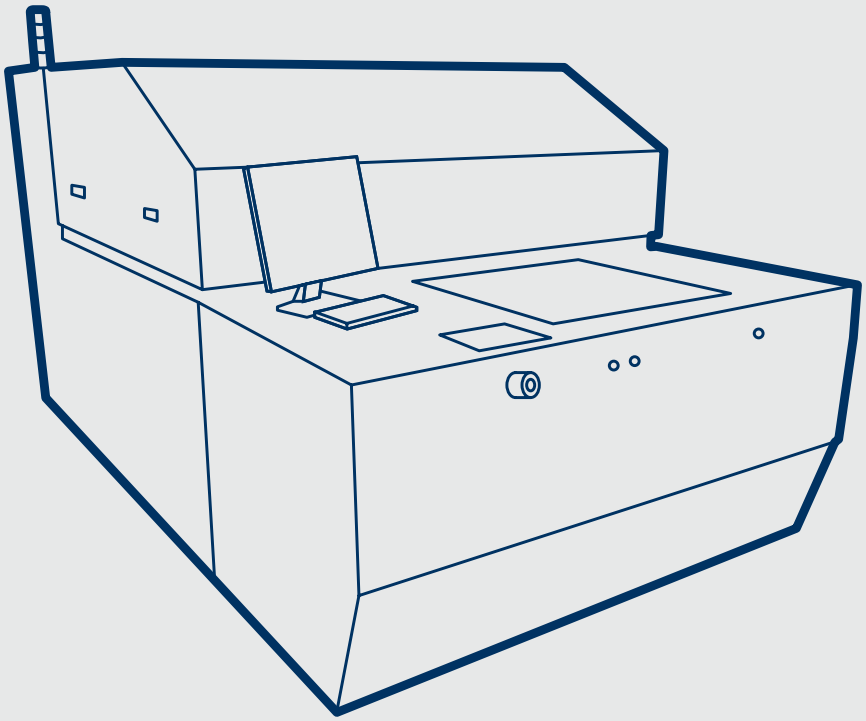
orbotech® The Language of Electronics

ORBOTECH DIAMOND™ 10/10XL

Solder Mask at its Best



PCB Production Solutions

ORBOTECH DIAMOND™ 10/10XL

Solder Mask at its Best

Orbotech Diamond 10/10XL is an advanced high-capacity digital imaging (DI) solution for a wide variety of solder mask (SM) applications, including HDI, MLB and FPCB. Powered by Orbotech's proprietary SolderFast Technology™, the field-proven Orbotech Diamond 10/10XL delivers high-quality imaging and fast throughput for the most complex designs. Raising the DI bar for solder mask applications, Orbotech Diamond 10/10XL is a high-end mass production solution that enhances imaging accuracy while decreasing total cost of ownership (TCO).

Benefits

High-Quality Imaging and High Throughput

- Patented, high power illumination source
- 3-wavelength spectrum for high-quality sidewalls, minimal undercuts and excellent surface quality
- "One Pass" technology to cover full panel area at one imaging with uniform imaging of the entire panel area
- On the fly target recognition and acquisition capabilities
- High depth of focus (DOF) for challenging topographies
- Adaptable for a wide variety of customer processes, eliminating the need to qualify new materials

High Capacity

- Fast and easy SM imaging set-up for new jobs
- Dual-table transport mechanism for optimal imaging time and efficiency
- Optional clamping solution
- Industry 4.0 and automation-ready solution

Outstanding Imaging Accuracy

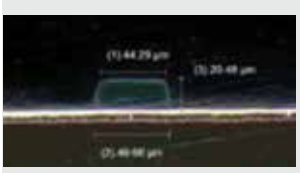
- Registration accuracy as fine as ±10µm
- Advanced scaling modes and algorithms for challenging panel distortions

