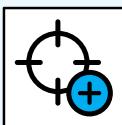

VIDEO


BENEFITS & VALUE



HIGH INSERTION QUALITY

Detect current changes, monitor insertion force to ensure quality



HIGH INSERTION ACCURACY

Best fit algorithm compensates for PCB positioning and component pin variations; Insertion rate **>99.5%**



FAST INSERTION RATE

Components are inspected and positioned simultaneously, shortening the cycle time; Optimal path algorithm

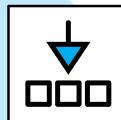
SMART INSERTER PLUS

VALUE IN EVERY INSERTION

The Smart Inserter Plus brings cost-effective intelligence, ease of use and simplicity to back-end electronics assembly automation. It leverages a linear motor positioning system and a host of intelligent features to deliver accurate, high-speed insertion of axial, radial and other odd-form components. It supports a range of feeder types and features an active clinch and controlled insertion force.

The Smart Inserter Plus provides single-process efficiency to complement multi-process cells. Features include:

- Eight independent insertion heads with standard active clinch
- High-force & programmable insertion
- Four cameras utilizing AI & AOI vision algorithms
- Best-fit insertion algorithm
- CAD data import
- Independent pick & place sequences
- Portfolio of standard feeders; on-the-fly replenishment
- Board shuffle mode
- Automated tool changes



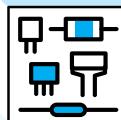
LOW REJECT RATE

AI and AOI algorithm enhance image, reduce background interference, improve pin positioning, and reduce reject rate to **<1%**



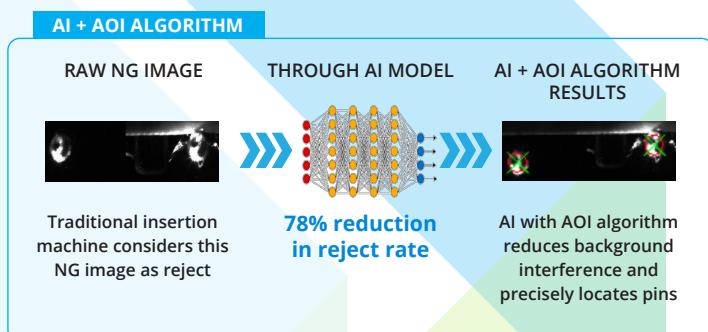
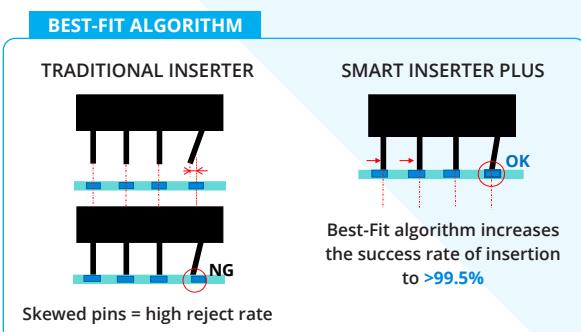
FAST NPI PROCESS

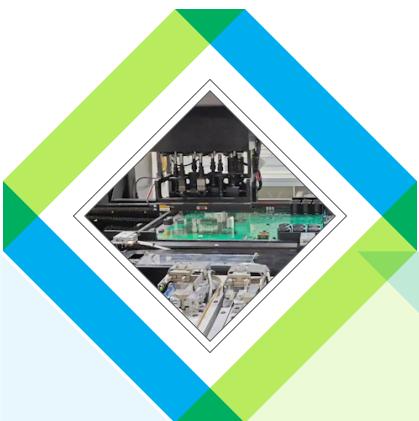
Offline programming optimizes the sequence of insertion heads and feeders to create streamlined products



SUPPORT FOR A VARIETY OF COMPONENTS

Full range of reliable feeding solutions accommodate a variety of components and packaging





Smart Inserter Plus Specifications

Positioning System	Single-gantry linear motor
Insertion Heads	8 heads, independent Z
Component Picking Method	Pneumatic gripper, vacuum nozzle
Cameras	4 ULCs for components, 1 fiducial camera
Feeder Inputs	32 inputs
Insertion Rate	1.4 seconds/pc ¹
Throughput	2,570 cph
Insertion Success Rate	>99% ²
Insertion Accuracy	±50µm
Reject Rate	<1% ³
PCB Dimensions (W x L)	Minimum size: 100mm x 50mm Maximum size: 550mm x 500mm (standard), 550mm x 800mm (optional)
PCB Thickness	Bare board 0.8–3.0mm; Carrier <=8mm
Max Component Size⁴	diameter: 49mm; height: 40mm; weight: <=200g
Max Weight of PCB & Carrier	3kg standard, 8kg optional
Max Insertion Force	5kg

Notes:

1. Using standard components and nozzles under factory conditions
2. PWB hole ≥ component PIN diameter 0.5mm
3. Exclusive of faulty components
4. Insertion range may be limited by head and clinch range

Modular design. Independent control. Full range of feeders.

The Smart Inserter Plus supports a complete portfolio of component presentation options. Regardless of what components you're inserting or how they're packaged, we offer cost-effective feeders for your product mix.



RADIAL TAPE FEEDER



Square Capacitor



Y Capacitor



Thermistor



LED



TUBE FEEDER



4-Pin IC



6-Pin IC



8-Pin IC



Relay



Transformer



Power Crystal



Transformer



Inductor



AXIAL TAPE FEEDER



Fuse



Axial Resistor



Axial Resistor



Diodes



Choke

