

Discovery™ II 8800

Automated Optical Inspection (AOI) System

PCB Production Solutions



Discovery™ II 8800 AOI System

Best Selling AOI. Now Better



Moving the world's best-selling AOI series to the next level of performance, Discovery II 8800 delivers new capabilities for greater operational efficiency. The system ensures high defect detection with full flexibility to handle today's challenging MLB mass production requirements.

Benefits

Detection Accuracy with Proven SIP Technology™

- Resolution down to 30µm line and space
- Full multi-layer panel understanding
- Patented LED illumination design

Efficient Smart Setup™ Operation

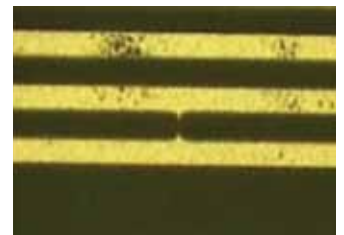
- Intuitive - Visual categorization of defects
- Short - Single cycle process (non-iterative)
- Optimal - Automatic generation of all setup parameters

Flexible Solution

- Patented vacuum table for optimal grip on any panel
- Fast and easy on-system defect verification
- Full automation support

Reduced Running Cost

- Half the power consumption and small footprint
- Minimal consumables (no bulbs)
- Less training requirements



Fine Short



Nick



Protrusion

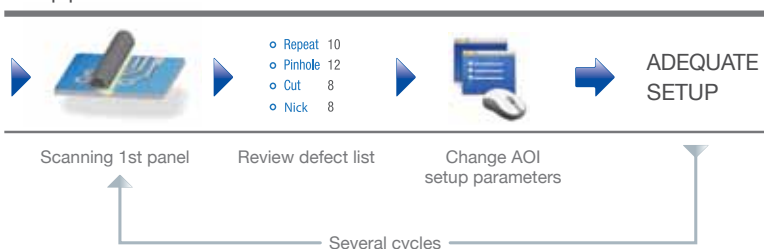
Detection Accuracy with SIP Technology™

Powered by Orbotech's field-proven SIP Technology, Discovery II 8800 delivers high detection accuracy and low false alarms with resolution down to 30µm on a diverse range of panels at full production speed. Full multi-layer panel understanding capabilities and feature-specific algorithms identify critical vs. non-critical defects. In addition, context-based detection ensures that the right sensitivity is applied according to panel attribute. Orbotech's patented LED illumination provides powerful, multi-angle lighting intensity for improved image quality.

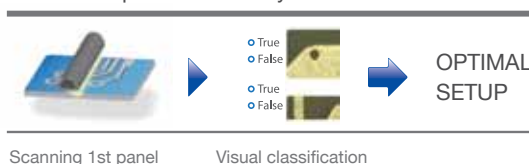
Efficient Smart Setup™ Operation

Orbotech's Smart Setup transforms the traditional AOI setup process to a single cycle with minimized process steps. Without the need for an expert, the operator can visually categorize true and false defects on the first panel of a job, then Smart Setup automatically does the rest. With Orbotech's advanced panel understanding capabilities, Smart Setup accurately categorizes the defects into groups and sorts them according to severity, from the most critical to the least. It then builds the optimal setup and automatically configures all relevant parameters accordingly. The result is an intuitive, optimal and much shorter setup process that increases the effective AOI throughput.

Setup process with other AOIs



Smart Setup with Discovery II



Flexible Solution

Supporting multiple production modes, materials and applications, Discovery II 8800 delivers expanded flexibility to handle a full range of production requirements. Using a patented vacuum table, the system ensures a firm grip on all panel types, including challenging bent and thin materials. With on-system verification capabilities, Discovery II 8800 provides fast and easy access to defects. For efficient mass production, the system can be seamlessly integrated with the panel handling automation of any vendor, in any configuration.

Reduced Running Cost

Featuring significant enhancements that improve AOI performance, Discovery II 8800 achieves increased efficiency for a lower cost of operation. The system utilizes minimal consumables (no bulbs), approximately half the power consumption of previous Discovery models and has a small footprint for minimal floor space. In addition, with Smart Setup, Discovery II 8800 significantly reduces the labor training time.