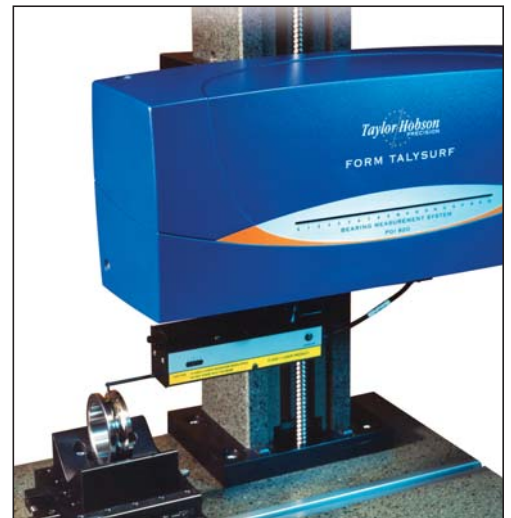
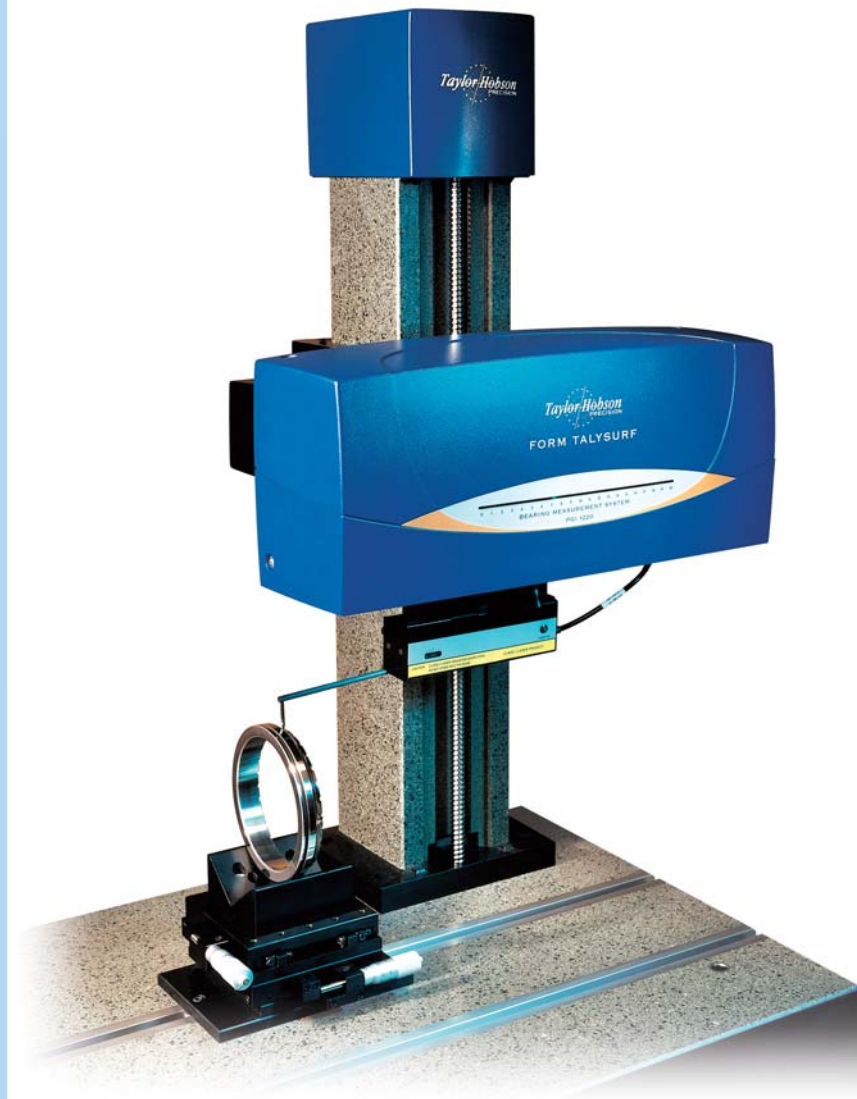


Surface finish systems for precision bearing manufacturers

The ability to measure roughness, waviness and contour all at once on curved surfaces has become increasingly important for precision bearing manufacturers. Taylor Hobson now offers a range of measurement systems with specifications in line with high performance applications for small (Form Talysurf PGI 420), medium (Form Talysurf PGI 820) and large (Form Talysurf PGI 1220) bearings of all functional types.



FORM TALYSURF PGI BEARING SYSTEMS ARE THE **AUTOMATIC** CHOICE FOR HIGH PERFORMANCE AND VALUE

- | | |
|-------------------------|---|
| Reliable and Repeatable | - Mechanical / electronic design ensures consistent results |
| Stable platform | - System provided on base and frame with AV mounts |
| Fully Programmable | - Easy to completely automate measurement sequences |
| Customized software | - Can customize both front ends and output layouts |
| Analysis flexibility | - Offers an extensive range of bearing analysis options |



Introduction

Taylor Hobson can claim a long relationship with bearing manufacturers. Case in point, the original Form Talysurf was developed in 1984 specifically for the precision bearing industry. It was the first instrument ever to measure form, texture and dimension on curved surfaces.

Our new line of instruments continue the tradition but also address the much more difficult specialized requirements on many types of high precision bearings.

Phase Grating Interferometer (PGI)

Phase Grating Interferometry via cylindrical grating is superior in every way to linear displacement gauges, making possible the accurate measurement of surface finish, form, radius and contour in a single trace.

