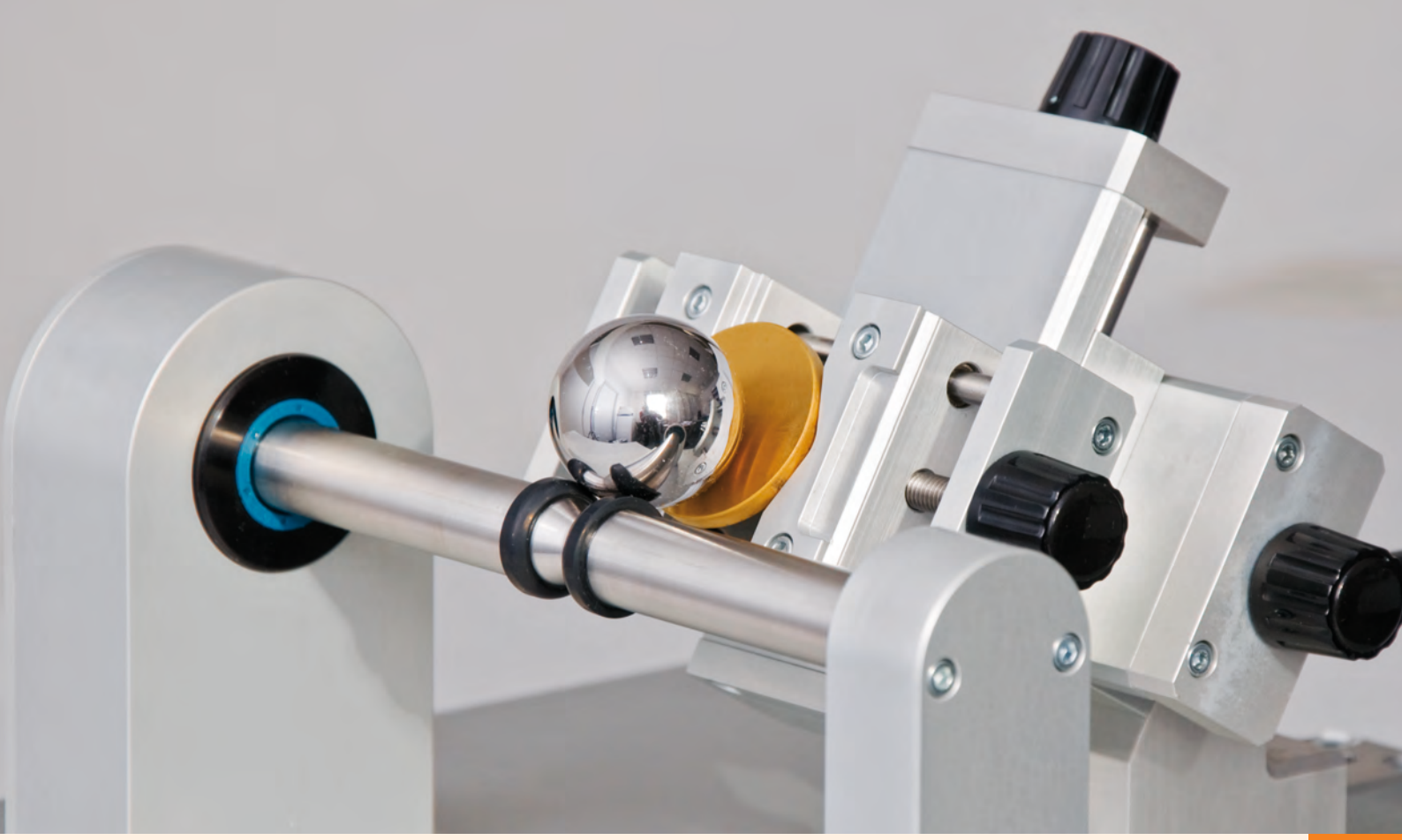


kaloMAX II

Spherical cap grinder for the determination of layer thickness

coating analysis

- Measurement of single layer and layer systems
- Measurement independent of the material
- Comfortable operation
- Precise measurement without calibration

BAQ GmbH • Hermann-Schlichting-Str. 14 • D-38110 Braunschweig (Germany) • Phone: +49 (0)5307 95102-0 • www.baq.de

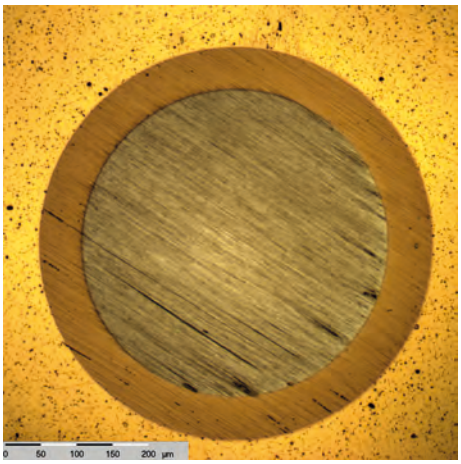
kaloMAX II

Spherical cap grinder for the determination of layer thickness of coatings and layer systems

The ball crater test is a well established method for the determination of layer thickness. With a rotating steel ball and an abrasive slurry, a spherical cap is ground through the coating into the base material of the sample. When examined with a microscope, the layer/base material interface appears as a circle or, in case of a multilayer coating, a system of concentric circles. The layer thickness can be calculated from the diameters of these circles and the diameter of the grinding ball.
This purely geometrical method gives highly accurate results even for layer thicknesses in the range of micrometers.
Evaluation and documentation can be further simplified by the software kaloSOFT and a camera-equipped microscope.

Range of application:

Layer thicknesses	approx. 0.3 – 50 µm
Diameter of the spherical cap	approx. 0.1 – 3 mm
Measurement accuracy	1 – 5 % (dependent on surface roughness)



Characteristics:

Ball diameter	15 – 40 mm
Clamping range for samples:	
Rectangular disc:	4 – 50 mm
Round disc:	4 – 50 mm
Shaft:	Ø 3 – 20 mm (other dimensions on request)
Cross table travel	25 x 25 mm
Incline of sample level	60 degrees
LED displays (14 mm height)	4 digits number of revolutions 4 digits runtime 1 digit program number
Number or revolutions of the drive shaft	100, 200, 300, 400, 500, 600, 700, 800, 900, 1000, 1100, 1200 1/min
Running periods	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 70, 80, 90, 100, 110, 120, 150, 180 s
Power supply	85 – 264 VAC, 47 – 63 Hz
Dimensions	300 x 295 x 235 mm (w / d / h)
Weight	approx. 8 kg

Options:

- Detachable vice
- Grinding paste of various granulation
- Various microscopes equipped with high resolution cameras
- Evaluation software kaloSOFT

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