SOLUTIONS IN MOTION®





MotoSweep 0 with DX100 Controller

MotoSweep O20 ■ MotoSweep O50

MotoSweep[™] O is an overhead radial robot transporter providing extended reach, improved access and floorspace savings by utilizing an inverted robot to service large workspaces. MotoSweep O is available with an HP20D, HP20D-6, MA1900, MH50, MH50-20, MH50-35 or MH80 robot.

MotoSweep O is ideal for robotic applications requiring long reach and expanded work envelopes including: machine tending, material handling, welding, deburring, trimming, deflashing and a variety of other applications.



WIDE RANGE OF ROBOTS SUPPORTED



ARC WELDING

TOP 3 REASONS TO BUY!

- Provides extended work envelope for a single robot
- Reduces installation costs by avoiding layout changes in the manufacturing facility
- Available in a wide range of payloads and reach configurations

Unmatched Flexibility

- Extended reach allows one robot to service multiple machines and secondary operation stations located in linear or radial configurations, maximizing floorspace utilization, material flow and productivity.
- With MotoSweep, a 6-axis robot has an extended envelope and can reach into the machine for loading/unloading parts from the front, side or top.
- Provides easy access for tool change, part setups and maintenance.
- For robotic arc welding applications, tremendous flexibility is achieved particularly for large, heavy weldments that require loading/unloading via overhead crane.
- The robot transporter has a 6.7 rpm beam velocity, ±180° rotation, 0.75-second settling time and ±0.1 mm (0.004") total repeatability. The repeatability of the robot must be added to the transporter for total robot/ transporter capability.

HIGHLIGHTS

- Available in C-frame (off-set) or straight riser configurations. Typically, the C-frame riser is preferred for machine tending applications, while the straight riser is preferred for welding applications. Mounting holes are provided at the end of the boom for optional equipment.
- Two beam lengths and a wide variety of riser heights provide significant flexibility to meet individual application needs.
- Massive work envelopes up to 11,212 mm (36.8 ft.) diameter (with optional 2,500 mm boom) provide maximum flexibility for a range of applications.

Options

- MotoSweep O HD provides similar functionality with larger payloads and larger work envelopes.
- MotoSim[®] EG (Motoman Simulator Enhanced Graphics) is a comprehensive software package that provides accurate 3D simulation of robot cells.

Additional Benefits

- Increased throughput and quality
- Labor savings
- Scrap reduction
- Ergonomic improvement
- Improved cycle time
- Post machining operations such as deburring, polishing or packaging
- Lowers automation cost per machine

ARM YOURSELF

...with a highly flexible 7-axis MotoSweep O solution from Motoman Robotics. MotoSweep O enables you to tend up to four machines with one robot and provides the flexibility to load parts into multiple machines from the top, side or rear. Lower your automation cost per machine!

MOTOSWEEP O

DRAWINGS





Ceiling Mount with Straight Riser

MOTOSWEEP O (CEILING OR WALL MOUNT; STRAIGHT OR C-FRAME RISER)

Robot	HP20D	HP20D-6	MH50	MH50-20	MA1900	MH50-35	MH80
Payload	20 kg (44.1 lb)	6 kg (13.2 lb)	50 kg (110.3 lb)	20 kg (44.1 lb)	3 kg (6.6 lb)	35 kg (77.2 lb)	80 kg (176.4 lb)
Working Range X (radius)	1,717 mm (67.6")	1,915 mm (75.4")	2,061 mm (81.1")	3,106 mm (122.3")	1,904 mm (75")	2,538 mm (99.9")	2,061 mm (81.1")
Working Range Z	2,072 mm (81.6")	2,270 mm (89.4")	2,456 mm (96.7")	3,501 mm (137.8")	2,259 mm (88.9")	2,933 mm (115.5")	2,456 mm (96.7")
Height HR	1,235 mm (48.6")	1,235 mm (48.6")	1,020 mm (40.2")	750 mm (29.5")	1,155 mm (45.5")	740 mm (29.1")	1,020 mm (40.2")
Height HB	2,640 mm (103.9")	2,640 mm (103.9")	2,640 mm (103.9")	2,640 mm (103.9")	2,640 mm (103.9")	2,640 mm (103.9")	2,640 mm (103.9")
Combined Working Diameter RC (2,000 mm Boom)	7,434 mm (292.7")	7,830 mm (308.3")	8,122 mm (319.8")	10,212 mm (402.1")	7,808 mm (307.4")	9,076 mm (357.3")	8,122 mm (319.8")
Combined Working Diameter RC (2,500 mm Boom)	8,434 mm (332")	8,830 mm (347.6")	9,122 mm (359.1")	11,212 mm (441.4")	8,808 mm (346.8")	10,076 mm (396.7")	9,122 mm (359.1")

Note: MotoSweep O modules have special anchor/foundation load requirements; contact Motoman Robotics engineering for details.

All dimensions based on standard riser height. Other risers are available. Contact Motoman Robotics engineering for additional information.

* Optional 2.5 m boom available that will increase diameter RC by 1,000 mm.

www.motoman.com



MOTOMAN IS A REGISTERED TRADEMARK WINDOWS IS A REGISTERED TRADEMARK OF MICROSOFT ALL OTHER MARKS ARE THE TRADEMARKS AND REGISTERED TRADEMARKS OF YASKAWA AMERICA, INC.

MOTOMAN ROBOTICS 100 AUTOMATION WAY, MIAMISBURG, OHIO 45342 TEL: 937.847.6200 = FAX: 937.847.6277