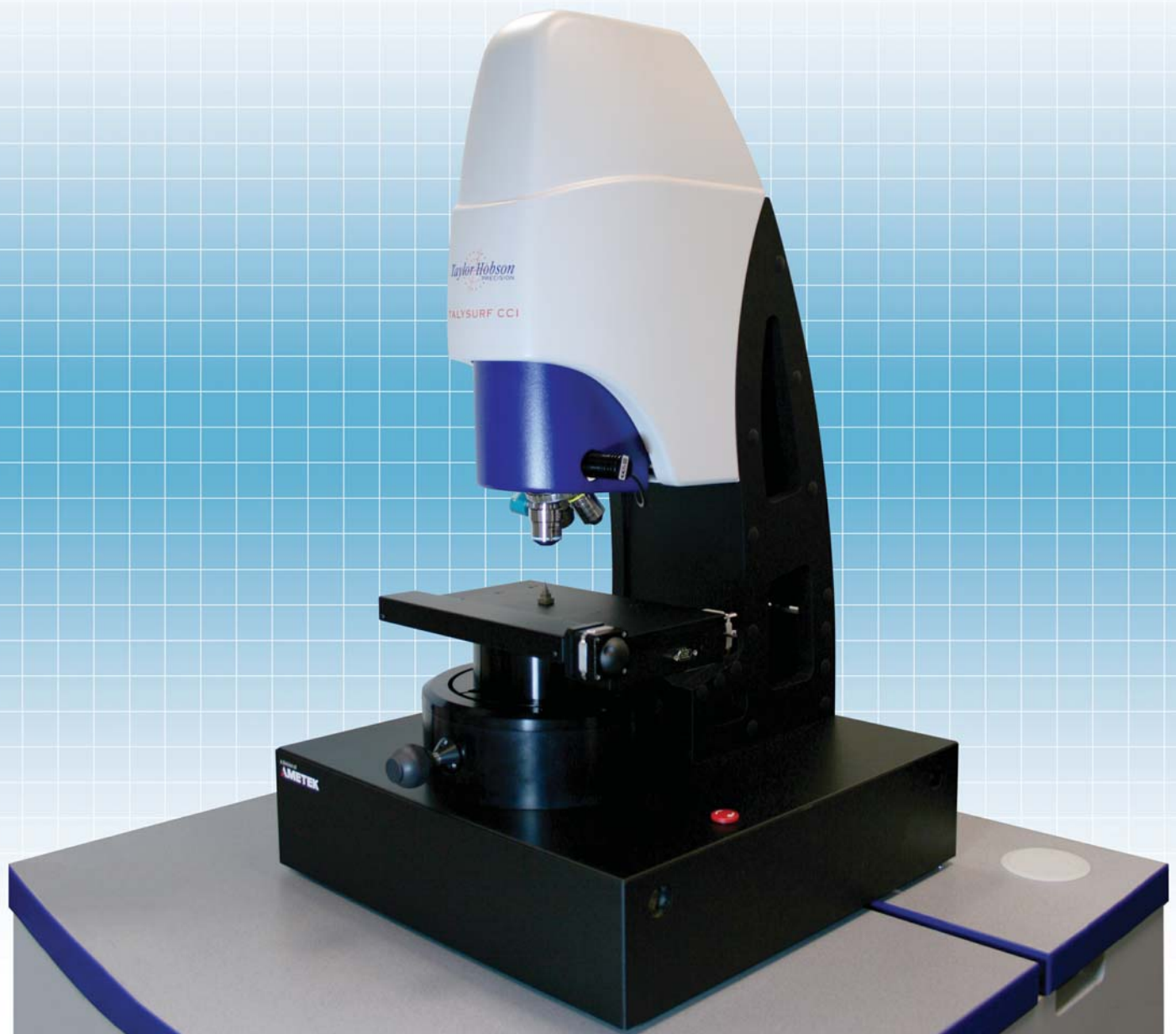


Talysurf CCI - Lite Non-contact 3D Profiler

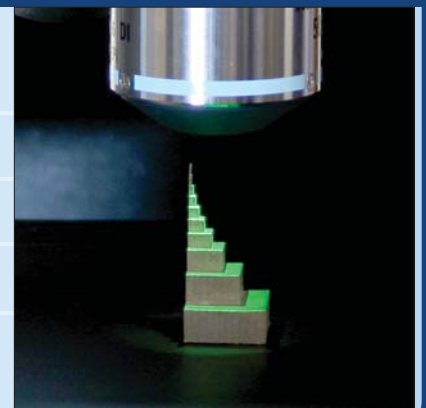
PRODUCT

Automated small footprint optical measurement system



Talysurf CCI delivers results you can trust with industry leading performance...

- ✓ Robust - strong & stable Z scanning mechanism
- ✓ Fast - auto XY & Z with Autofocus & Turret
- ✓ Flexible - 2.2 mm Z range (>10 mm with Z stitching)
- ✓ Precise - over 1 million data points as standard
- ✓ Simple - one measurement mode for all surfaces



Next generation interferometer, based on the world leading coherence correlation algorithm.

Bringing high performance optical measurements within the reach of both precision manufacturing and research companies.

Scanning interferometry

The Talysurf CCI Lite is an advanced type of measurement interferometer. It uses an innovative, patented correlation algorithm to find the coherence peak and phase position of an interference pattern produced by our precision optical scanning unit.

