

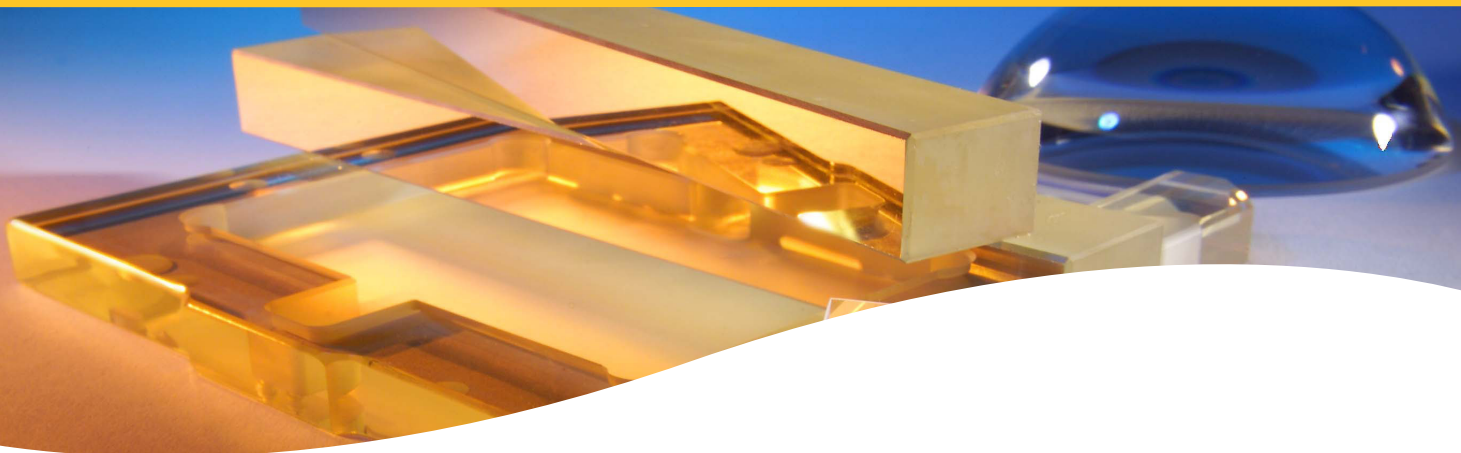
SURFACE FORM | TRANSMITTED WAVEFRONT | ADVANCED ANALYSIS



