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marco designs and builds high performance dispensing systems based on proprietary piezo-ceramic technology. Products include dispensing valves and associated control units for solving challenging dispensing and micro-dispensing tasks.

Founded in 1982, marco employs 330 people today with headquarters located in Dachau Germany near Munich. Design and manufacturing are in Germany and technical service centers are located throughout the world including China, Korea, Vietnam and Eastern Europe with recent expansion in the USA.

Products include

- StepDot system for type 5, 6 and 7 solder paste
- Superior jet dispensing system for UV-, underfill- and bonding-adhesives as well as lubricants and grease
- Hot melt jet dispensing system for PUR materials
- 2-component jetting system for 2 part media
- Piezo actuated slider valve for silicone encapsulants used in LED assembly
- HMI-Software controls for intuitive programming, data analysis and factory optimization
- Process controls for dispense monitoring and compensation
- Innovative flank shaping control for optimizing actuation parameters and fluid dynamics
- Volumetric control system for real time process monitoring precision dispensing
- System components: electronic pneumatic regulators, pressure amplifiers, piezo sensors
- Actuation frequency up to 2,000 Hz

As a vertically integrated company focused on system analysis and process development, marco utilizes an inter-disciplinary engineering approach to develop industry leading products and push performance boundaries. The company designs and manufactures all components in the modular valve systems including piezo actuators, valve drive mechanisms and critical fluid module components.

This modular design approach allows marco products to be easily customised for specific fluids and application requirements with a faster time to market and a lower cost of ownership. Leveraging the modular design enables marco to offer a broad product family of dispensing and fluid system configurations for a wide variety of applications in the electronics assembly industry.

Visit **marco's booth 3816 in hall B** today to discuss applications and your precision dispensing needs.