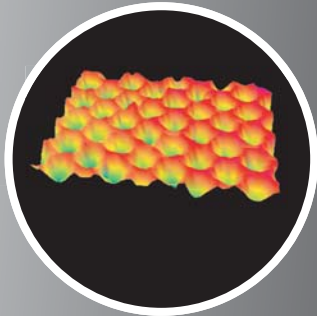


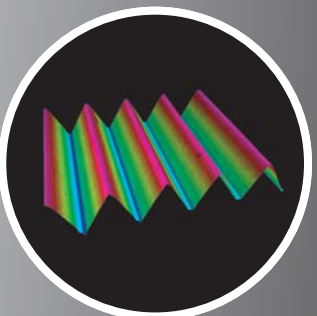
ZOOMSURF 3D

Highest performance 3D measurements

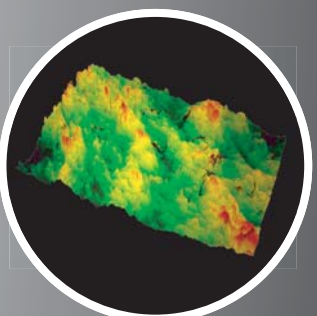
Fully automated optical profiling system for research and production applications



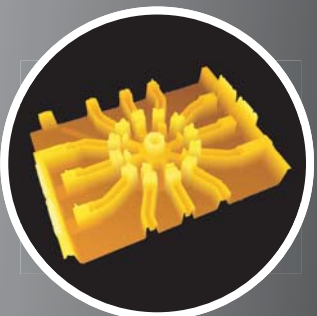
Printing sample measurement



Diffraction grating height and shape characterization



Subnanometric roughness measurement



MEMS micromotor static and dynamic characterization



- *Sub-nanometer vertical resolution for high resolution roughness measurements (down to 0.1 nm) at all magnifications*
- *Non-contact measurements allowing accurate and repeatable results*
- *All axes motorization enabling automatic stitching of numerous field of view*
- *Automated measurement sequence*
- *Easy to use and production ready*
- *Automated step height and surface flattening functions*

ZOOMSURF 3D is the most powerful static and dynamic 3D measurements system with motorized stage for very large sample

SPECIFICATIONS

Measurement techniques

Scanning white light and phase-shifting interferometry.

Light source

White or monochromatic source, automatic swiching and intensity ajustement

Objectives

x 2.5, x5, x10, x20, x 50 (tip/tilt optional)

Zoom

x0.35 to x1.6 (in standard)

Field of view

7.2 x 5.4 mm to 80 x 60 nm

Measurement array

Selectable measurement area 32x32 up to 768x580 pixels

Scanner

500 µm piezo scanner, with feedback loop using linear highly capacitive sensors technology (More than 2 mm available on demand)

Sample Stages

Large sample handling capabilities

200x200 mm motorized translation stage

150 mm motorized Z translation

Rotative stage (optional)

6-8" vaccum chuck wafer (optional)

Video Display

LCD Colors monitor 17"

Computer

Video acquisition card, intel or AMD processor

HDD 120 GB, ethernet 10/100 MB, keyboard / mouse, digital I/O card

512 MB memory, CD ROM reader / writer

Software

Fogale 3D software package

running under Microsoft Windows 2000 Professional

ENVIRONMENT

Temperature Range

Between 15 to 30 °C

Humidity Range

< 80 %, non-condensing

DIMENSIONS

Microscope

800 mm x 800 mm x 1800 mm

WEIGHT

Microscope

700 kg

Shipping Weight

900 kg

PERFORMANCE

Vertical measurement range

0.1 nm to 500 µm standard

Vertical resolution

< 1 Å

RMS repeatability

0.3 nm RMS

Lateral spatial sampling

0.1 to 9.3 µm

Field of view

7.2 mm to 80 µm

Reflectivity

1% to 100%

Sub-nanometer resolution

ZoomSurf 3D brings a new level of performance to non-contact 2D and 3D measurement with vertical resolution down to 0.1 nm.

Non contact measurements

All measurements are non-destructive and require no sample preparation.

Step height, thickness, surface topography, bump size, field stitching Roughness measurement

Versatile

All types of materials can be mesured without difficulty. Reflectivity range 1% to 100%

Automation

Complete motorization enables easier handling as well as auto focus and automatic stitching of numerous fields of view.

Automatic measurement sequences

System stability

ZoomSurf 3D provides highly stable metrology thanks to its design including advanced anti-vibration systems and it's capacitive feedback loop technology.

Powerful analysis software

Fogale 3D software is an intuitive, interactive and very powerful metrology software providing an extensive range of data analyses and visualization.

A large range of options is available for various applications :

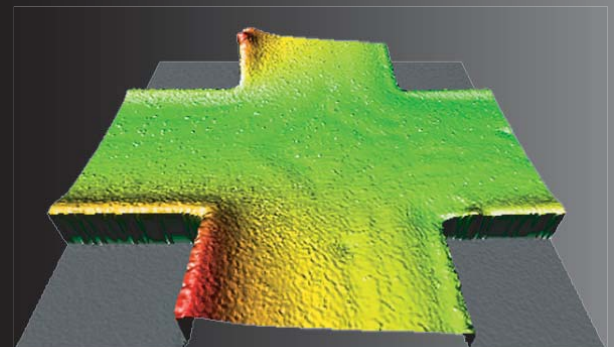
>vibrations analysis

>MEMS Solution

>circular andcylindrical stitching

>MEMS vacuum box

>Laser doppler vibrometer



FP_PRO_ZoomSurf3D_UK04_v1

Fogale Nanotech

Parc Kennedy - Bât A3 - 285 Rue Gilles Roberval

CS 32028 - 30915 NIMES CEDEX 2

Tel : (33)4 66 62 05 55 Fax : (33) 4 66 62 71 60

mail : info@fogale.fr - web : www.fogale.fr