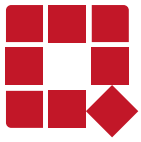


# kaloMAX NT II S3

Spherical cap grinder for the determination of layer thicknesses for up to three samples at the same time

- Measurement of layer thicknesses and layer systems
- Measurement independent of coating/substrate combination
- Uncomplicated handling
- Precise measurement without calibration
- Significant time saving through parallel testing of several samples

coating analysis



# kaloMAX NT II S3

Spherical cap grinder for the determination of layer thicknesses of single layers and layer systems

## Method:

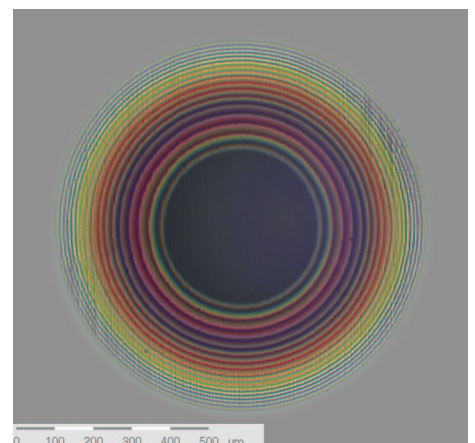
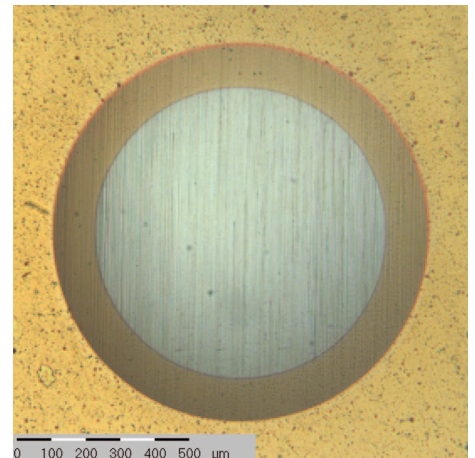
For a wide variety of samples, coating thickness measurements with calotte grinders has been an established method for many years. A hardened steel ball moistened with an abrasive slurry is set in motion by the motor-driven shaft, which grinds a spherical cap in the sample – the so-called calotte. If the coating is ground completely through, each individual layer can be identified under the microscope as a concentric ring (flat sample) or ellipse (cylindrical sample). By determining the diameters (flat sample) or the long diagonals (cylindrical sample), all layer thicknesses can be calculated with the evaluation software kaloSOFT. The geometric measurement provides results with high accuracy for coatings in the  $\mu\text{m}$  range.

## Advantages:

- material-independent
- fast (grinding time only a few seconds to a few minutes)
- no preparation works
- low error rate
- traceability
- no specialized personnel required
- high accuracy

## Area of application:

Coating/substrate combination	material independent
Layer thicknesses	approx. 0.3 - 50 $\mu\text{m}$
Calotte diameter	approx. 0.1 - 3 mm
Measurement accuracy	1 - 5 % (depends on the surface roughness)



## Technical Data:

Range of application:	
Clamping range for plane samples	35 mm (other dimensions on request)
Clamping range for round samples	3 - 25 mm (other dimensions on request)
Positioning range cross table	25 x 25 mm
Inclination of sample level	60°
Color display	320 x 240 Pixel
Speed of rotation	50 - 1000 $\text{min}^{-1}$
Grinding time	freely selectable
Measurements	300 x 295 x 235 mm
Power supply	85 - 264 VAC, 47 - 63 Hz
Weight	approx. 8 kg

## Options:

- Detachable vise
- Abrasives of different grain sizes for different applications
- Microscopes with high-resolution USB 3 cameras
- Evaluation software kaloSOFT
- Clamping profiles adapted to samples
- All-in-one solutions
- Automated versions

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