

StuderControl

AUTOMATIC CONTROL MEASUREMENTS DIRECTLY ON THE MACHINE

With TouchPositioning, TouchControl and Multi-Control STUDER offers three tools for increasing productivity. Workpieces are controlled directly on the machine, the results are recorded and corrections are transferred to the control system.

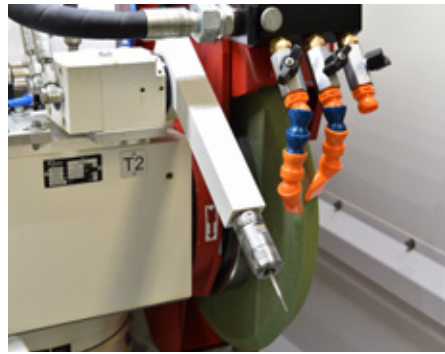
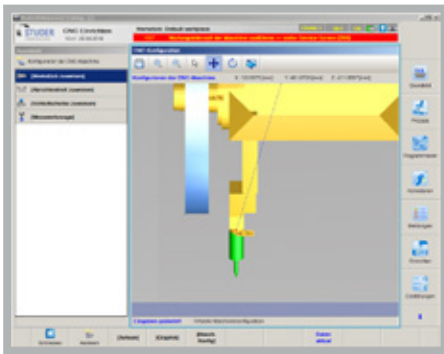
The logo for Studer, featuring a stylized white 'S' icon to the left of the word 'STUDER' in a bold, white, sans-serif font.

TOUCHPOSITIONING

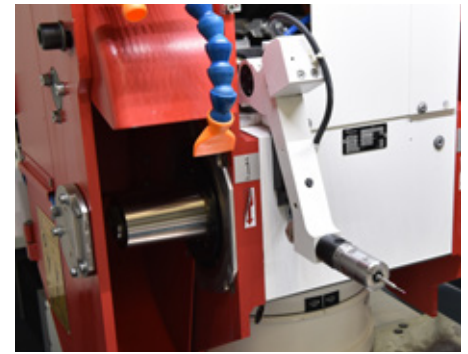
Prerequisite: Machine with a touch probe.

- **Length positioning** for the correction of deviations in the Z-direction (e.g. due to different centerdepths).
- **Circumferential positioning** for circumferential positioning of the workpiece or determination of a contour.
For machines with a touch probe parallel to the machining plane.
- **Length control measurement** For machines with StuderSIM operating system.

External grinding machines Touch probe perpendicular to the workpiece axis and at an angle or parallel to the machining plane.

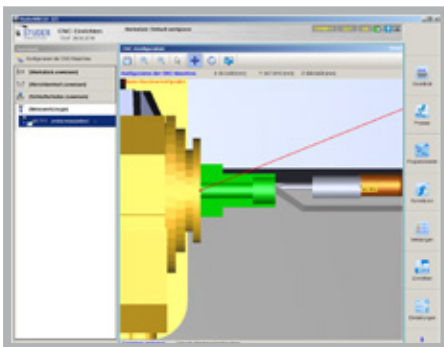


At an angle to the machining plane



Parallel to the machining plane

Internal grinding machines Touch probe parallel to the workpiece axis and parallel to the machining plane.



