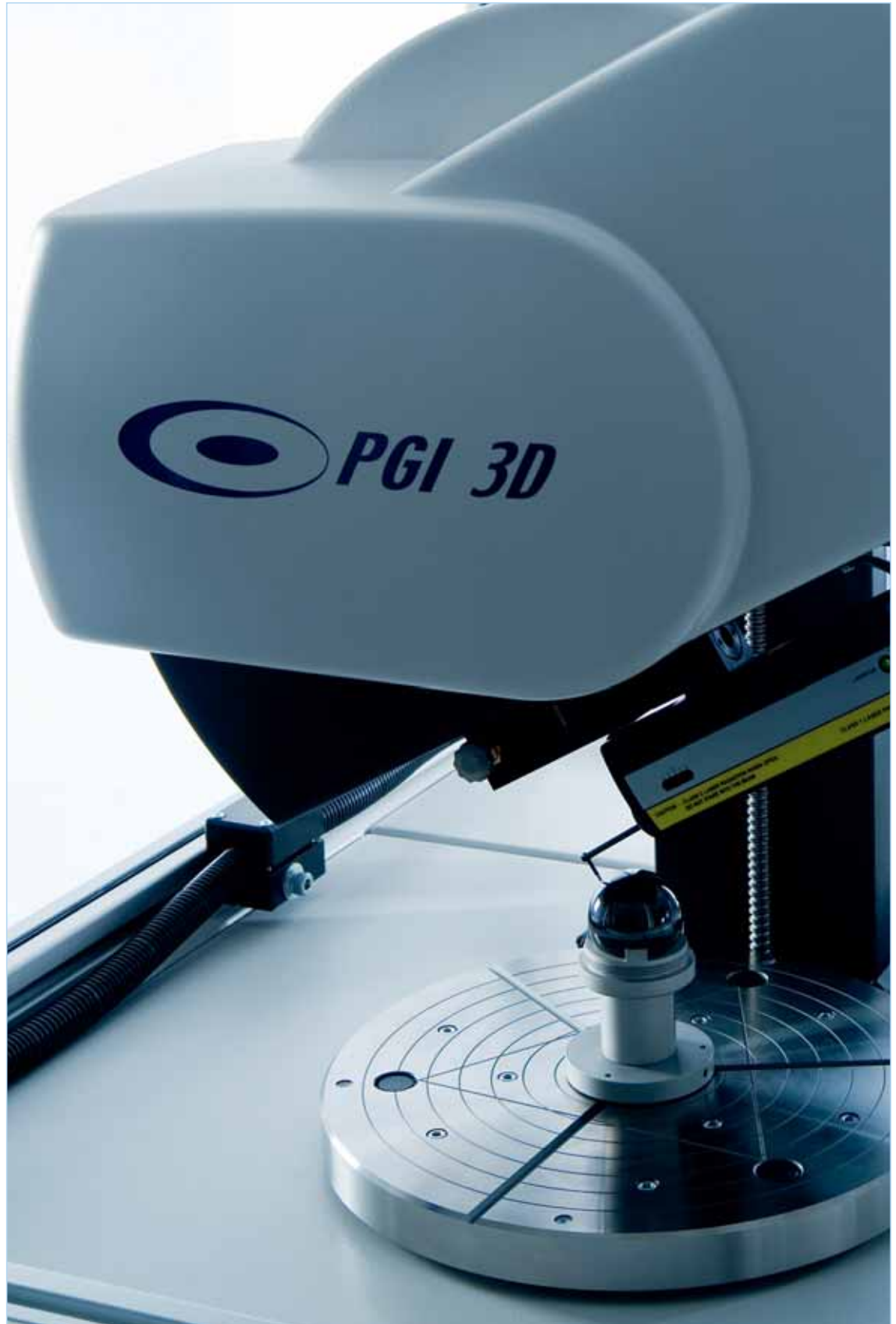


Preliminary



Talysurf PGI 3D Optics

Automated 3D measurement and analysis



Introduction

Talysurf PGI 3D Optics



Talysurf PGI 3D Optics Aspheric Lens / Mould Measurement System

A ideal combination of ultra high precision with measurement versatility and complete automation.

Providing the ability to measure near vertical slopes, with practically no limit in aspheric departure, the PGI 3D Optics offers the necessary flexibility to measure a huge variety of optical components spanning an array of different industries. Essential for most moulded, ground or diamond turned parts, the complete assessment of component form error and surface astigmatism is clearly presented using a new (fully automatic) user interface and 3D output display.

PGI 3D Optics - The Ideal Instrument

Aspheric optics are amongst the most demanding of today's ultra-high precision form measurement applications. The new Form Talysurf PGI 3D Optics is able to meet the most demanding metrology requirements for new and existing lens designs, supporting a wide range of product applications:

- IR Optics (defence, medical, surveillance, etc.)
- Digital Camera Lenses
- Blu-ray (and standard) DVD Optics
- Projector lenses
- High Power LEDs
- Cellphone Camera Lenses

Automation

Fully automated operation is facilitated via a new Production Interface, ideal for use on the shop-floor. Providing easy-to-use 'single-click' operation, the PGI 3D Optics can be used with the most basic of training.

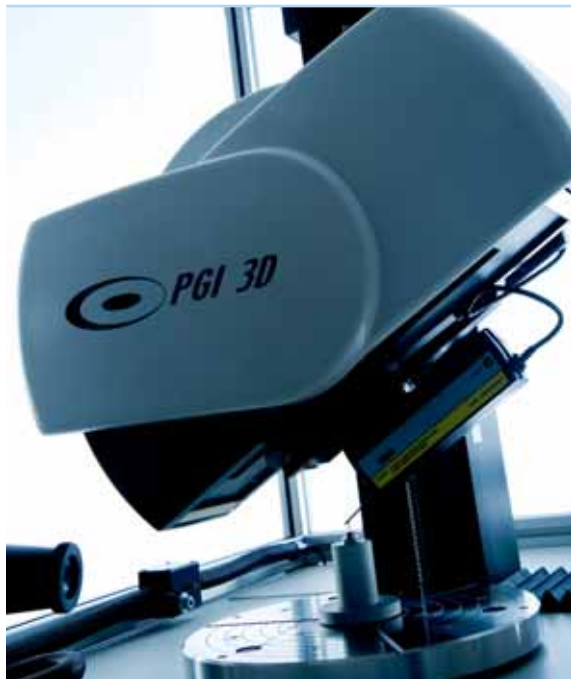
Ultra High Precision Air-bearing Spindle

Taylor Hobson specialised spindles provide the best combination of precision and stiffness in the world, providing unrivalled axial and radial accuracy.

- < 0.02µm radial accuracy
- 0.0003µm/mm coning error

Key features

Aspheric lens / mould measurement system



The benefits of PGI 3D Optics

The ideal combination of ultra high precision with measurement versatility and complete automation.

- Form repeatability <math>< 100 \text{ nm}^*</math> (typically <math>< 50 \text{ nm}</math>)
- Slope angles up to 85 degrees*
- Measurement envelope up to 200 mm diameter (max sag <math>< 20 \text{ mm}</math>)
- Fully automatic centre and levelling
 - Including new routines to ensure the accurate alignment of virtually any part
 - Steep, shallow, small SAG etc
- Rapid 3D measurement & analysis throughput
 - Fully automated measurement routines
 - Automatic analysis and output display
- Aspheric analysis software
 - Complete with derived coefficients analysis (AAU)
 - 3D astigmatic analysis and display
 - Diffractive analysis

*parts less than 60 mm diameter