

Laboratory of micro – nanoindentation

(high precision hardness testing at very low loads)

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Nanoindenter Agilent G200

- High precision of measurement
- Testing from 0.05 mN to 10 N
- Dynamical mechanical analysis
- Tip scanning
- Microscratch testing
- High temperature testing up to 500°C

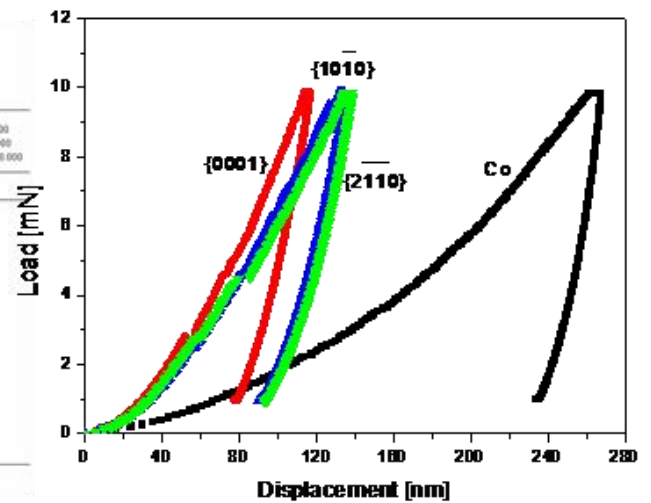
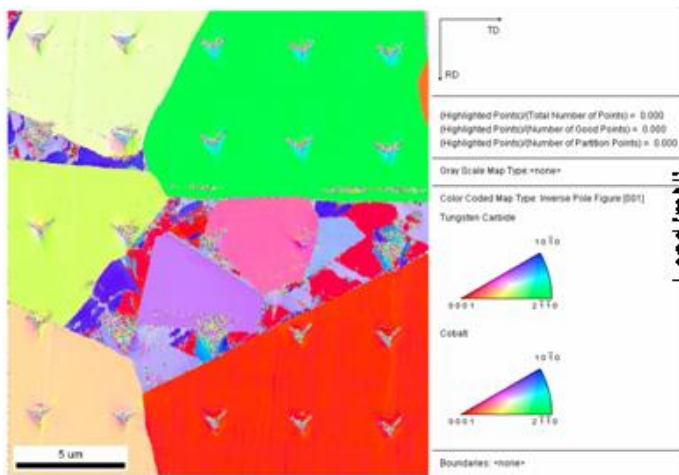


Micro-nano indenter TTX NHT

- Various tip geometries
- Loading resolution 40 nN
- Testing from 0.1 to 500 mN
- Dynamical mechanical analysis
- Indentation fatigue and creep
- Wide range of loading modes

Applications:

- Measurement of hardness, elasticity, creep, fatigue, elasto-plastic phenomena
- Characterization of thin coatings, films, and layers
- Mapping of surface mechanical properties
- Characterization of mechanical properties of individual phases in composites
- Measurement of anisotropy of mechanical properties of grains/crystals



Indents in individual grains in WC – Co (EBSD) system and load-displacement dependencies in WC grains and Co binder.