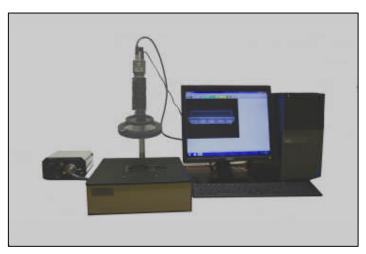
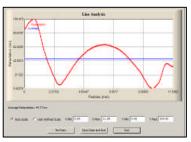


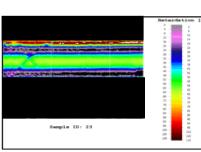
## **DIAS-1600 Digital Stress Analyzer System**



## The DIAS-1600 Stress

Analyzer uses digital imaging technology for stress inspection applications. This PC-based system is used for quality control, process control, failure analysis, product development, and research to ensure that residual stresses remain within specified limits. This package is ideal for products in which very low stresses can hamper product performance, such as optical components, lenses, annealed parts, glass seals, TV glass, etc.





## Measurement results are reported:

- For individual points
- As graphs of stress, retardation, or birefringence vs. position along any line
- As full-field, color-coded maps of stress distribution

## Use of the DIAS-1600 provides the following benefits:

- Quantitative retardation/birefringence or stress measurements in a userfriendly, menu-driven PC format
- Eliminates errors and decisions based on the user's visual judgement
- Reproducible, accurate results
- Easy calibration
- User-defined pass/fail thresholds and identification of min/max values
- Configurable scaling and data storage options
- Quick analysis feature for multiple "like" samples (requires fixturing)



"World Leader in Glass Stress Measurement"

Components	Specifications
Model	DIAS-1600 Digital Image Analysis System
System	Polarized Illuminator/Sample Stage with Support Post
Configuration	Swing-out Analyzer asembly
	Camera assembly (including lens, filters and CCD camera) and adjustable
	mount
	Camera power supply
	Camera cables (1 each for connecting to AC power and to PC)
	Video frame grabber board, installed in PC
	Desktop computer with flat-panel LCD color monitor
	DIAS-1600-2 Stress Analysis Software
	Verification Retarder/Linear Scale Reference
	Plane or Circular Polarization (Specify)
Retardation	Approximately 0-280 nm (ABS) or +/-140 nm (Bias mode, plane polarization)
Measuring	
Range	
Accuracy	+/-0.01%, full scale
Precision	Better than 1 nm of optical retardation
Measurement	Two Decimal Places (Retardation/Birefringence/Stress).
Resolution	
Display	640 x 480 Pixels
Resolution	
Units	Nanometers (nm), MegaPascal (MPa), Pounds per Square Inch (psi)
CCD Camera	Monochromatic Industrial Type, C-Mount, 50 mm fixed focus, 768 x 494 pixels
Options	Other Light Sources, Immersion Cells, Video Zoom Lenses, Custom Software,
	Special Sample Fixturing, Power Conditioner, Tint Plates for Visual Inspection