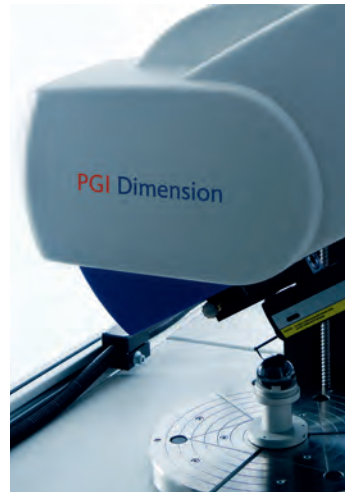
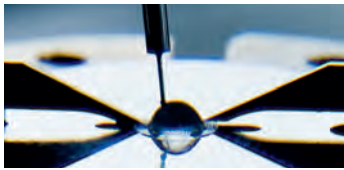


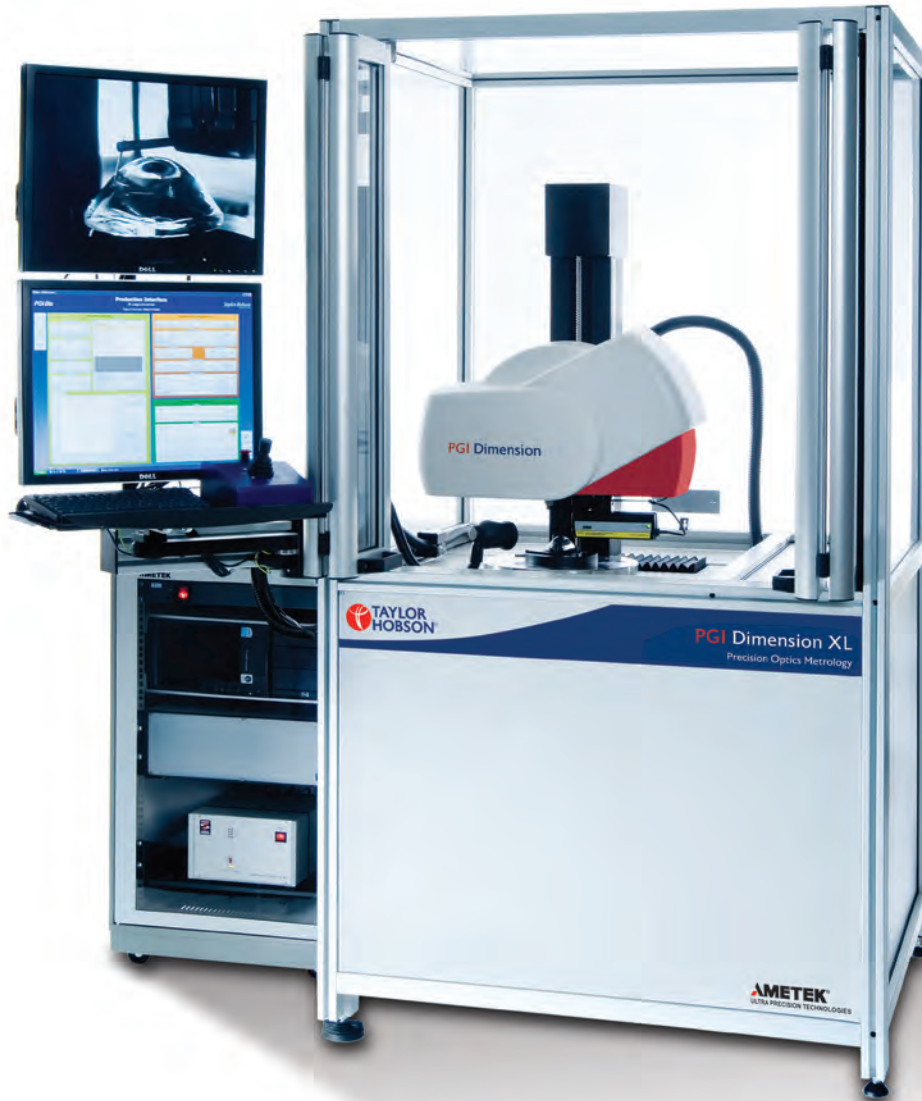
PGI Dimension

A versatile automated system for precision optics measurement



Talysurf PGI Dimension

Fully automated one-touch aspheric optics measurement



Based on two of Taylor Hobson's core technologies...

