ARGOS matrix 200 / 300

automated scratch/dig inspection
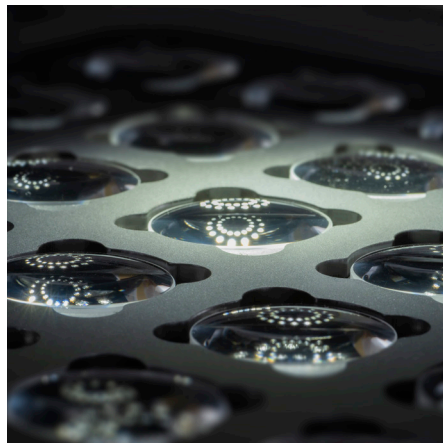
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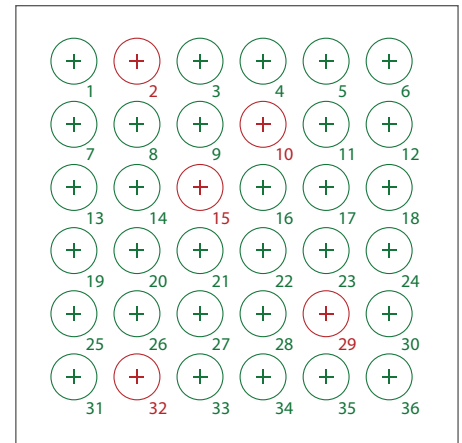

- ○ **FULLY AUTOMATED SURFACE INSPECTION**
- ○ **VERSATILE FROM MICRO-OPTICS TO WAFERS**
- ○ **OBJECTIVE AND REPRODUCIBLE**

Automated stitching of large parts

Serial inspection of many parts on a tray

Clear pass/fail decision and detailed reports

BENEFITS

Large flexibility: any shape from aspheric micro lenses to 12" wafers can be inspected.

Automated serial inspection without user interaction reduces cost and improves process quality.

Objective test results with clear decisions and detailed information on relevant defects and statistics.

FUNCTIONALITY

ARGOS matrix is equipped with a high-resolution camera and a switchable dark-field illumination. Images with different lighting configurations are fused for reliable defect detection with high repeatability. A precision

12" stage allows inspection of large numbers of parts in a tray. Our stitching mode allows inspection of large parts - flat or curved. PDF test reports with clear decision and detailed information are automatically created.

SPECIFICATIONS

ARGOS measurement head	ARGOS matrix S	ARGOS matrix M	ARGOS matrix L
Smallest ISO 10110-7 size grade	0.004 (digs), 0.0025 (scratches)	0.0063 (digs), 0.004 (scratches)	0.01 (digs), 0.0063 (scratches)
Smallest visible defects*	< 1 µm	< 2 µm	< 3 µm
Reproducibility of the size measurement*	< 1.5 µm	< 3 µm	< 4.5 µm
Inspection example*: 8" wafer	12 min	4 min	2 min
Inspection example*: Lens, D = 30 mm, curvature R = 30 mm	4 min	2 min	15 s
Maximum inspection area / System size (L x W x H)	**ARGOS matrix 200**: 205 x 205 mm / 645 x 520 x 700 mm **ARGOS matrix 300**: 305 x 305 mm / 845 x 720 x 700 mm		
Surface materials	Polished, uncoated or coated surfaces with optical quality, e.g. glass, semiconductors, metals, plastics, crystals, other surface types on request.		

*for details see technical specification document

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