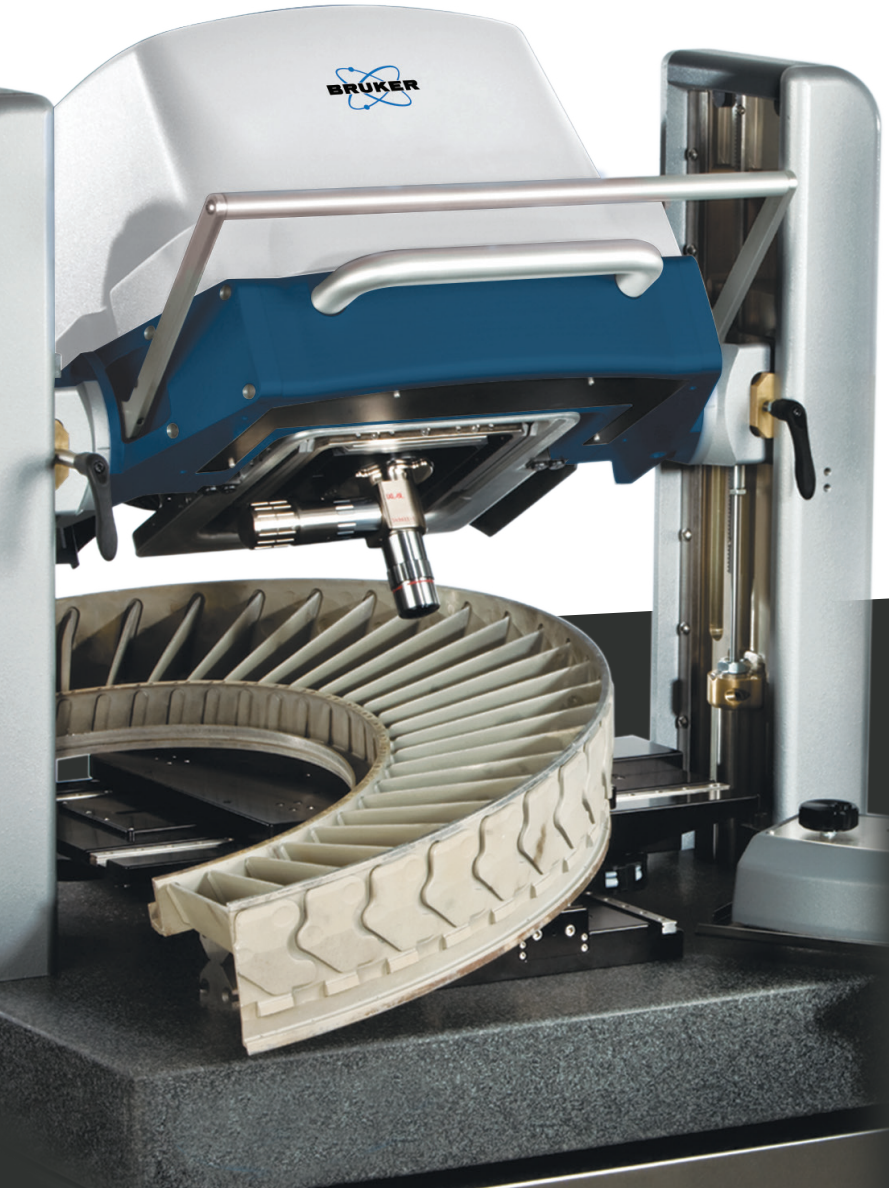
3D OPTICAL METROLOGY

NPFLEX-1000 Profilometer

Most flexible large-sample precision manufacturing solution for fast, automated roughness and surface texture measurements

NPFLEX-1000

The floor-standing NPFLEX-1000 white light interferometry (WLI) system brings unprecedented flexibility, measurement capabilities, and performance to precision manufacturing industries aiming to understand and control manufacturing processes. With its open-gantry design and 300-mm distance between the stage and objectives, the system is uniquely capable of handling nano- to macro-features effortlessly on samples of widely varying shapes and sizes. New one-click Advanced Find Surface™ improves user experience and time-to-result by incorporating auto-focus and auto-illumination and eliminating the need to manually register the surface before each measurement. Combined with its self-adapting USI measurement mode and guided, simplified VisionXpress™ interface, the NPFLEX-1000 provides uncompromised metrology for automotive, medical device, and additive manufacturing production facilities.



