StrainScope Cord Tester

Real-time polarimeter for fast and precise measurement of cord stresses in container glass

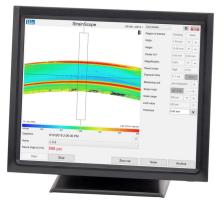
The fracture strength of glass is strongly determined by internal mechanical stresses. An inhomogeneous glass composition leads to so-called cord stresses, which remain undetected with conventional polariscopes or polarimeters. The manual measurement by means of a polarizing microscope is very time-consuming and requires specially trained and experienced operating personnel.

The StrainScope® Cord Tester automates the stress measurement in ring sections of container glass and shows the distribution of compressive and tensile stresses in real time – directly in the desired measuring unit.

This allows you to perform the quality inspection close to production and with little training. You can respond quickly to production problems and avoid production losses and expensive complaints.



StrainScope



Features and Benefits

- ✓ Fast and easy operation
- Prompt results displayed directly in MPa or psi
- Consistently high product quality through testing close to production
- Cost reduction by avoidance of customer complaints
- ✓ Complete traceability through automatic result documentation







StrainScope® Cord Tester

Technical Data

Operation	external Windows PC with 17" touch screen
Accessory	rotary table with height adjustment
Illumination	LED array (diffuse), linearly polarized
Image acquisition	matrix camera with telecentric lens
Image resolution	856 x 706 pixels
Measuring field size	approx. 12 x 10 mm
Lateral resolution	approx. 0.014 mm
Measuring results	polarization angle (°) optical retardation (nm) normalized retardation (nm/cm, nm/mm, nm/in) integrated stress (MPa, psi)
Measuring range	approx280 to +280 nm optical retardation
Measuring resolution	approx. 1 nm optical retardation
Measuring frequency	up to 25 Hz (depending on PC performance)
Interfaces	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. 700 mm (H) x 350 mm (W) x 370 mm (D), excl. PC
Weight	approx. 23.4 kg (excl. PC)

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