

MikroCAD Surface Metrology Systems

THE PIONEER IN 3D TECHNOLOGY FOR SUB-MICRON SURFACE METROLOGY

MIKROCAD PREMIUM

THE FUTURE OF 3D SURFACE METROLOGY IS HERE

MikroCAD delivers fast, cost-effective and flexible 3D scanning that outperforms traditional solutions such as confocal and white light interferometry (WLI) for a variety of materials including shiny and steeply angled surface geometries.

MikroCAD. The Original Sub-Micron Scanner.





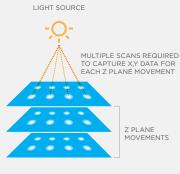
SUB-MICRON FRINGE PROJECTION **PROFILOMETRY**

> LMI's MikroCAD 3D scanner is the first surface metrology system ever to use structured light fringe projection profilometry to achieve sub-micron level detail of surface micro-textures and generate complete 3D surface scans in just seconds. With MikroCAD, customers can acquire critical sub-micron surface information in a variety of applications, and scan with stunning resolution, analyze with industry standard measurement tools and report with highly effective visualizations.

MikroCAD technology appears in CMM machines as noncontact scanning probes, cutting tool inspection systems, process control lines to monitor key material properties as well as traditional lab-based instrumentation.

Why Fringe Projection Profilometry?

The fringe projection technique has the outstanding ability to produce incredibly highresolution, full-field, noncontact 3D reconstruction of surface structures at rapid rates and for a variety of materials.



CONFOCAL

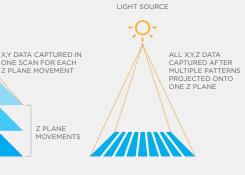
MICROSCOPY



LIGHT SOURCE

Z PLANE MOVEMENT

Z PLANE

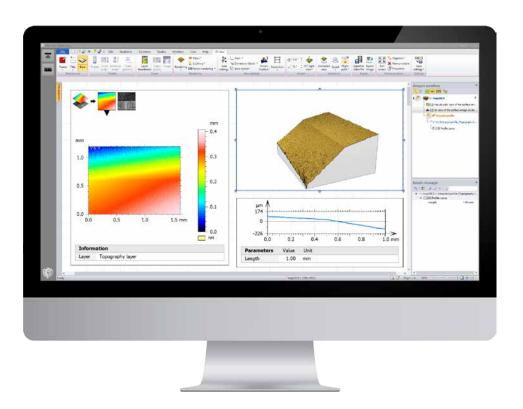


FRINGE PROJECTION MICROSCOPY

COMPLETE SURFACE METROLOGY SYSTEM

With its combination of precision 3D scanner hardware and MikroCAD software powered by **Digital Surf's MountainsMap®** Technology, everything you need is at your fingertips. Plus, MikroCAD's compact, lightweight design allows you to leverage the technology into new application areas previously impossible with traditional solutions.

Digital Surf's powerful technology gives MikroCAD software stateof-the art surface imaging, analysis and metrology tools in a graphical multi-language user environment, allowing users to create comprehensive and visual surface metrology reports faster than ever before.



COMPETITIVELY PRICED

BEST OF ALL, MikroCAD is available for an industry leading **ONE THIRD THE PRICE** of competing solutions.

RANGE OF MODELS



MikroCAD lite

FOV: 1.6x1.2 mm MR: 0.8 mm X Rez: 2.4 μm Z Rez: 0.2 μm



MikroCAD premium

FOV: 1.6x1.2 mm 0.8 mm MR: X Rez: 1.2 μm Z Rez: 0.1 μm



MikroCAD premium

FOV: 13x10 mm 3 mm MR: X Rez: 8 μm Z Rez: 1 µm



MikroCAD premium

FOV: 80x60 mm / 140x105 mm MR: 30 mm X Rez: 50 / 87 μm

Z Rez: 5 / 9 μm



MikroCAD plus

FOV: 1.7x1.4 mm MR: 0.5 mm X Rez: 0.7 μm Z Rez: 0.07 μm

THE LEADING SOLUTION FOR MICROSCALE SURFACE **METROLOGY**



MIKROCAD. THE ORIGINAL SUB-MICRON SCANNER.

Sub-Micron Level Scanning

MikroCAD's fringe projection structured light technology enables greater resolution — seeing down to 0.1 of a micron on a 2mm X 2mm target. This resolution cannot be achieved with laser-based solutions due to laser speckle effects that prevent scanning at the sub-micron level.

Flexible Scan Capabilities

MikroCAD delivers sub-micron accuracy and repeatability on a variety of challenging scan surfaces such as shiny, reflective and steep edges, in contrast to confocal solutions that are unable to handle steeply angled geometries.

Powerful Integrated Software

MikroCAD software combines hardware scanner connection, exposure setup, and live video feedback with MountainsMap® 3D analysis. visualization and reporting to deliver a seamless, fluid and effective user workflow.

Range of Available Models

MikroCAD scanners are available in lite, premium and plus models to fit the price/performance requirements of various applications. And, all MikroCAD models come factory pre-calibrated and ready to produce results out-of-the-box.





NON-CONTACT













LEARN MORE: Imi3D.com/products/mikrocad

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