

Macro Semi 3D Metrology

Wafer Metrology: 2D & 3D Inspection



Artificial Intelligence

Tag and train images
to classify and quantify defects.



First system in the world to do wafer 3D & 2D analysis simultaneously

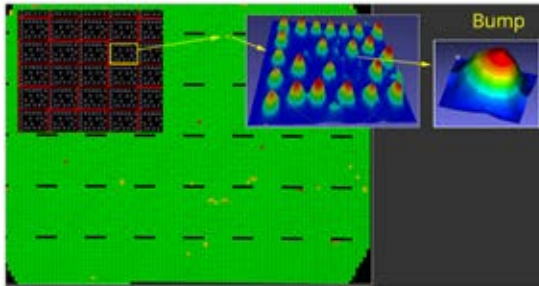
- Increase your yield with the most advanced A.I. in semiconductor metrology.
- BTBP's system detects and quantifies process defects.
- Wafer metrology is the key to process control and yield enhancement.



How it works

- Load & scan the wafer.
- Capture the full wafer for 2D and 3D analysis.
 - Recipe setup and binning capability.
 - Classify wafer defects and generate highest resolution 3D models for quantitative measurements.
 - Detect & display defects like particles, scratches, missing patterns & bumps.

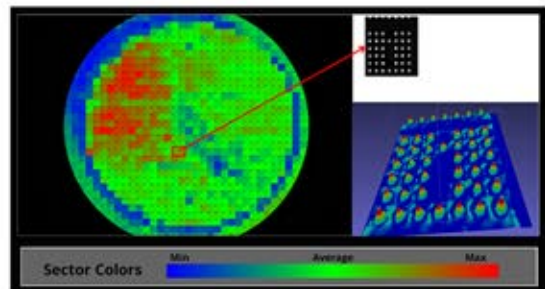
Highlights



DETECTING THE DEFECTS

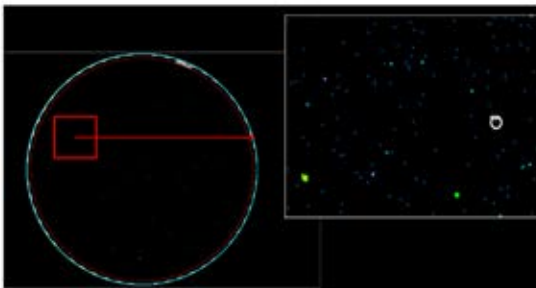
Bumps on the wafer:

- Identifying X,Y location(relative to notch), minimum height, maximum height, average height and diameter of the bump on a wafer.
- Information is saved in the industry standard KLARF format.



BINNING CAPABILITY : . . .

- Missing bumps can be identified.
- High quality imaging providing a greater detail of intensities for detecting even floor variations & the height of bumps more accurately.



PARTICLES ON THE WAFER:

- Features capable of detecting the presence of particles, residues, damaged wafers, wafer edges, hard & soft defects with their locations, count and size with high binning accuracy.
- **32 Bit High Dynamic Range Process of Scanning:** Provides a wide range of intensity's for detecting sub micron particles(0.25 microns) to very large particles(many millimeters) with a single scan for front and back of the wafer.
- Automatic classification of defects through our computer algorithm process of deep learning(A.I.).

Application Features

 Follows SEMI Standards for Job Handling	 Recipe Management	 User and Role Management	 Access Control Based on Login	 Defect/Particle Map in Standard Format	 A.I. Available for Classifying Defects.	 Signature Analysis
 Charting Package for Professional Reporting	 3D Viewer with Measurements	 Die-to-Die Matching	 2D and 3D Analysis	 HDR Imaging	 Edge Inspection	 Automatic Notch Detection

