ShaPix[®] 1500 Series

See your planar surfaces in full 3D when microns matter.

Fast. Flexible. Affordable.

The ShaPix 1500 Series solution measures the profile, flatness and waviness of planar surfaces. The compact sensor design provides flexibility for specific mechanical configurations to meet particular application needs - all at an affordable price.

This technology produces measurements in easy to understand, high-definition 3D pictures and reports within minutes. The micron level visualizations produced by ShaPix enable clear understanding and communication throughout the life of a planar surface - from design to production to consumer function.





Data-rich, 3D images: The 1500 Series measurement solution inspects planar surfaces with micron level accuracy. With more than four million points of data, 50 nanometer vertical resolution and 80 micron lateral resolution, you can quickly see and understand part shape and form. These easily understood pictures provide fast feedback for process control improvement.

High-speed, easy to use, non-contact: Using Coherix's laser holographic technology allows for measurements within minutes instead of hours – leading to actionable results faster than ever. With an entire toolbox of software analysis capabilities, operators can evaluate a surface with all of the precision and none of the headache of traditional tactile metrology.

Light weight & flexible: The 1500 Series is designed with the flexibility to be configured for specific application needs. Regardless of the configuration, this metrology solution comes with the full ShaPix areal surface analysis software. With a small footprint, this solution is ideal for being incorporated into a variety of spaces.



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Full 3D. When microns matter.

Capabilities

Flatness	8,	waviness	nrofile	parallelism	
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- Stitching of large surfaces
- Full 3D analysis & reporting
- ROIs, zones, sectional plots
- Data export, STL, Databases, CSV
- Multi-surface relationship
- Virtual gasket
- Thickness uniformity
- Gap analysis

Environmental

Ambient operating temperature:	Ambient operating temperature:				
18 - 25 degrees C					
Rate of temperature change:					
< 1 degrees C within last 10 minutes					
< 6 degrees C within last 1 hour					
Humidity: 12% - 80% non-condensing					
Class 1 Laser Product					

Performance

Field of view (LxWxH):	150 x 150 x 225 mm			
Working range from sensor: 25 - 250 mm				
Lateral resolution:	80 µm			
Vertical resolution:	0.05 μm			
Combined standard unc	ertainty: (L in mm, K=1)			
Step height :	(0.6 + 0.5L) μm			
Milled aluminum:	(1.0 + 0.5L) μm			

Sample Applications



Hydraulic manifold photo

Gear photo



Hydraulic manifold full 3D measurement



Gear full 3D measurement



Pump photo



Heat exchanger insert photo



Pump full 3D measurement

Heat exchanger insert measurement

