

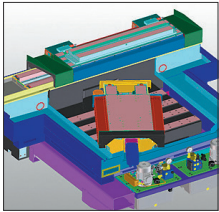
TSCHUDIN T35

THE MODULAR PRODUCTION
CYLINDRICAL GRINDING MACHINE



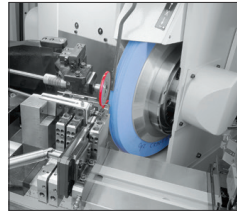
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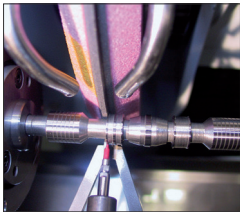
Axes configuration

- Straight or angular
- Range +6° to -30° configurable



Prismatic grinding system

- Very efficient production grinding process
- Shortest part changing time, rapid retooling
- Fully integrated handling with modular peripherals and great autonomy



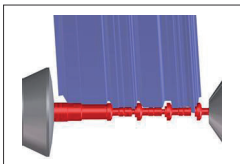
Burr-free grinding

- Several patented processes
- Production of sharper, burr-free edges



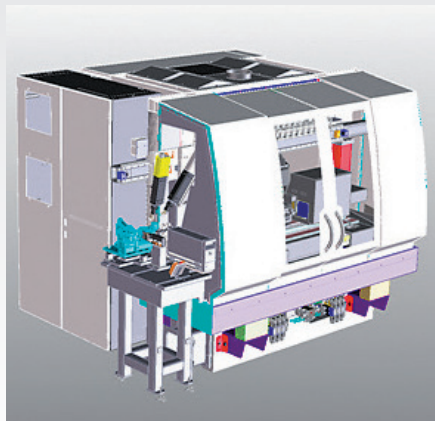
Match grinding

- Highly accurate automatic process with several extension possibilities
- Automatic cylindrical correction within 0.1µm range



Grinding from hardened bar stock

- High precision parts can be finish-ground directly from hardened bar stock
- Optimal process to produce non-machined parts with high precision centers and minimum over measure for subsequent operations

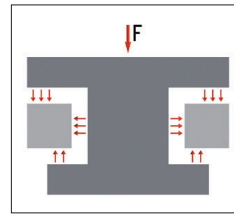


Automation

- Modular concept for peripherals and handling systems
- Wide application range from small integrated handling to complex systems with autonomous cells
- Unrestricted use, water or oil
- Customer-specific solutions possible

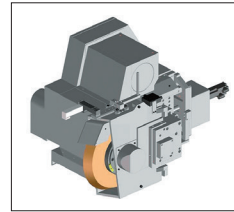
Technical Data Tschudin T35

Dimensions		
Distance between centers	mm	400
Grinding length	mm	400
Centre height	mm	125 / 175
Max. workpiece diameter	mm	249
Workpiece weight		
between centres	kg	150
Base / Table slide		
Travel z axis	mm	600
Rapid traverse	m/min	15
Resolution	µm	0.1
Upper table		
Swivelling range	degr	+/- 6 °
Wheel slide		
Travel x axis	mm	350
Rapid traverse	m/min	7.5
Resolution	µm	0.1
Wheelhead OD		
Wheel (appl. spez.)	mm	400 - 500 x 80 x 203.2
Diameter	mm	up to 600
Width	mm	up to 120
opt	mm	500 x 120 x 203.2
Peripheral roller bearing	m/s	0 - 120
Peripheral hydrodynamic	m/s	45 / 60
Spindle speed	min-1	V const (opt)
Motor output	kW	10 (opt. up to 20)
Workhead		
Spindle speed	min-1	5 - 1,500 (opt. 3,000)
Motor output	kW	2.1
Spindelnose taper		MT5 / Ø 70 mm // MT6 / Ø 90 mm
Spindelnose bore	mm	34
Spindle torque	Nm	20
Tailstock		
Sleeve retraction	mm	80
internal taper		MT3
Control		Bosch / Siemens



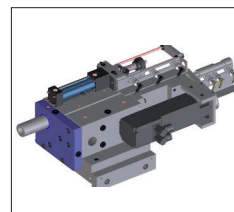
Hydrostatics with holding device

- X and Z guideways
- No stick slip
- Good damping
- High dynamics



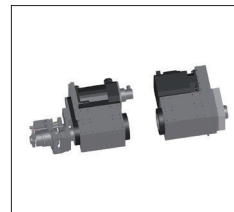
Wheelhead

- Hydrodynamic spindle bearings
- Roller bearing variant for applications up to 120 m/sec.
- Grinding wheels 400 – 600 mm



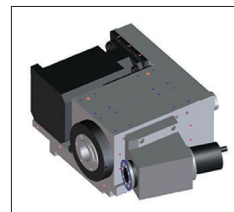
Tailstock

- In manual or automatic versions
- Version for automatic taper correction



Workhead

- MT5 and MT6 versions in modular construction
- Synchronously running workheads left and right for special grinding applications



Dressing device

- Formed dressing roll unit installed behind workhead, tailstock or on the table
- CNC controlled profiling roll unit fitted behind the wheelhead

