

precision. nothing less.

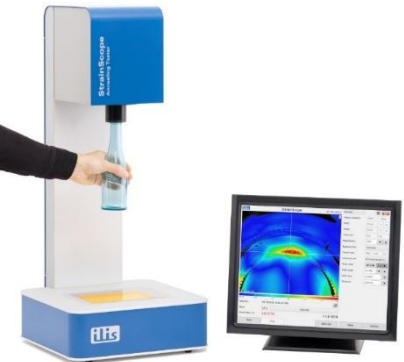


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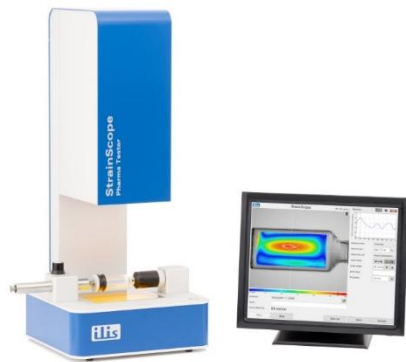


- Founded 1998, based in Erlangen (Germany) since 2001
- Competencies & products
imaging polarimetry (StrainScope®), optical spectroscopy (Chroma™),
glass recipe calculation (BatchMaker®)
- Target markets
glass manufacturing & processing, pharmaceutical industry, optics & photonics,
semiconductor industry
- Applications
container glass & tableware, tube & laboratory glass, pharmaceutical packaging,
optical materials and components, semiconductor substrates, transparent plastics

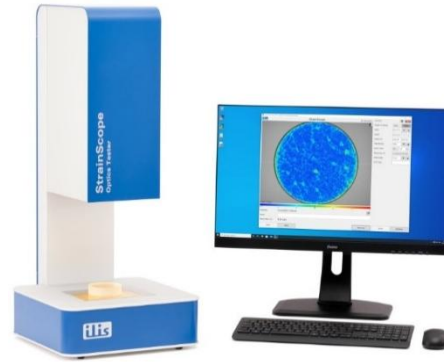
StrainScope® digital imaging polarimeters



StrainScope® Annealing Tester
container glass (annealing stress)

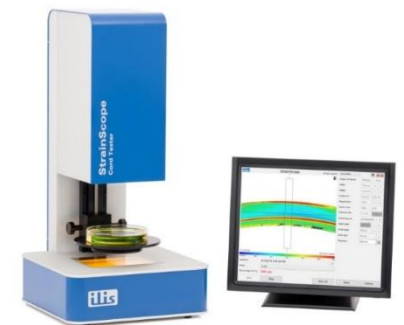


StrainScope® Pharma Tester
pharmaceutical glass packaging

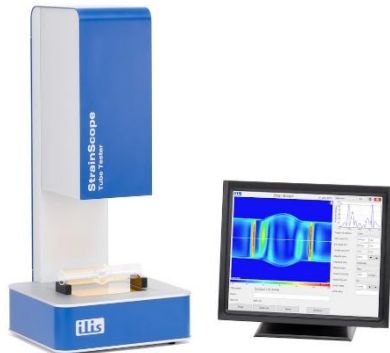


StrainScope® Optics Tester
optical materials and components

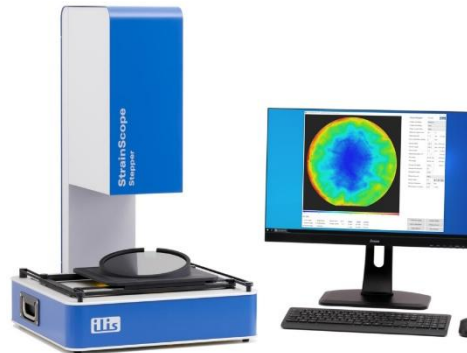
- Accurate and reproducible measurement of the stress distribution in real time
- Various variants, specially adapted to the respective measurement task



