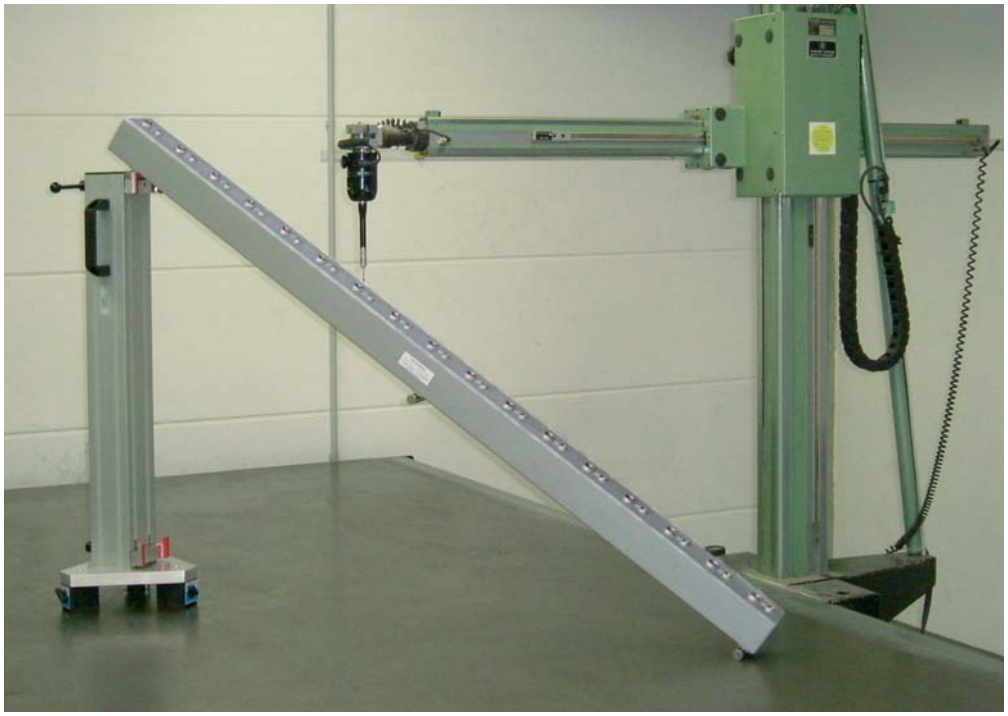
Artefact for monitoring the accuracy of medium-sized coordinate measuring machines (Articulated-arm CMM and laser tracker)

KOBA-Cone Bar



DELIVERY PROGRAMME AND SERVICE:

- gauge blocks
- gauge block accessories
- step gauge KOBA-step
- sphere plate KOBA-check
- ball bar
- optical scale KOBA-optima
- thread gauges
- feeler gauges
- plug gauges
- ring gauges
- precision parts
- KOBA-calibration service
- DKD-calibration laboratory for length measurements

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Made in Germany

Catalogue No. 6750/E/01/2009

Properties and design features

- Carrying body of long-term stabilized CFK material (Carbon Fibre)
- Hermetically sealed on all sides
- Protected against humidity by special coating
- Measuring range 20 x 100 mm (2000 mm)
- Extended measuring range up to 12,000 mm by evaluation of coupling measurements in combination with programme iti-check
- There are different probing elements for individual measurement tasks:
  – ceramic spheres for use with any CMM with axes > 2000 mm
    or volumetric diagonals > 3000 mm
  – small conical rings of stainless steel for flexible-arm type CMM with rigid probes (Faro, Romer, CimCore ....), for optical systems with tactile probing (Krypton: Space probe, GPS-system: Vector probe ....)
  – large conical rings of stainless steel for laser tracker with 1.5" spheres (Faro, Leica ....)
- With three stainless supporting rollers
- With calibration certificate
- in-house-calibration
  for spheres: U_{95} = 1 µm + 1.5 µm x L/1000 mm
  for cones: U_{95} = 2 µm + 1.5 µm x L/1000 mm

Accessories

- Stand (standard) with two quick supports (for fixation of the cone bar to the supporting rollers for 20°, 25°, 30°, 35° inclined or vertical assembly, with three switchable magnetic bases
- Supplementary stand with support only at the top for 35° inclined assembly, in combination with standard stand for horizontal fixation of the cone bar in a height of approx. 1 m (of advantage in case of horizontal coupling measurements for checking large measuring volumes), with three switchable magnetic bases
- Aluminium boxes for the cone bar and stand

Recommended scope of supply for user of broad spectrum of CMM

For monitoring the accuracy of CMM according to VDI/VDE 2617 or ISO 10360-2:

Use cone bar:

- For Leica laser tracker up to 12,000 mm length
- For articulated-arm type CMM (e.g. Faro, Romer, CimCore)
- For medium-size CMM (approx. 3000 x 2000 x 1500 mm) with cone bar (cone bar with supplementary set of 21 high-precision ceramic spheres) – in combination with evaluation software iti_Check (identical to Wenzel_Check)