Additional Measuring Systems
And on-machine Measurement

One of important sources of workpiece inaccuracy is the machine tool structural deformation due to own weight, process forces or temperature effects. Another sources of errors result from the common strategy of measuring the workpiece geometry outside of the machine tool in different conditions than during machining.

RCMT has developed several systems for calibrating the machine tool before the machining process, for monitoring its condition online or for direct evaluation of the workpiece errors on the machine and calculating the compensation needed.

Main benefits include:

- Improved static positioning accuracy
- Improved path control accuracy
- Significantly improved geometric and dimensional workpiece accuracy
- Ability to align several machines working on one workpiece and compensate for their error.

RCMT system of workpiece on-machine measurement allows evaluating the workpiece errors and calculating the machining corrections directly on the machine.

The machine can be controlled by metrology software implemented in CNC as a coordinate measurement machine.

Inbuilt RCMT measurement system / laser tracker for contactless position measurements and evaluation of the machine tool static errors.