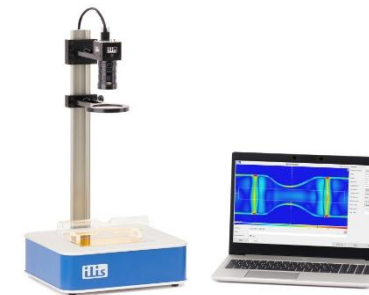
StrainScope® Cord Tester
container glass (glass homogeneity)



StrainScope® Tube Tester
tube glass and tubular products



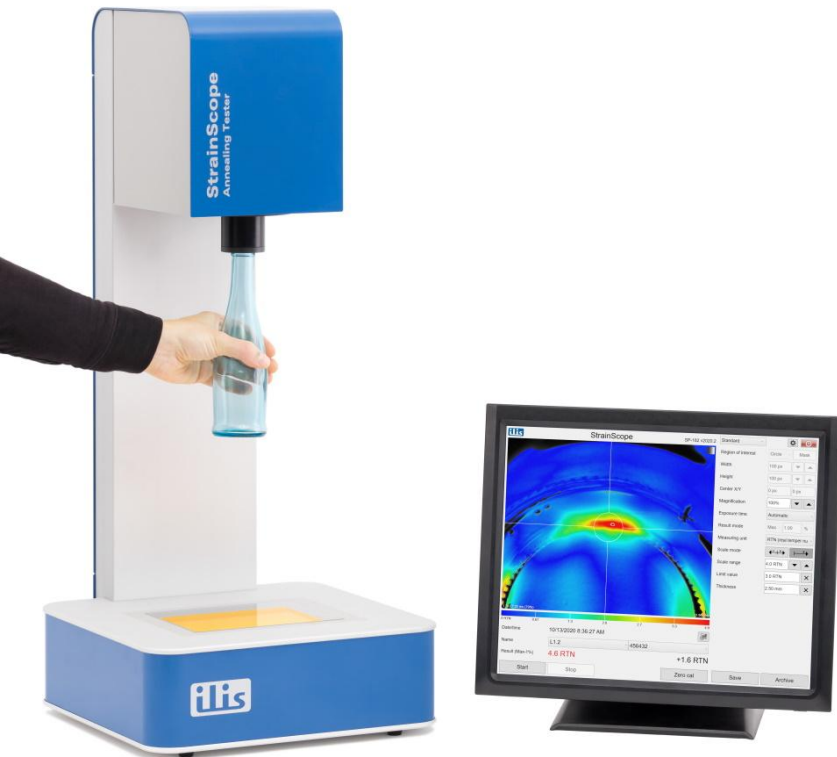
StrainScope® Stepper
large-format optical and crystalline materials and components



StrainScope® Flex
R&D and process automation

StrainScope[®] Annealing Tester

container glass (annealing stress)

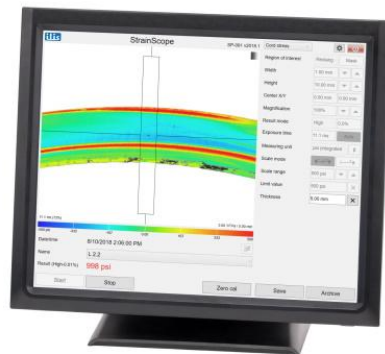
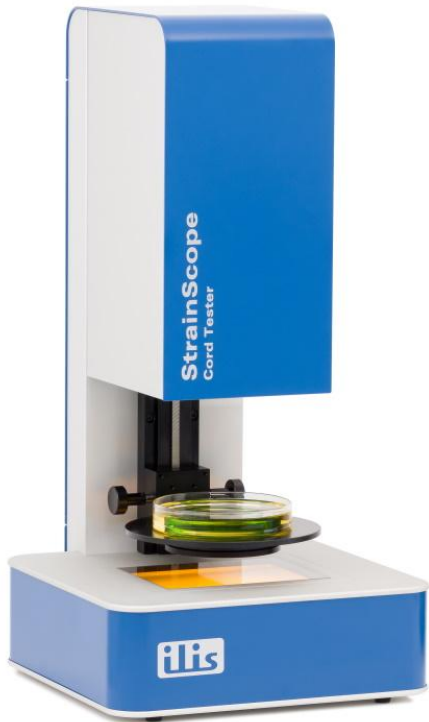


