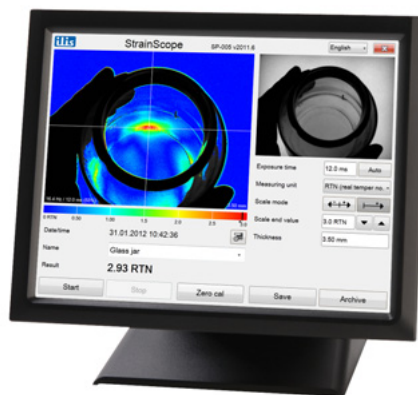
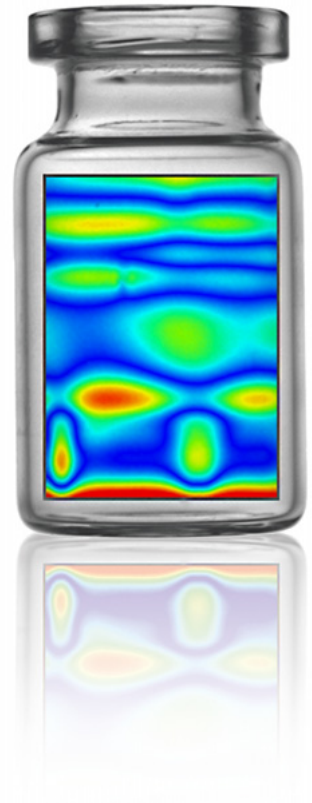


StrainScope™

Imaging real-time polarimeter systems for the automatic measurement of residual stress in transparent materials

The fracture strength and processing ability of glass and plastic products are strongly determined by inherent mechanical stresses. But even small residual stresses influence the optical properties, an undesirable effect in many applications. Therefore, constant testing of residual stress is a very important

part of quality control. The StrainScope™ series automates the measurement and evaluation of the stress birefringence and enables a fast and exact determination of residual stresses and their spatial distribution in real time.



Your Benefits

Objective and reliable results

Fast and easy operation

Improvement in quality by on-site measurement

Traceability by automatic archival of all results

Cost reduction by optimizing the production process



StrainScope™

S3/180

S3/125

Operation	external PC with touch screen
Illumination	LED array, approx. 200 x 160 mm
Image acquisition	Matrix camera with fixed focal length lens
Working distance	approx. 410 mm (S3/180) approx. 265 mm (S3/125)
Field of view	approx. 150 x 112 mm (S3/180) approx. 100 x 75 mm (S3/125)
Image resolution	600 x 450 px
Depth of focus	approx. 100 mm
Measuring results	Polarization angle (°) optical retardation (nm) normalized retardation (nm/cm, nm/mm) integrated stress (MPa) apparent and real temper number (ATN, RTN)
Measuring range	approx. -280 to +280 nm (uni-directional)
Measuring frequency	up to 20 Hz (depending on computer performance)
Interfaces	Foot switch
Power supply	24 V DC, 2.5 A
Dimensions (H/W/D)	approx. 780 x 350 x 420 mm (S3/180) approx. 635 x 350 x 420 mm (S3/125)
Weight	approx. 15 kg (without PC)

Technical Data

- Hollow glass** (e.g. container glass, tableware, lamp glass)
- Tube glass and related products** (e.g. lab glass, pharmaceutical containers)
- Plastics** (e.g. ophthalmic lenses, technical films)

Application Examples

Custom adaptations and special versions are possible on request. No responsibility is taken for the correctness of the information. All information is subject to change without prior notice. © 2012 ilis gmbh, all rights reserved. As at 01/2012
Product website: www.ilis.de/en/strainscope.html