

NEWS RELEASE

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Yamaha Robotics Introduces 3 New Surface Mounter Innovations to Handle Special Requirements in Automotive, Aerospace, Medical and Other Demanding Markets

Kennesaw, Georgia, U.S.A. – Yamaha Motor Corporation U.S.A. Robotics Division has introduced three hardware-based performance options for high-speed mounters that enhance productivity, quality control, and flexibility for handling special products such as large LED boards. Available for all new Yamaha mounters, these options are designed for easy fitting to simplify upgrading equipment already in the field.

NOZZLE TIP FORCE MEASUREMENT SYSTEM

This feature was designed for early detection of placement force changes, protecting fragile components from damage. Accurately tracking any changes in force allows timely nozzle maintenance to ensure optimal end-of-line production yield. Implemented with a module fitted at the mounter's feeder interface, the system provides an easy menu-driven setup and measures the component-placement force to within 0.1N resolution.

Along with standard side view cameras, integrated nozzle cleaners and full time vacuum monitoring, these options work together to ensure that every component is picked correctly and placed without error.



Yamaha YRM20DL

Also newly available is an electrical component verification system that measures the inductance, capacitance, or resistance (LCR) values of components in SMD-chip packages to verify the correct part type and tolerance before placement. This lets users instantly detect issues such as feeder errors, reel errors, or defective components before placement, to maximize first-pass yield and avoid rework.

The LCR unit can be fitted to Yamaha YRM mounters with no special software or hardware modifications required. LCR verification and nozzle-tip force measurement are ideal for markets with high quality-management demands, such as automotive, aerospace, and medical.

Lastly, a much larger board size option lets YRM mounters handle boards up to *1.6 meters long* and 510mm wide, for producing assemblies such as extra-large LED-lighting boards. While increasing the maximum board size by more than 30% compared to the standard YRM mounters, the new option accepts boards up to *10mm thick and weighing up to 10kg*.

These extended capabilities let product manufacturers easily work with assemblies designed for high thermal capacity, such as heavy-gauge copper or aluminium insulated metal substrate (IMS).



Yamaha One Stop Solution SMT Line

1 STOP SMART SOLUTION

The new options can be implemented individually or together to boost surface-mount production performance and extend the advantages of the 1 STOP SMART SOLUTION, which comprises Yamaha's YRP printers, YRM-D dispensers, YRM mounters, and YRi-V inspection systems. The 1-STOP SMART SOLUTION lets users configure a complete SMT assembly line from Yamaha, unified with a common software platform and smart tools that ensure superior flexibility, quality, and productivity.

About Yamaha USA Robotics

Yamaha Motor Corporation, U.S.A. is a subdivision of Yamaha Motor Corporation, and has employed its core technologies in the areas of servo-motor control and image recognition technology for vision (camera) systems to develop solder paste printers, printed circuit board inspection machines, flip

chip hybrid placers and dispensers. Yamaha Motor Corporation, U.S.A. offers a full line of machines for electric/electronic parts mounting and other production-line solutions to answer the diversifying needs of today's electronics manufacturers. Yamaha Motor Corporation, U.S.A. has sales and service offices in Japan, China, Southeast Asia, Europe, and North America, providing a truly global sales and service network, delivering best in class on-site sales and service support for their customers.

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