

# VeriFine™



VeriFine™ is the industry standard for verification allowing fine defect identification for fine-line PCB applications.

The VeriFine verification system is optimized for fine-line, high-end HDI, advanced flex and packaging applications. The system sets new standards of image quality, throughput, and ease-of-use for the verification of advanced applications.

## Benefits:

- Unsurpassed image quality
- Ease-of-use for maximum productivity
- Operated with virtually no additional training
- Compact, ergonomic design maximizes operator efficiency
- Easy defect classification for process control



## Unsurpassed Image Quality

VeriFine's advanced optical head is designed with a high-resolution camera delivering powerful magnification to guarantee an excellent view of defects under 3 micron. VeriFine systems are equipped with 3 independently controlled illumination channels: coaxial, diffusive, and grazing light - providing superb imaging of a large variety of materials. Dedicated algorithms developed for VeriFine further enhance the image quality and provide the best ever image of defects areas.



2 micron fine short

## Compact and Compatible

VeriFine's compact design requires minimal floor space. It supports Orbotech's full range of AOI systems and can be operated with virtually no additional training. A plug-and-play system, VeriFine doesn't require a constant air supply flow.

## Ease-of-use for Fast Verification

VeriFine's fast X/Y motion system and ergonomic design maximize operator efficiency and throughput. VeriFine improves working conditions by offering:

- Easy access and within a close range working distance to the defect area
- An accurate X/Y system placing the defect at the center of the image
- Tilted table for easy access to the defect area
- Auto focus and vacuum flattening that ensure all defects are in focus
- Small, movable defect reclassification keypad
- Laser pointer
- Multilingual software

## Controllable Vacuum Power

VeriFine's unique vacuum system allows adjustment of vacuum suction power, preventing damage to delicate fine line and flex panels, while ensuring excellent panel flatness.

## Specifications:

Maximum Panel Size	26" x 28" (660mm x 712mm)
Maximum Inspection Area	24" x 26" (610mm x 660mm)
Panel Thickness	0-400mil (0-10mm)
Transition Time Between Defects	Maximum: 1 second Typical: 0.5 of a second Motion speed: 700mm/sec
Zoom Magnification Range	105x-250x
Field of View	1.0mm-2.5mm
Illumination	3 independently controlled illumination types (LED-based): coaxial, diffusive, grazing
Working Distance*	2.5" (64mm)
Applications Supported	All HDI, flex and packaging types at all production stages
Feature Measurement	Down to 2 micron
Image Display	High-resolution adjustable 17" flat panel display
Panel Handling	Vacuum table, pins and pin-less panel mounting
AOI Systems Supported	Orbotech Discovery™, InSpire™, PC™, SK™, Vision™, Spiron™, PC-Micro-II™ and InFinex™ series
Physical Dimensions	49.2" width x 49.6" depth x 47.2 - 63" height (adjustable) (125cm x 126cm x 120-160cm)

\* From Diffusive illumination module

• VeriFine is class 1 laser products according to IEC 60825-1 containing a class 2 laser. Laser Specification: Red laser diode, 635nm, <1mw max power.  
• Specifications are subject to change without notice.