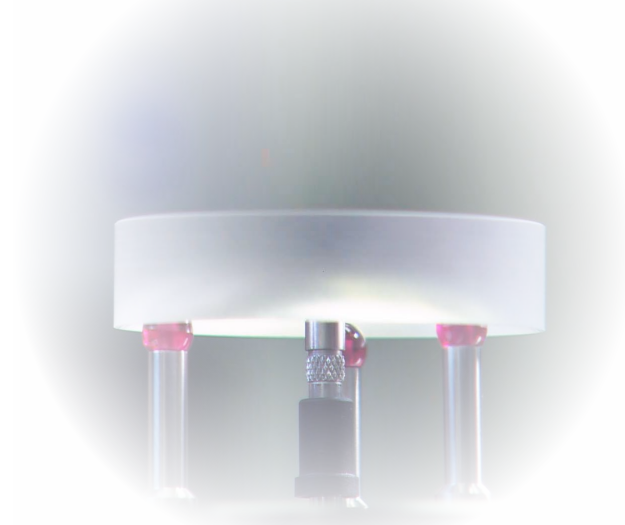
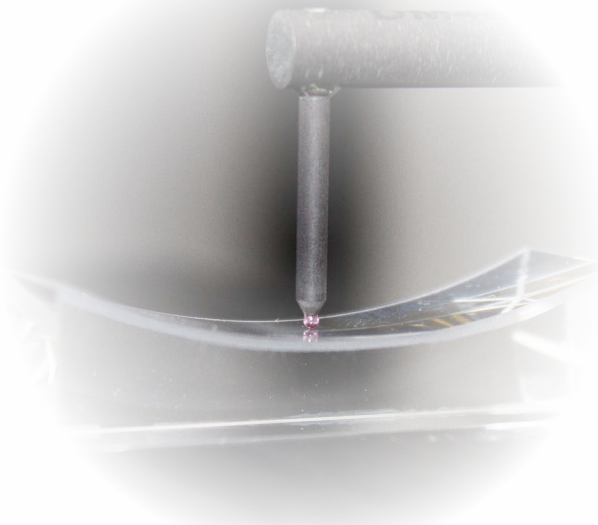




Contact Metrology Systems



OptiTrace 5000
Surface Profilometer



UltraCURV
Precision Spherometer

Innovative Machines for Precision Optics and Technical Ceramics



CNC Optical
Grinding Machines



Ultrasonic
Machining Centers



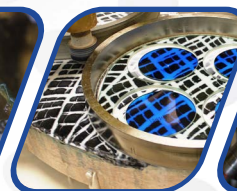
Optical
Centering Machines



CNC Spherical
Polishing Machines



CNC Asphere/Freeform
Polishing Machines



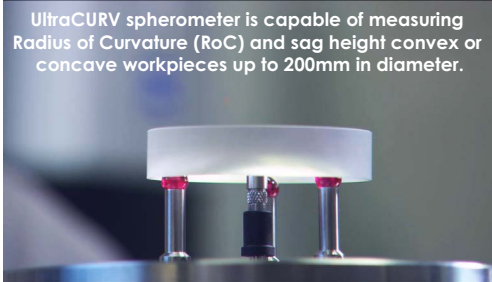
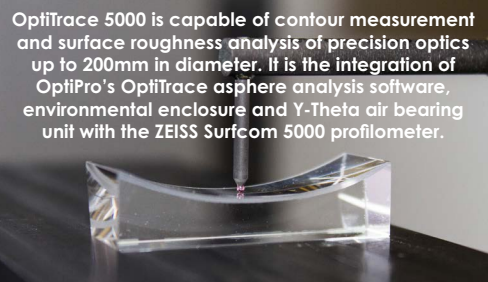
Planetary
Polishing Machines



Non-Contact
Metrology Solutions

In-process and final metrology with speed.