- Digital replacement for conventional polariscopes and polarimeters
- Easy and fast operation
- Monitoring of residual stresses in the base area of bottles and jars
- Optimization of the annealing process (cost reduction by energy saving)



StrainScope® Cord Tester

container glass (glass homogeneity)

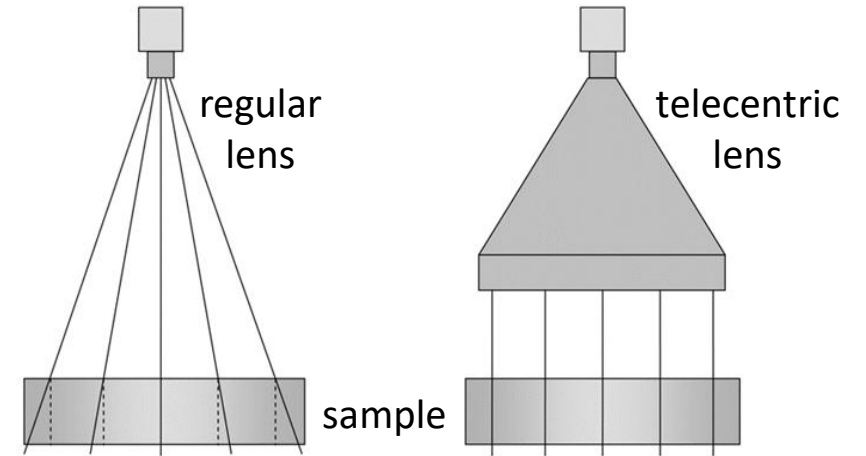
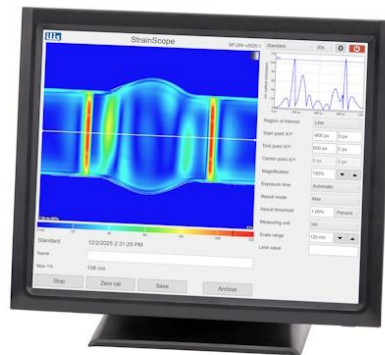


- Digital replacement for polarization microscopes with Berek compensator
- Minimized operator influence
- Monitoring of cord stresses (caused by inhomogeneous glass composition)
- Traceability by automatic documentation of the measurement results



