EOTECH
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Hair

MiniSURF

Ex-vivo 3D imaging system
for micro-surfaces analysis

Product description

Technology MiniSURF is a full field optical profilometer, based on phase shifting interferometry. This microscope combines a black and white camera, a 50x high end interferometric lens, a LED light source and a high accuracy piezo electric motor. The optical head is mounted on a robust colum fixed on a passive antivibration table.

Main features No sample preparation is required. Being based on non contact techniques, it is a non destructive measurement. Its unique analysis algorithm provides both contrast images and calibrated surface measurements and especially roughness parameters according to linear profiles, making it a perfect tool for hair surfaces state measurement.

Software The MiniSURF software will guide the user to acquire the surface structure, and will calculate parameters like profiles and surface roughness, structure porosity and other parameters. The software allows to visualize contrast image and surface topography with stuning rendering, in order to illustrate clinical studies and to support the associated cosmetic claims for hair care products.

Applications

Single hair measurement:

- Illustrations
- Scale and damages

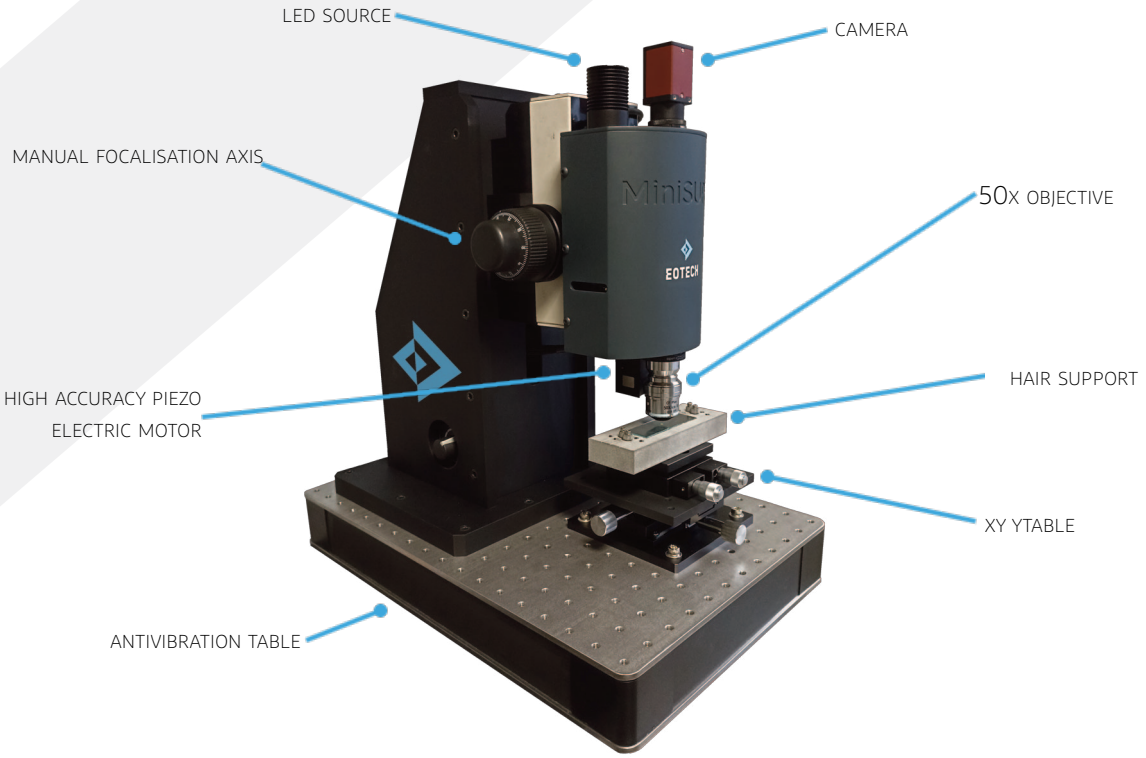
Advantages/benefits:

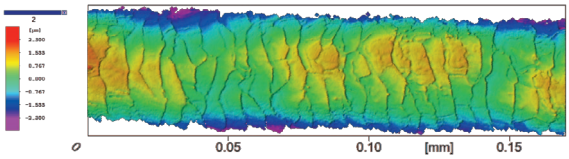
- Compact device
- Cost effective solution
- Non destructive
- Quantitative and qualitative results
- All-in-one software

Cosmetic claims:

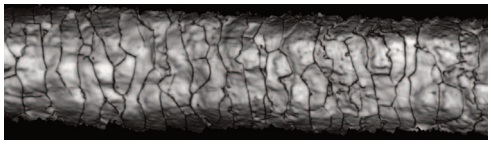
- Gloss
- Repair
- Smoothing
- Sheating

Technical data

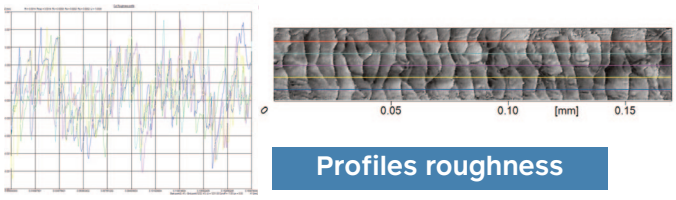




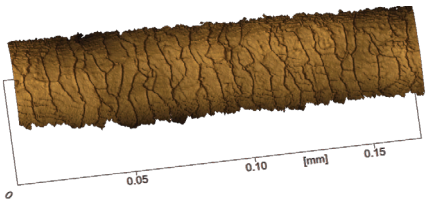
Surface



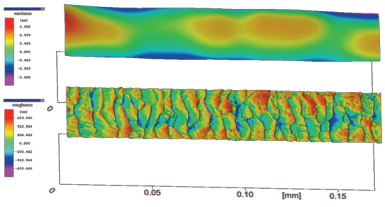
Contrast



Profiles roughness



Rendering



Cut Off

System specifications

Features	Value
Illumination	LED (Wavelength : 565 nm ; FWHM : 104 nm)
Camera	1456 x 1088 pixels (1.6 Mp)
XY range	50 x 50 mm²
Z range	30 mm
Focus range	100 µm
Weight	30 kg
Size (LxHxP)	450 x 450 x 300 mm

Imaging specifications

Characteristics	Value
Magnification	50X
Measurement surface (µm²)	160 x 120
Working distance (mm)	3.4
Optical resolution (µm)	0.5
Lateral sampling (µm)	0.11
Standard Z resolution (µm)	0.05

Contact

EOTECH SAS

1, ZI du fond des prés

91460 Marcoussis – France

Tel : + 33 (0)164 497 130

Email : info@eotech.fr

Web : www.eotech-sa.com

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