Innovative and precise solution for simultaneous measurement of parallel plate surfaces, thickness variation, and homogeneity – requiring no specialized part set-up or surface preparation.
**ARTIFACT SUPPRESSION**
The core design of the Verifire MST laser interferometer is based on a true on-axis, common path Fizeau interferometer configuration with patented FTPSI technology and Ring Source Illumination (aka “Ring of Fire”), which enables superior artifact suppression for high resolution imaging and precise surface form metrology and material characterization.

**THREE SURFACE METROLOGY**
Plane parallel plates can now be measured for the flatness of the front and back surface (1) plus the optical thickness of the plate. In one data acquisition, you can measure the front surface map, optical thickness variation, and the back-surface approximation using optical thickness information.

**FOUR SURFACE METROLOGY**
This technique enables the measurement of the following with only two data acquisitions (and no part coating or preparations):
- Front and Back surface maps
- Physical Thickness Variation (including Wedge)
- Optical Thickness Variation
- Refractive Index Variation:
  - Nonlinear Homogeneity
  - Linear Homogeneity
POWERFUL SOFTWARE SUITE
The Verifire™ MST laser interferometer is powered by our Mx™
data acquisition and analysis software package, with hundreds
of reportable parameters. Surface characterization and
measurement applications include:

- Transmitted Wavefront
- Homogeneity
- Peak-to-Valley; PV
- PSD, PSF, MTF Analysis
- TTV
- Multi Surface Investigation
- Geometry Calculator
- Zernike and Legendre Fits

AVAILABLE WAVELENGTHS
- 633 nm
- 1.053 μm
- 1.55 μm

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 reliable optical
metrology solutions in the industry for more than
45 years! See why ZYGO is the most trusted brand
of laser interferometer today.

Metrology without compromise.