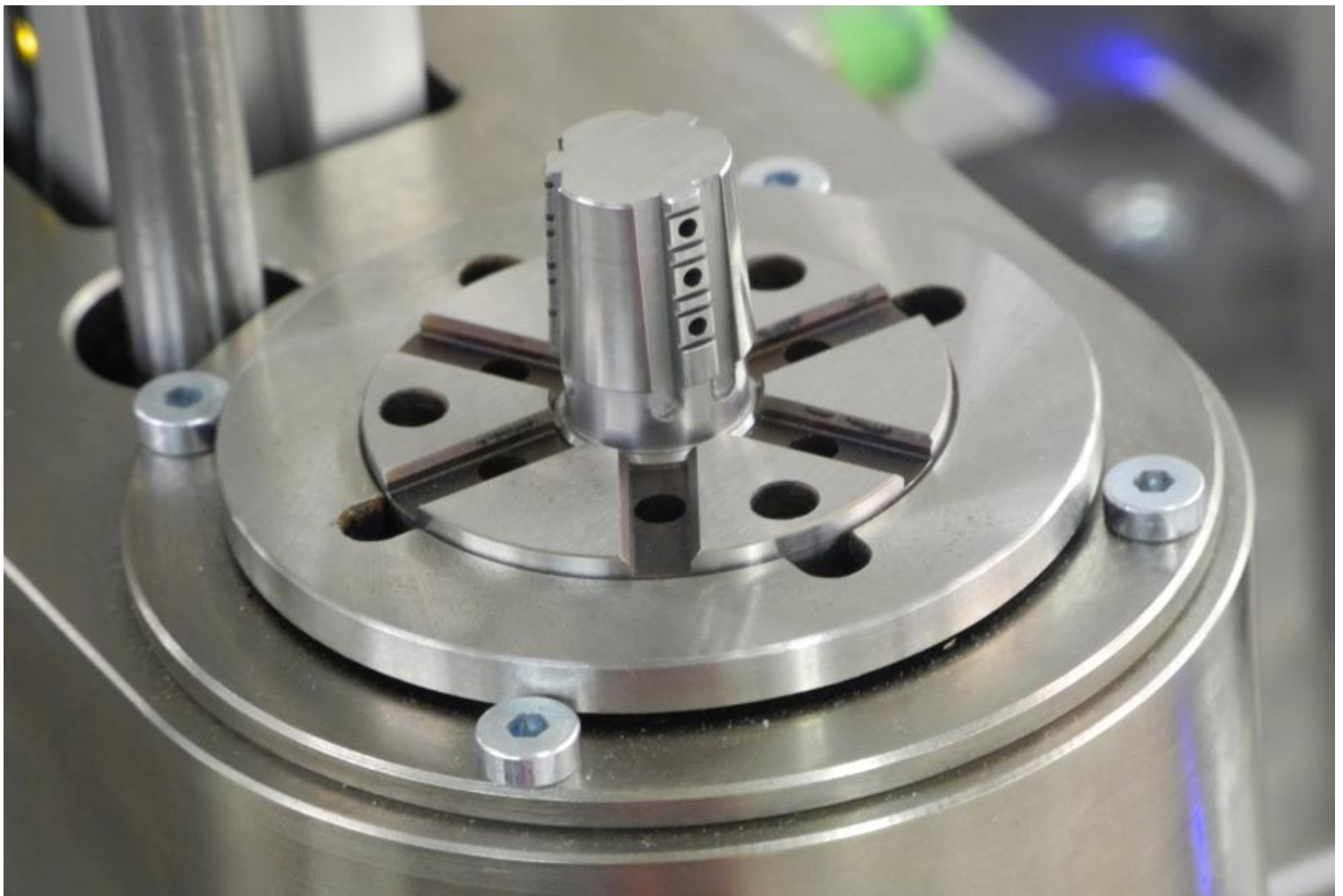




**ENGINEERING**  
*by Messtechnik*

**Measuring device for inner - cone**

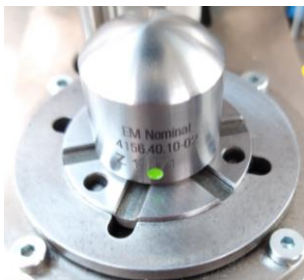


# The universal inner cone measuring station

The use of air measurement technology in combination with VARIOsoft offers a universally applicable measuring device for a variety of different inner cones.

An overview of the advantages:

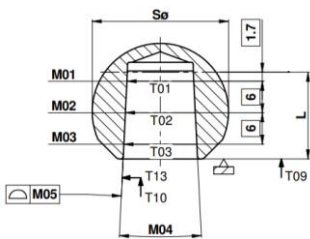
- Short measuring times with highest accuracy
- For 100% control directly next to the processing machine
- Automatic changeover for different workpieces
- Integrated VARIOsoft for measurement data analysis and documentation



Air gauge / Setting master



Straightness measurement



Ex. definition of characteristics

## Diameter, cone angle and roundness

The workpiece is now positioned fully automatically via the support in such a way that an air gap is created and thus the part can be rotated. The air gap is searched for via a servo axis in combination with the piezo converter of the air nozzle in such a way that the air measurement takes place in the linear characteristic curve.

Measuring time: approx. 12 seconds (without workpiece handling)

The two characteristics diameter and cone angle are calibrated via the nominal master.

## Straightness measurement

The air probe is installed slightly recessed in the mounting cone. This enables non-contact measurement of straightness. The air measuring nozzle moves vertically downwards along the cone.

Measuring time: approx. 6 seconds (without workpiece handling)

The straightness measuring device does not require calibration.

Characteristic	Nominal (mm)	UT (µm)	LT (µm)	Tol.- Field (µm)	Probe	Remarks
M01	Ø 12.87	25	-25	50	P01	Inner diameter
M02	Ø 13.46	25	-25	50	P02	Inner diameter
M03	Ø 14.06	25	-25	50	P03	Inner diameter
M04	5.7395°	0.1522	-1522	0.3044	P01, P03	Angle
M05	0	20	0	20	P01 - P03	Cone shape



Typical workpieces

### Options:



Barcode scanner for order entry and selection of the respective inspection plan



User recognition with fingerprint reader. Automatic assignment of the user interface to the various programming levels in VARIOsoft.

