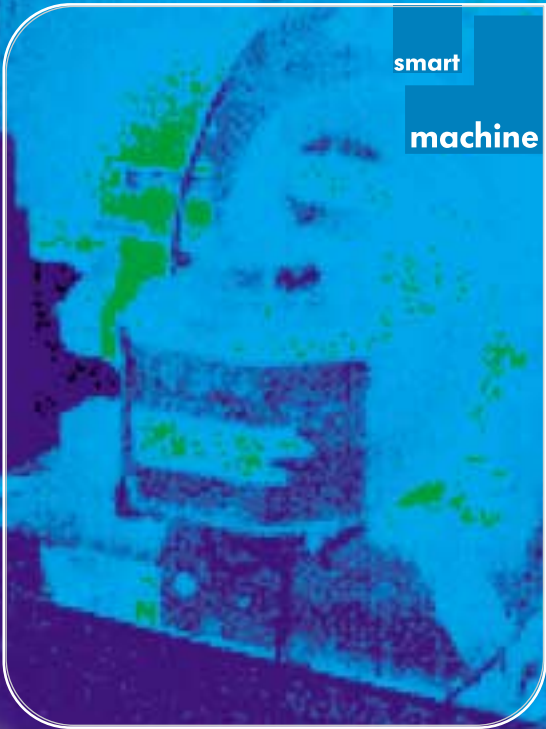
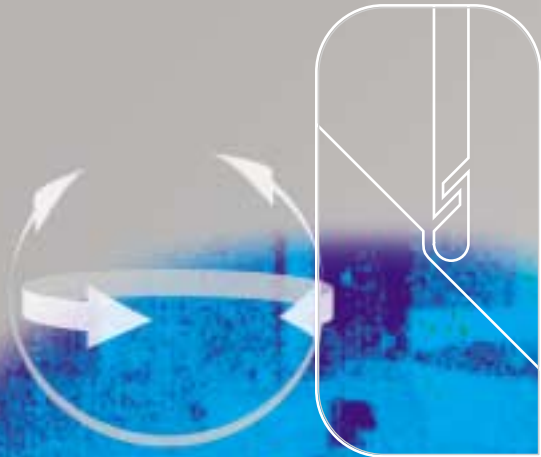
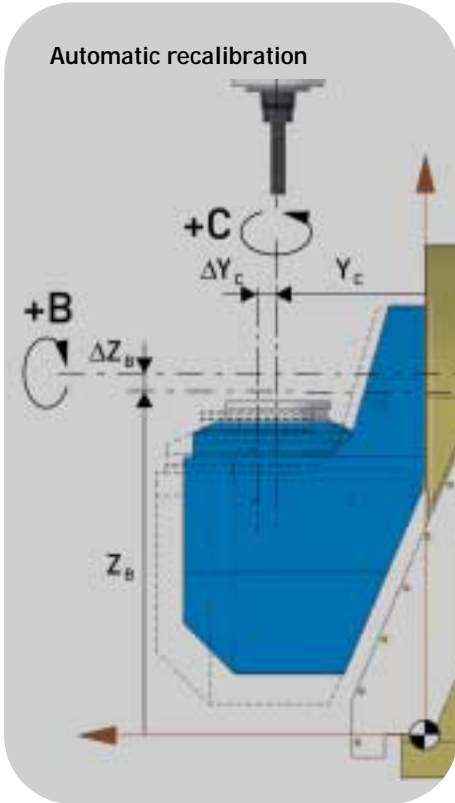


ITC 5X



smart
machine

Intelligent
Thermal
Control for 5 axis



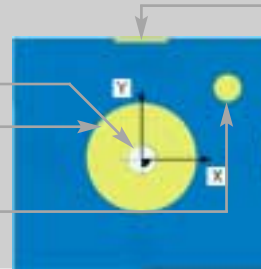
Possibilities for measurement

- on a reference pallet
- on the work table
- on the workpiece

Centre of rotation
Rotation axis

Type of measurement 1:
Hole/pin in the centre

Type of measurement 2:
Hole/pin eccentric



Type of measurement 3:
Reference surfaces
eccentric

Examples



Hole in the centre Reference pallet "MacroMagnum"



Hole outside the centre, reference pallet "Dynafix"



Hole in the centre on a workpiece

The ITC extension for 5-axis machines

ITC -5X is a supplementary module of the "Intelligent Thermal Control" for machines with a rotary tilting table or a tilting head and a rotary table. Due to constantly increasing machine powers, the thermal influences can no longer be prevented purely by means of the mechanical construction.

Despite exact compensation between the tool and the workpiece, the position of the rotation axis stored in the control system can change as a result of the heat drift.

This takes effect above all when working in swivelled levels. This is exactly where ITC-5X is used.

The functional principle

By means of a simple, automatic calibration cycle, the position of the rotary motion within the three-dimensional space is measured using measuring probes (option).

This can be registered on a reference pallet (option), on reference surfaces of the work table or on the workpiece. The measured position is stored automatically.

To ensure that ITC-5X is used correctly, a training course at your sales outlet is essential!

When using ITC-5X, working with an activated preset table is a must.

Your benefit

- Increase in the workpiece accuracy in swivelled and/or rotated machining applications (Cycle 19, Plane-Functions, M128)
- Compensation of external influences by means of recalibration
- Increase in the process safety when performing 5-axis machining applications
- Minimisation of standstill times (no manual measuring)
- Automatic recalibration in unmanned operation