



LMI TECHNOLOGIES

ENGINEERING POSSIBILITIES

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.



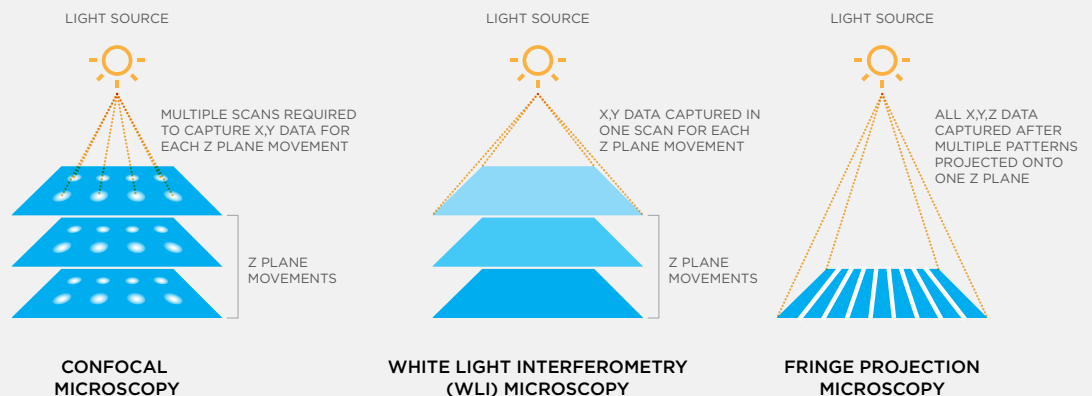
# SUB-MICRON FRINGE PROJECTION PROFILOMETRY

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 non-contact 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?

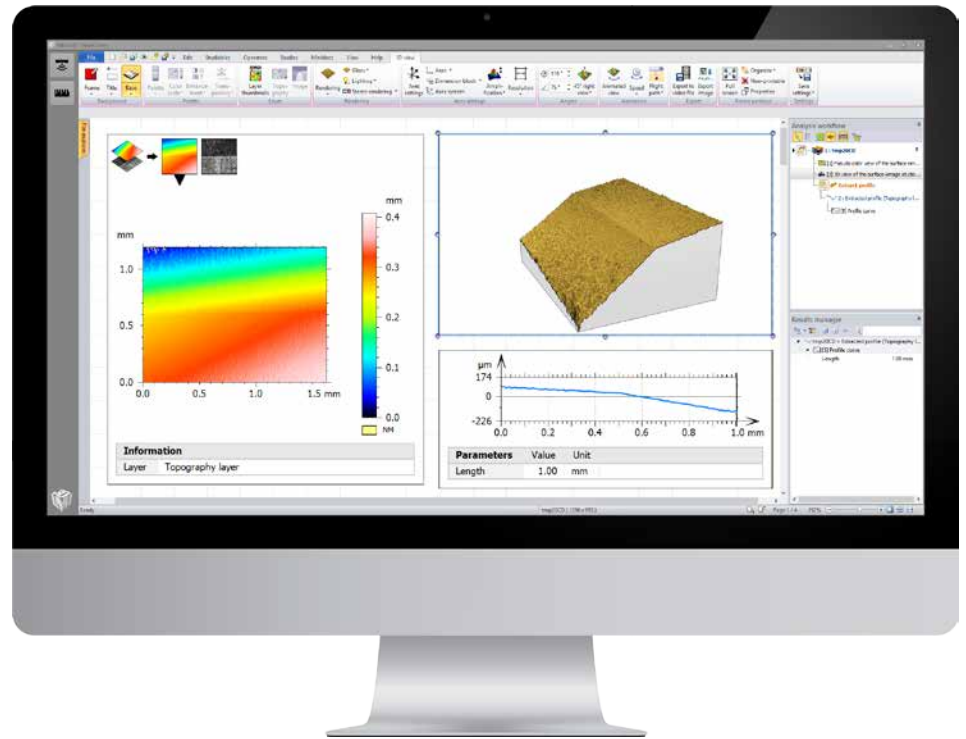
The fringe projection technique has the outstanding ability to produce incredibly high-resolution, full-field, non-contact 3D reconstruction of surface structures at rapid rates and for a variety of materials.



# 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 state-of-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.



**67%**  
LESS

## 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  $\mu\text{m}$   
Z Rez: 0.2  $\mu\text{m}$



### MikroCAD *premium*

FOV: 1.6x1.2 mm  
MR: 0.8 mm  
X Rez: 1.2  $\mu\text{m}$   
Z Rez: 0.1  $\mu\text{m}$



### MikroCAD *premium*

FOV: 13x10 mm  
MR: 3 mm  
X Rez: 8  $\mu\text{m}$   
Z Rez: 1  $\mu\text{m}$



### MikroCAD *premium*

FOV: 80x60 mm /  
140x105 mm  
MR: 30 mm  
X Rez: 50 / 87  $\mu\text{m}$   
Z Rez: 5 / 9  $\mu\text{m}$



### MikroCAD *plus*

FOV: 1.7x1.4 mm  
MR: 0.5 mm  
X Rez: 0.7  $\mu\text{m}$   
Z Rez: 0.07  $\mu\text{m}$

# 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.



PRE-CALIBRATED



NON-CONTACT



HIGH ACCURACY



HIGH SPEED



REPEATABLE RESULTS



SIMPLE INTEGRATION



FLEXIBLE



COST-EFFECTIVE

**LEARN MORE:** [lmi3d.com/products/mikrocad](http://lmi3d.com/products/mikrocad)

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