Release of the FX-3R, the newest model in JUKI's line of high-speed modular mounters

On May 9, 2011, JUKI will release the FX-3R High-speed Modular Mounter. The newest model in the series, the FX-3R has significantly higher production capacity than its predecessor the FX-3. Through design improvements both in hardware and software, the FX-3R realizes a production capacity of 90,000 CPH (0.040 second/chip under optimal conditions).

The FX-3R is equipped with new linear servomotors in X and Y axes to drive the heads. In addition, by reducing the weight of the head and by updating the head design with more rigidly structured, placement speed is made faster. Improvements are also made in the optimization software to increase the efficiency of actual placement operation. Through these improvements, the FX-3R realizes a production capacity of 90,000 CPH (0.040 second/chip under optimal conditions), 21% faster than the FX-3. Supporting large boards with a size of 610 x 560mm (XL board specification) as a standard feature, the FX-3R offers an optional feature to produce a long size board up to 800mm wide, mainly used for LED lighting.

FX-3R inherits the "Hybrid tape feeder feature", the first realized by the previous model FX-3. With this feature, FX-3R accepts both electric and mechanical tape feeders in one machine. With a combination of KE-3020 high speed flex mounter FX-3R creates a high speed and high quality production line, capable of meeting a variety of manufacturing needs.

In the surface mount market, high-speed machines have been mainly required. JUKI has worked to directly take in market requirements and understand customer needs. The FX-3R, the newest evolution in the FX series, offers increased speed to fulfill the major customer requirement.
JUKI will expand our market share in the high speed market by developing products that should meet the growing requirement of faster throughput and the ability to produce high volume and high mix products.

◆Features of the FX-3R

(1) Increased speed
   - Upgraded by new X-Y axis linear servomotors. Acceleration has been increased by reducing the weight of heads and increasing the rigidity of the head units. Furthermore, by optimizing the actual placement movement, the FX-3R realizes a production capacity of 90,000 CPH (0.040 s/chip under optimal conditions), 21% higher than the current model.

(2) Hybrid feeder lines with the KE-3020
   - Has a "hybrid feeder specification" that allows to use both electric and mechanical tape feeders in one machine. When the FX-3R is used in combination with the KE-3020, which has the same specification, it is possible to create a high-speed, high-quality production line.

(3) Improved support for mounting LEDs
   - Supports a long board up to 800mm wide, which are used in LED lighting. The FX-3R provides increased support for mounting LEDs through its functions that prevent variations in LED color and illumination intensity.

◆Release date

May 9, 2011