ITOKI All Steel Co., Ltd. Metallic Furniture coating







Super fast color change

Increase of automation level

Expanding productivity



<u>Installation Key Data</u>

Objects: Cabinets and Panels

Parts Size: 1200 mm (L) x 700 mm (W) x 2400 mm (H)

Conveyer Speed: 2.7m/min

Scope of Delivery for 4 booth systems:

2x MCR01 (5 guns, 18 guns)

23x OptiSpray AP01+ OptiGun GA03P

42x OptiGun GA03AX

1x AS08-5P, 1x AS08-18P

2x AS08-21P

1x OptiCenter® OC05

4x Robots with gun positioners

6x ZA07-18/XT11-10

3x ZA07-18/XT03

1x PH150+PS2-2

1x 20000m3/h

7x 9000m3/h

1x MagicCompact® BA04 with moveable base

3x Local brand booth













Company Profile:

Since its establishment in 1961, Itoki manufactures storage furniture and counters, and now, as a member of the Itoki group, it has expanded to products such as large desk tops and wooden tops. As a professional manufacturer of office furniture, they are constantly developing and producing different products that meet the changing requirements of the customers.

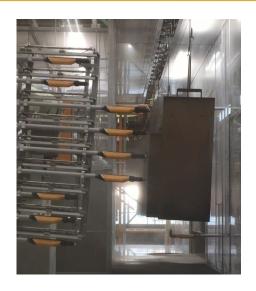
Company Expectations:

Itoki decided to stop outsourcing the coating job and had clear requirements for the new line:

- ✓ Color change time within 1 min. (limited to cabinet inside coating)
- Minimizing downtime during color change
- ✓ Minimize touch-up coating on the inside of the cabinet
- Automatic setting of the number of reciprocating guns depending on the height inside the cabinet

- ✓ Reducing manpower by high level of automation
- ✓ Interlock the automatic coating with the production management system
- ✓ Powder savings







The milestone of this project was the development of the new color change device MultiColor Robot MCR01 (world's first installation) to meet customers expectations. The system includes the OptiSpray AP01 application pump technology, which is optimal for coating the inside of the cabinets.

The MCR allows automatic cleaning within one minute and prevents contamination even when changing



from black to white color. The system demonstrates a high level of automation and a coating efficiency of 95% or more.

The development of a lightweight axes system that moves the gun in and out of the cabinet contributes to the solution of automatic coating of various object shapes.

Finally, by interlocking the automatic coating with the production management system,



this coating line has also achieved labor savings that can be managed by one administrator and one touch-up station.

