Non-stop CNC Vision Measuring System with Tracking Auto Focus (TAF)

Quick Vision QV STREAM PLUS

Captures images and tracks surfaces while in motion providing unsurpassed throughput
Non-stop CNC Vision Measuring System with Tracking Auto Focus (TAF)
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FEATURES
• Enables high-throughput measurement—more than five times higher than earlier models. *1
• New method captures the image continuously without stopping the stage.
• Includes a tracking auto focus (TAF) feature that tracks the contours of waves and warpage on the surface of the workpiece and maintains focus. This eliminates time spent for autofocusing.

SPECIFICATIONS
Specifications for QV STREAM PLUS Series systems with TAF

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<td>Model</td>
<td>QV-X302T1S-D</td>
<td>QV-X404T1S-D</td>
<td>QV-X606T1S-D</td>
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**Main unit**

- Measuring range (XxYxZ): 11.81"x7.87"x7.87" (300x200x200mm) / 15.57"x15.57"x9.84"(400x400x250mm) / 23.62"x25.59"x9.84"(600x650x250mm)

**Performance**

- Accuracy E1 (X, Y axes (image)): (1.5+3L/1000) μm *1
- Accuracy E2 (Z axis (image)): (1.5+4L/1000) μm *1
- Accuracy E2 (XY plane (image)): (2+4L/1000) μm *1
- Resolution: 0.1μm
- TAF Z-axis resolution: 0.3μm
- Operating temperature range: 20±1°C

**Main equipment and features**

- Imaging Device: B&W CCD
- Illumination Unit: Co-axial Light, Color LED
- Transmitted Light: Blue LED
- PRL: Color LED (quadrant)
- Observation unit: PPT 1X-2X-6X

**Tracking Auto Focus (TAF)**

The TAF feature focuses continuously, adjusting to changes in the height of the object being measured. Automatic tracking of surface waves and warpage (in the Z axis height direction) improves measurement throughput. The feature also cuts out the hassle of focusing during manual measurement, reducing the work burden for measuring system operators.

*1 Determined using Mitutoyo inspection methods. Optical magnification for which accuracy guaranteed: 2.5X objective (QV-HR2.5X or QV-SL2.5) + 2X tube lens

*2 Varies according to workpiece surface texture and reflectance.
*3 These are design values.

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