WAFER BLOCK AND INGOT MEASUREMENT SYSTEM

Our new **solid state 3D Wafer Block Measurement System** uses 3D laser profile measurement techniques. Wafer block measurements are now automated with high accuracy and reliability.

The 3D Scanner makes 3D models of wafer blocks and ingots, measuring the size and finding defects with a resolution down to 0.01 mm.

Accurate 3D models of wafer blocks and silicon ingots are created with our 3D scanner. The scanner is based on multiple laser triangulation profiles working in a common 3D coordinate system with the highest accuracy. A scan is fast and creates models with a resolution down to 0.01 mm.

The 3D model can be exported to CAD systems.
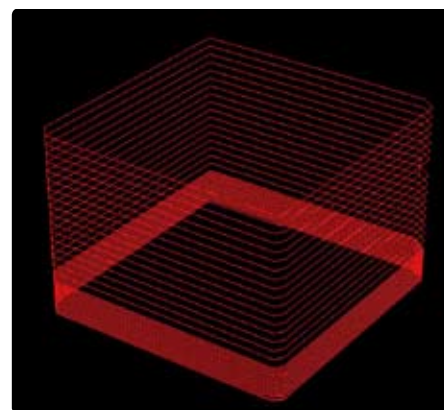
On wafer blocks, the system is measuring:

- Side parallelism
- Width
- Height
- Angles
- Side flatness

To be Measured

- *3D laser profile measurement of wafer blocks and silicon ingots*
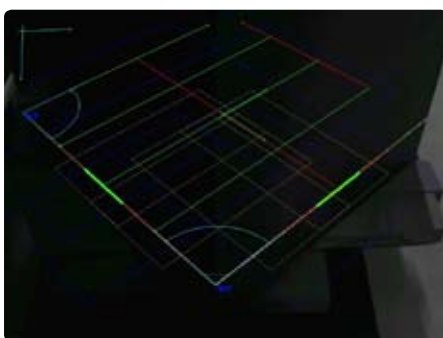- *Size and defects with 0.01 mm resolution*

3D measurements

3D laser profile model of a wafer block

By combining Scorpion Vision Software®, Firewire cameras, Lasiris lasers with Sony desktop robots and Toshiba Machine's Cartesian robots, objects up to 1000 x 1000 x 500 mm are measured.
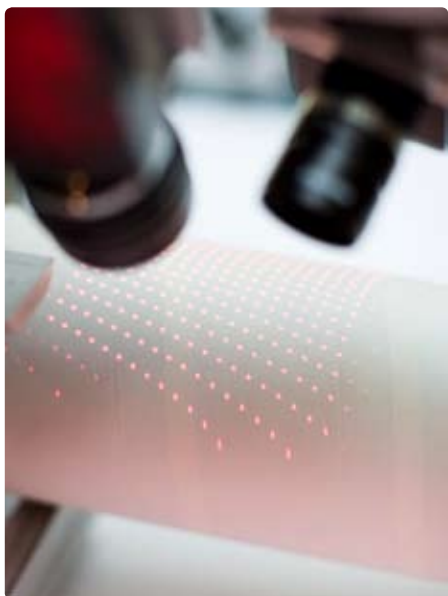

Measuring angles and side flatness

3D scanning of wafer block

Technical Data

Computer System
- 19" Sony TFT 1280 x 1024
- Industrial IPC, P4 3.0 GHz
- 2 Gbyte memory
- Raid 1 - Dual SATA 160 Gbyte HD

Measurement Resolution
- Size and defects: from 0.1 to 0.01 mm

Software
- Windows XP SP2
- Scorpion Vision Software® with wafer block module

Object size
- Maximum 1000 x 1000 x 500 mm

Language Support
- English and Norwegian

Specifications might change without any notification.

Systems based on extensive 3D Research

The systems are based on extensive 3D machine vision research. Tordivel AS is participating in research projects aiming to simplify the use of 3D machine vision measurements in the manufacturing industry.

Complete Wafer Inspection Systems

The solutions are built on Scorpion Vision Software® for user friendliness, configurability, reliability and ease of maintenance. Off-the-shelf world class hardware components including area- and line scan camera technology are used.

Tordivel as

A complete supplier of Optical Wafer Measurement Systems and Components

For more information:

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