

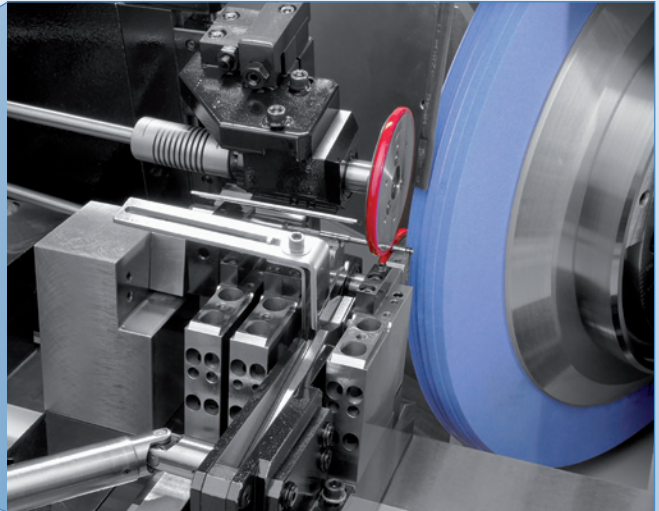
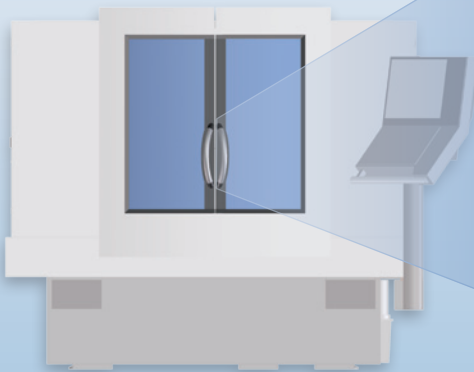
TSCHUDIN T25

- High-volume throughput with minimal space requirements
- Designed for standard processes in production grinding

TSCHUDIN T25

The small production cylindrical grinding machine

TSCHUDIN T25



FEATURES / AREAS OF APPLICATION

Small, economical and compact production grinding machine that has been pared down to the bare essentials for widest possible range of grinding solutions. The uncompromising integration of the handling system (keyhole solution) enables: individual linking of autonomous loading cells / no vibration influences from autonomous handling systems / minimal oil carry-over / semi-automation possible.

- Constructed for high economic efficiency
- Production applications for large-series and mass production
- Precise applications, e.g. injection parts, eccentric shafts, control valves etc.
- Match grinding, e.g. grinding of guide edges
- Process-oriented solutions
- Fanuc control

SPECIFICATIONS

Distance between centres	mm	400
Travel z-axis	mm	500
Rapid traverse	m/min	20
Resolution	µm	0,1
Travel x-axis	mm	400
Rapid traverse	m/min	10
Resolution	µm	0,1

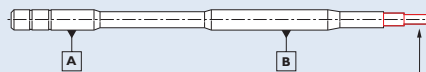
Grinding wheel	mm	500×80 (100)
Peripheral roller bearing speed	m/s	63 (80)
Motor output	kW	10
Machine space requirements		approx. 4 m ²



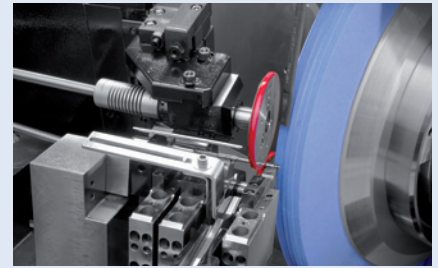
APPLICATIONS

PRISMATIC HOLDER GRINDING

- Grinding of rotation-symmetric components in PCD prisms
- Driven by 2 plastic rollers



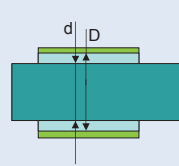
↗	The best circular run-out (A-B)
○	The best roundness
↔	Best form- and dimensional accuracy



CHUCK, FLANGE AND SHAFT COMPONENTS AUTO-PAIRING

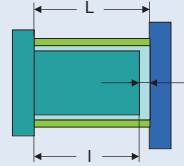
- Establish extremely precise play between two components

Cylindrical Diameter Matching



Play tolerance $\geq 1.5\mu\text{m}$

Length Matching

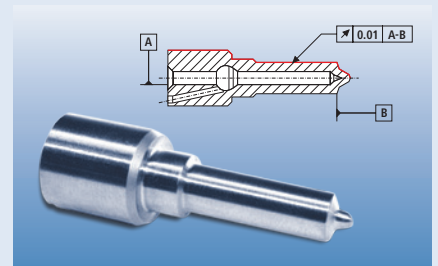


Play tolerance $\geq 3\mu\text{m}$



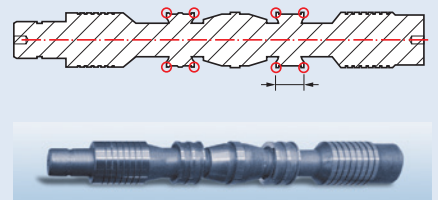
NOZZLE BODY GRINDING

- Grinding of the exterior contour of a nozzle body
- The entire outer contour of the nozzle must be ground very precisely, efficiently, and in the shortest time
- There is one centering preparation on the cylinder blank (reference point B)



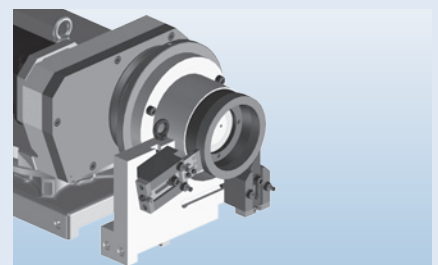
SLIDE VALVE GRINDING SIMULTANEOUS GRINDING

- Production of extremely accurate, sharp-edged and burr-free control edges
- Burr-free, sharp edged grinding due to the highly accurate simultaneous grinding
- Creating specific valve characteristic lines using hydraulic auto-pairing
- Create a precisely defined clearance between slide valve and valve bore
- The main and simultaneous grinding wheels process the workpiece simultaneously



SHOE GRINDING

- Widely used process for creating ring-shaped mass-produced parts
- Synchronised grinding
- Quick and easy workpiece insertion
- Low radial and axial run-out



L. Kellenberger & Co. AG

Heiligkreuzstrasse 28
9009 St.Gallen / Switzerland
Telefon +41 (0) 71 242 91 11
Fax +41 (0) 71 242 92 22

L. Kellenberger & Co. AG

Längfeldweg 107
2500 Biel-Bienne 8 / Switzerland
Telefon +41 (0) 32 344 11 52
Fax +41 (0) 32 341 13 93

HARDINGE GRINDING GROUP
KELLENBERGER · JONES & SHIPMAN · HAUSER · TRIPET · TSCHUDIN

www.kellenberger.com
info@kellenberger.net