StrainScope® Tube Tester

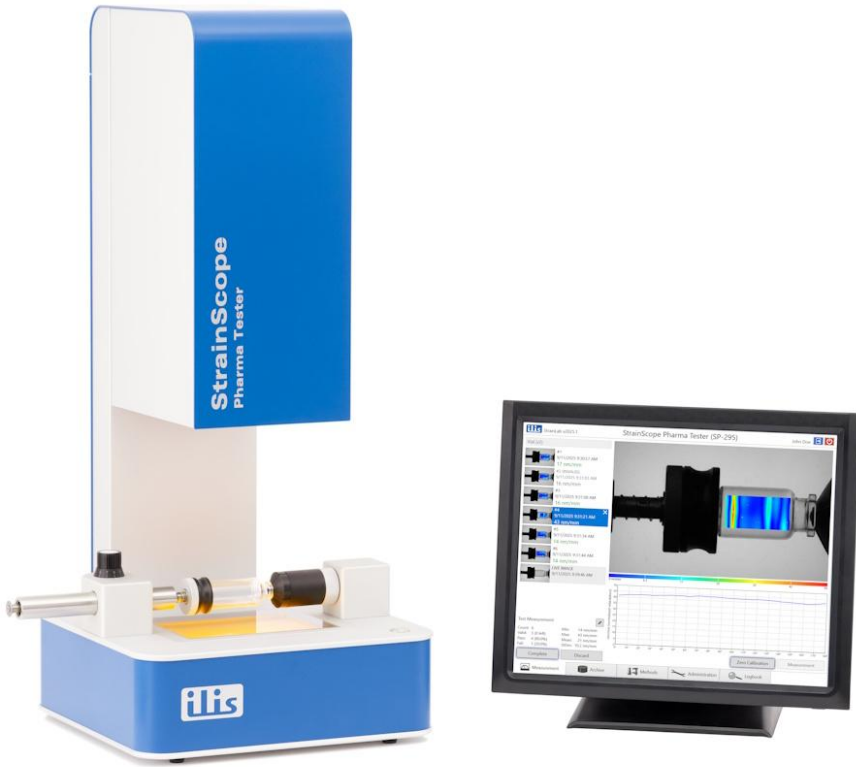
tube glass and tubular products



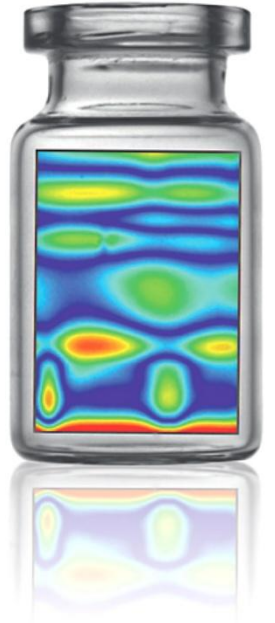
- Measurement of residual stress in tubular glass and products made of tube glass
- Distortion-free field of view through the use of telecentric optics
- Fast and easy operation

StrainScope® Pharma Tester

pharmaceutical glass packaging

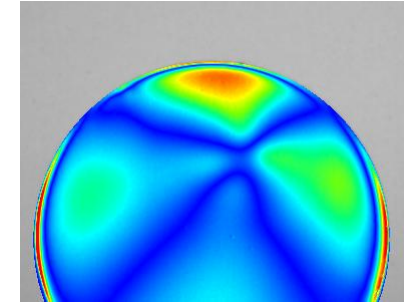


- Reproducible measurement of the residual stress in syringes, vials, ampoules and cartridges
- Telecentric optics for distortion-free measurement
- Automatic rotation and determination of the maximum stress value
- GMP-compliant software available (authentication, data integrity, traceability and qualification)

