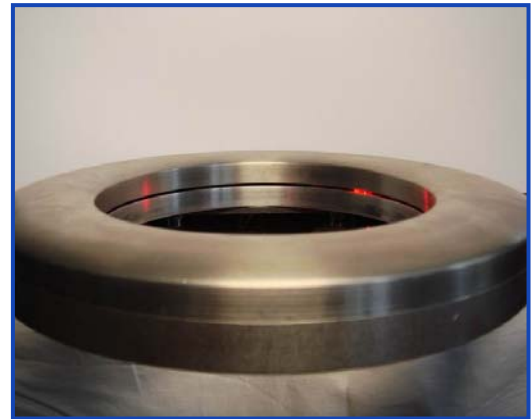


RotoLAB surveys and calibrates robot tools in order to guarantee a constant production quality. It is possible to measure every almost rotation-symmetric tool.

Due to the short testing time of 4 seconds (minimum), a continuous survey of the dimensional stability of the tool is made possible. If, in the course of any testing the limit values are exceeded, the calibration will start automatically.

During the calibration, geometric variations of the tool are registered and the tool data are corrected.

There are two different methods for the correction of the tool data. The correction may be effected either automatically (in this case no operator's entry is required) or by manual entry of the operator.



## Technical data

- 3D-measurement
  - 2D coordinate measurement (x,y)
  - 1D bisection procedure (z)
- Relative repeat accuracy < 0.03 mm
- Data communication via RS-232 on Com-Port 3
- Control of RotoLAB by KRL Program

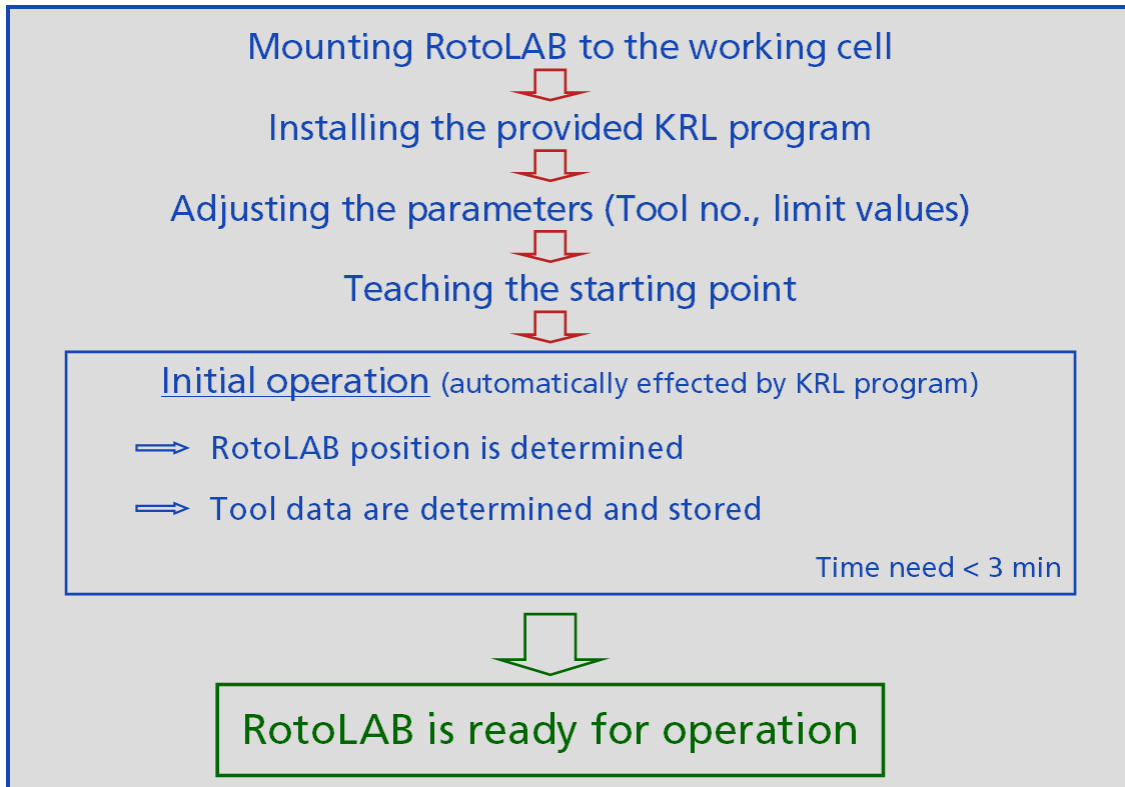


- Measurement range: 75 mm inside the diameter
- Splash-proof casing
- Dimensions: b 190 mm, t 245 mm, h 23 mm
- Horizontal mounting

## Tool measurement

- Determination of the geometric variation of robot tools in 3 dimensions
- Testing time 4 sec. (approach and departure movements of the robot not included)
- Calibration time < 30 sek.
- Calibration accuracy of the tool < 0.2 mm
- Simple and flexible adjustment of the measuring parameters and the measuring process
- Measurement of every almost rotation-symmetric tool possible
  - Minimum diameter 0.8 mm
  - Maximum diameter 50 mm
- Pincer tools with a working stroke of no less than 24mm
- Welding torch:
  - Determination of the z-value via object diameter (position of every single contour modification is detectable, e.g. passage welding rod – contact tip)
  - Determination of the centricity of the contact tip to the gas nozzle

Workflow Initial Operation



Workflow Measuring

