FACTORY AUTOMATION

Everything Under Control: Robot-assisted Hot-Melt Gluing Station

Economical mass production of door handle systems for the motor industry is only possible with automated manufacturing facilities. MW-TEC is a specialised manufacturer of custom-built machines in Velbert, Germany. In their door handle assembly gluing station, the company uses an agile industrial robot supported by the intelligence of a compact controller, both from Mitsubishi Electric. Integrated in a network, these components help to ensure high product quality and more efficiency on the production line.

In addition to improved performance, the MW-TEC engineers also wanted to keep the costs for engineering, installation, commissioning and maintenance as low as possible. They thus chose a standard field bus system to keep the overheads for the assembly station down and to ensure trouble-free communication between the components. Looking for an equally cost-effective and powerful solution for the visualisation and control system, the engineers chose the MELSEC FX3U compact controller and the MAC E300 control terminal, a well-matched duo from Mitsubishi’s wide range of automation components.

The MELSEC FX3U compact controller is the only PLC in this segment that has a master module for Profibus DP, making it possible to configure a very economical solution for all the communications within the production facility via the standard network. The robot, control terminal and remote inputs and outputs are all connected to the controller via the Profibus master module, which supports up to 64 remote field devices.

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Industry: Car industry suppliers / hot-melt adhesive systems
Products: Industrial robots, compact controllers, control terminals

We had no trouble at all configuring this 6-axis MELFA RV-3SB for the task, even though this was our very first project with a Mitsubishi robot.

CEO, MW-TEC GmbH & Co. KG, Velbert, Germany

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