There's a lot riding on your components. We get it. That's why you take the accuracy of your measurements so seriously – and why we take the accuracy and intelligence of our equipment so seriously. From contour and surface roughness analysis to radius of curvature and sag height measurements, we offer the precision that you require with the OptiTrace 5000 surface profilometer and UltraCURV spherometer. Whether your requirements involve planos, spheres, aspheres, hemispheres or cylinders/acylinders, you can trust OptiPro's measure of confidence.

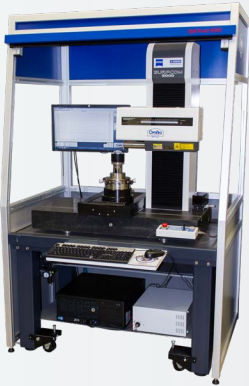


High Performance Equipment

Engineered for precision and repeatability

OptiTrace 5000

- Environmental enclosure reduces error from outside elements such as dust particles
- Dual beam laser feedback and jeweled diamond stylus pivot maximize repeatability
- Y-theta air bearing unit for 2D & 3D measurement
- Best in class accuracy and resolution



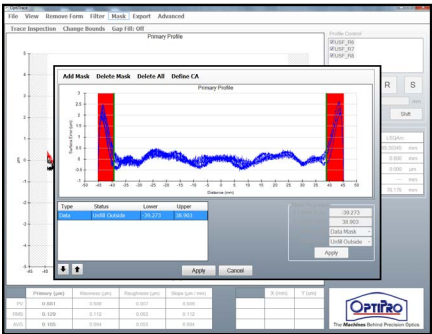
UltraCURV

- Measure up to 200mm optics with a 3 point technique or with spherometer rings
- Small diameter workpiece adapter for measuring RoC of small lenses
- Measure any RoC without an extensive test plate library
- Fast setup on the shop floor or in the lab



Intelligent Software Technology

User-friendly yet highly capable

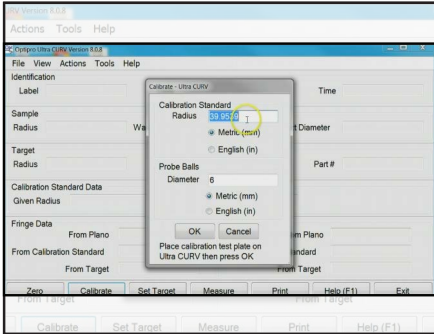


OptiTrace Software:

- Load multiple traces on one plot to see where/how the optic is changing
- Create a 3D surface error map by taking multiple traces across the optic
- Asphere toolbox with radius optimization, global sine convert, sag table, detailed slope analysis

UltraCURV Software:

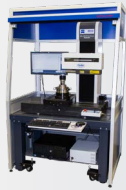
- Step-by-step procedure to calibrate & measure RoC and sag height
- Once calibrated, UltraCURV can measure any RoC



Capabilities

● Standard ○ Available — N/A

OptiTrace 5000: Surface Profilometer



Standard Features:

- Diamond Stylus • Ruby Stylus
- OptiTrace asphere analysis software

Optional Features:

- CNC Y-Theta air bearing work stage
- Manual Y-Axis linear stage

Planos	Spheres	Aspheres	Cylinders Acylinders	Prisms	Freeforms
●	●	●	●	—	—

Sphere & asphere part size limit



UltraCURV: Precision Spherometer



Standard Accessories:

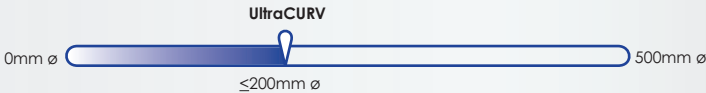
- For table top unit:** (3) Moveable contacts with 6 mm dia. balls (Ruby and Carbide) **For handheld unit:** Different sized spherometer rings
- For both units:** • (1) Netbook Mini Laptop
- (1) Protective Case • (1) CURV Software • (1) Instruction manual

Optional Accessories:

- Calibration sphere kit

Planos	Spheres	Aspheres	Cylinders Acylinders	Prisms	Freeforms
●	●	—	—	—	—

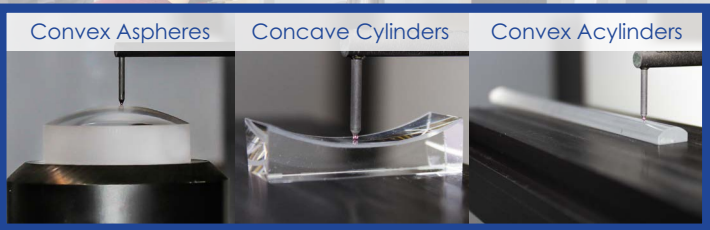
Spherical part size limit



Contact Metrology Applications:

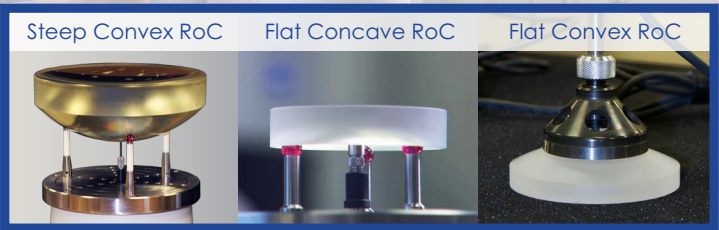
OptiTrace 5000:

Ideal for contour measurement and surface roughness analysis of aspheres, cylinders and acylinders.



UltraCURV:

Ideal for measuring radius of curvature and sag height of ground or polished planos and spherical optics up to 200mm in diameter.



Specifications*

	OptiTrace 5000	UltraCURV
Horizontal Axis (X-Axis) Traversing length; Measuring range Straightness accuracy Resolution Indicated X accuracy Tracing speed Detection principle	200 mm $0.05 + 3L/10000 \mu\text{m}$ 0.54 nm $\pm (0.2 \mu\text{m} + L/1000 \text{ mm})$ Variable from 0.03 mm/s to 60mm/s Scale	Probe stroke distance $\pm 12.7 \text{ mm (0.5")}$ Diameter of test part 5 mm to 200 mm System accuracy 0.1 μm (4 μin) Measuring force 0.6 N (60 gf) max. Dimensions (excluding computer) 200 mm dia. x 300 mm high (8" dia. x 12" high) Weight (excluding case) 5.5 kg (12 lbs.) Power w/o computer 120 VAC (6 VDC, 500mA (Transformer included)) Netbook computer Windows Operating System USB Computer Interface
Column Axis (C-Axis) Traversing height Drive speed Detection principle	500 mm Variable to 200 mm/s Scale	
Detector Detection principle Resolution Measuring range Indicated Z accuracy Measuring force Radius of stylus Material of stylus Tracing arm lift off	Dual Base Laser Interferometer 0.31 nm 13 mm, 26 mm, and 32 mm $\pm (0.2 + H /1000) \mu\text{m}$ 0.75 mN 2 μm diamond, 0.5 mm, 1.0 mm ruby Diamond (option: ruby ball) Automatic system	
Miscellaneous Power supply Power consumption Dimensions Dimensions of base Weight Standard accessories	110, 120 Vac (50-60 Hz) Approx. 350 VA 2100 mm width, 1500 mm height, 1000 mm depth 600 mm width, 320 mm depth Approx. 350 kg Calibration device, gauge block, tools, diamond and ruby tip styli	
Environment Temperature Accuracy guaranteed	10-30°C $20 \pm 2^\circ\text{C}$ (without direct air movement) $0.5^\circ\text{C} / 1 \text{ hour}$ (maximum rate of change) $0.1^\circ\text{C} / \text{operation time}$	
Humidity	40-80% (without moisture)	

* Specifications subject to change. Contact OptiPro for the latest specifications.

Unparalleled Dedication to Customer Success

Sales

Developing Partnerships

Service

Reinforcing Relationships

Support

Ensuring Excellence

www.optipro.com/the-optipro-difference



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