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
Multisensor Measuring Center™

<table>
<thead>
<tr>
<th></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

**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.