

**YASKAWA**

# Painting and Coating

Robotic Solutions for All Industries



# Robust Solutions for Diverse Demands



## Precise, Consistent, Versatile

Engineered to seamlessly integrate with existing machinery and automation, Yaskawa Motoman's line of painting and powder coating robots can drastically improve the quality and efficiency of your paint process while reducing costs and start-up efforts. Optimized for a range of Tier 1 and Tier 2 automotive applications, as well as general industry tasks, our extensive expertise combined with a full suite of products and technologies makes it easy to configure an ideal solution for your specific needs.

- High-quality finishing of small parts in a compact footprint.
- Fast and efficient painting of workpieces on moving conveyors.
- Smooth and consistent painting of automobile interior surfaces.
- Highly flexible with wide range of motion to accommodate painting of large or complex shapes.
- Scalable workcell combinations to support various styles of painting.
- Easy setup reduces downtime.
- World-class support services to maximize uptime, accelerate ROI and ensure long-term performance.

## The Robotics Advantage

- Achieve consistent finishes
- Optimize system uptime
- Increase production speeds and throughput
- Reduce material waste
- Improve safety in hazardous and non-hazardous work environments
- Save valuable floorspace

## DX200-FM

MPX-series robots are controlled by the powerful DX200-FM controller.

- Integrated paint software supports various paint control instructions
- Integrates with a wide range of paint hardware configurations
- Category 3 Performance Level d (PLd) Functional Safety Unit (FSU) available (optional)

## Full Range of Robots Optimized for Painting

Optimized for painting and powder coating applications, six-axis MPX-series robots create smooth, consistent finishes with outstanding efficiency. These robots accommodate the processing of multiple parts in various sizes, and their streamlined profile designs allow high-density layouts.

- Factory Mutual approved for utilization in Class I, Div. 1 hazardous environments
- Floor, wall or ceiling mounted options for layout flexibility
- Intrinsically-safe programming pendant available (optional)

### MPX1150

One of the smallest, intrinsically-safe robots in the world, this model is best-suited for painting of smaller components. It features a straight wrist and is well-suited for mounting a variety of spray guns and small bells.



- 5 kg wrist payload
- 727 mm horizontal reach
- 1,290 mm vertical reach
- $\pm 0.02$  mm repeatability

### MPX1950

Featuring a hollow inline wrist that is well-suited for mounting a variety of spray guns and small bells, this model enables high-quality painting of small to medium parts.



- 7 kg wrist payload (3 kg upper arm)
- 1,450 mm horizontal reach
- 2,730 mm vertical reach
- $\pm 0.15$  mm repeatability

### MPX2600

Engineered with high-performance axis drives, this model is ideal for painting medium-sized automotive components, as well as other industrial coating tasks. It features a large hollow wrist to prevent utility interference.



- 15 kg wrist payload
- 2,000 mm horizontal reach
- 3,643 mm vertical reach
- $\pm 0.2$  mm repeatability

### MPX3500

Featuring a hollow wrist design, this model is well-suited for mounting spray equipment applicators. Its hollow L-arm accommodates in-arm pneumatic controls and on-arm gear pump dispensing. It is ideal for painting large automotive workpieces, as well as contoured parts such as interior/exterior surfaces.



- 15 kg wrist payload (25 kg upper arm)
- 2,700 mm horizontal reach
- 5,095 mm vertical reach
- $\pm 0.15$  mm repeatability

## Explosion-Proof Handling Robot

### MHP45L

Optimized for use in Class I, Div. 1 hazardous environments, this FM-approved robot is designed to help streamline automated paint line layouts by eliminating the need for dedicated part transfer equipment. Its high payload and flexible range of motion make it ideal for transferring large workpieces while avoiding interference with paint robots and other peripheral equipment.

- 45 kg payload
- 2,850 mm horizontal reach
- 5,095 mm vertical reach
- $\pm 0.07$  mm repeatability



Explore the impact a robotic painting system can have on your operations: visit [yaskawa-motoman.com](http://yaskawa-motoman.com)

## Paint Application Enhancements

Yaskawa offers a variety of powerful, efficient enhancements for your paint and power coating applications.

### MotoFeeder II

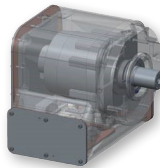
Compact, multi-functional rotary feeder facilitates quick and easy setup of painting systems and enables multiple paint patterns for nearly every component. This external axis coordinates with the robot motion for smooth, consistent paint application.



- Various arm lengths and payload capacities available
- Robot can be installed on the MotoFeeder to utilize the robot's full range of motion for large parts
- Switchable between indexing rotation and continuous rotation without changing parts
- Can be used for high-efficiency single- or double-spindle painting
- Allows workers to set and shift workpieces while robot is painting

### PMU-Series

Built with a pressurized enclosure for use in Class I, Div. 1 hazardous environments, this explosion-proof servo motor is ideal for use with peripheral equipment such as tracks, turntables and shuttle feeders.



- 3.7 kw for robot traverse tracks, and large turntables and shuttles
- 0.9 kw for small turntables and part shuttles
- 0.4 kw for small part shuttles and paint gear pumps

### MPO10

Specifically designed for automotive production lines, the compact SCARA-style MPO10 robot opens car body doors to enable painting of interior surfaces. It provides optimized productivity of paint lines when combined with MPX-series robots.



- Space-saving, low-height design enables high-density layouts
- Provides flexible options for range of motion and other system requirements
- Can be mounted on a traverse track

### MotoSim

A valuable tool for offline programming and testing, this comprehensive software package reduces programming time and increases production uptime. Accurate 3D simulation of robotic cells can minimize fixturing errors and reduce robot installation time.



- Optimize robot and equipment placement
- Perform collision detection, reach modeling and cycle calculations
- Ideal for use with complex systems, including moving line systems

# YASKAWA

[yaskawa-motoman.com](http://yaskawa-motoman.com)

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YASKAWA ROBOTS CAN BE USED FOR A WIDE VARIETY OF APPLICATIONS INCLUDING ARC AND SPOT WELDING, ASSEMBLY AND KITTING, CUTTING (LASER, PLASMA, ULTRASONIC, WATERJET), DISPENSING, INSPECTION, MATERIAL REMOVAL, PAINTING AND STEM EDUCATION. THESE ROBOTS CAN ALSO BE USED FOR HANDLING APPLICATIONS SUCH AS PICKING, PACKING, PALLETIZING, INJECTION MOLDING, LOAD/UNLOAD, MACHINE TENDING, PART TRANSFER, PRESS TENDING AND SORTING. PLEASE CONSULT YASKAWA MOTOMAN TO CONVERT ROBOT MODEL FROM PRIMARY APPLICATION.