

ARGOS matrix 200

automated scratch/dig inspection

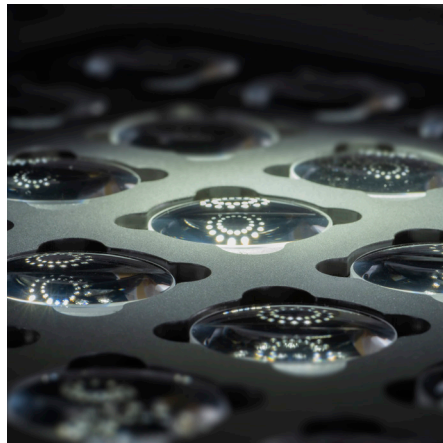
DI OPTIC
creating optical solutions



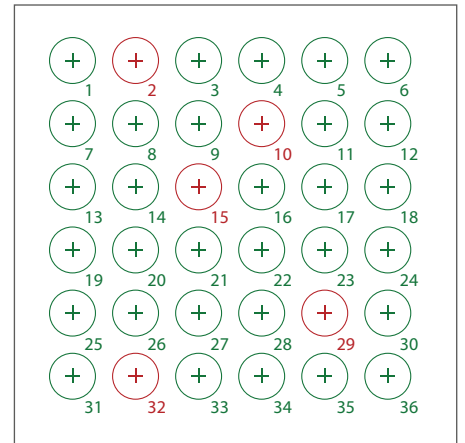
- FULLY AUTOMATED SURFACE INSPECTION
- VERSATILE FROM MICRO-OPTICS TO WAFERS
- OBJECTIVE AND REPRODUCIBLE



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 8" 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 200 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

8" stage allows inspection of either large numbers of parts or a single large surface - 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 | 15s |
| Maximum inspection area / System size (LxWxH) | 205x205 mm / 645x520x700 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