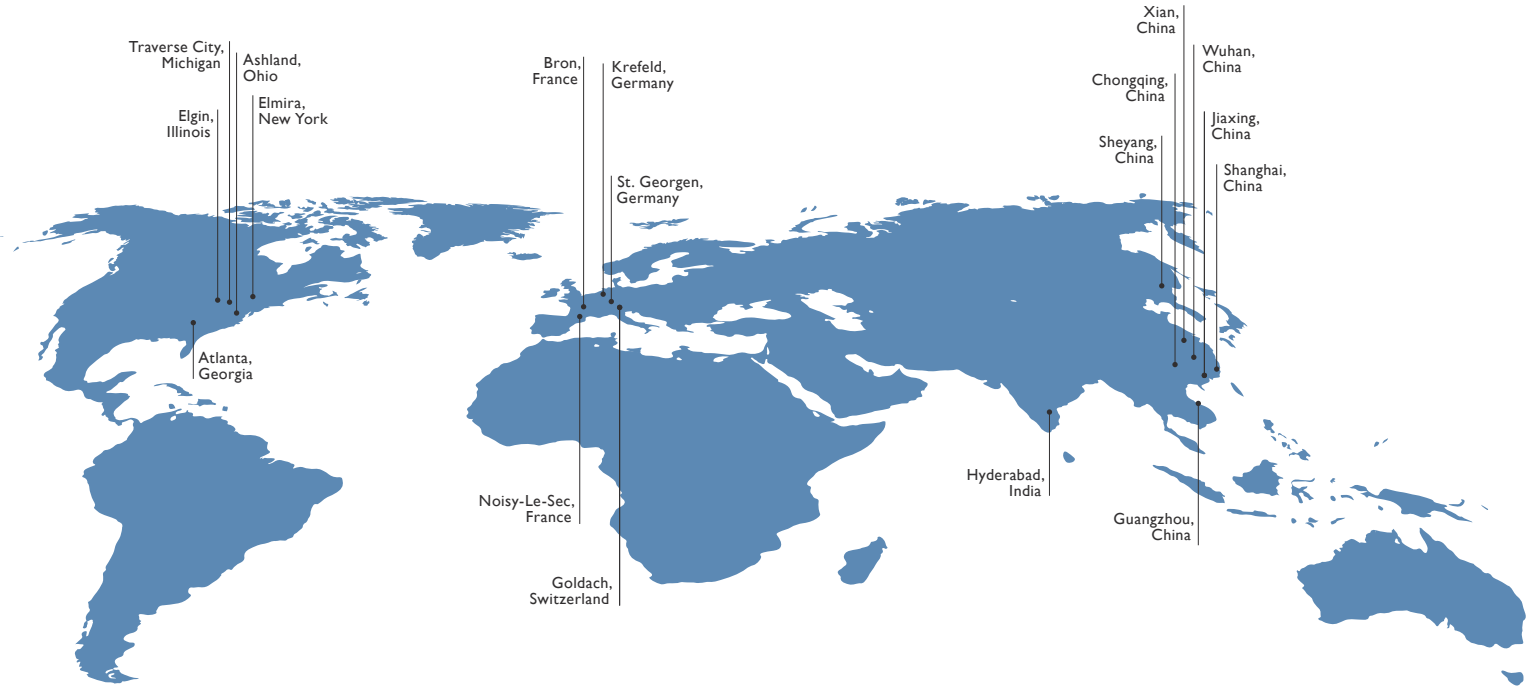


Control systems

- Siemens 840 D
- Bosch Rexroth MTX

The software for the control system was developed by grinding specialists and thus permits optimum programming of grinding and dressing processes. A particular highlight is the integration of part-specific features such as measurement technology, handling and additional processing units.

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AMERICAS

GEORGIA
Hardinge Corporate
79 W Paces Ferry Rd, 2F
Atlanta, GA 30305
P. 800.843.8801

ILLINOIS
Hardinge
1755 Britannia Dr
Unit 1A
Elgin, IL 60124

MICHIGAN
Forkardt
2155 Traversfield Dr
Traverse City, MI 49686
P. 800.544.3823
E. tcsales@forkardt.com

NEW YORK
Hardinge
1 Hardinge Drive
Elmira, NY 14903
P. 800.843.8801
E. info@hardinge.com

OHIO
Ohio Tool Works
1374 Enterprise Parkway (TR 743)
Ashland, OH 44805
P. 419.281.3700
E. sales@ohiotoolworks.com

EUROPE

SWITZERLAND
Hardinge Kellenberger AG
Thannackerstrasse 22
CH-9403 Goldach
P. 41 71 2429111
E. info@kellenberger.net

GERMANY
Hardinge GmbH
Fichtenhain A 13c
47807 Krefeld
P. 49 2151 49649 10
E. info@hardinge-gmbh.de

J.G. Weisser Söhne GmbH
Johann-Georg-Weisser-Straße 1
78112 St. Georgen
P. +49 7724 881-0
E. info@weisser-web.com

FRANCE
Jones & Shipman SARL
8 Allee des Ginkgos
BP 112-69672
Bron Cedex, France

ASIA

CHINA
Hardinge Machine
(Shanghai) Co. Ltd.
1388 East Kangqiao Road
Pudong, Shanghai 201319
P. 0086 21 3810 8686