

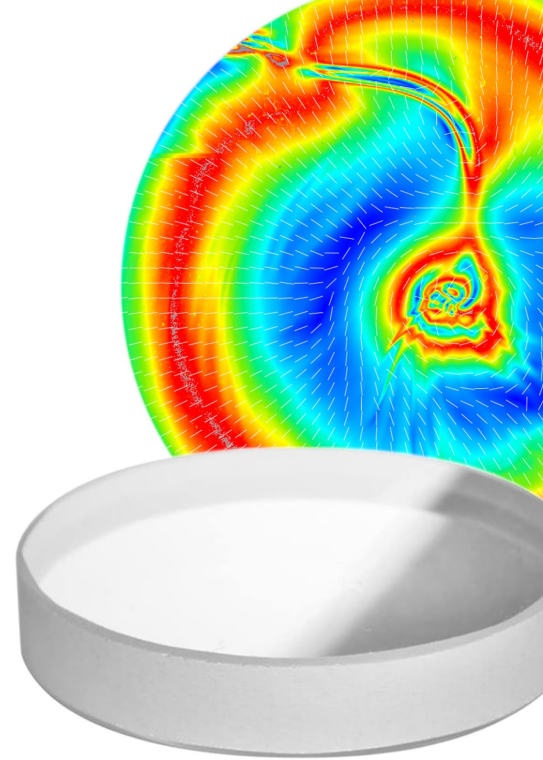
StrainScope Stepper

Real-time polarimeter for fast and precise measurement of the stress birefringence in large-format optical materials and components

Internal stresses affect the mechanical and optical properties of products made of glass and plastics, both in the manufacturing process as well as in the further processing.

With the StrainScope® Stepper you can measure residual stresses with high spatial resolution precisely and reproducibly – in real time and including orientation (azimuth angles). The telecentric optics enable the measurement of even thick materials without parallax errors and the measurement of residual stresses in materials with intrinsic birefringence. The motorized positioning stage features automatic stitching of larger samples up to 220 x 220 mm².

The convenient archive function ensures that all measurement results are fully documented.



Features and Benefits

- ✓ Fast and easy operation
- ✓ Integrated XY positioning table with automatic stitching
- ✓ Objective, reproducible and precise measurement results
- ✓ Complete traceability through automatic result documentation





StrainScope® Stepper 200

Technical Data

Operation	external Windows PC with 27" monitor, keyboard/mouse
Illumination	LED array (diffuse), circularly polarized
Image acquisition	matrix camera with telecentric lens
Image resolution	1000 x 1000 pixels up to approx. 2800 x 2800 pixels
Measuring field size	approx. 78 x 78 mm up to approx. 220 x 220 mm
Lateral resolution	approx. 0.078 mm
Measuring results	optical retardation (nm) normalized retardation (nm/cm) integrated stress (MPa)
Measuring range	approx. 0 to 120 nm optical retardation
Measuring resolution	approx. 0.1 nm optical retardation
Data interface	USB 3.0
Power supply	100–240 V (AC), 50/60 Hz, 100 VA (max. 1.1 A)
Operating conditions	15-30 °C, 30-70 % relative humidity, non-condensing
Dimensions	approx. 800 mm (H) x 480 mm (W) x 530 mm (D)
Weight	approx. 45 kg (excl. PC)

All information is non-binding and is subject to change without notice.
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