TOUCHCONTROL

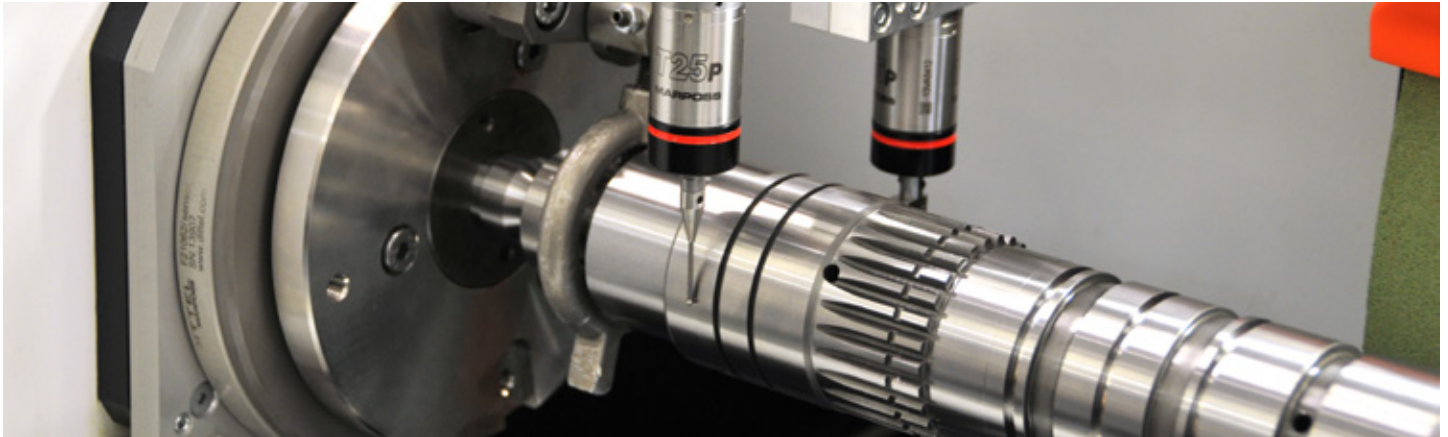
Prerequisite: TouchPositioning and touch probe parallel to the machining plane.

- **Flexible diameter and length control measurement**
For machines with StuderSIM operating system the length control measurement is already standard in the TouchPositioning.
- **Calculation of dimensional deviations**
Seat and tool specific on machines with StuderWIN operating system. Only tool specific on machines with StuderSIM operating system.
- **Logging of post-process control data**
(absolute control values). For machines with StuderWIN operating system.
- **Programmable cycle for automatic calibration of the touch probe to reference diameter or length**
For machines with StuderWIN operating system.

MULTICONTROL

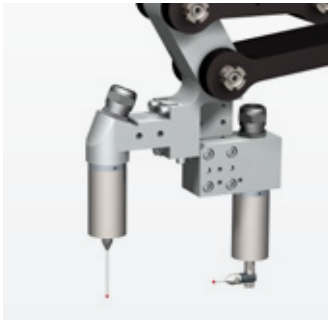
For post-process control measurements including active positioning functions.

Prerequisite: S33 with external grinding wheel in tool position T2 right and workhead MT4 or ISO50.



The following functions are possible, depending on the probe configuration:

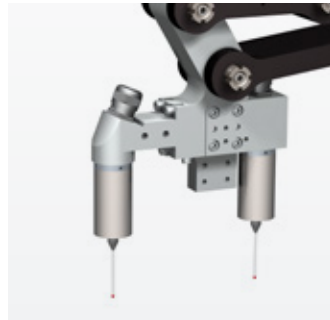
- **Length positioning** for the correction of deviations in the Z-direction (e.g. due to different centers).
- **Circumferential positioning** for circumferential positioning of the workpiece.
- **Flexible external or internal diameter and length control measurement**
- **Cylindricity control measurement**



Probe configuration A

for workpiece dia.
up to 70 mm (2.75")

- Length positioning
- Circumferential positioning
- External diameter
- Cylindricity



Probe configuration B

for workpiece dia.
50 to 100mm (1.95 – 3.9")

- Length positioning
- External diameter
- Cylindricity



Probe configuration C

for workpiece dia.
up to 280 mm (11")

- Length positioning
- Circumferential positioning
- External diameter



Probe configuration D

for workpiece dia.
up to 340 mm (13.4")

- Length positioning
- Circumferential positioning
- Internal diameter (bore depth
max. 8 mm [0.31"])

Probe configuration can be easily converted by the operator.

Repetition accuracy:

+/-0.001 mm (0.000,04")

for diameter and cylindricity control measurements with probe configuration A or B
or internal diameter with probe configuration D.

+/-0.005 mm (0.000,2")

for other functions and external diameter with probe configuration C.

Additional functions

- Calculation of dimensional deviations seat or tool specifically.
- Logging of post-process control data (absolute control values).
- Programmable cycle for automatic calibration of the touch probe to a reference diameter or length.
- MultiControl touch probe can also be used for QuickSet.



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ISO 9001
VDA6.4
certified

