

TECHNICAL DATASHEET

Universal cylindrical grinding machine for heavy workpieces

Manufacturer	DANOBAT
Type	R3-4000-S5
built Retrofit	2001 2024
Control	SINUMERIK 840 D



The photo shows the machine during retrofit

Working area

Max. Peak width	4.000 mm
Max. Workpiece \varnothing	850 mm
Peak height	525 mm
Max. Workpiece weight. between centres with steady rests	5.000 kg

Feeds & travels

Feed rate Z-axis	0,01 – 6.000 mm/min
Feed rate X-axis	0,01 – 6.000 mm/min
Travel Z-axis (table)	4.500 mm
Travel X-axis (grinding spindle)	650 mm

Technical datasheet

DANOBAT, R3-4000-S5,

built/retrofit 2001/2024

Grinding wheel

Max. dimension	Ø1.060x60x304,8	mm
Grinding wheel speed	1.100	min-1
Peripheral speed	45	m/sec
Power	22 kW	52 kW (60% ED)

Tailstock

Taper	MK 6
Pinole way	100 mm
Pinole-Ø	115 Mm

Workpiece spindle

Taper	MK 6
Speed range workpiece	10 - 120 min-1
Torque drive motor	41,5 Nm

Machine dimensions

Space requirement l x b x h	ca13,1 x 6,3 x 2,9	m
Machine weight	25.500	kg

Equipment & Accessories

CNC cylindrical grinding machine in most robust design for heavy workpieces

Scope of retrofit:

- Slideways of X- and Z-axis regrinded, intermediate table and top table regrinded
- Centre height of headstock and tailstock readjusted
- Machine checked from the bottom up and rebuilt
- Cabling in the machine renewed
- Hydraulic tubes and lines renewed
- Ball screws of X- and Z-axis renewed
- New bellows
- Wearing parts replaced
- New machine painting in two-layer-structure with oil-resistant and abrasion-resistant two-component paints, color RAL 7035 light gray and RAL 5007 brilliant blue
- CNC Control SINUMERIK 840 D
- New balancing of the grinding wheel
- 2 pc. Grinding wheels Ø 1.000 x 60 x 304,8 mm
- 2 pc. Support bearing
- front-end dog + 1 pc. travelling tailstock tip
- Coolant unit with belt filter
- Full enclosure of the workspace with 2 large sliding doors
- Extraction unit for emulsion mist