

Precision Placement Machines QSV-W Fully-Automatic Large Board Assembler

Key Features and Benefits

Supports board sizes up to 913mm x 1524mm (36.6" x 60")

Patented Line Scan CCD Align system in-process component alignment

Windows 7 or 10 compatible

Easy-to-use PPPro Pick and Place operating system

Electronic manufacturing service providers that want to grow their business and OEMs requiring high quality large board assembly now have a solution in the PPM QSV-W fully-automatic Large Board SMT assembler. Manufacturers no longer have to rely on manual handling or expensive custom work cells to perform large board assembly. The QSV-W assembles a wide range of SMT components onto the very largest boards.

Capabilities

PPM introduces the QSV-W fully-automatic SMT assembler, delivering the largest board handling capability in the industry. The QSV-W is optimized for your large-board applications, performing superbly in low to medium mix applications with moderate numbers of components. The QSV-W offers many of the same advanced technologies found in our complete line of placement and dispensing systems. The QSV-W includes patented Line Scan CCD Align system in-process component alignment, PPPro operating system and a dual spindle placement head. Additional standard features include downward vision system, integrated PC, nozzle changer and status light tower.

Platform

The QSV-W provides a superior mechanical architecture, featuring a unique front-loading work holder or shuttle system that accepts boards up to 913mm wide x 1524mm long (36.6" x 60"). Feeder positions located on each side of the QSV-W enable maximum board width capability. All feeders, placements and nozzle changer pockets fall within the vision range to maximize ease of use.

The QSV-W is designed specifically for large board assembly with a variety of PCBA/Substrate fixturing schemes.

The Y2 axis or "Y Wagon" can be a vacuum table, manual clamping table or configured with a traditional conveyor system.

Other custom Y Wagon layouts are available upon request.

Operation

The QSV-W builds one PCB at a time, using a single overhead gantry to position the dual-nozzle placement head and a Y Wagon to move the PCBA/Substrate in and out giving the machine its large board capacity. Closed loop DC servo motors with linear encoders for the X, Y1 & Y2 axes, and rotary encoders for the Z & Theta axes ensure placement accuracy.

In operation, the QSV-W operator loads a PCBA onto one of the optional Y Wagon conveyor systems. The Y Wagon will move independently in Y increments to process the board using the overhead X/Y/Z/T gantry system to pick and place components. All components are vision centered on the fly utilizing an onboard Line Scan CCD Align system.