NPFLEX-1000 Features:

- Ultimate large-part and high-slope surface compatibility reduces sample preparation and increases the range of measurement surfaces accessible per part
- Exceptional ease-of-use empowers operators at any experience level to obtain expert results
- Super-fast automated measurement and analysis routines provide decreased time-to-result
- Highly robust bridge architecture and integrated vibration isolation offer long-term accuracy and reliability for production environments

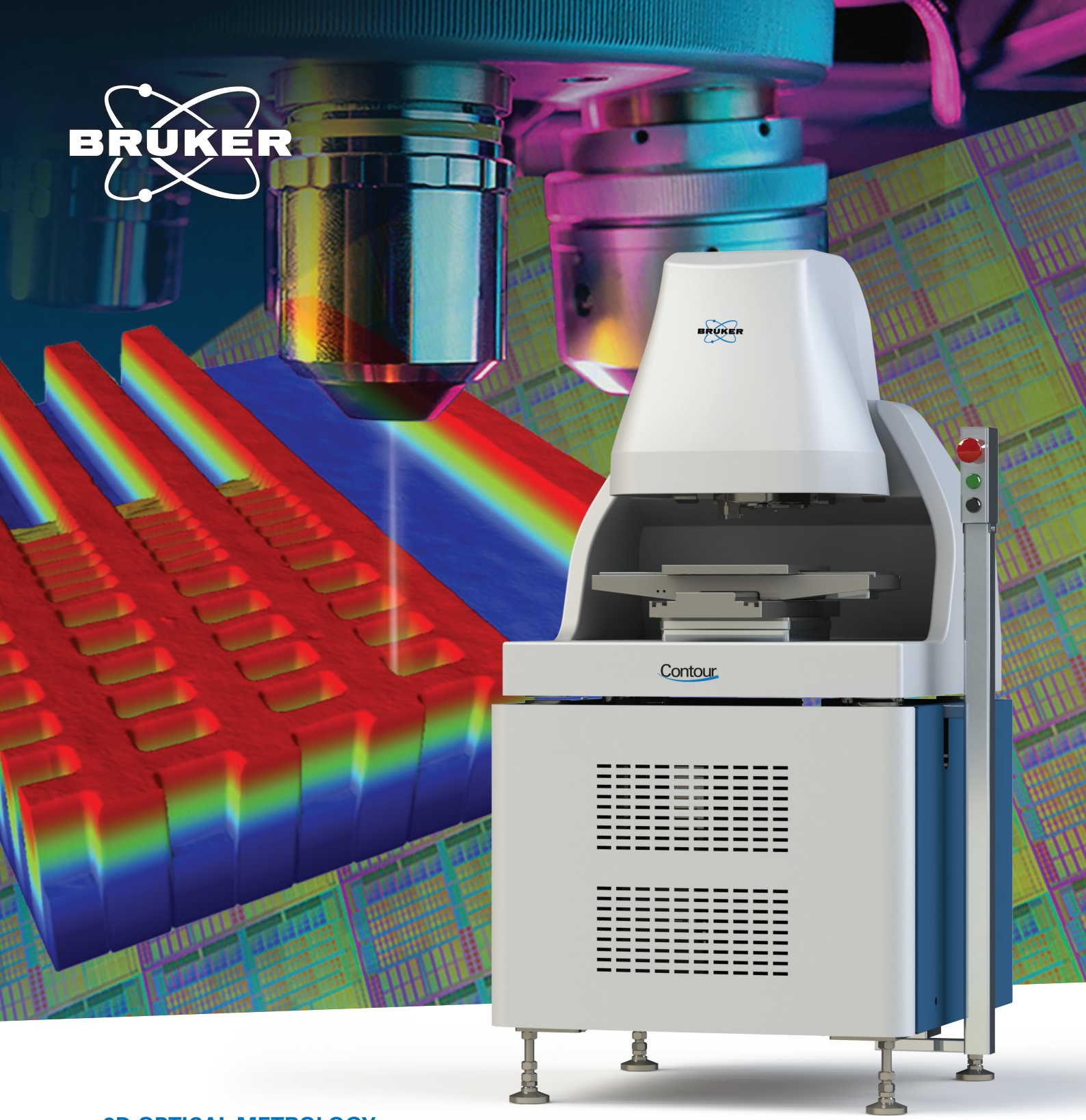
Practical Advantages

Open-access sample loading and intuitive analysis software enable characterization of surface texture, finish, roughness, curvature, slope, and numerous other parameters with sub-micron resolution.

