

ADVANTEST®

MASK CD-SEM

E3660

MASK CD-SEM supporting sub-2 nm node photomasks



The E3660, using Advantest's proprietary electron beam scanning technology and high-precision stage control technology, is a new tool that measures fine pattern dimensions on photomasks with greater precision and stability. Furthermore, to meet the demands of sub-2 nm technology, it uses actual photomasks as components for generating faithful SEM images.

As the newest entry in the company's E3600 series, which has been widely accepted in the photomask SEM market, the E3660 achieves over 20% improvement in measurement repeatability compared to the existing model, the E3650. This contributes to accurate and rapid measurement of increasing number of hotspots in photomasks, which are becoming increasingly miniaturized and densified, based on design data. It also provides a new measurement method for curved patterns, which are expected to be widely used with the increasing adoption of Multi Beam Mask Writers.

E3660 Features

- **Large Field Measurement**

High-accuracy wide-field SEM images enable multi-point simultaneous measurement. In addition, the E3660's high precision SEM contour image extraction function powerfully supports lithography simulation.

- **Improved Long-Term Stability of CD Measurements**

The E3660 utilizes focus control with the Z stage and in situ ozone cleaning technology, making long-term stable CD measurements possible without adjustment.

- **DBM (Design Based Metrology) Support**

Rule-based approach based on design information enables multi-point measurement recipes to be automatically generated and high-precision measurement of hotspots and fine patterns to be carried out.

- **Curvilinear Pattern Measurement**

Various measurement algorithms are provided, including curvature measurements for curved patterns.



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<https://www.advantest.com/>

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