

QED INTERFEROMETER FOR STITCHING: QIS

A metrology powerhouse capable of measuring even extreme aspheric departures.



The QIS interferometer completely designed, engineered and built by QED Technologies. It is optimized for stitching and gives customers the ability to measure more parts, with improved accuracy, speed and ease of use.

QED's QIS incorporates hardware and software features designed to enhance the performance of QED's metrology products. The proprietary QIS coherent imaging system allows the user to obtain measurements with higher fringe densities and greater contrast. The advanced optical design of QIS reduces common errors, such as retrace and magnification errors. In addition, the greater focus travel provided by QIS allows for the measurement of parts with shorter radii than possible with a general purpose

interferometer. QIS was also designed using the same software platform, QED.NET, as QED's Q-flex™ MRF™ systems, which enables seamless communications between systems. The new 1920 x 1920 pixel, high-resolution camera allows for improved spot measurement capability. This means that you can more accurately characterize the MRF removal function, enabling you to make better manufacturing process decisions and achieve convergence faster and with more accuracy.

QIS is available on the ASI(Q) platform, or as a field upgrade to existing ASI and SSI-A platforms.

Measure More. Polish Better.

- Higher fringe density
- Higher fringe contrast
- More slope measurement
- No pixel scale errors
- Greater focus travel
- Integrated software platform

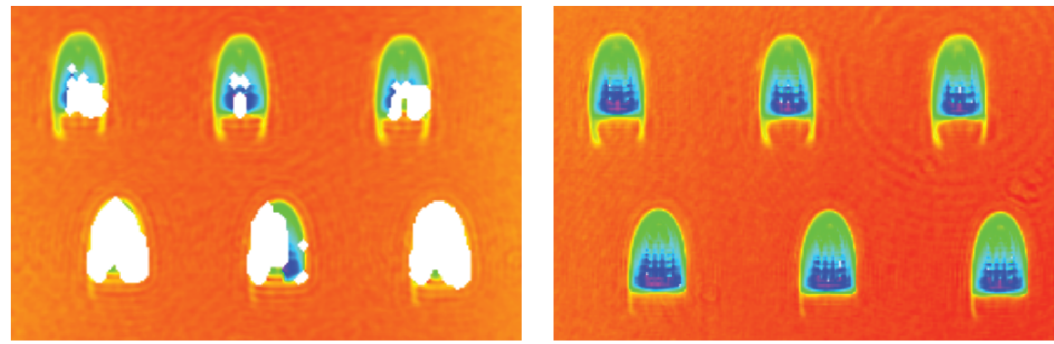
QED INTERFEROMETER FOR STITCHING (QIS)

Measure more; measure better.

- ▶ Higher lateral resolution: greater slope capture, resolve smaller features
- ▶ Better spot metrology for MRF
- ▶ Auto focusing and larger focus range
- ▶ Convenience
- ▶ Reduced opportunity for operator error
- ▶ Enhanced aspheric capability and reduced measurement cycle time
- ▶ Improved interferometer calibration and reduced low-order uncertainty
- ▶ Integrated software platform

Upgrade to QIS

- ▶ QIS gives you more aspheric capability
- ▶ Fewer subapertures (for already-testable aspheres)
- ▶ Automatic focusing
- ▶ Reliable asphere acquisitions
- ▶ Improved spot metrology
- ▶ Use your existing Zygo interferometer on a bench



Improved spot measurement with new high resolution camera.

- 0.4616 μm	0.0590 μm	- 0.4616 μm	0.0590 μm
PV: 0.4999 μm	RMS 0.0499 μm	PV 0.5206 μm	RMS 0.0682 μm
80,125 pixels	20.20 x 28.00 mm	84,264 pixels	19.95 x 28.01 mm

THE STITCHING ADVANTAGE

Stitching technology has four major advantages over standard interferometry:

1. **larger field of view**—you can see “more” of the surface
2. **higher lateral spatial frequencies**—you can see a better picture of the surface
3. **improved accuracy**—you can feel confident in the quality of your results because the unit automatically calibrates systematic instrument errors
4. **aspheric measurements**—you can measure aspheres without null lenses

THE "Q" ADVANTAGE

QED's ASI(Q), is the latest innovation in precision optics metrology, brought to you by QED Technologies. The ASI(Q), completely designed, engineered and built by QED, is powered by QIS, the QED interferometer for stitching. Optimized for stitching, QIS enables you to measure more parts, measure them better, and say yes to more complex projects. QED innovation and ingenuity inside, brings expanded capabilities and new versatility to the ASI(Q). QIS is available on the new ASI(Q) platform, or as a field upgrade to existing ASI and SSI-A platforms.

QIS DOWNLOADS

QIS PRODUCT SELL SHEET

- [QIS - QED Interferometer for Stitching \(MKT1049\)](#)

ADDITIONAL INFORMATION AND EQUIPMENT:

- [ASI\(Q\) Sellsheet \(MKT1049\)](#)
- [Attenuation Filter \(MKT1046\)](#)
- [QRC \(MKT1044\)](#)
- [QED Metrology Overview](#)

QED TECHNOLOGIES



MRF Polishing & SSI Metrology products & technologies are exclusively provided by QED

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