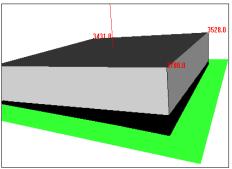
### TECHNOLOGICALLY ADVANCED

# MV-3 2D AOI Series

## MIRTEC

- High-Performance Five Camera Desktop AOI Machine
- **Exclusive TEN MEGA PIXEL Camera Technology**
- 9.8 Micron / Pixel Precision Telecentric Compound Lens Design
- Integrated Ten Mega Pixel SIDE-VIEWER® Camera System
- Extremely Simple Programming and Operation
- Superior Defect Detection / Lowest False Call Rate!
- "World Class" Global Customer Support







- Integrated INTELLI-BEAM® Laser Inspection System
- Four Point Height Measurement for Co-Planarity
  Testing of BGA and CSP Devices
- Enhanced 3D Solder Paste Measurement Capability



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#### **MV-3 Series Features and Specifications**

#### **Standard Features:**

- Intel ® Core™2 Duo PC, 24" Flat Screen LCD Monitor, Windows 7<sup>™</sup> OS, HDD, Mouse & Keyboard, Network LAN Card.
- Adjustable PCB Work Fixture, Safety Light Curtain.
- Three (3) Layer Programmable LED Light Source (Horizontal, Vertical, Coaxial).
- Pre and Post Reflow Inspection Capability.
- Automatic Teaching Software w/ Comprehensive Package Type Library for Simple "Drag and Drop" Programming.
- Local Software: Repair Plus Software, Statistical Process Control (SPC) Software.

#### Options:

- Five or Ten Mega Pixel Top-Down View Digital Color Camera System (See Specifications).
- SIDE-VIEWER® Camera System Quantity (4) Five or Ten Mega Pixel Side View Digital Color Cameras (See Specifications
- INTELLI-BEAM® Laser System Z-Height Measurement Capability for BGA and CSP Devices.
- NG Marking System Clearly Marks Position of Defects with a Water Soluble Ink Dot.
- 2D Bar Code Reader Gun Type 2D Bar Code Reading Capability Using Handheld Gun Type Reader.
- 2D Bar Code Reader Camera Type 2D Bar Code Reading Capability Using the Top Down Camera System.
- Remote Software: Off Line Programming, Remote Repair Plus, Remote SPC, Remote Management (PC Required).
- Inspection System Moveable Workstation.

#### **System Specifications:**

Top-Down View Camera Options	Field Of View	Resolution
5M Pixel (2,456 x 2,058) Camera Option 1	44.7mm x 37.4mm (1.76" x 1.48")	5 Mega Pixels @ 18.2 um/pixel
5M Pixel (2,456 x 2,058) Camera Option 2	32.9mm x 27.5mm (1.30" x 1.08")	5 Mega Pixels @ 13.4 um/pixel
5M Pixel (2,456 x 2,058) Camera Option 3	24.0mm x 20.1mm (0.94" x 0.79")	5 Mega Pixels @ 9.80 um/pixel
10MP ISIS (3,664 x 2,736) Camera Option 1	66.6mm x 49.7mm (2.62" x 1.56")	10 Mega Pixels @ 18.2 um/pixel
10MP ISIS (3,664 x 2,736) Camera Option 2	49.0mm x 36.6mm (1.93" x 1.44")	10 Mega Pixels @ 13.4 um/pixel
10MP ISIS (3,664 x 2,736) Camera Option 3	35.9mm x 26.8mm (1.41" x 1.05")	10 Mega Pixels @ 9.8 um/pixel

SIDE-VIEWER® Camera System	5 MEG: Quantity (4) Five Mega Pixel (2,576 x 1,968) Digital Color Cameras
SIDE-VIEWER' Camera System	10 MEG: Quantity (4) Ten Mega Pixel (3,664 x 2,736) Digital Color Cameras
INTELLI-BEAM® Laser Specifications	Z-Height Measurement Accuracy: +/- 20 um
	Resolution: 15 um / point
	Inspection Speed: 0.5 sec / point
Top-Down Camera Lens	Precision Telecentric Compound Lens Design
Top Side Clearance	Standard - 45mm (1.77"); Optional - 25mm (0.98")
Bottom Side Clearance	50.8mm (2.0") From Bottom of PCB Surface
Minimum Component Inspection	01005 Chip Component.
Robot Positioning System	Precision Closed Loop Micro Stepper Positioning System
Resolution	6 um (.000236 in.)
Repeatability	±15 um (± 0.000591 in.)
Maximum Inspection Speed	0.37sec / frame - 8.946 mm <sup>2</sup> / sec (11.046 in <sup>2</sup> / sec)
Power Requirements	110-220 VAC ± 10%; 50/60 Hertz; 5 Amps

Model Number	PCB Size Range
MV-3L	50mm x 50mm to 500mm x 400mm (2.0" x 2.0" to 19.7" x 15.7")
MV-3U	50mm x 50mm to 660mm x 510mm (2.0" x 2.0" to 25.9" x 20.1")

Model Number	Machine Dimensions
MV-3L	975mm W x 1,200mm D x 655mm H (38.3" W x 47.2" D x 25.8" H)
MV-3U	1,185mm W x 1,455mm D x 690mm H (46.6" W x 57.2" D x 27.2" H)

Model Number	Weight
MV-3L	110kg (242lbs)
MV-3U	160kg (352 lbs)