

AutoInspector Series - Spectra Series II

Large Format AOI

The Spectra Series II, Quad-Color Technology system is MVP's large format AOI solution. The Spectra has a standard inspection area of 35 x 35 inches (890 x 890mm). The optional Spectra XL is configured with board indexing and will allow inspection of boards up to 35 x 40" (890 x 1016mm). The Spectra and Spectra XL are the solutions for large board production lines.

Configured with high resolution cameras and Quad-Color technology as standard, the Spectra series provided the ability to use multiple angles of light to determine different characteristics of each component and lead inspected all from a single image. Quad-Color Technology combined with MVP's flying stage allows faster inspection cycle times while increasing inspection capabilities. Additionally, with enhanced defect coverage, false rejects are minimized.

- Standard Large Format System 35" x 35"
- Board Indexing Capabilities to 35" x 40"
- Flexible, Reliable and Robust Measurements
- Lowest Cost of Ownership
- Optional Paste and Pin-in-Hole Inspection
- Easy-To-Use Award Winning iPro and ePro Software
- Class Leading Performance and Yield Capability



The Spectra and Spectra XL complement MVP's wide range of award winning AOI products and allow for the introduction of flexible solutions with the capability to increase performance and speed metrics at the same time.

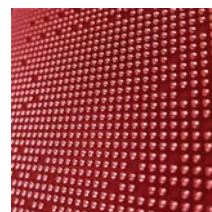
Discuss your SMT and Microelectronics inspection application with Machine Vision Products, Inc., and discover your solution



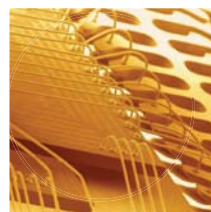
SMT AOI



3D Paste AOI



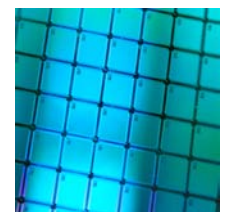
BGA AOI



Wire Bond AOI



Die and Epoxy AOI



Die Surface AOI



Spectra Series Technical Specifications

Inspection Speed

- Acquisition Speed of 75 Megapixels per Second with a Single 5MP Camera
- Up to 90 sq.cm per Second (14 sq.inches per Second) Inspection Dependant on Board Layout, Density and Field of View

System Hardware

- State-of-the-art Large Format Color Camera
- Proprietary "On-the-fly" Camera Acquisition
- Programmable Variable LED Strobe Lighting
- Proprietary Multi-color Illumination
- Field of View Resolution 7 - 17 Micron/Pixel
- 01005 Capable
- Copy-exact, Inter-machine Capability
- Dual High Precision X/Y Stage with 0.5 Micron Linear Scales, Closed-loop Linear Servo Motors for Fast Acceleration and Speed
- Center Board Support

System Software

- CAD-driven, Library-based Programming Software
- Proven High Performance, Adaptable Algorithms with Highest Detectability and Lowest PPM False Accept and False Reject Rates
- Full Network Integration (TCP/IP, NFS Protocol)
- Off-line or In-line Defect Review Capability
- Defect Image Archive Capability
- Real-time SPC Package
- Report Generation Utilities for Production Inspection Measurements
- Inspection Program Change Tracking
- 5th Generation Proven Inspection Software
- Multi-pass Technology, Adjustable Lighting Intensity
- MVP Dynamic Process Control Compatible

Material Handling

- SMEMA Interface
- Flexible PLC Control
- Auto Board Clamp for Precision Registration
- Single and Dual Lane
- Support for Thin and Standard PCB Processing

Physical Specification

- Spectra Standard Inspection Envelope 890 x 890mm (35" x 35")
- Spectra XL Inspection Envelope 890 x 1016mm (35" x 40")
- Footprint 1496 x 1642mm
- Height 1602mm (63")
- Conveyor Length 11600mm
- Power 220-240VAC 50/60Hz, 10 Amperes
- Air 60 PSI, 1CFM
- Weight 945kgs (2100 lbs)

System Configurations

- MVP Spectra
- MVP Spectra XL

Options

- 3D Paste Volume Inspection*
- Pin-in-Hole Inspection*
- Center Board Support
- CAD Translation Software
- Three Section Conveyor for Improved Cycle Time*
- Off-line Programming Capability
- Top Side Reference Lifters
- AutoWidth
- Programmable Z-Axis Control Function
- MVP Dynamic Process Control

* Options may reduce inspection area

Information contained in this document is summary in nature and is subject to change without notice. Appearance of the final, delivered product may vary from the photographs shown herein.

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