3D AOI is introduced on the robust Supra platform. The MVP Supra 3D introduces MVP’s advanced 3D AOI capabilities for enhanced detection of post reflow lifted lead defects and other process detractors down to 01005 components.

This newest addition complements MVP’s advanced color detection with 3D and allows user to benefit from the power of superb detection of complex defects and advanced visualization.

Configured with both traditional 2D AOI and MVP’s advanced 3D technology the Supra 3D is ultimately flexible. The Supra 3D is factory configurable for SPI inspection or for 3D AOI combining 2D AOI and MVP’s advanced 3D technology. 3D AOI allows users to select to use 3D on specific component types or individual reference designators, or to use full 3D coverage.

Configurable for 2D and 3D AOI
Superb detection of lifted leads and complex defects
8 or 10µm High Resolution Telecentric Optics
01005 Solder Joint Inspection, Certified
Best in class cost to performance ratio for 3D AOI
Post Reflow, Post Paste, Post Wave and SPI
Easy-To-Use Performance Based Programming
Lowest cost of ownership
Cost Effective 3D Automated Optical Inspection

Technical Specifications - Supra 3D AOI

Inspection Speed
- Acquisition Speed of 75 Megapixels per second with a single high resolution camera with Flying Stage Technology.
- Flexible, State of the Art, MVP 3D Projection Acquisition for Height and Volume

System Hardware
- State-of-the-art 8MP large format color camera
- Proprietary "On-the-fly" camera for 2D Acquisition
- Programmable variable LED strobe lighting
- Proprietary multi-color illumination
- Standard resolution 10um
- 01005 capable
- Copy-exact, inter-machine capability
- Precision X/Y stage with 0.5 micron ball-screw/rotary brushless DC motor drive system
- Dual closed loop linear encoders

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
- Multipass technology, adjustable lighting intensity
- MVP Dynamic Process Control compatible

Material Handling
- SMEMA Interface
- Flexible PLC Control
- Auto board clamp for precision registration
- Support for thin and standard PCB processing

Physical Specification
- Inspection envelope 508mm x 508 mm (18" x 20")
- Footprint 990mm W x 1100mm D
- Height 1580mm (62")
- Conveyor length 996mm
- Power 208-240VAC 50/60Hz, 10A
- Air 60 PSI, 1CFM
- Weight 500 kgs (1100 lbs)

System Configurations
- MVP Supra 3D
- Optional 5 MP Camera Acquisition
- Proprietary Multi-color illumination

Options
- CAD and Gerber translation software
- Off-line programming capability
- Dotplate and lighting calibration tool
- Dual Lane Material Handling
- AutoWidth Adjust
- Top Side Reference Lifters
- Programmable Z-Axis control function
- MVP Dynamic Process Control

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.

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