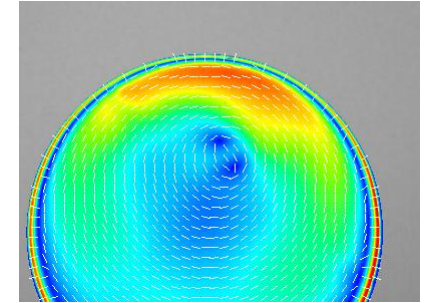


StrainScope® Optics Tester

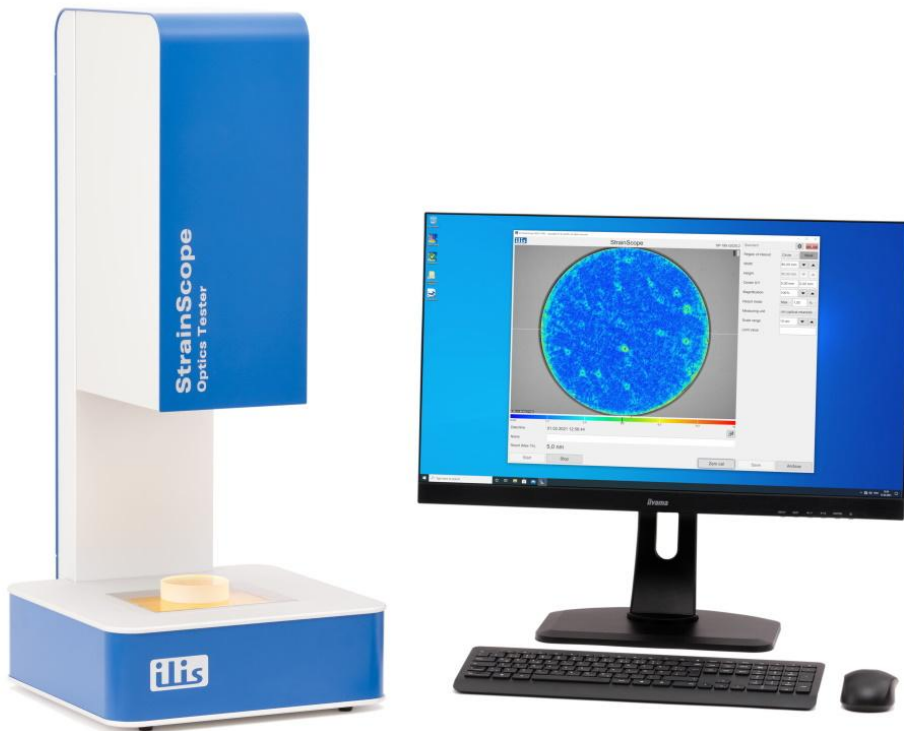
optical materials and components



linear polarization



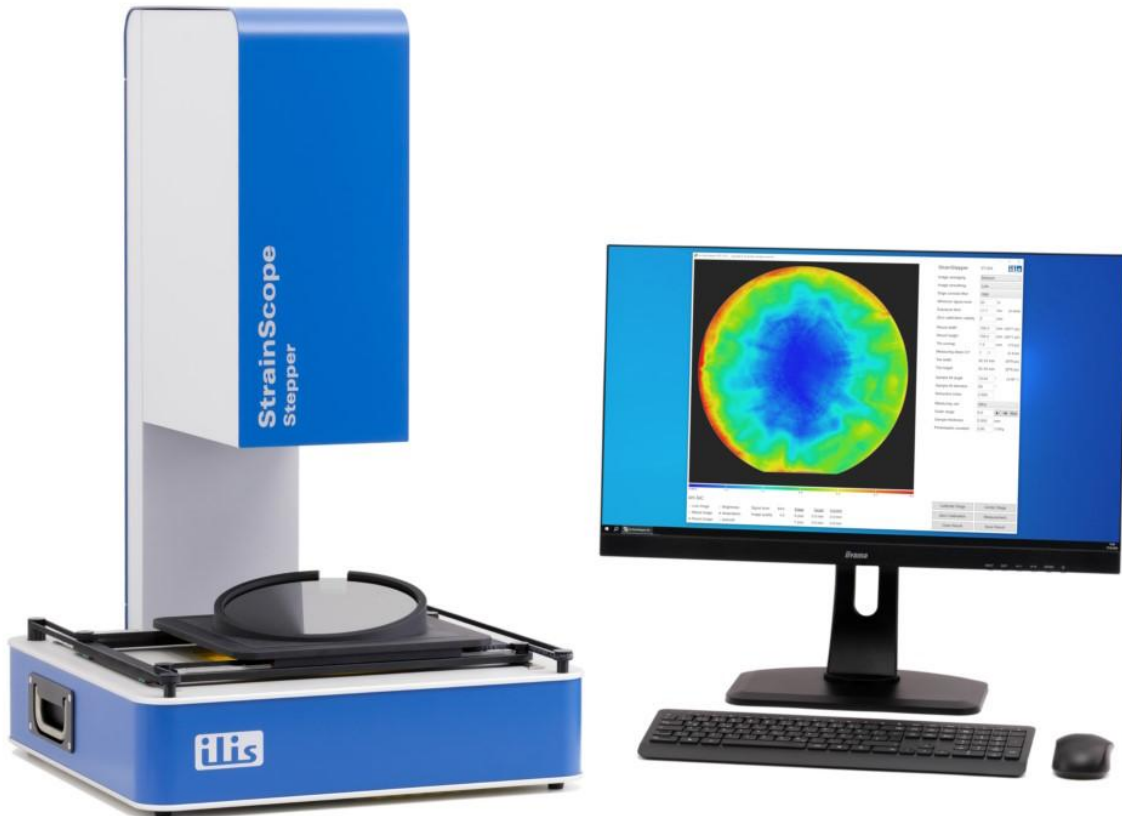
circular polarization



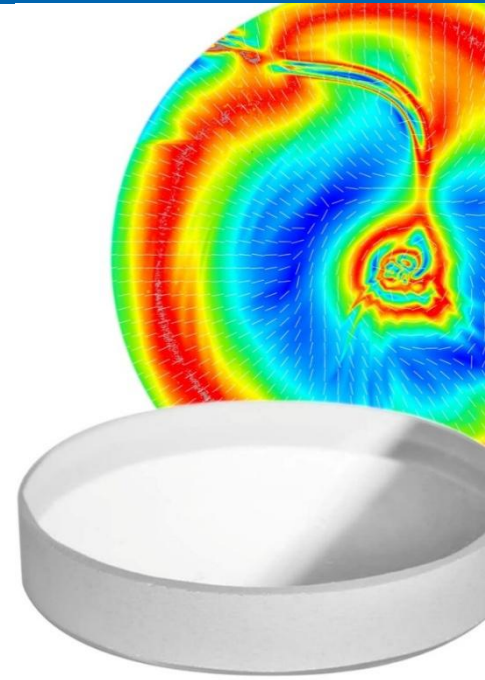
- Measurement independent of the stress orientation through the use of circular polarization
- Telecentric optics for distortion-free measurement
- Ideally suited for thick glasses or crystalline materials with intrinsic birefringence
- High resolution and sensitivity

StrainScope® Stepper

large-format optical and crystalline materials



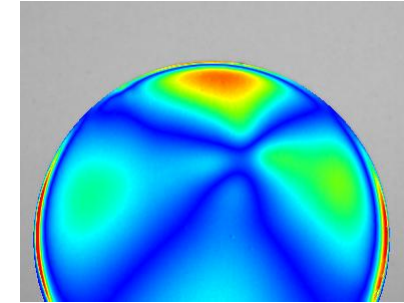
