

METROLOGICAL TESTS

Compact profilometer

NANOVEA
PS50

Nanovea PS50 is a contact-less profilometer, suitable to scan profiles and areas of a surface by correlation of a x-y position of a moving sample table, with a z reading of a chromatic confocal sensor.

Chromatic confocal technique uses white light filtered through a series of lenses with high degree of chromatic aberration.

As a result, different wavelengths focus at different distances, creating a vertical measurement range.

When the surface of interest is within measurement range, a single wavelength is in focus, and is returned through the pinhole accessing the CCD detector, and determining a height reading in the instrument.

Resulting surface reconstruction is suitable for a variety of uses, spanning geometric control, roughness and texture measurement, morphology evaluation.



Specifications

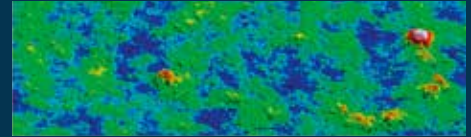
PS3 OPTICAL SENSOR

- Vertical range:
1100µm
- Can be extended up to 25mm
by optional sensors
- Working Distance:
12mm
- Lateral accuracy:
2µm
- Height repeatability:
< 5nm

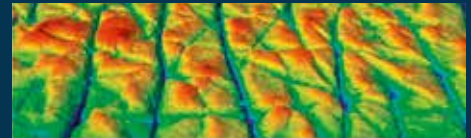
X-Y MOTORIZED TABLE

- Scan range:
50 x 50mm movement
- Resolution:
0,1µm
- Max sample weight:
8 kg

ROUGHNESS
& FINISH



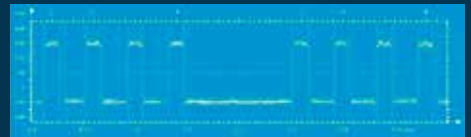
TEXTURE
& GRAIN



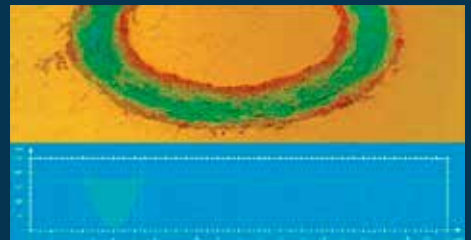
GEOMETRY
& SHAPE



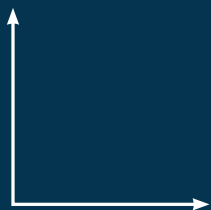
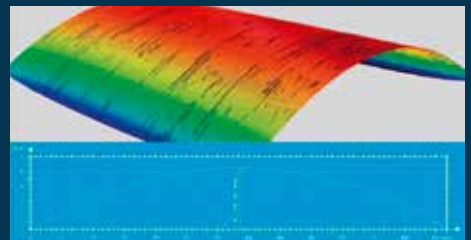
STEP HEIGHT
& THICKNESS



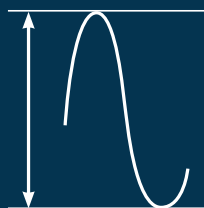
VOLUME
& AREA



PLATNESS
& WARPAGE



X - Y Scan Area
50 x 50 mm Motorized



Height Range
110 µm to 25 mm



Desktop Dimensions
38 x 33 x 43 cm



Scan Speed
20 mm/s