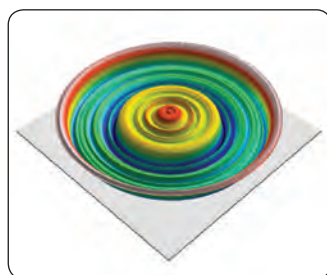
Aspheric profilometry and high accuracy roundness...

Delivering rapid optics cresting and precise measurement.

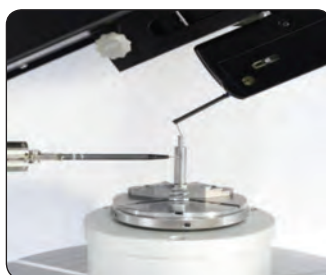
The most versatile metrology in the industry



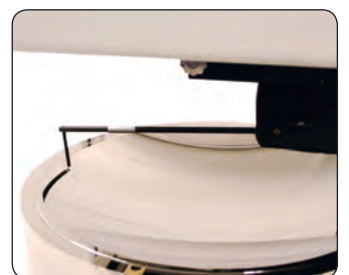
Steep spheres and aspheres



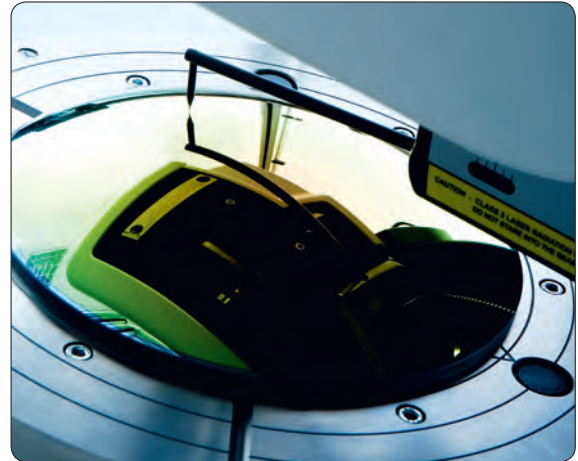
Highly aspheric gullwings



Roundness and runout



Large diameter asphero-diffractive



The benefits of Talysurf PGI Dimension

Versatile 2D and 3D analysis for spheres, aspherics and diffractives

Form repeatability of <math><100\text{ nm}</math> and slope angles of up to 85 degrees mean that the Talysurf PGI Dimension instrument is a versatile instrument for spherical, aspheric, diffractive lenses and molds, which allows a wide range of accurate 2D and 3D measurements and analysis. The fully automatic centre and levelling feature includes new routines to ensure the accurate alignment of virtually any part: steep, shallow, large and small.

Designed for ease of use in the production environment

The new production interface gives fully automated operation, ideal for use on the shop-floor. The easy-to-use 'single-click' operation is quick to learn and will provide an automatic 2D or 3D analysis and output display. The instrument can be initially set up by quality specialists for the use of a wide range of manufacturing staff. After commencing the measurement PGI Dimension can then be left unmanned to complete the cycle.

Unique software saves production time and increases output

Advanced Aspheric analysis software guarantees the quality of aspheres and saves time with instant analysis of form error, zone depth and spacing. Unique patented technology delivers nm level residual form error analysis, and advanced algorithms can extract a sub-micron lens form error from much larger diffractive zone depths. Derived co-efficient functions enable reverse engineering of aspheric and diffractive components, giving feedback to designers of the as-is manufactured lens (with error) to enable adjustment of critical design systems to improve performance.

Technology advancements

The patented ball calibration routine gives dimensional measurement capability and gauge linearity in a single automated operation, to exacting standards calibrated from our own UKAS approved laboratory. New levels of measurement capability are achieved through the unique calibration unit and software which help to achieve centering and levelling of the lens for accurate rotational lens measurement.

PGI Dimension's enhanced capabilities support IR Optics, projector lenses, digital camera lenses, high power LEDs, Blu-ray and standard DVD optics and cellphone camera lenses.

