Polarimeter

Residual stress measurement for glass containers and glassware

- Direct retardation determination
- Objective and reproducible results
- Dual-mode operation
- Compliant to ASTM C148-B
- Simple operation

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DIRECT MEASUREMENT OF RESIDUAL STRESS

The Agr Polarimeter is designed for simple evaluation and quantification of residual stress in glass containers and glassware. This device offers a simple and reliable means to determine residual stresses with measurable results that are objective and accurate.

SIMPLE OPERATION

The Agr Polarimeter, used in accordance to ASTM C148-B, makes it possible for an operator to directly measure residual stress in an annealed glass object. Measurements can be performed in a simple and straightforward manner without the additional need for strain disks or conversion charts.

The Polarimeter incorporates a rotatable analyzer with up to 180° of rotation for easy and precise grading of optical retardation. A precision graduated scale and corresponding apparent temper grade reference provide for direct determination of temper grade. Because of the direct method, measurement is fast and subject to less arbitrary evaluation. In addition, measurement is more efficient and eliminates the unwieldly handling of disks and limitations that are associated with color comparison methods.

BENEFITS

- Provides quantitative measurement results
- Expands capabilities for analyzing colored as well as flint ware
- Compatible with thick materials such as heavy bottle bases, candle and decorative ware as well as non-standard shapes
- Eliminates the need for fragile and expensive strain disks
- Simpler and easier to use than traditional polariscopic methods

FEATURES

- Direct, quantitative measurement of stresses
- Dual-mode operation permits use as polarimeter or polarscope
- Retardation measurement up to 565nm
- Compact size makes it ideal for plant floor or laboratory
- Rotatable analyzer with corresponding temper grade scale
- Retractable tint plate
- Compatibility with ASTM C148-B

Agr reserves the right to alter design and/or specifications without notice.

The Agr Polarimeter meets all requirements as specified in ASTM C 148, Polarscopic Examination of Glass Containers.