DynaFiz™

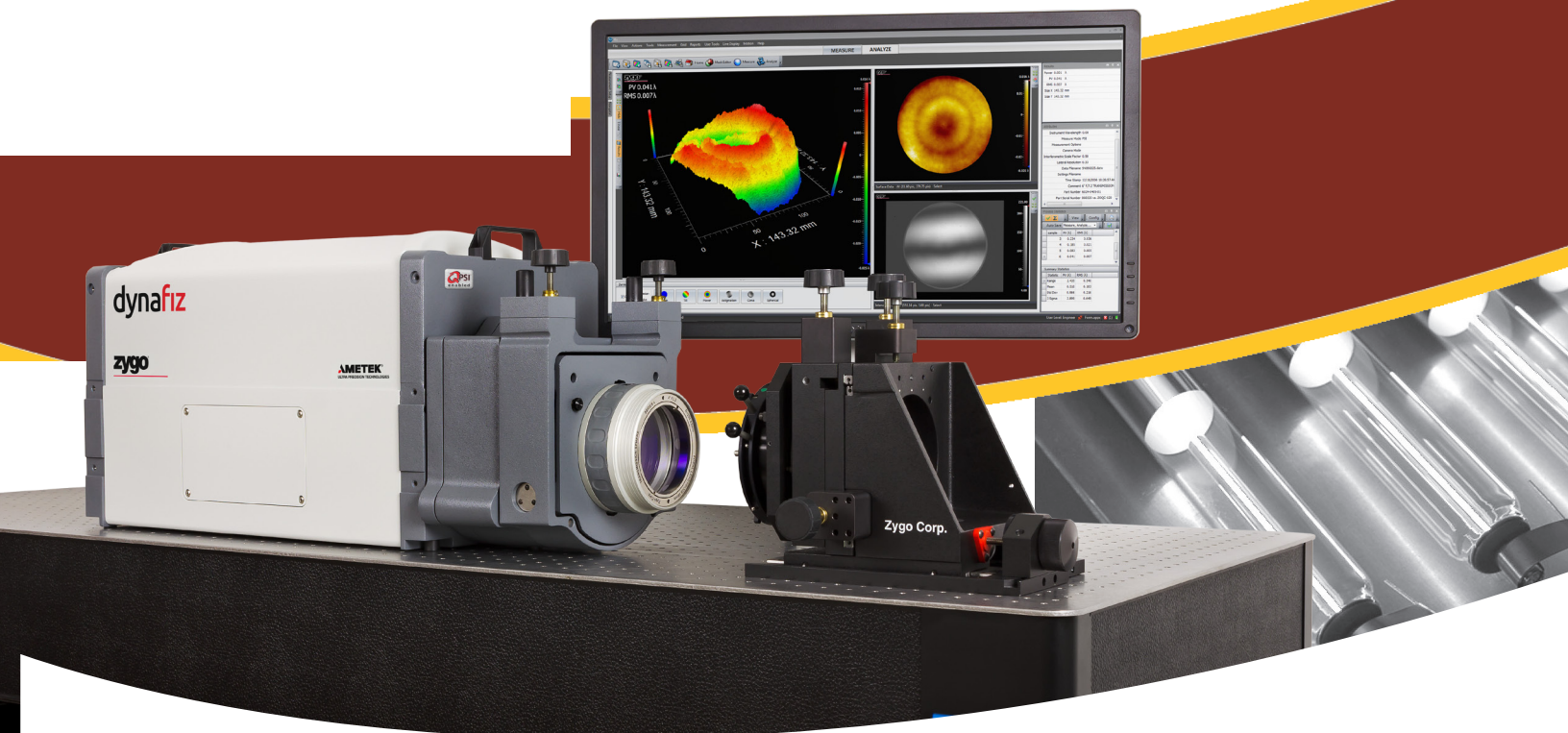
DYNAMIC LASER INTERFEROMETERS

High Precision Optics Metrology in Extreme Environments



zygo®

AMETEK®
ULTRA PRECISION TECHNOLOGIES



WE ARE COMMITTED TO PROVIDING LEADING INTERFEROMETERS AND OPTICAL TEST SOLUTIONS FOR ALL ENVIRONMENTS.

Environments with extreme air turbulence and vibration can often limit the performance or capabilities of phase-shifting interferometry (PSI) for measuring surface form and transmitted wavefront of optical components and assemblies. To address these challenges, we have developed the DynaFiz laser interferometer, our dynamic measuring system.

Designed from the ground up, the DynaFiz system maximizes performance and versatility across a wide range of environments, even in the most extreme and demanding ones. ZYGO's DynaFiz system comes standard with many leading features and technologies not found on comparable systems, including DynaPhase™ instantaneous acquisition technology, SmartAveraging™, and LivePhase™ data acquisition, and an ultra-high performance, long-life laser. Built to perform, all DynaFiz systems are designed for the highest reliability and protection of your investment – day in and day out.

The DynaFiz interferometer is supported by a full range of hardware options and optical accessories and is powered by our comprehensive software platform, MX™, providing key data acquisition, analysis and visualization functions, and instrument hardware control. Versatility and expanded capabilities are easily accessible through defined applications or customizable recipes and scripts.

Suitable for a wide range of applications:

- ▶ *In-Vacuum/Thermal chamber testing*
- ▶ *Pulsed optical distortion testing*
- ▶ *Large optics; long-cavity testing*



INDUSTRY-LEADING FEATURES

▶ DYNAPHASE™ INSTANTANEOUS DATA ACQUISITION TECHNOLOGY

Ensuring reliable and precise results in extreme environments.

DynaPhase is a ZYGO patented acquisition method that can tolerate extreme vibrations while maintaining high spatial resolution and throughput.

▶ LIVEPHASE™ REAL-TIME ACQUISITION AND ALIGNMENT

Simple and intuitive setup with real-time feedback.

Even the most complicated series of alignment steps are simplified with our LivePhase technology, providing intuitive and deterministic user feedback during part setup and alignment, utilizing simple visuals and quantitative Zernilke results.

▶ ULTRA-PERFORMANCE LASER

High output, frequency stabilized laser delivers core performance and reliability gains.

Our internally designed and manufactured lasers boast higher light output and reliability than any 633 nm HeNe laser used in a commercially available Fizeau laser interferometer, providing you with more light and wavelength stability for better metrology and uptime. Now that's ROI!

▶ SMARTAVERAGING™ ACQUISITION

Eliminates guesswork in yielding the lowest noise measurements.

If you are looking to achieve the highest level of precision and measurement throughput, automatically, then Smart Averaging is the answer. Unique to ZYGO, Smart Averaging is a software feature that enables you to 'set it and forget it', providing a simple control for optimizing metrology and minimizing operator variability.

▶ COHERENT ARTIFACT REDUCTION SYSTEM (CARS)

See what you want, how you want—with variable zoom.

Our CARS solution reduces imaging artifacts and noise from wavefront shearing, speckle or mottle – by a factor of 6-10 times. Our hardware-based CARS solution is simply turned on/off via a software setting, and is ideally suited for applications requiring sub-nanometer precision and highest quality surface data.

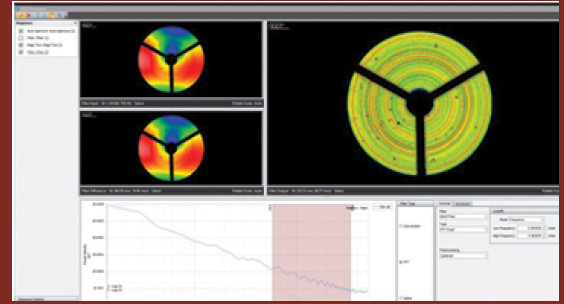
POWERFUL SOFTWARE SUITE

The DynaFiz™ laser interferometer is powered by our Mx™ data acquisition and analysis software package, with hundreds of reportable parameters. Surface characterization and measurement applications include:

- Radius of Curvature
- Transmitted Wavefront
- Material Homogeneity
- Peak-to-Valley; PVr
- Prism, Wedge, Corner Cube
- PSD, PSF, MTF Analysis
- Grazing Incidence
- Zernike and Legendre Fits

Additional features and capabilities include:

- Scripting
- Remote Access



LEADING HARDWARE OPTIONS AND REFERENCE OPTICS

Precision metrology depends on high quality reference optics. That's why we design, manufacture and qualify our transmission flats and spheres to provide you with optimum performance from your laser interferometer. Our certified manufacturing and metrology processes are based on NIST approved calibration techniques, ensuring that all ZYGO reference optics meet or exceed the specified performance.

Hardware options include:

- Encoded Zoom and Focus
- Switchable Polarization



Offering the broadest and most precise optical test and metrology solutions in the industry for more than 45 years! See why ZYGO is the most trusted brand or laser interferometer today.

Metrology without compromise.

zygo®

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