Low Total Cost of Ownership

- High production system efficiency
- Long-life LEDs
- Low power consumption

High-quality SM imaging, no residue on vias

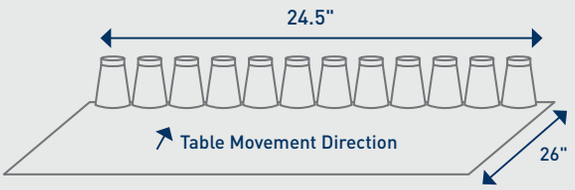
High registration accuracy



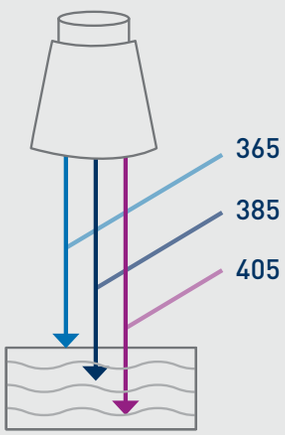
50µm solder dam, 20µm thickness on Cu

100µm solder dam, 40µm thickness on Cu

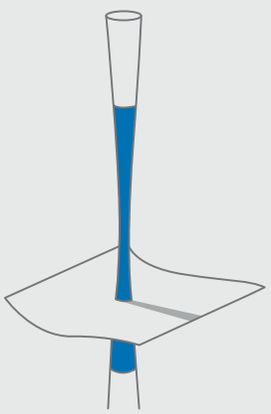
High Quality Imaging and High Throughput



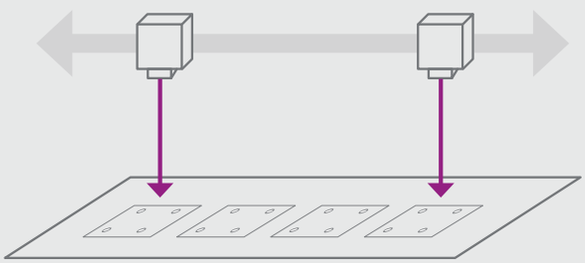
One Pass Printing for high throughput, high uniformity and no stitching



3WL spectrum for high quality side walls, minimal undercut and excellent surface quality

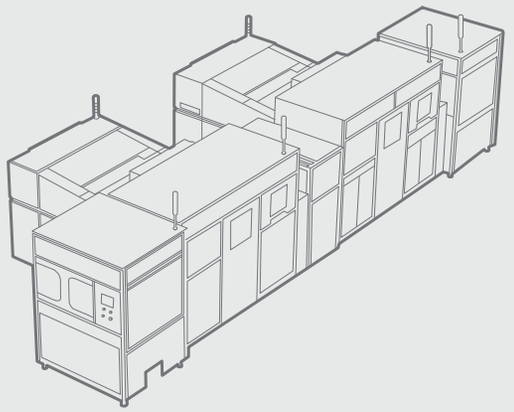


High Depth of Focus (DOF) for challenging topographies

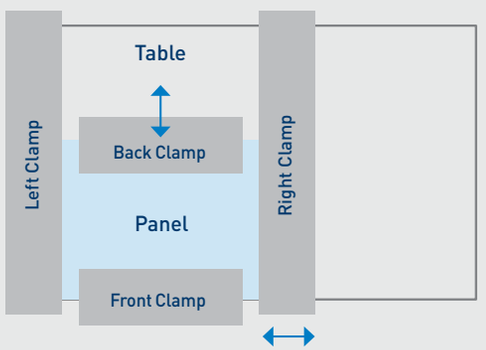


On-The-Fly target recognition and acquisition

High Capacity Mass Production Solution



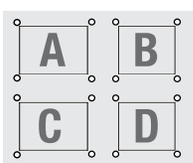
Automation ready solution



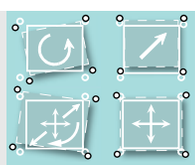
Clamping

Outstanding Imaging Accuracy

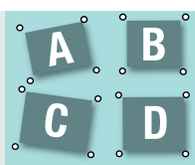
Advanced Scaling modes and algorithms for challenging panel distortions include Auto Scaling, Partial Scaling and Non Linear Scaling



CAM Data



Panel



Imaging