

ShaPix®

ROBUST 3D METROLOGY



Today's demand for precision in design and manufacturing requires tighter control of **SHAPE**.

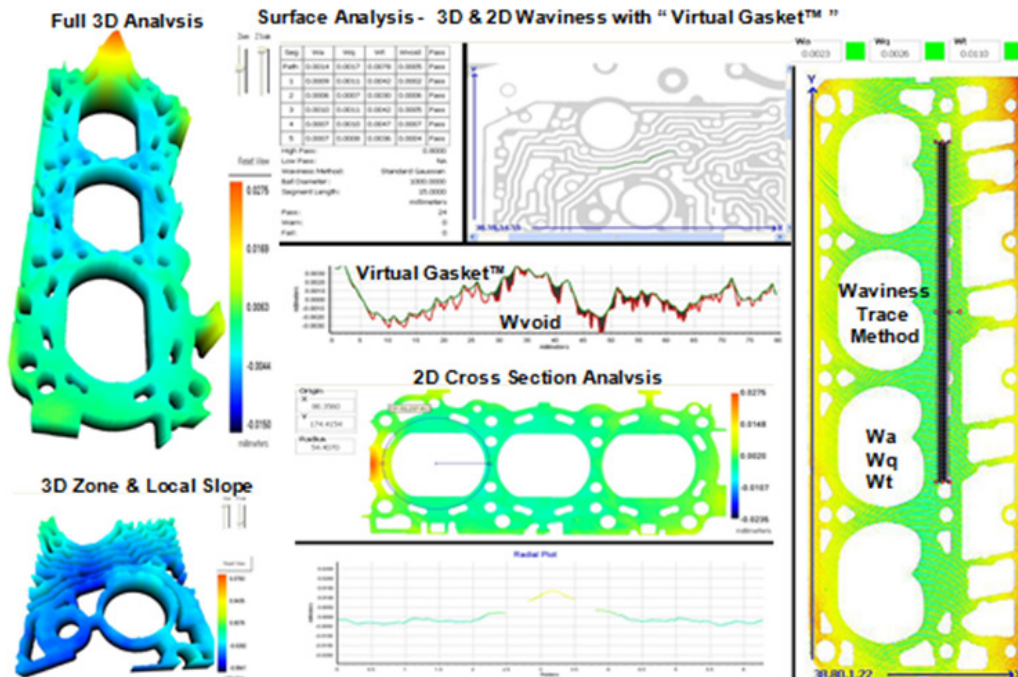
The Coherix **ShaPix Surface Detective** is the shape analysis game changer. Coherix **Robust 3D** data enable you to see microns in **FULL 3D!**

ShaPix provides YOU with 4 Million Data Points to +/-1 Micron in Under 1 Minute!

See **YOUR** parts **TRUE SURFACE SHAPE** in **FULL 3D** in less than 1 minute!

Base Reporting Includes:

- Zone Flatness
- Zone Waviness
- Multi-surface relationships
- Parallelism
- Virtual Gasket



ShaPix[®] Surface Detective[™] Specifications

System

Technique

Non-Contact, three dimensional surface measurement using multi-wavelength phase-shifting holographic Interferometry (Holography)

Software: ShaPix HDM and Analyzer software

Operating System: Windows[®] 7

Performance

Maximum surface data points 4,194,304 per view

Instantaneous field of measurement 288 mm x 288mm

Data stitching for unlimited surface measurement

Multiple views per surface stitchable to full system accuracy

Measurement capture time: 40 seconds

Resolution: X: 150 μ m

Y: 150 μ m

Z: 0.1 μ m

Accuracy: + - 1 μ m

Repeatability: + - 1 μ m

* Standard deviation on an optical reference surface <0.3 μ m

Required part surface specular reflectance for incident light normal to surface: > 1% @ 760 nm wavelength

Options

XY or Y slide table for internal part positioning
Manual or Automated Operation

Multiple surface measurement application software packages

Standards: NIST traceable measurement artifacts

Coherix standard automation interface available

Custom engineering quoted upon request

Custom fixtures quoted upon request

Environmental

Ambient Operating Temperature

Ambient operating temperature
18 to 38 degrees C

Rate of Temperature Change

< 1 degrees C within last 10 minutes

< 6 degrees C within last 1 hour

Part Temperature

Within 3 degrees C of ambient temperature throughout measurement

Humidity

10% - 80% non-condensing

Ambient Vibration

Floor vibration: "ISO Workshop" Floor above 8Hz

Acoustic noise: < 80 Db

Mechanical

NEMA 12 Cabinet

	700 Series Sensor	800 Series Sensor	1200 Series Sensor
Height (mm)	2734	2505	2905
Width (mm)	1370	1400	1400
Depth (mm)	1082	3830	3830

Measurement Cavity Dimensions

	700S	800S	1200S
Height (mm)	700	838	1238
Width (mm)	745	900	900
Depth (mm)	914	1828	1828

Utilities

Electrical Power:

110 to 480 volts available

Other power options quoted upon request