

Ultra VM

Ultra Discovery™ VM



Ultra Discovery™ VM AOI System

Orbotech's Ultra Discovery™ VM AOI systems offer a new level of AOI performance. Discovery's field-proven SIP Technology™ has been designed to overcome the complex challenges of FC-BGAs and the most advanced PBGA/CSP and COFs.

Simple, Intelligent, Powerful

Ultra Discovery VM delivers Simple, Intelligent and Powerful AOI performance with 10µm line/space inspection capabilities for FC-BGA, PBGA, CSP and COF production.

Delivering super clear images essential for capturing the finest defects, the system achieves outstanding AOI results with minimal effort or training, even on complicated panels. Most of manufacturers' valuable time on the system is spent inspecting panels. Logic false calls are virtually eliminated and overall false calls are minimized saving precious verification time.

Benefits

- High throughput and superior detection with minimal number of false calls
- Especially designed for inspection of the finest lines down to 10µm
- Quick set-up even for the most complicated jobs for higher productivity
- Automation ready
- Very high uptime



SIP Technology™



Push-to-Scan®:

- A 'no set-up' process
- Top AOI results with minimal effort or training
- The easiest, user-friendly interface (GUI)
- Full 'Step and Repeat' functions

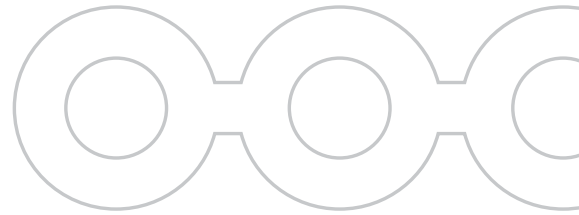
Visual Intelligence:

Using SIP Technology, Ultra Discovery VM introduces Orbotech's detection paradigm to the world of fine-line FC-BGA, PBGA/CSP and COF production. With the Visual Intelligence Detection Engine – now dedicated for IC substrate applications - manufacturers no longer have to choose between detection and false calls or waste time on non-critical defects. For the first time in AOI, detect all you want, and only what you want.

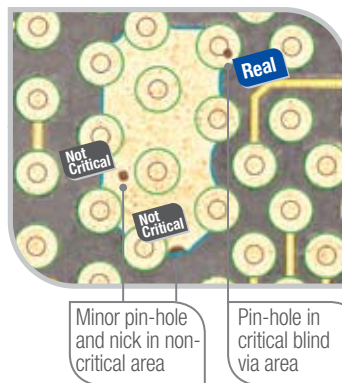
Ultra Discovery VM is equipped with a super-fast optical head, which together with its dedicated IC substrate panel understanding, delivers exceptionally high throughput, superior detection and low false call rates. The optical head is specially designed for inspection of the finest lines down to 10µm. The customized professional lens, featuring unique wide angle illumination, delivers very clear images essential for capturing the finest defects.

Visual Intelligence:

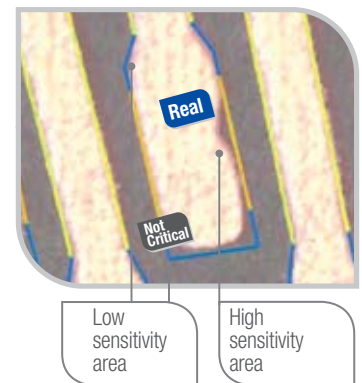
- Full panel understanding, context-based detection engine
- Equipped with ultra-fast sensors and powerful data processing for maximum inspection speed
- Industry first: low false calls reporting for FC-BGA, PBGA/CSP and Chip-on-Flex application boards.



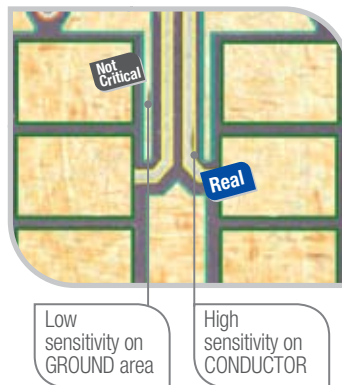
Different sensitivities for critical and non-critical areas



Different sensitivities for wire bonding pads



Different sensitivities for conductors and ground area



Different sensitivities for power conductor and ground area