- Integrated positioning table with automatic stitching
- Telecentric optics
- 220 x 220 mm² distortion-free field of view
- Application examples:
 - Optical glasses (SiO₂, etc.)
 - Crystal materials (SiC, CaF₂, Al₂O₃, etc.)
 - Lens blanks for lithographic applications
 - Semiconductor substrates (e.g. SiC wafers)



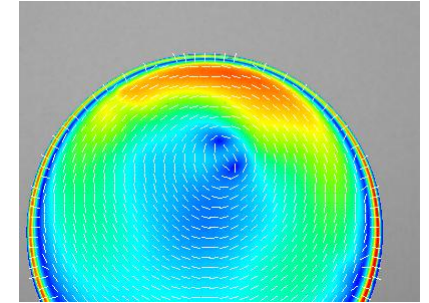
StrainScope® Flex

modular real time polarimeter

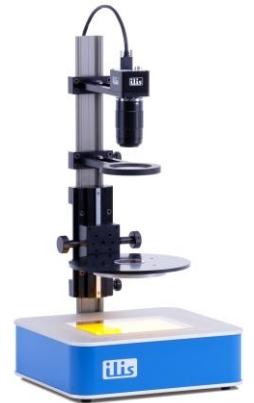
- Flexible and compact design
- Versatile solution for varying measuring tasks in research, development and process automation
- Switchable between linear and circular polarization
- Exchangeable objective lens



