



OPTIMET

OPHIR

A Newport Corporation Brand

Steel Sample Scan

Executive Summary

Optimet's ConoProbe MK10 with a 25 mm lens was used to scan a steel sample. The main industrial application during the scanning is related to the surface planarity error.

1. Optimet's Advantages over Other Technologies:

1. Unique collinear technology
2. Capability to measure sharp angles in minimum clearance
3. High lateral resolution
4. High sampling rate with no need for averaging

2. Application Description

Steel sample scanning using Optimet's ConoProbe MK10 with a standard 25 mm lens

Test settings:

- Measurement rate: 9 kHz
- X-step: 50 μm
- Y-step: 50 μm
- Laser power: 12

3. Results and Observations

Sample

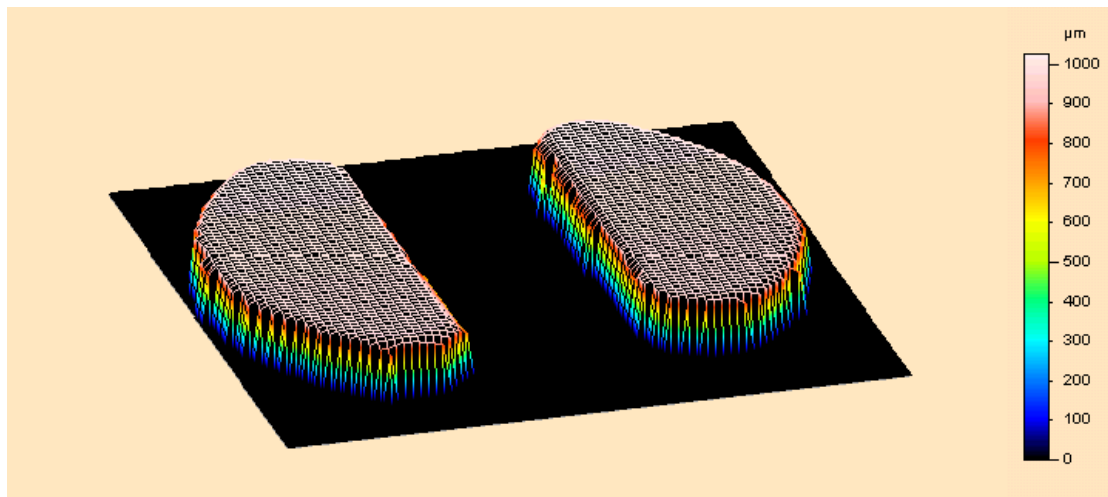


Figure 1 – 3D representation of the sample



OPTIMET

OPHIR

A Newport Corporation Brand

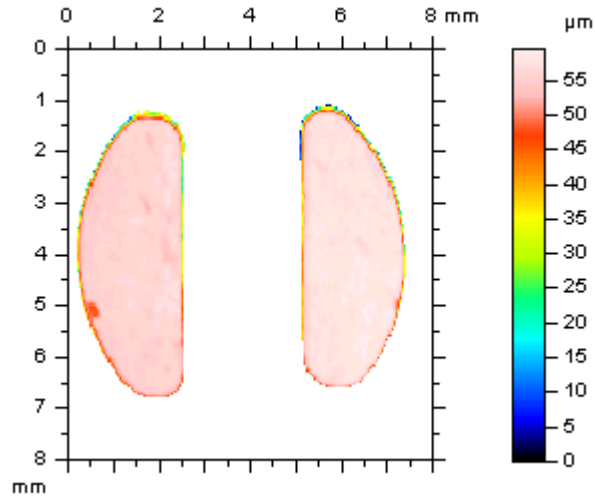


Figure 2 – Sample after leveling left surface

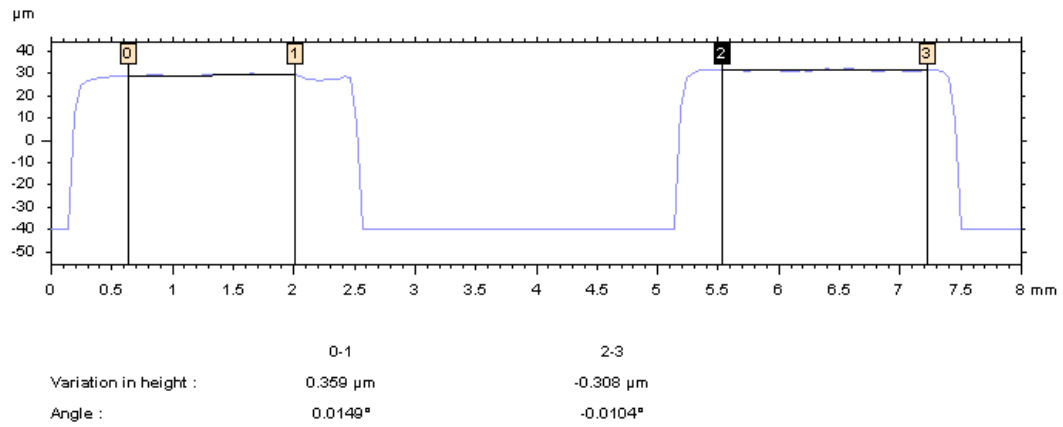


Figure 3 – Selected X profile

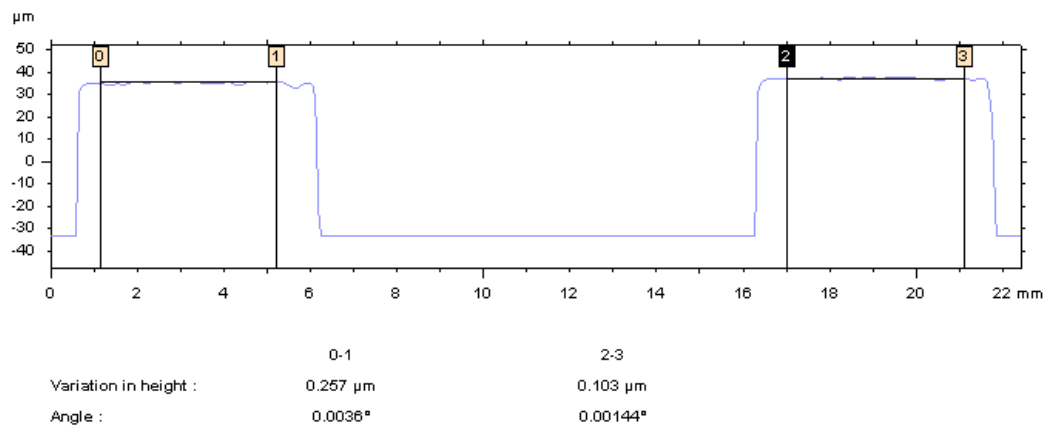


Figure 4 – Y-profile of both paths



OPTIMET

OPHIR

A Newport Corporation Brand

4. Data:

| Parameter | Value |
|--|--------------|
| Reflective/Diffusive/Transparent/Translucent | Diffusive |
| Working Range (mm) | 0.7 |
| Precision (μm) | 1 |
| Stand Off (mm) | 14 |
| Max. Data Rate (Hz) | 9K |
| Lateral Resolution(μm) | 4 |
| Z Resolution | - |
| Application Category | - |