New Product Announcement

Fuji Machine Manufacturing has developed an all-in-one placement platform called the AIMEX IIS. This optimum machine for high-mix low-volume production inherits concepts from the popular AIMEX, but with increased flexibility and expandability.

The remarkable progress of home digital electronics and next generation communications infrastructure is based on electronic circuit boards. These boards are manufactured using surface mount technology, at the center of which are electronic assembly machines (mounters). Recent transitions in the market mean that there are growing calls for mounters that can better support high-mix low-volume production and variable-mix variable-volume production.

Fuji developed the AIMEX IIS as one answer to these new demands.

Features

1. Can load a huge quantity of parts

   In order to support the large volume of part types required for high-mix production, up to 130 different part types in tape can be set on the machine. In addition, the supply units can be easily changed, with a wide variety of units available to supply parts from trays and sticks in addition to tape.

2. High-mix low-volume production support

   - Optimize changeovers with the large quantity of part supply positions (up to 130 parts) using the Multi Job Line Balancer.

     High-mix low-volume production requires a lot of production program changeovers. The optional Multi Job Line Balancer can group production programs beforehand, optimize them, and quickly determine an optimum feeder arrangement to minimize changeover, with batch changeover of feeders performed when switching groups.

   - Independent production support for dual lanes

     This machine can perform dual lane production of different panels at the same time by using double conveyors. Changeover is possible at one lane while production continues at the other. This reduces lead times including the time needed to change products.

3. Handles a wide range of panel sizes

   The AIMEX IIS supports small panels from 48 x 48 mm (1.89" x 1.89") to very large panels up to 774 x 686 mm (30.47" x 27"). This allows it to efficiently produce a wide range of panels, from small ones such as those used in mobile phones and digital cameras to medium size panels such as those needed for TVs, network boards and notebook computers, as well as long LED panels and LCD-TV panels.

4. Large part support

   Parts up to 38.1 mm (1.5 inches) in height can be handled on the AIMEX IIS with the odd-form part OF head. This allows the machine to place tall parts such as large scale relays and LAN connectors that are widely used for automotive panels and motherboards.

5. Minimized changeover time

   The newly developed MFU-65 parts supply unit makes the work for batch changeover of feeders easier and more efficient.

6. Support for variable-mix variable-volume production by using NPI tools*

   Easily recover from vision processing errors on the machine by automatically generating vision data. This makes introducing a new job to a line faster by reducing the work required when vision processing errors occur during initial production checks.

   *NPI tools: New Product Introduction tools

   These are a system for reducing the time needed to recover from errors and adjust data in order to efficiently ramp up production of a new product.

7. Can select either a single or twin robot configuration

   You can select from a single robot or twin robot configuration to match the production conditions of your factory.

AIMEX IIS heads and many exchangeable units (device related, part supply units, camera units, and optional units) are shared with the NXT-series. The AIMEX IIS inherits the flexibility of the NXT-series and, just like with NXT machines, can be flexibly configured to match the production conditions.

AIMEX IIS machines can also be linked together with AIMEX and NXT II machines to support high-volume production. The flexible placement platform AIMEX IIS offers a one machine solution to meet the various demands of high volume production of smart phones and tablets from EMS manufacturers as well as the ability to handle parts from the very small up to the very large odd parts such as relays and connectors used in the control boards of automobiles.