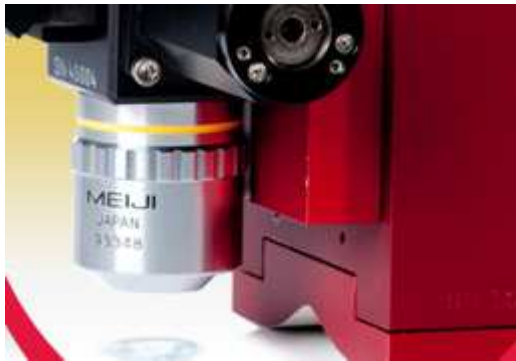
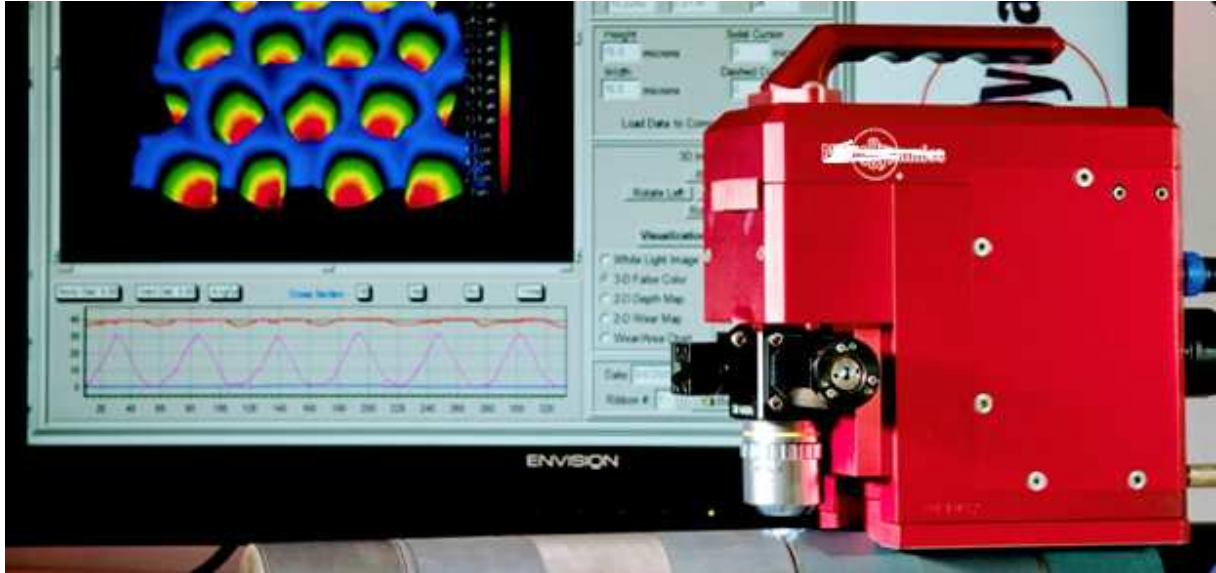
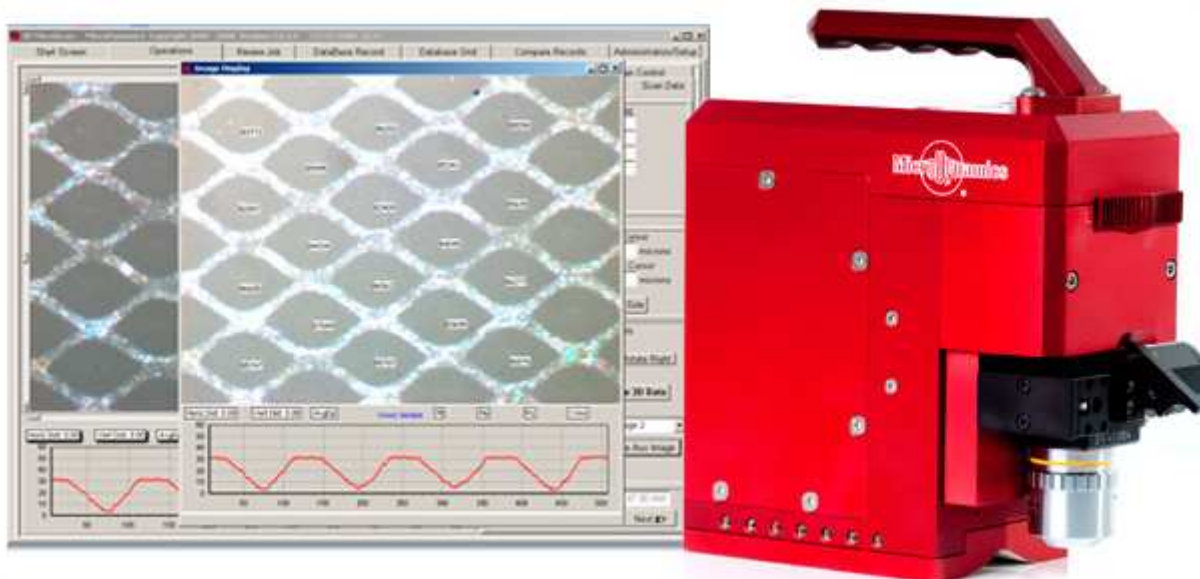


