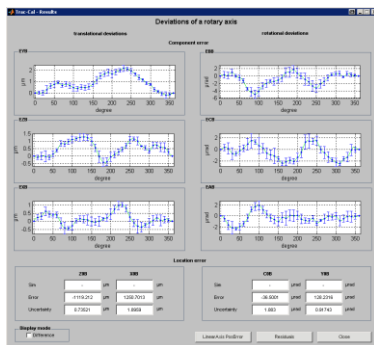


# TRAC-CAL

## ▶ MODULE ROTARY AXIS CALIBRATION



Illustration of a measurement



Display of the errors of the rotary axis

- ▶ WITH THE MODULE ROTARY AXIS CALIBRATION IT IS POSSIBLE TO DETERMINE SYSTEMATIC ERRORS OF ROTARY AXES HIGHLY ACCURATE, ADDITIONAL TO THE ERRORS OF LINEAR AXES IN TRAC-CAL BY THE SAME MEASUREMENT PRINCIPLE WITHOUT ADDITIONAL HARDWARE.

### MEASUREMENT PRINCIPLES

Like for linear axes the LaserTRACER doesn't need to be aligned precisely. At user defined interval positions of the rotary axis, the interferometer is doing length measurements. After a few position changes of the LaserTRACER on the rotary table it is possible to compute the positioning errors of the rotation, squareness in both directions, axial motion, radial motion in both directions and tilt motion in both directions.

### FIELD OF APPLICATION

Check and calibration of rotary tables and swivel axes of machine tools and measuring machines.

The method is especially suitable for big rotary axis.

### YOUR BENEFITS

- ▶ High accurate determination of angular positioning, squareness, axial, radial and tilt motion in every direction
- ▶ Adaptable to different machine types
- ▶ Low purchase cost because no additional hardware is necessary
- ▶ Forecast of the achievable accuracy (via simulation)
- ▶ Automatic generation of the required machine control code for the measurement
- ▶ Direct feedback on the machine repeatability and the quality of the acquired data during the measurement
- ▶ Automatic evaluation of the measurements and graphical visualisation
- ▶ Qualitative validation of the results by simulated performance evaluations
- ▶ Output of a detailed report
- ▶ Error maps in different formats

**Order number 3120**

As of May 2013. Subject to change!

**ETALON**

APPLIED TRACEABILITY

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