Flexibility

The Talysurf CCI Lite is invaluable for many applications requiring high precision 3D profile analysis. A variety of objectives are available and can be fitted simultaneously to the turret enabling many types of surface to be measured. A fully automated stage and auto measurement routines add to the high level of flexibility of the system.

All types of surfaces can be measured

Versatility is one key benefit of the Talysurf CCI Lite. Polished or rough, curved, flat or stepped surfaces with reflectivity between 0.3% and 100% can all be measured using one single algorithm, with no need to change mode for different surfaces and no concerns about the wrong mode being used.

All material types are measurable including glass, liquid inks, photo resist, metal, polymer and pastes.

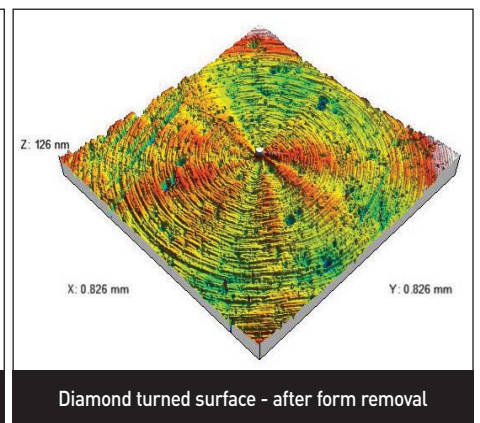
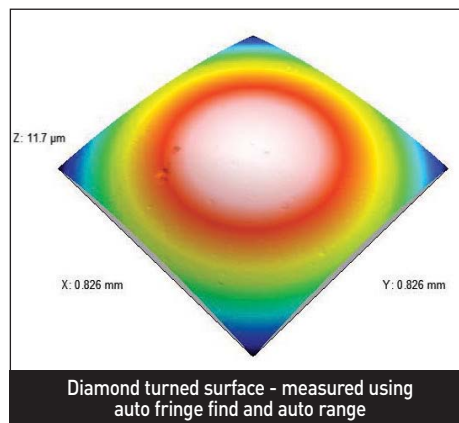
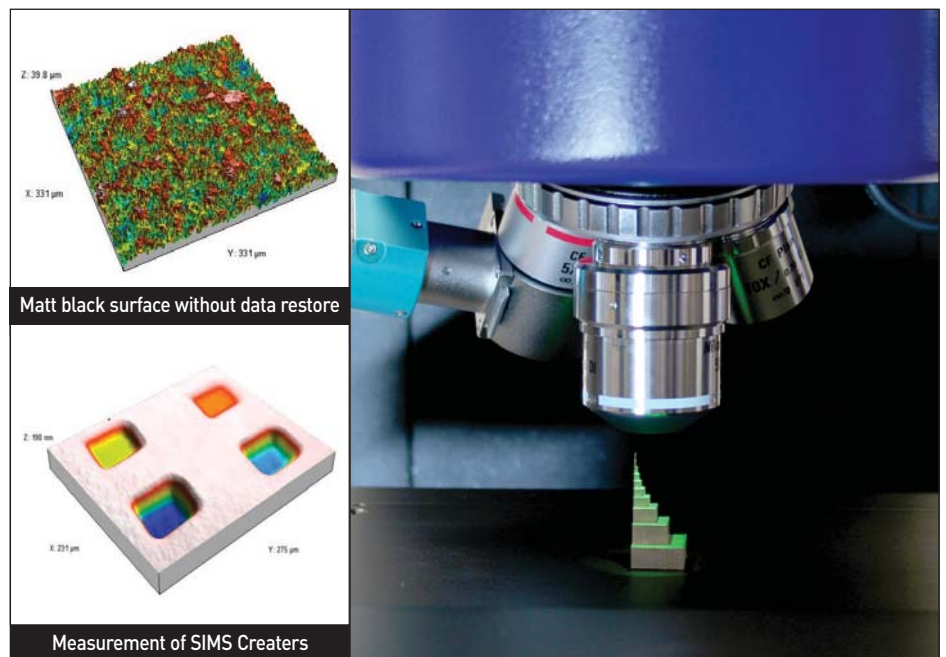
Data analysis tools

Surfaces are quantified absolutely using the latest internationally recognized parameters for both 3D and 2D surface characterization.

- area and volume parameters
- 120 x 2D & 40 x 3D parameters
- counting and sorting
- automatic step height

Automation

Automation is included as standard. With programmable X, Y & Z stages, autofocus and autorange enabling easy to use features such as single button press measurements of complex shapes including X, Y & Z stitching and the ability to follow a surface shape for improved measurement throughput.



Talysurf CCI Lite System Specifications

| | |
|----------------------------------|--|
| Measurement technique | Coherence Correlation Interferometry |
| Vertical range [Z] | 2.2 mm as standard (>10 mm with Z-stitching) |
| Vertical resolution [max] | 0.01 nm [0.1 Å] |
| Noise floor [Z] | <0.08 nm [0.8 Å] ¹ |
| Repeatability of surface RMS [Z] | <0.02 nm [0.2 Å] ² |
| Max. Measurement area [X, Y] | 6.6 mm (>75 mm with X, Y stitching) |
| Number of measurement points | 1024 x 1024 standard |
| Optical resolution [X, Y] | 0.4 - 0.6 μm (surface dependent) |
| Step height repeatability | <0.1% |
| Surface reflectivity | 0.3% - 100% |
| Measurement time | 5-40 seconds (typical) |

¹As demonstrated by multiple measurements on a levelled fused silica optical flat
²As demonstrated by 1 sigma Std Dev of 20 Sq (RMS) measurements on SiC flat

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@ametek.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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