Material-insensitive—reflectivity from 0.05% to 100% and surface textures from flat to rough

Automation-ready—fully customizable measurement and analysis routines

Self-calibrating—highest accuracy and reproducibility



3D OPTICAL METROLOGY

ContourX-1000 Profilometer

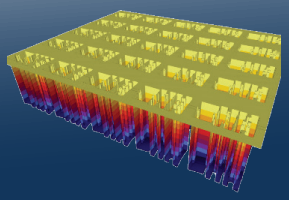
Self-Calibrating, Fully Automated Solution
for Research and Production

ContourX-1000
3D Optical Profilometer

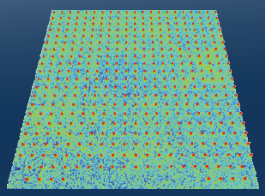
The floor-standing ContourX-1000 white light interferometry (WLI) system incorporates the very latest Bruker hardware and software innovations for fully automated 3D areal measurements of surface texture and roughness. New one-click Advanced Find Surface™ with auto-focus and auto-illumination improves user experience and time-to-result, eliminating the need to manually register the surface before each measurement. Combined with its self-adapting measurement mode USI and guided, simplified VisionXpress™ interface, the ContourX-1000 provides uncompromised metrology on any surface, by any operator, even in multi-user high-volume production facilities.

Only the ContourX-1000:

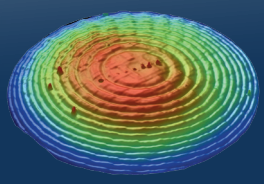
- Provides fast and flexible production-floor metrology with tip/tilt head, dual-light source, and advanced automation
- Ensures extreme accuracy and reliability with self-calibrating laser and integrated vibration isolation
- Enables most user-friendly measurement and analysis software with guided, simplified routines and recipes



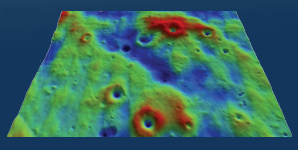
High-aspect-ratio MEMS structure



High-density bump interconnect



Stitched measurement of a bifocal contact lens showing form



Technical polymer film

3D OPTICAL METROLOGY

ContourX Benchtop Profilometers

Most Accurate and Repeatable
Surface Roughness and Topography Measurements

ContourX 3D Optical Profilometers

Four Decades of Non-Contact Surface Metrology Innovation

Bruker's metrology products have a long history of enabling scientists and engineers to make breakthrough discoveries and drive the frontiers of new applications that improve the quality of our lives. Our suite of ContourX 3D Optical Profilometers helps researchers and engineers in R&D, manufacturing, and QC to tightly control surface-related process parameters with robust, reliable, and easy-to-use non-contact 3D surface metrology for best-in-class accuracy and repeatability.

ContourX benchtop profilometers combine four decades of Wyko® and Bruker technological advances to achieve industry-leading capability and utmost customer satisfaction with:

- Most optimized WLI technology for surface metrology
- Unmatched vertical resolution over large field of view
- Fastest time to results with uncompromised precision and accuracy
- Best-in-class reliability and repeatability

ContourX-500

Flagship benchtop model with full automation, encoded X/Y stage, proprietary tip/tilt metrology head, and a patented measurement algorithm for features beyond optical diffraction limit.

ContourX-100

Streamlined metrology tool with advanced WLI optical module, advanced 3D analytical library, fast auto-focus and intensity, manual stage and tip/tilt adjustments.

ContourX-200

Workhorse system adding automated XYZ stage, advanced find surface, stitching, and large area mapping.

TRIBOLOGY AND MECHANICAL TESTING

TriboLab HD
High-Torque Friction Material Tester

Fast and Cost-Effective In-Lab
Rapid Screening of New Friction Materials

ID3D
DESIGN

INDUSTRIAL DESIGN
PRODUCT DESIGN
MODELS & PROTOTYPES
MECHANICAL ENGINEERING

COMMERCIAL / INDUSTRIAL

COMMUNICATIONS TEST PLATFORM

AIRLINE ENTERTAINMENT SYSTEM

PROFESSIONAL SQUEEGEE

HAND HELD TOOL

MARINE VESSEL INSPECTION TOOL

CAMERA FLASH LIGHT MODIFIER