

Orbotech Infinitum[™] 10/10XT

The New Way of R2R Imaging

Orbotech Infinitum 10/10XT

Orbotech Infinitum 10/10XT is a groundbreaking roll-to-roll direct imaging solution for mass production of flex PCBs.

Driven by KLA's breakthrough Drum Direct Imaging (DDI)[™] technology, Orbotech Infinitum 10/10XT enables optimal material handling and high-speed imaging delivering extremely high yield and throughput.

This new solution leverages KLA's field-proven Large Scan Optics (LSO)™ technology and MultiWave Laser™ technology to ensure superior line quality and high accuracy for even the most delicate flex materials.

Orbotech Infinitum 10/10XT is an all-in-one, compact and closed innovative solution, ensuring superior performance and optimal efficiency

Benefits

Optimal Material Handling, Superior Yield

- Innovative drum-based solution for best material placement
- Controlled low-tension material movement preventing distortions
- Integrated automated cleaning mechanism eliminating particles

Fast Throughput, High Capacity

- High-speed imaging enabled by continuous exposure on a rotating drum
- High imaging efficiency with on-the-fly target registration
- Maximized uptime with quick job and roll changeovers

Outstanding Imaging Quality

- Superb fine line structure and uniformity enabled by continuous exposure and high depth-of-focus (DOF)
- Compatible with a wide range of resists and processes enabled by simultaneous multiwave exposure
- Automatic material distortion compensation mechanism for high positioning accuracy

Compact and User-Friendly

 One-box, minimal footprint solution for extreme efficiency and cleanliness



- Highly intuitive, user-friendly GUI ensuring smooth operation
- Unique design enabling easy roll exchange



Technologies



DDI[™]Technology



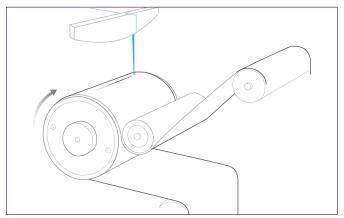
LSO™Technology



MultiWave Laser™ Technology

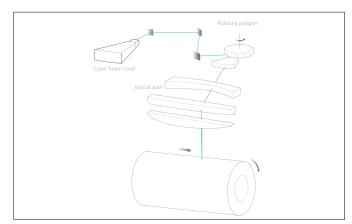


High-Capacity, Drum-based DI R2R



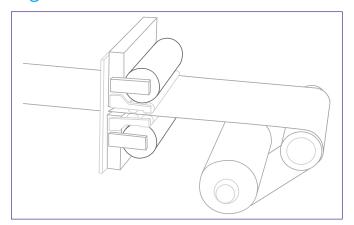
Continuous, unidirectional and constant drum rotation for high throughput and perfect material handling enabled by KLA's new DDI^{m} technology

High Imaging Quality



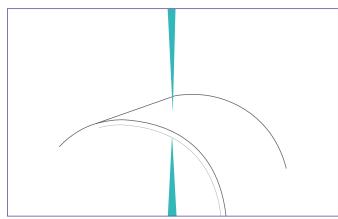
Superior line structure in a single scan enabled by KLA's LSO $^{\mathtt{M}}$ technology

High Cleanliness



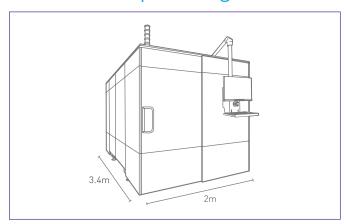
Integrated, automated cleaning mechanism

High Line Uniformity



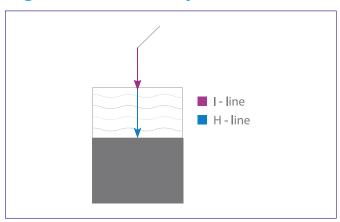
Line precision and uniformity enabled by high depth of focus (DOF)

All-in-One Compact Design



One-box, minimal footprint for maximum efficiency

High Resists Flexibility



Compatibility with a wide range of resists and processes driven by KLA's MultiWave Laser™ technology



Specifications

Orbotech Infinitum 10

Orbotech Infinitum 10XT

Roll Width	250 - 260mm	250 - 520mm
Maximum Exposure Width	260mm	520mm
Minimum Line/Space*	10/15μm	
Registration Accuracy (FtG)	±10μm	
Imaging Energy Range	10 - 1,000mJ/cm²	
Maximum Roll Weight	50Kg	
Maximum Roll Diameter	300mm	
Applications	Flex R2R - Single-Sided, Double-Sided, Multi-Layer	
System Dimensions	3.4m x 2.0m x 2.4m	

^{*}Depends on photoresist properties