

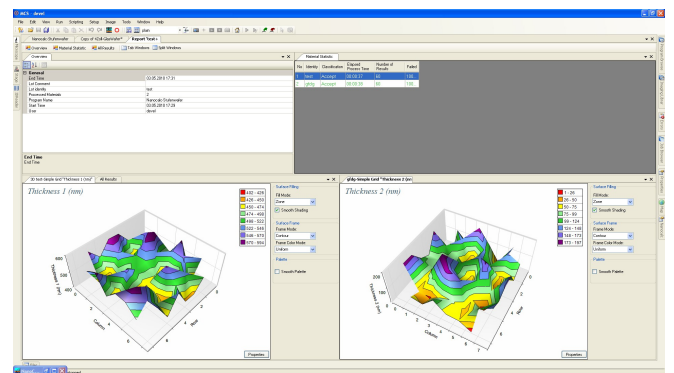
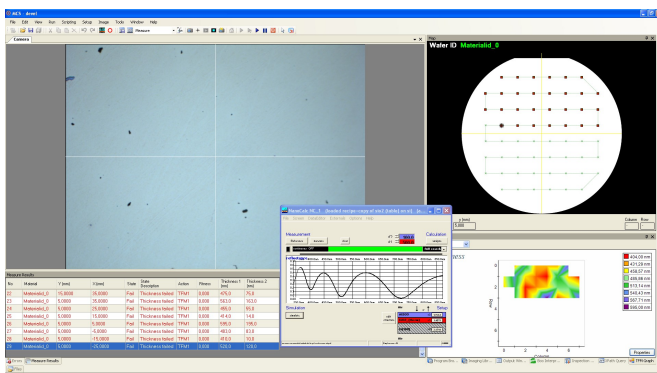
MCS TF

Fully Automatic Thinfilm Measuring Station

Robust solution for your thinfilm measuring tasks in production and development. For all optical transparent and semitransparent materials. Reliable measurement even on multilayers (layer thickness 50nm to 50µm).



- **fast, contact-free, reliable**
- MCS Software Suite: modern software for metrology and inspection
- Precise positioning on smallest structures via highly efficient pattern alignment
- Comprehensive layer- and material catalogue is included in the scope of delivery
- automatic 2D/3D layer thickness mapping, layer thickness profiles
- Fiber coupled spectrometer (no moving parts, no wear)
- 400-800 nm spectral bandwidth
- smallest size of measuring point 4µm
- automatic performance microscope with motorized xy cross table
- laser autofocus for high reproducibility also on thin layers
- robot wafer transport: fast, secure and contamination free
- wafer diameter from 100mm to 300mm (larger substrates on request)
- cleanroom class 1 compatible



MCS TF

Areas of Application IC and MEMS

- measuring of dielectrical layers on wafers, glass, sapphire, III-IV semiconductors
- (SiO₂, Si₃N₄, resist coated layers, ITO...)
- very thin metallic layers on wafers or glass (Ag, Al, Au, Ti, ...)
- SOI silicon thickness measurement (Silicon On Isolator)
- thickness measurement of thinned silicium wafers
- thickness measurement of Si membranes resist layer thickness uniformity on semiconductor masks
- DVD/CD layer
- lens coating (anti scratch and anti reflex coating)
- DLC (Diamond Like Carbon) hard coatings
- film thickness
- air gap between mask and wafer within exposure units
- very thick photo resists in the field of micromechanics (100µm bis ca. 250µm)
- theoretical layer simulation measuring of multilayers
- 3D-thickness profile processing

Options:

- MCS-CD structure width measurement
- Overlay control
- MCS-IS inspection and review (KLA - KLARF Daten)
- MCS-FLY fast image capture via continuous stage movement, inspection & grabbing "on the fly"
- Whitelight Interference WLI and Phaseshift Interferenz PSI
- (VSI vertical scanning interferometry, PSI phase shift interferometry)
- 3D surface testing



ProMicron
Bachmühlweg 24
74366 Kirchheim/Neckar
Germany

Internet www.promicron.de
Email info@promicron.de

Phone (+49 7143) 4056-0
Fax (+49 7143) 2086447