

TECHNICAL DATASHEET

CNC – INTERNAL CYLINDRICAL (ID) GRINDER

Manufacturer	ROWEIG (Made in Germany)
Type	SI8-2x500
Control	Siemens Sinumerik 802D solution line
Built	2014



High-quality CNC internal cylindrical grinding machine for grinding cylindrical, conical, simple and stepped bores, short outside diameters and end faces

Working Area

Max. swing diameter	Ø1.000 mm
Internal grinding diameter	Ø80 - 900 mm
Max. grinding depth	500 mm
Max. external grinding diameter	Ø900 mm
Max. workpiece weight	1.000 kg

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Workpiece spindle

Spindle bearing	High-precision cylindrical roller bearings	
Lubrication	Grease lubrication	
Magnetic chuck plate	Ø600	mm
Workpiece spindle drive	Servo motor + toothed belt	
Travel distance X2 axis	650	Mm
X2 axis drive	Servo motor + ball screw	
Max. angle of swiveling device	22,5	° Manually adjustable via angle measuring device
Guiding system	Flat guide with sliding coating, tensioned without play	
Measuring system	direct	Heidenhain glass scale

Z-Axis – Grinding feed

Material of carriage	Cast iron	
Guide system	V-and Flat guide with gliding surface	
Z-axis drive	Servo motor + ball screw	
Measuring system	incremental	Via rotary encoder
Max. travel range Z-axis	900	mm

Dressing console and dressing axis

Position	Mounted on the upper table	
Adjustment range of dressing console	620	mm manually
Travel range of X-axis (dressing axis)	260	mm
Diamond holder of dresser	MK1	
Pneumatic weight relief		

Grinding spindle

Grinding spindle taper	60	mm
Drive power	15	kW
Spindle bearings	axial and radial backlash free	
Lubrication	Grease lubrication	
Grinding wheel speed	1.500 – 3.500	1/min
Grinding spindle dimensions	400 x 100 x 127	mm (D x B x d)

Dimensions and weight

Footprint approx.	4,7 x 2,9 x 2,2	m
Weight approx.	9.500	kg

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Connection Data

Anschlussleistung	36	kVA
Betriebsspannung	400	V
Betriebsfrequenz	50	Hz
Nennstrom	72	A
Zuleitungssicherung	80	A

Equipment and accessories

- CNC internal cylindrical grinding machine for grinding bores, cones, short outer diameters, and end faces
- Siemens SINUMERIK 802D sl control with swiveling control panel with SIEMENS Simatic 10" touch HMI mounted on the front of the machine
- SIEMENS mini handheld control unit
- Swivel device for workpiece headstock for grinding of conical bores
- Angle measuring device for efficient and quick adjustment of standardized cone shapes
- Enclosure of the working area
- Automatically operated operator door
- Manual maintenance door at the rear of the machine
- Central lubrication unit for ball screws and flat guides
- Circulating lubrication for machine table
- Pneumatic unit
- Wet grinding unit with universal paper belt filter, discharge container, and magnetic separator, tank capacity approx. 500 l
- UNIFIL extraction and filter unit
- Control cabinet with SINAMICS digital drives
- Central lubrication for ball screws and flat guides
- Electro-permanent magnetic plate Ø 600 mm, absolute accuracy due to no heat, incl. adhesion control (30-100%), automatic magnetic pole switching via button. After switching off the magnetic plate, the remaining residual magnetism in the clamping plate is dissipated
- Electric straight dresser, mounted on the headstock. Dressing feed continuously adjustable. Diamond feed possible via single or double stroke (automatic compensation of dressing amount)
- Various grinding spindles
- 1 steady rest
- 1 set of leveling shoes

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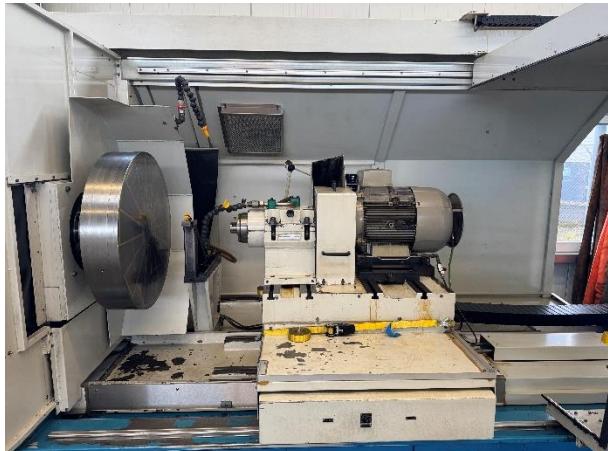
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Tel. +49 (0) 6096 / 97060 | fleckenstein@fleckenstein-machine.com | www.fleckenstein-machine.com

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