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All-in-one system solution marc1 GantrySystem



The innovative *marc1 GantrySystem* is a dispensing robot that follows precise path curves along all axes. It dispenses smallest dots of media such as solder paste, silver epoxy or under filler. The *marc1 GantrySystem* combines state-of-the-art robot technology with a sophisticated dispensing control by simultaneously controlling dispensing and motion through the same unit – the Dispensing Control Unit (DCU). This is unique in the dispensing industry.

The solid yet lightweight design has a high tool load capacity of up to 7 kg, while enabling precise high-speed dispensing with accelerations up to 3g with consistent repeatability. With the *marc1 GantrySystem*, marco offers individual complete solutions for different applications from a single source. The gantry combines a large work surface with a very compact footprint. A large swivelling HMI touch display together with the foldable keyboard facilitates operation.

All five linear motors in the three axes are equipped with a newly developed, patented water cooling system.

Technical data:

- Up to 3g acceleration in all axes*
- ±3 µm repeatability
- Dimensions in mm W/D/H: 800 x 950 x 1800
- Travel of the axes in mm X/Y/Z*: 480 x 480 x 120
- Lightweight construction: Weight of basic version 650 kg
- Openings for cluster or inline set-up in mm
 - 640 x 520 (W x H) front door opening
 - $-460 \times 190 (W \times H)$ side openings
 - 445 x 185 (W x H) rear opening

This intelligent thermal control system provides temperature stability ensuring consistently high-precision throughout the dispensing process.

At the front, a large glass door gives easy access, while openings on the right and left allow integration into an inline production line (SMEMA-compliant interface). The rear opening is designed for a cluster arrangement of the machine. In addition, the robot is cleanroom compatible. Due to its modular design, the *marc1 GantrySystem* can be quickly adapted to changing customer needs, such as media, air and cooling-water supply. The cell and the machine bed are pre-equipped with a large number of pneumatic and electronic interfaces so that additional units and tools can be quickly integrated.





^{*} Depending on the dispensing solution