

DISCOVERY™ II 9200

Automated Optical Inspection (AOI) System



DISCOVERY™ II 9200 AOI SYSTEM

Best Selling AOI. Now Better

Moving the world's best-selling AOI series to the next level of performance, Discovery™ II 9200 delivers new capabilities for greater operational efficiency. The system ensures high defect detection and high throughput with full flexibility to handle today's challenging MLB, Flex PCB and HDI mass production requirements.

Benefits

Detection Accuracy with Proven SIP Technology™

- Resolution down to 25µm line and space
- Full multi-layer panel understanding
- Patented LED illumination design

Increased Performance with the Latest Software Version

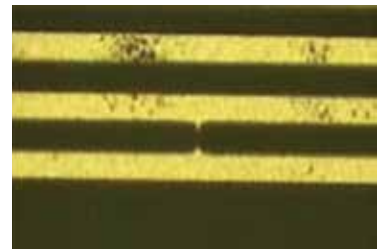
- Advanced algorithms improve detection and reduce false alarms
- Enhanced detection of dark and long fine shorts inside clearances
- Improved user permission control tool

Flexible Solution

- Efficient Smart Setup™ operation
- Patented vacuum table for optimal grip on any panel
- Fast and easy on-system defect verification
- Full automation support

Reduced Running Cost

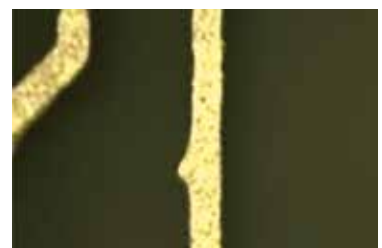
- The fastest Discovery™ II model
- Minimal consumables (LED illumination)
- Less training requirements



Fine Short



Nick



Protrusion



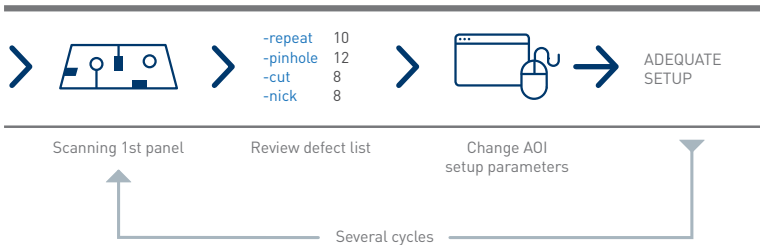
Detection Accuracy with SIP Technology™

Powered by Orbotech's field-proven SIP Technology™, Discovery™ II 9200 delivers high detection accuracy and low false alarms with resolution down to 25µm on a diverse range of HDI, Flex PCB and MLB 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.

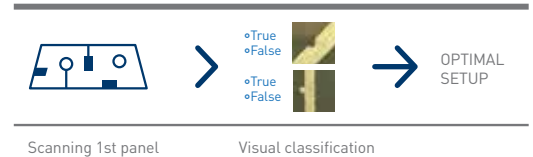
Increased Performance with the Latest Software Version

Featuring the latest Orbotech AOI software, Discovery™ II 9200 brings the most updated advantages to your production process. Advanced algorithms dramatically reduce alarms caused by over-etching on lines while keeping the excellent detection of critical nick defects. An updated circular pad algorithm creates a more accurate model to improve detection and reduce false alarms in the pad area. This version also enables the detection of dark and long fine shorts in clearances and cracks on laminate. The new user permission mechanism creates a new application profile and sets the permission rights of the profile for increased efficiency in the AOI room.

Setup process with other AOIs



Smart Setup™ with Discovery™



Flexible Solution

Supporting multiple production modes, materials and applications, Discovery™ II 9200 delivers expanded flexibility to handle a full range of production requirements. Orbotech's Smart Setup™ transforms the traditional AOI setup process to a single cycle with minimized process steps. 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 9200 provides fast and easy access to defects with unique UV illumination that allows distinguishing between real defect and false alarms.

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 9200 achieves increased efficiency for a lower cost of operation. This Discovery™ model is the fastest one in the Discovery™ II series. The system utilizes minimal consumables (LED illumination), approximately half the power consumption of previous Discovery™ models and has a small footprint for minimal floor space. Smart Setup™ significantly improves the ease of use in Discovery™ II 9200, remarkably reducing the need for training.