linear polarization

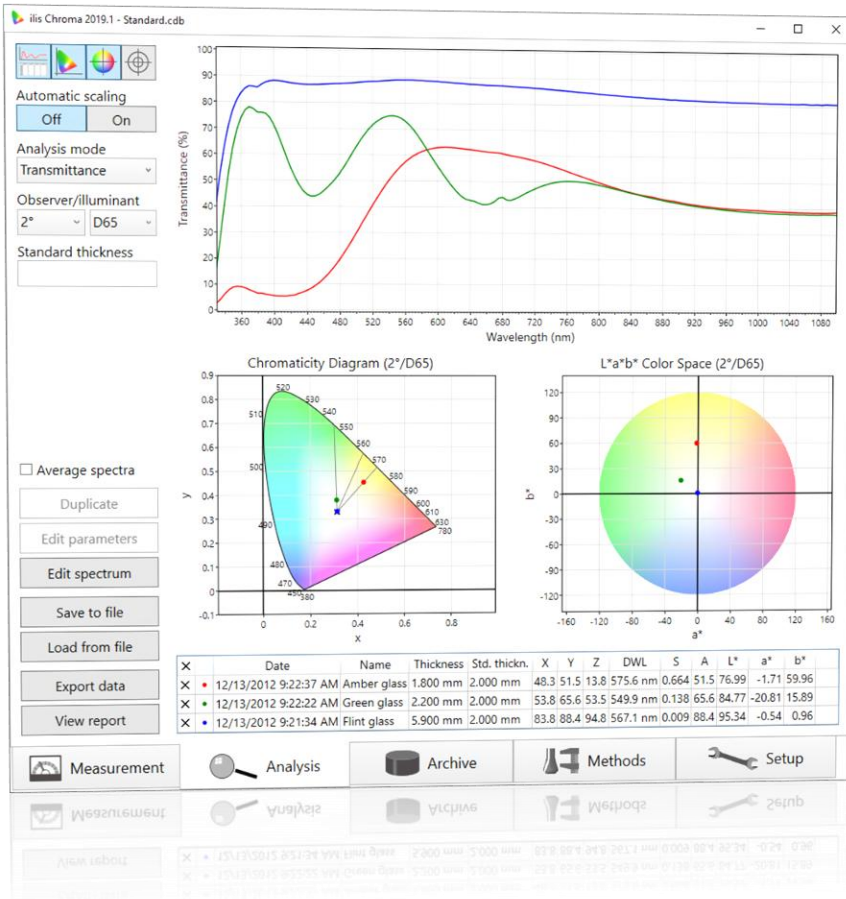


circular polarization



Chroma™ software

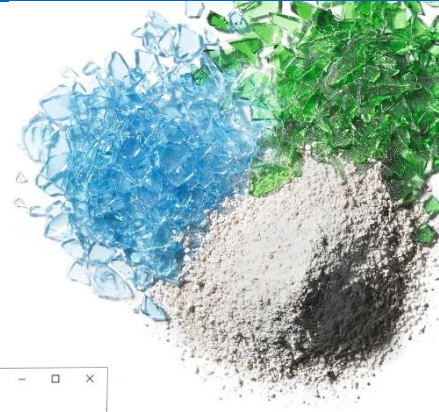
color measurement (not only) for glass industry



