



M3 Nanoindentation

P3 Roughness

T3 Wear

N3 SPECS

M3

Input

Loading Options (Nano) 5mN, 10mN, 20mN, 50mN, 100mN, 200mN, 400mN
Loading Options (Micro) 2g, 5g, 10g, 20g, 50g, 100g, 200g

Output

Displayed Data Hardness, Young's Modulus
Export Format csv

Sensor

Load Range 400mN (Nano) / 2N (Micro)
Load Resolution (Theoretical) 0.03 μ N (Nano)/ 0.30 μ N (Micro)
Load Noise Floor 10 μ N / 50 μ N
Depth Range 250 μ m
Depth Resolution (Theoretical) 0.003nm
Depth Noise Floor 0.5nm

Base

Motorized Stages X, Z
Stage Travel 40mm
Stage Resolution 5 μ m
Stage Accuracy 20 μ m

P3

Input

Scan Area Options 1x1, 2x2, 3x3, 4x4, 5x5, 10x10, 15x15 (mm)
Step Size 1x1, 2x2, 5x5 (μ m)

Output

Displayed Data Roughness, Heightmap Image
Export Format pdf

Sensor

Optical Pen Range 300 μ m
Optical Pen Resolution 8nm
Optical Pen Vertical Accuracy 60nm
Optical Pen Lateral Resolution 2.6 μ m

Base

Motorized Stages X, Y
Stage Travel 40mm
Stage Resolution 5 μ m
Stage Accuracy 20 μ m

T3

Input

Loading Options (Nano) 5mN, 10mN, 20mN, 50mN, 100mN, 200mN, 400mN
Loading Options (Micro) 2g, 5g, 10g, 20g, 50g, 100g, 200g

Output

Displayed Data Wear rate, depth vs. time
Export Format csv

Sensor

Load Range 400mN (Nano) / 2N (Micro)
Load Resolution (Theoretical) 0.03 μ N (Nano)/ 0.30 μ N (Micro)
Load Noise Floor 10 μ N / 50 μ N
Depth Range 250 μ m
Depth Resolution (Theoretical) 0.003nm
Depth Noise Floor 0.5nm

Base

Motorized Stages X, Z
Stage Travel 40mm
Stage Resolution 5 μ m
Stage Accuracy 20 μ m