

PROSCAN DDMS

AUTOMATIC DEFECT DETECTION AND MEASUREMENT SYSTEM



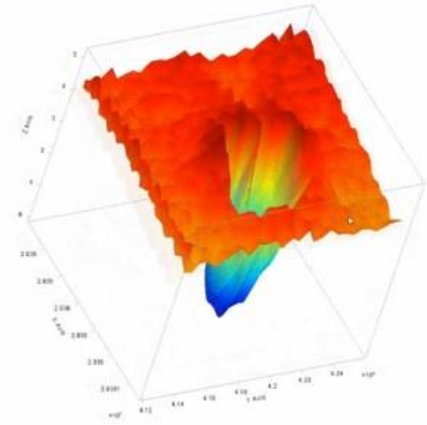
HIGH PERFORMANCE MEASUREMENT

Proscan **DDMS** (Defect **D**etection and **M**easurement System) represents a fully automated, machine learning approach to identification and measurement of scratches, pits, pinholes, and surface deformations to μm levels.

From scanning to reporting of data, each step is automated and repeatable. A cutting-edge vision system scans the surface with intelligent lighting, to identify the locations of the defects. These can be classified for severity based on operational parameters, whilst excluding 'false flags' from dust or swarf.

Each defect is then measured for depth, width, and volume with a high-resolution sensor. Roughness and other surface parameters can also be measured in key areas, with real time inspection possible while results are acquired. Based on the results and pass/fail criteria, the part is then sentenced based on the observed defects.

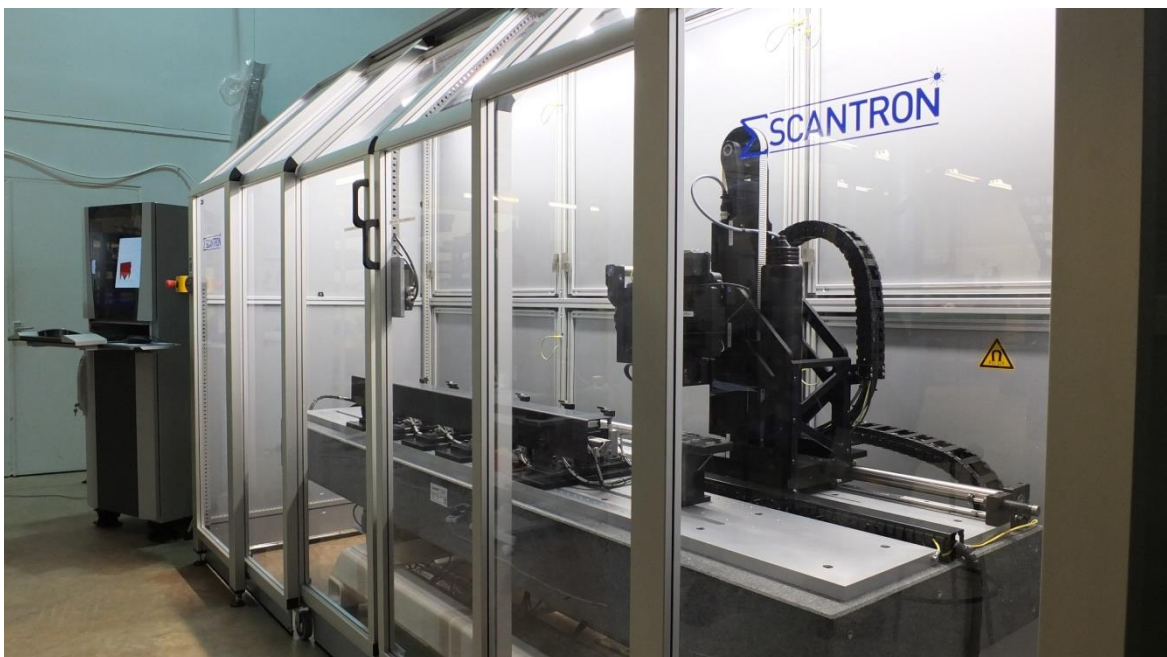
We work hand in hand with the customer to develop a software protocol specific to their sample and defect type.

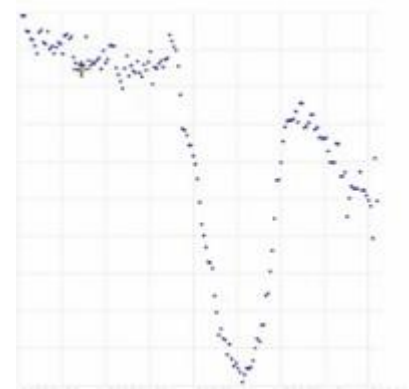
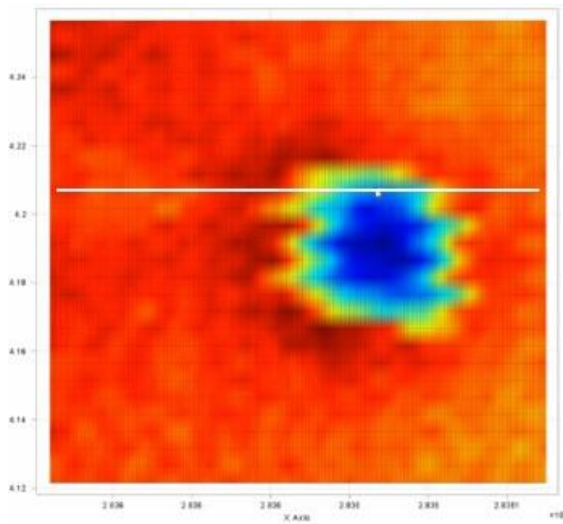


VERSATILITY

The Proscan **DDMS** system allows for the measurement of ...

- scratches
- pinholes
- pitting
- other defects
- roughness
- shape
- flatness
- thickness





HIGH SPEED MEASUREMENT

Using line measurement technology, we can obtain hundreds of thousands of data points per second, allowing for 100% measurement of defects or surface quality many times more reliably and faster than a visual inspection. This ensures rapid return on investment and a step change in quality control capabilities.

FACTORY-READY

The extreme precision of the system can resist industrial environments, with air bearings, granite tables and footings, full enclosures, and acoustic dampeners all possible solutions to environmental disturbances.

The intelligent defect location software also helps to eliminate false flags resulting from airborne contamination.

Factory acceptance data has demonstrated perfect reproducibility with defect detection, and repeatability far below $1\mu\text{m}$ in dimensional measurements.

QUANTITATIVE INSPECTION

In many fields, visual inspection and comparison need to be carried out. This job can be dull and difficult with potential for user error.

We eliminate the subjectivity by physically measuring and automatically grading defects to give operators the same answer time after time.

We work with operators and quality engineers to tune the defect detection algorithm. This allows for the correct sensitivity to determine whether defects are considered in or out of tolerance.

PROSCAN SERIES

FIRST IN NON-CONTACT MEASUREMENT

2D/3S



Surface roughness and flatness analysis

2200



3D surface measurement

3D LINE



Defect detection and measurement



In-house design
& flexibility

DDMS



Automatic defect detection and measurement

MAGNUM



Surface and shape measurement system for sheet products

MASTERTRAK



Online thickness and width

Scantron are specialists in non-contact inspection, detection, and measurement systems. Our capabilities include ...

- defect detection
- displacement
- flatness
- shape
- surface roughness
- thickness
- diameter
- distance
- length
- straightness
- speed
- width

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