Automatic Macro Inspection System

AMI-3000

Featuring High Throughput and Exceptional Sensitivity

The AMI-3000 automatic macro inspection system brings together all of Nikon's expertise in semiconductor manufacturing to enhance macro inspection precision, providing quantified reference criteria and enabling more efficient process management.
The AMI-3000 offers a substantial increase in yield.

AMI-3000

High Detection Sensitivity

Nikon's exclusive diffracted light detection system detects pattern variation, due to defocus by the stepper or uneven coating by the coater, with excellent sensitivity. Our proprietary algorithms accurately recognize diffracted light from the top pattern layer, making it possible to identify defects in underlying patterns.

Inspection of Entire Surface of Every Wafer Offers Higher Throughput

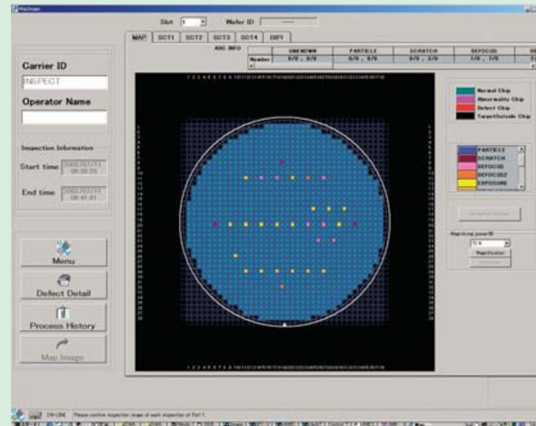
Capturing the entire wafer surface in a single image provides one of the world's highest throughputs for an automatic macro inspection system (150 wafers/hour), enabling 100% lot inspection.

AI-Driven Image Processing Handles Process Changes

Nikon's field-proven image processing technology, driven by AI, is now applied to device inspection. Our unique learning function quantifies the acceptable value of "good wafer image" results for each process, providing the versatility needed to respond to process changes and deliver stable inspection results.

Auto-Rework Judgment, Including Automatic Defect Classification (ADC)

In addition to the ADC function, users can specify their own rework criteria for each process. Adjusting the threshold of the defect criteria in the recipe provides automatic rework judgments in wafer and lot units.



Options

- Automatic Defect Classification (ADC)
- AGV capable
- Wafer ID Reader, Cassette ID Reader
- Edge bead removal inspection (EBR)
- Signal Tower, Remote terminal
- Online interface

Specifications

Wafer size	300mm
Throughput	≥ 150 wafers/hour
Major inspection items	Exposure errors/defocusing defects, coating errors/uneven coating, developing errors, foreign particles, scratches, etc.
Dimensions	1,417 (W) x 2,503 (D) x 2,430 (H) mm
Weight	Approx. 1,400kg
Safety standards	Complies with SEMI S2-0200, S8-0701, CE marking

Specifications and equipment are subject to change without any notice or obligation on the part of the manufacturer. July 2003.

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WARNING | TO ENSURE CORRECT USAGE, READ THE CORRESPONDING MANUALS CAREFULLY BEFORE USING YOUR EQUIPMENT.

The export of this product is controlled by Japanese Foreign Exchange and Foreign Trade Law and International Export Control Regime. It should not be exported without authorization from the appropriate governmental authorities.

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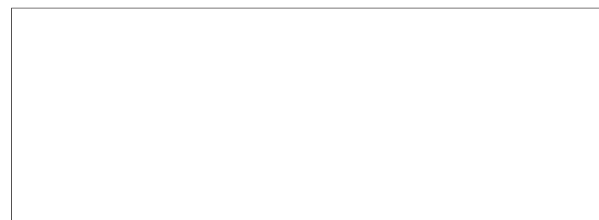

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