Measurement of: Thickness of the thin film

Equipment: Stylus based surface profiler (M/s AEP Technology Inc.,

USA, Model: NanoMap 500ES) - 2

Property Measured : Thickness of samples measured by measuring the step height between film and substrate.

Photograph:



Basic Principle: A contact profilometer uses a diamond stylus, which is moved vertically and laterally in contact with the sample for a specified distance. It precisely measures small variations in stylus displacement as a function of position. This technique is a real direct measurement of surface height or thickness of the sample.

Capabilities:

Maximum scan length: up to 200 mm

Stylus force: 1 – 15 mg

Sample viewing: Color camera with selectable magnification

Thickest sample capacity: > 20 mm

Sample size: 5 mm x 5 mm

Sample Requirement: Minimum 5 mm x 5 mm with sharp step and should be optically flat