

# METROLOGY

## Nanoindenter

Manufacturer: Bruker

Model: Hysitron TI Premier



## General Description:

The Nanoindenter is an instrument for delivering quantitative nanomechanical properties of different materials from metals to biological tissues. It is often used for determining the hardness and Young`s modulus of thin films. Additionally, it also has the features of topological imaging, nanoscratch tests and nanowear tests. The instrument can be equipped with a high temperature stage if mechanical properties and deformation behaviour as a function of temperature are of interest.

## Key Specifications:

- Nanoindentation load and displacement range: 75 nN to 10 mN and 0.2 nm to 0.5 µm.
- Topological scan volume: >60 µm x 60 µm x 4 µm.
- High temperature stage: the sample can be heated up to 400 °C.
- Quasi-static and dynamic continuous measurements.
- Mapping of modulus and hardness distribution across a surface.
- Quantifying scratch resistance, thin film adhesion and friction coefficient measurements.

<b>Availability</b>	For use by qualified personnel only.
<b>Location</b>	Cleanroom C8 Europastraße 12 9524 Villach
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