The value of choice

And now, for the first time, PGI technology is available with different gauge ranges and resolutions to serve an entire industry with systems configured to suit your particular requirements for price, performance and workpiece capacity.

- **Form Talysurf PGI 420**
4mm gauging range
3.2nm resolution
450mm motorized vertical column
120mm traverse unit
- **Form Talysurf PGI 820**
8mm gauging range
3.2nm resolution
450mm motorized column
200mm traverse unit
- **Form Talysurf PGI 1220**
12.5mm gauging range
3.2nm resolution
700mm motorized column
200mm traverse unit

All of the above systems offer specifications and functionality in line with most general bearing applications, typical of those found in the automotive arena.

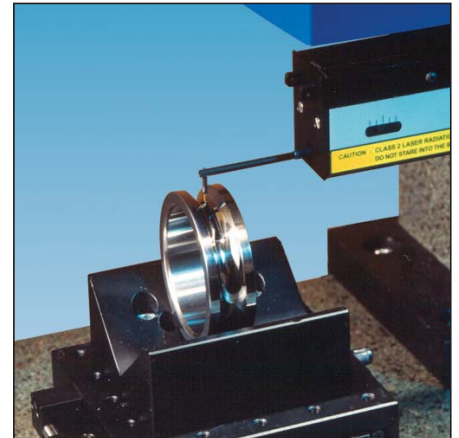
High precision fundamentals

Form Talysurf PGI systems incorporate the fundamental requirements of high precision bearing manufacturers, which include ease of use, robustness and reliability.

The systems are completely programmable allowing for all measurement and analysis requirements to be automated. Simplified User Interface (SUI) routines provide simple "push button" operation (with restricted access to instrument set-up programs) for operators in production areas.

Many measurement routines have been developed just for bearing manufacturers, including roller bearing and gothic arch analysis. Users can also develop customized measurement result layouts to provide, for example, multiple results on a single page; virtually any format of results is possible.

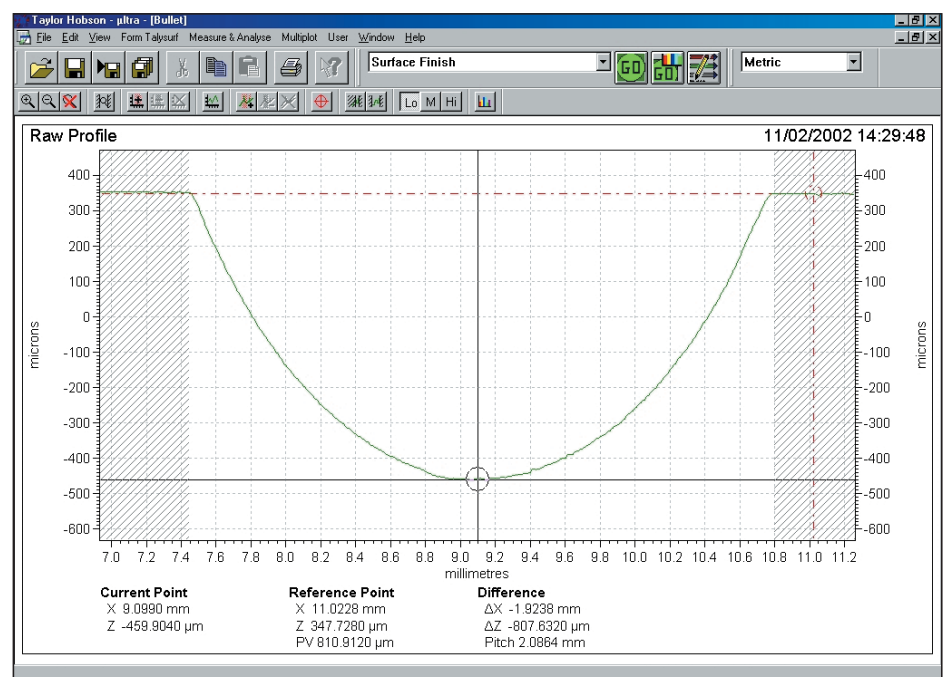
Stability and reliability are assured in any environment. Form Talysurf PGI platforms include a solid granite base, steel frame and integrated anti-vibration mounts. The PGI gauge is housed in a protective cover and includes a rigid mounting mechanism for the interchangeable stylus arms to ensure reliable and repeatable results.



Automotive bearing measured on Form Talysurf PGI



Detail of radius shown in raw profile image below



An example of a simplified user interface for the Form Talysurf PGI

Specifications are subject to change without notice.

Serving a global market

Taylor Hobson is world renowned as a manufacturer of precision measuring instruments used for inspection in research and production facilities. Our equipment performs at nanometric levels of resolution and accuracy.

To complement our precision manufacturing capability we also offer a host of metrology support services to provide our customers with complete solutions to their measuring needs and total confidence in their results.

Contracted Services from Taylor Hobson

- Inspection services**
 measurement of your production parts by skilled technicians using industry leading instruments in accord with ISO standards
- Metrology training**
 practical, hands-on training courses for roundness and surface finish conducted by experienced metrologists
- Operator training**
 on-site instruction will lead to greater proficiency and higher productivity
- UKAS Calibration and Testing**
 certification for artifacts or instruments in our laboratory or at customer's site

For the above services, contact our Center of Excellence:

email: taylor-hobson.cofe@ametec.com
 or call: +44 116 276 3779

- Design engineering**
 special purpose, dedicated metrology systems for demanding applications
- Precision manufacturing**
 contract machining services for high precision applications and industries
- Preventative maintenance**
 protect your metrology investment with a Talycare service cover plan

For the above services, contact our Sales Department:

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