# Cylinder Inspection System

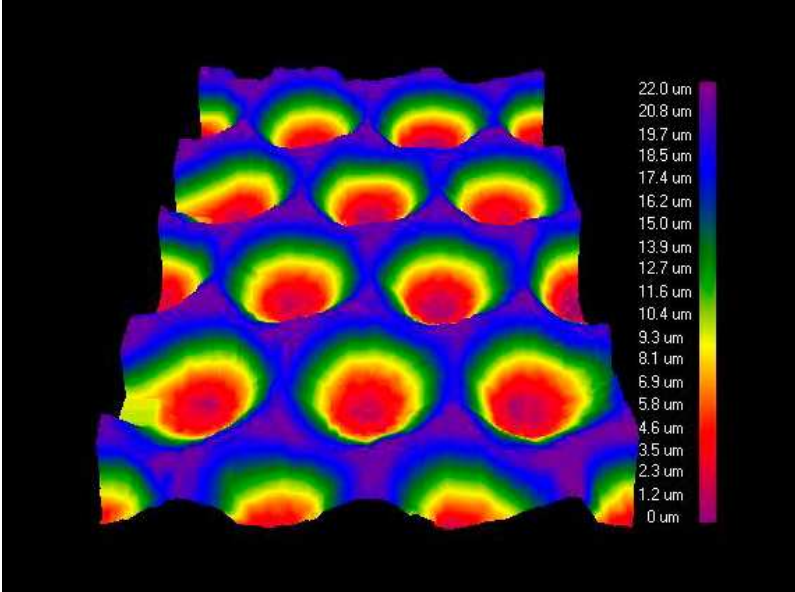
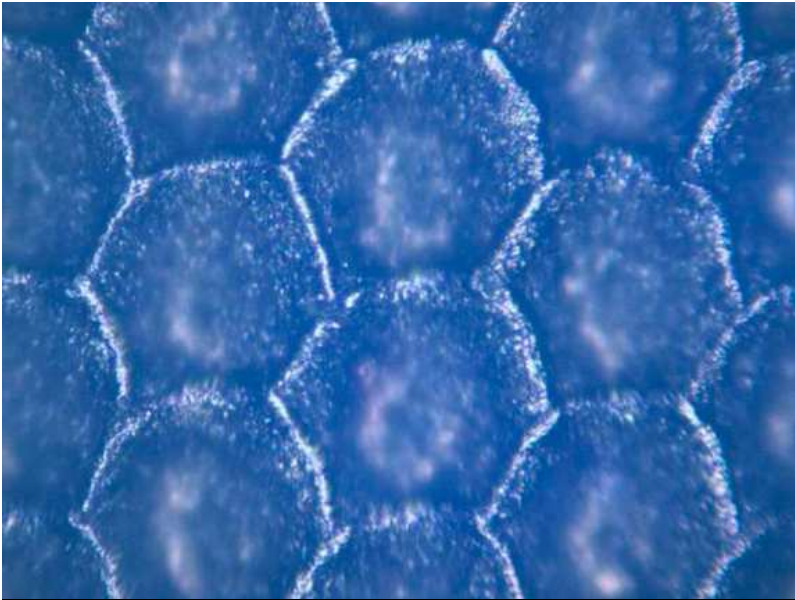
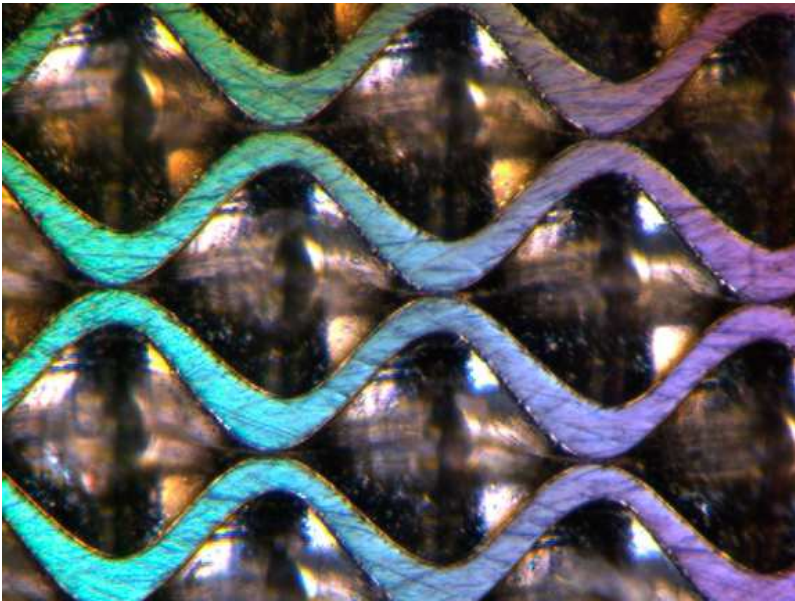


