The Vertex Multisensor Measurement Systems implement new technologies to provide speed and accuracy on reliable and affordable measuring machines.

The systems include InSpec Metrology Software, a programmable optical zoom, 3x digital zoom, non-linear stage compensation, non-linear optics compensation, and advanced LED lighting.

InSpec Metrology Software provides point-and-click simplicity, proprietary edge detection, advanced lighting control and calibration, multi-sensor integration, automated calibrations, and a clear display of measurement data and tolerances.
# VERTEX Measuring Center™

<table>
<thead>
<tr>
<th>Model</th>
<th>Encoder Resolution</th>
<th>XY Accuracy</th>
<th>Z Accuracy</th>
<th>Measurement Capacity</th>
<th>Stage Capacity</th>
<th>Machine Dimensions</th>
<th>Machine Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vertex 251</td>
<td>0.1 µm</td>
<td>2.0+L/250</td>
<td>2.0+L/200</td>
<td>250x160x160mm</td>
<td>10 kg</td>
<td>606x808x1033mm</td>
<td>120kg</td>
</tr>
<tr>
<td>Vertex 311</td>
<td>0.1 µm</td>
<td>2.6+L/175</td>
<td>3.0+L/150</td>
<td>315x315x160mm</td>
<td>10 kg</td>
<td>718x1084x1029mm</td>
<td>150kg</td>
</tr>
<tr>
<td>Vertex 312</td>
<td>0.1 µm</td>
<td>2.6+L/175</td>
<td>3.0+L/100</td>
<td>315x315x250mm</td>
<td>10 kg</td>
<td>718x1084x1208mm</td>
<td>160kg</td>
</tr>
</tbody>
</table>

Specifications subject to change without notice. Accuracy units are microns; length L units are millimeters.

**Non-Linear Calibration**
Ensures Highest Accuracy
Standard for Stage and Optics
Automated Procedures

**Touch Probe Ready**
Automated Probe Calibrations
Automatic Approach Vectoring
Automated Docking

**Laser Probe Ready**
Point and Path Data
Graphical Range Display
Automated Laser Calibrations

**Rotary Indexer Ready**
Vertical and Horizontal Mounting
Faceplate and Chuck Included
Automated Rotary Calibration

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**Machine**
- Precision X, Y, and Z Linear Ways
- Motorized, Programmable Zoom Lens
- Proprietary Control and Amp Boards
- Machine Resident Calibrations
- Single USB Connection to Computer

**Camera and Optics**
- Digital, Hi-Res Video, Color (C series)
- Digital, Hi-Res Video, B&W (M series)
- 19.5:1 Zoom Range, ~20x-390x (H Series)
- 36:1 Zoom Range, ~15x-540x (U Series)
- Fast Servo Drive Magnification Changes
- Instant Digital Magnification Changes

**InSpec Metrology Software**
- Dynamic Sub-Pixel Image Processing
- Point Edge Detection Tools
- Multiple Point Edge Detection Tools
- Video Overlays and Crosshair
- On-Screen Scale
- Feature Constructions
- Tool Property Editing
- Lights, Zoom, and Zone Editing
- Instant Tool Editing on Stored Images
- Advanced Dimensioning and Tolerancing
- Automated Export Settings
- Automatic Report Construction
- Feature Summary Display
- Data Points Display (Whisker Charts)
- Feature Status Log Display
- Full Screen, Window, and Dual Monitor Display
- Image Capture and Export to JPG or BMP
- User Configuration and Password Protection

**Advanced Illumination**
- LED Lighting - Surface, Profile and Axial
- Multi-Ring, Multi-Sector Ringlights
- Lighting Angles from 25 to 90 Degrees
- Intuitive Graphic Interface
- Full Control to Enhance Edges
- Long Life LEDs (approx 10,000 hrs)
- InSpec Includes Lights Calibration

**Part Program Compatibility**
Transfer programs between systems with InSpec.