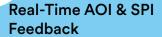


# **SMT Process Control: Your 5-Point Action Plan**

Minimize SMT line defects like misalignment, tombstoning, and solder bridging with these real-time control strategies.





- Inline SPI (Solder Paste Inspection) Catch paste-related misalignments and bridging early.
- Automated Optical Inspection (AOI) Identify placement errors before reflow.
- Immediate Alerts Prioritize high-risk zones for operator intervention.



#### **SMT Setup Precision**

- ✓ Daily Feeder & Stencil Checks Calibrate feeder positions and ensure stencil cleanliness.
- Solder Paste Volume Verification

Automate inspections to maintain ideal solder volume and alignment.



#### **Thermal Profile Monitoring**

- Live Reflow Profiling Adjust reflow oven settings in real-time.
- **S** Combat Tombstoning & **Cold Joints**

Use live thermal data to maintain optimal wetting and component



### **Operator & Machine Data Sync**

🔗 Integrate Operator Logs & **Machine Data** 

Detect recurring defect patterns across shifts and equipment.

Root Cause Visibility Reduce guesswork and improve corrective actions



## Continuous Improvement Metrics

- 1 Real-Time Yield Tracking (FPY, DPMO)
- Gain instant insights into defect trends and cost impact.
- Proactive Cost of Quality (CoQ) Control

Drive down rework and scrap costs with data-driven decisions.

