

Metallic Plates Scanning

Executive Summary

Optimet's ConoProbe MK10 with a 25 mm focal lens was used to scan metallic plates. The tests were performed only to demonstrate measurement capability. Two metal plates were scanned using talc powder with optimal results.

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

Scanning of two metallic plates using Optimet's ConoProbe MK10 with 25 mm focal lens.

2.1 Method

Test Settings:

Sample A

- Measurement rate: 9KHz
- X-step: 4.8 μm
- Y-step: 100 μm
- laser power: 15

Sample B

- Measurement rate: 9KHz
- X-step: 4.8 μm
- Y-step: 100 μm
- laser power: 11

3. Results and Observations

Sample A

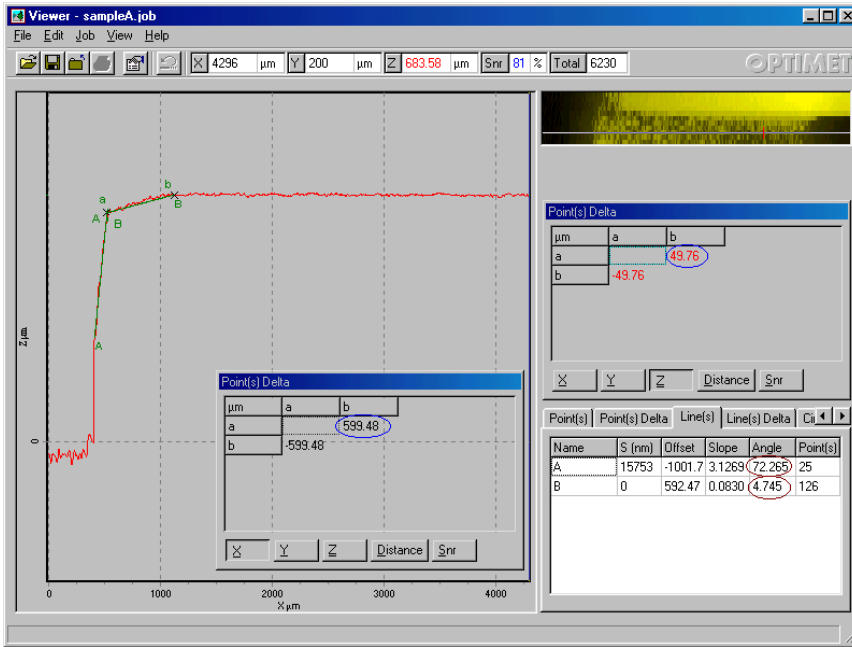


Figure 1 – Sample A – X profile

Name	Our results	Specification parameters
A-A	Angle 4.75°	Angle 6°
B-B	Angle 17.7°	Angle 15°
a-b	Distance 49.76 μm	Distance 60 μm

Table 1 – Sample A – results comparison

Sample B

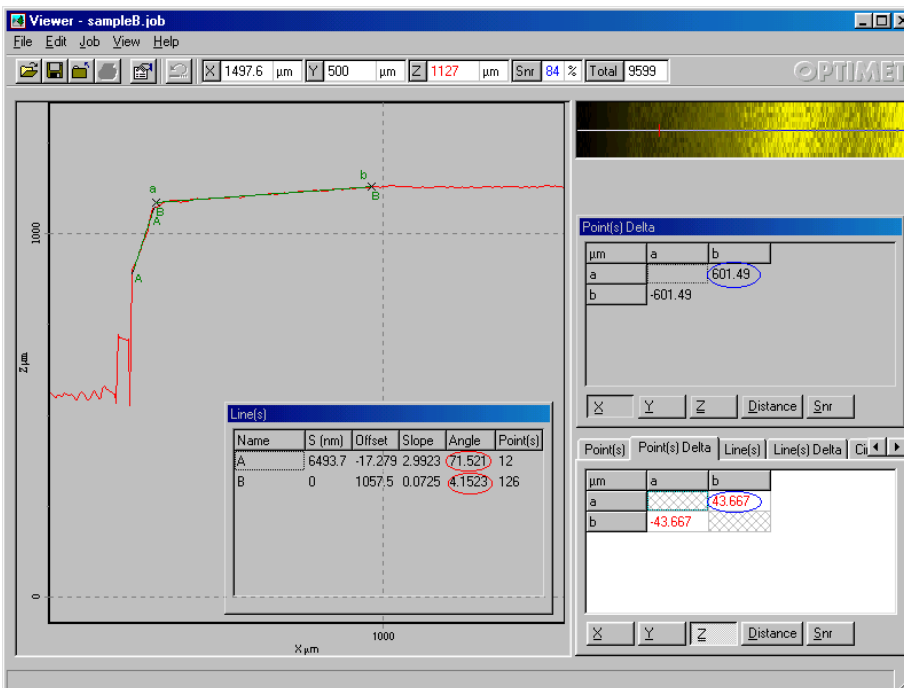


Figure 2 – Sample B – X profile

Name	Our results	Specification parameters
A-A	Angle 4.15°	Angle 6°
B-B	Angle 18.5°	Angle 15°
a-b	Distance 43.7 μm	Distance 60 μm

Table 2 – Sample B – results comparison



OPTIMET

OPHIR

A Newport Corporation Brand

4. Data:

Parameter	Value
Reflective/Diffusive/Transparent/Translucent	Reflective
Working Range (mm)	1.8
Precision (μm)	3
Stand Off (mm)	15
Max. Data Rate (Hz)	9kHz
Lateral Resolution	-
Z Resolution	-
Application Category	-