kVA	5



S-Axis: Swivel Base
L-Axis: Lower Arm
U-Axis: Upper Arm
R-Axis: Arm Roll
B-Axis: Wrist Bend
T-Axis: Tool Flange

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