

PRESS RELEASE

Lasertec Corporation

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(Tokyo Stock Exchange Prime Market, Code 6920)

Lasertec Releases ABICS Series E320 EUV Mask Blanks Inspection and Review System

Yokohama, December 2, 2024 - Lasertec Corporation announced today the release of the ABICS Series E320, an EUV mask blank inspection and review system that contributes to defect management and yield improvement in the production of next-generation EUV mask blanks. Lasertec is now accepting orders for this new system.

Lasertec has been engaged in the development of inspection technology using EUV light sources for many years. The ABICS Series E120, the predecessor model to E320, has been widely used for quality assurance inspection of mask blanks and defect mitigation, thanks to its high sensitivity detection of phase defects and highly accurate capturing of defect coordinates, and has earned a good reputation among customers.

Today, efforts are being made for the adoption of high-NA EUV lithography to enable the further shrinking of device geometries. Under the circumstances, it is crucial that EUV mask blank manufacturers have the capability to detect and control phase defects that are smaller than previously controlled.

The ABICS Series E320 features a newly designed high-magnification Schwarzschild objective and optimized illumination optics to achieve the level of defect sensitivity and accuracy in defect coordinates required for high-NA EUV lithography.

Lasertec is dedicated to developing unique solutions to support the needs of customers and facilitating quality and productivity improvements, thereby contributing to the advancement of the semiconductor industry.

Features

- Actinic inspection (with 13.5nm EUV light)
- High-sensitivity detection of printable phase defects inside reflective Mo/Si multilayers
- High-sensitivity and high-speed inspection with dark-field optics (40x magnification)
- Highly accurate capture of defect coordinates using high-magnification review (1,500x)
- Defect analysis, including defect classification and determination of false defects, using bright-field and dark-field review

Applications

- Detection of phase defects in the Mo/Si multilayers of next-generation EUV mask blanks
- Review of phase defects in EUV mask blanks
- Highly accurate capture of phase defect coordinates to enable defect mitigation



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