

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 widht	4.000	mm
Max. Workpiece Ø	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

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 reground, intermediate table and top table reground
- 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