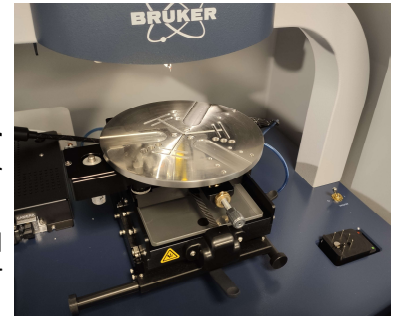
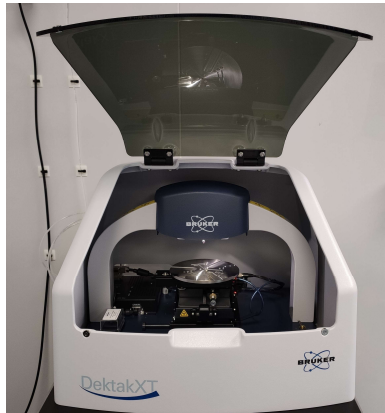


Manufacturer
Bruker

Model
DEKTAK XT



Profilometer



Surface topography measurements

The mechanical profilometer DEKTAK XT is used to measure surface topography electromechanically by moving a sample below a diamond-tipped stylus with a specific contact force, depending on the material being measured.

It allows:

- Step height measurement
- 2D roughness quantification
- Feature dimension analysis

Technical specifications

- Sensor head: low inertia LIS-3 on a high stability arc that allows ultra-low noise measurements
- Anti-vibration table and anti-acoustic cover for high resolution measurements
- 4-inch manual stage with X-Y positioning over 100 mm, 360° of rotation and sample tilt correction
- Scan Length Range: up to 55 mm on an optical flat glass ($\lambda/10$ quality), which assures reproducible baseline
- XY Resolution: controlled by the scan speed
- Vertical Range: from 1 nm to 1 mm, with 1 Å maximum resolution
- Variable intensity illumination for viewing samples with differing reflectivity
- High-resolution color camera (3.1 Mpx) with 8x zoom and a maximum FoV of 2.2 mm
- Stylus radius: 0.7 μm , 2 μm , 5 μm and 12 μm
- Stylus tracking force: 1-15 mg

Available software:

Vision64

- Up to 20 analytical functions per scan, such as analysis of roughness, waviness, step height and surface stress determination
- Measurement on image
- Integrated database to work with statistics and multiple point measurements

