

PHIXEL IHW - POST-SEAL IN-TAPE INSPECTION

The only post-tape inspection equipment on the market providing full inspection capability

Guarantees the quality of the products you produce and deliver. The Post-Seal In-Tape Inspection eliminates quality defects - bringing customer complaints and field recall rates close to 0 PPM. The PHIXEL IHW has a fast convertible for 7-13-inch carrier tape reel diameter and auto conversion for different carrier tape widths up to 32mm. With AOI cellular network architecture for recipe management and Advanced Defect Classification (ADC) by hybrid analysis, the Post-Seal In-Tape Inspection outperforms market competition to go above and beyond your customers' requirements.



Key features

Application

- Inspection after taping to detect orientation, lead, mark, seal, package surface defect, reel label and quantity

Key features

- Min. 5 MP camera for top & bottom inspection
- AOI cellular network architecture for recipe management
- Reel size: 7" to 13"
- Throughput: up to 120,000 UPH (subject to package size & pitch)
- Option: tilted lead defect vision
- Cu exposure detection under development
- Package: leaded, leadless, and WLCSP
- Carrier tape width: 8 to 32 mm (auto track width)
- Advanced Defect Classification (ADC)
- SEMI standard with SECS/GEM interface
- Option: real-time data feeding to MES and eSPC
- Option: auto email alert (defect/batch summary)

Specifications

Imaging system

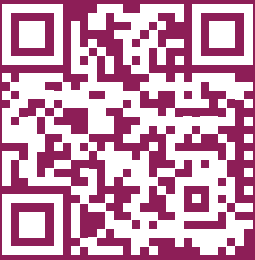
- Camera: 5M pixels area camera monochrome
- Number of cameras: 2: 1 (top) + 1 (bottom)
- Resolution/Field of view: 4 - 16 $\mu\text{m}/\text{pixel}$ FOV: 10 mm to 40 mm
- Minimum object detection: 16 μm
- Lighting: Compound lighting

Inspection categories

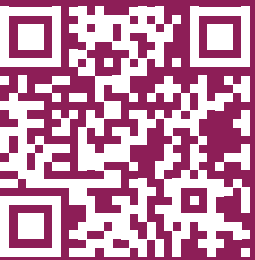
- Program mode: Fast programming for common reject criteria
- Reject treatment: Electronic map
- Inspection view: Top (and angle camera for lead lift-up defect as upgrade option)

Inspection items

- Marking defects: Unclear mark (faded character). Shift mark (misaligned marking). Incomplete mark. Double mark (multiple character). Vertical mark (wrong orientation). No mark. Mixed marking
- Moulded Package defects: Bubbles/bulge. Voids/pin holes. Crack. Broken body. Chipping Scratch. Unmoulded. Incomplete fill. Foreign material
- Lead Package defects: Mould flash on/along lead. Foreign material and contamination. Exposed wire/clip. Ejector mark. Visible wire Solder bridging. Bent lead/lead angle. Lead sweep. Lead length. Lead spacing/span. Lead cuts/depressions/damage. Lead burr. Missing lead. Lead length. Incomplete lead forming. Metal burr
- Taping defects: Loose/unseal cover tape. Cover tape misalignment. Damaged/contamination cover tape. Deformed/damaged cavity. Damaged bottom tape. Chipped/broken body. Mixed product. Edge sealing. Unseal tape. Offset sealing.
- Cover tape tearing. Product tilting



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