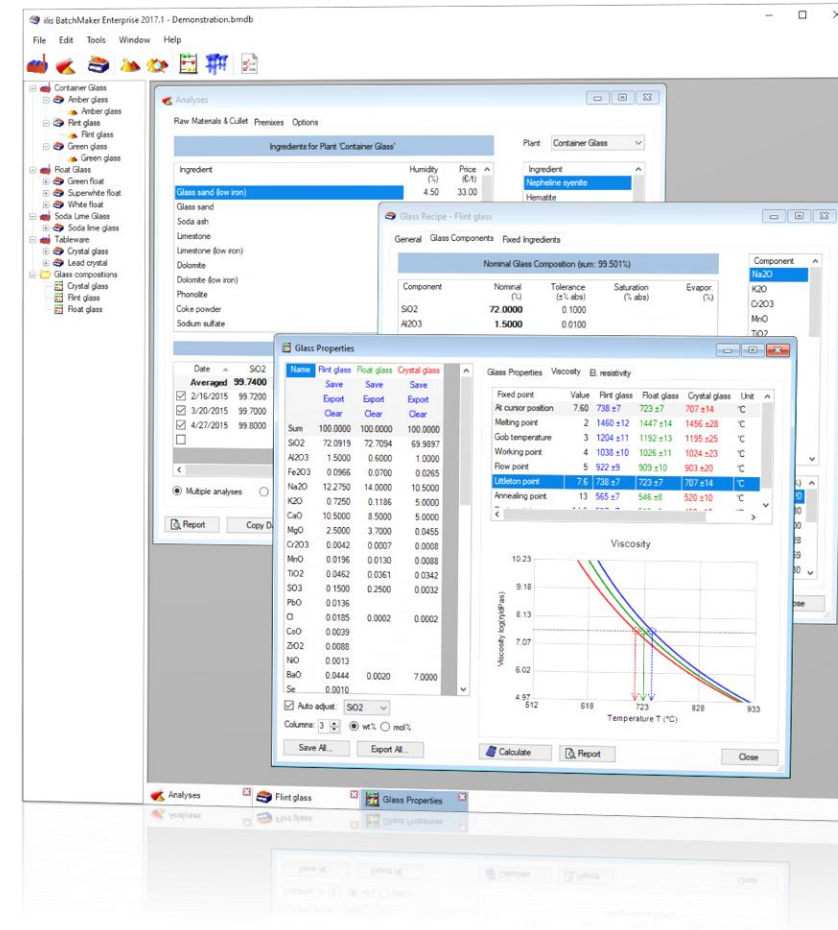
- Chromaticity/Helmholtz values, CIELAB, etc. (acc. to ISO 11664/CIE 15)
- Architectural and automotive glazing parameters (EN 410, ISO 9050, ISO 13837)
- Spectral redox determination ($\text{Fe}^{2+}/\text{Fe}^{3+}$ ratio)
- Integrated data management and trend analysis
- Direct control of many spectrometer models
- Workflow-based user interface

BatchMaker[®] software

batch recipe calculation and glass development



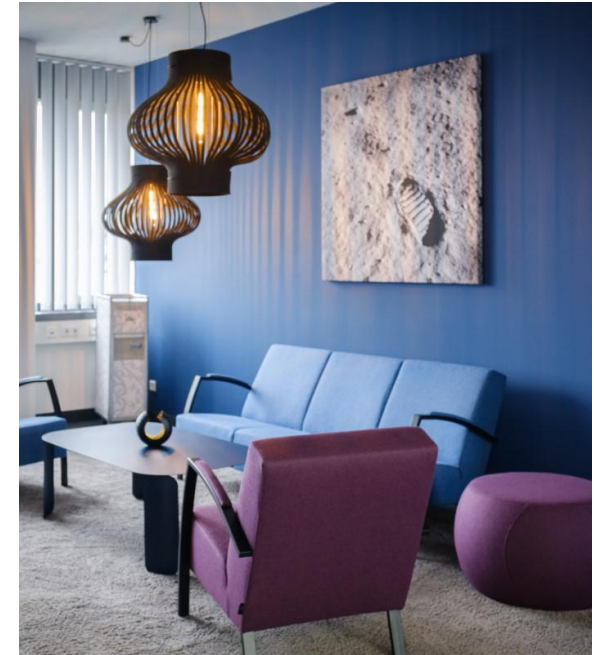
- Easy and fast calculation and correction of batch recipes for glass production
- Convenient management and editing of raw materials and chemical analyses
- Calculation of major batch and glass properties
- Integrated raw material usage and glass property calculator
- Internal database for easy data storage



ilis academy

seminars and workshops

- Practice-oriented seminars and workshops in small groups on the topics of residual stress measurement, color measurement and glass recipe calculation



Customers worldwide



What can we do for you?



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