Microscope Optics



Full automatic software with results showing cell's size, depth, wall thickness and so on.

Results will be shown in form of data as well as 2D and 3D images.



## Spezification.

|                             |   |
|-----------------------------|---|
| <b>Technology</b>           | Non Contact White light Interferometry                                      |
| <b>Scanner</b>              | Closed Loop linear servo  |
| <b>Field of View</b>        | 86x64 $\mu$ m to 1411x1058 $\mu$ m  |
| <b>Illuminator</b>          | Integrated long-life<br>one watt white-light LED                            |
| <b>Objective mounting</b>   | Threaded objective  |
| <b>Controls</b>             | Computer GUI  |
| <b>Part viewing</b>         | On-screen display standard  |
| <b>Fine focus travel</b>    | 20mm of travel  |
| <b>Camera</b>               | Industrial VGA 24 bit color   |
| <b>Dimensions<br/>(HWD)</b> | 8.5" x 8" x 3.5"<br>215.9 x 203.2 x 88.9mm                                  |
| <b>Weight</b>               | 4.33kg/9.53lbs  |
| <b>Input voltage</b>        | 100/240 VAC, 50/60 Hz   |
| <b>Computer</b>             | High-performance Dual-core based CPU<br>with LCD monitor (laptop available) |

|                            |  |
|----------------------------|--|
| <b>Vertical Scan Range</b> | $\leq 500\mu\text{m}$  |
| <b>Vertical Res.</b>       | $\leq 10\text{nm}$   |
| <b>Lateral Res.</b>        | 0.13 to 2.21 $\mu\text{m}$ , objective dependent   |
| <b>Data scan rate</b>      | $\leq 20\mu\text{m}/\text{sec}$  |
| <b>Maximum Data Points</b> | 307, 200   |
| <b>Step Height</b>         | Accuracy $\leq \pm 0.5\%$<br>Repeatability $\leq .05\% @ 1\sigma$  |
| <b>Capabilities</b>        | Automatic Depth, Volume,<br>Screen count, surface roughness<br>(Sa, Sq, Sskew, Skurtosis, Ra,<br>Rt, Rz, Yrms), wall widths,<br>dot coverage   |
| <b>Presentation</b>        | 2D and 3D graphics,<br>Real time visualization, tabular data<br>Manual feature measurement tools,<br>semi-automated cross section<br>With measurement tools,<br>image capture, and composite<br>Ancillary images |

|                    |   |
|--------------------|---|
| <b>Objectives</b>  | Infinite Conjugate<br>interferometric objectives;<br>2x, 4x, 10x, 20x, 40x, BoreScope |
| <b>Part Stage</b>  | Tooling and fixturing<br>engineered per application                                   |
| <b>Measurement</b> | Lateral Calibration standard  |
| <b>Standards</b>   | Precision lateral calibration standard<br>SIC reference flat                          |

|                            |  |
|----------------------------|--|
| <b>Temperature</b>         | 15 to 30°C (59 to 86°F)  |
| <b>Rate of Temp Change</b> | <1.0°C (1.8°) per 15 min   |
| <b>Humidity</b>            | 5-95% relative, noncondensing  |
| <b>Vibration Isolation</b> | Required for vibration frequencies in<br>the Range of 1 Hz to 120 Hz |