Unlock the Potential of the Fuji NXT

Developed by the innovators who created the award-winning Optel™ MES Software suite for Lean electronic assembly. Optel Lean/NXT is a standalone solution that unlocks the potential of the Fuji NXT Scalable SMT placement platform.

The highly modular Fuji NXT machines can be configured in large numbers of modules to reduce manufacturing cycle time. This unique architecture can be very powerful yet also presents several challenges to realize their full benefit, including more frequent replenishments and replication of part numbers across modules. Optel Lean/NXT unlocks their potential and delivers the throughput and control you expect from your NXT investment.

Key Features:

• Real time communication and feeder verification using the Fuji Open Interface
• Machine program data download directly from Fuji Flexa
• Complete component traceability report for each reference designator
• Automatic component cycle counting after each panel on each module
• Automatic download and saving of machine performance data after each panel on each module
• Graphical interface for machine performance monitoring in real time
• Real time scrap data collection
• Excess scrap warning, visual for the operator, and via e-mail for supervisors
• Associating reels to feeders by scanning unique reel barcode ID (if available) or scanning reel data (part number, vendor, date code, lot code, quantity) and feeder ID
• Automatic feeder verification
• Support for reel splicing
• Disassociating reel from feeder if feeder is not inserted into slot within 45 seconds or if feeder is removed from the machine slot for more than 30 seconds
• Feeders common between two jobs stay verified after changeover
• Usage and scrap report generation per part number after the job is completed
• Setup verification history report
• Support for capturing panel barcode labels at the beginning of line
• Support for Oracle, Microsoft SQL Server, and embedded databases

Optional Features:

• Moisture Sensitive Device (MSD) tracking
• Electronic Kanban and Supermarket management
• Duty cycle-based feeder maintenance
Setup Verification and Component Traceability

Operator interface for Optel Lean/NXT consists of the following views:

- **Machine View** – Lists all machine modules, slots and nozzles. It is used to display performance data per machine, module, slot or nozzle.
- **Panel View** – Lists all panel IDs scanned before entering the machine, in order they are scanned.
- **Data View** – Verification data entry. Optel Lean/NXT supports capturing required material data (part number, vendor, quantity, date code, and lot code) or just license plate if material is bar coded at the receiving stage.
- **Setup View** – Displays job setups for each module. The green chip indicates successful setup verification. The red highlighted slot is due for replenishment in 1 panel (PTC = Panels To Changeover) and is red to indicate that splicing needs to be performed before the module stops for replenishment. The yellow highlighted slots are excess scrap warnings.
- **Performance View** – Displays important machine performance indicators, updated after each panel is completed.

Machine Performance Monitoring

Supervisor’s configuration of Optel Lean/NXT is used for real time monitoring of machine performance from any computer in the plant.

- Minimum and average machine cycle times are reported by module, with the fastest modules displayed in green and the slowest in red.
- Placements and error information are reported in a stacked bar chart by module. The user can double click on module bar to display a bar chart displaying errors by each slot in the module, and errors by each nozzle on the module head.
- Machine utilization is presented as a pie chart with sections for each machine status.