

TECHNICAL DATASHEET
CNC- Generating Gear Grinder

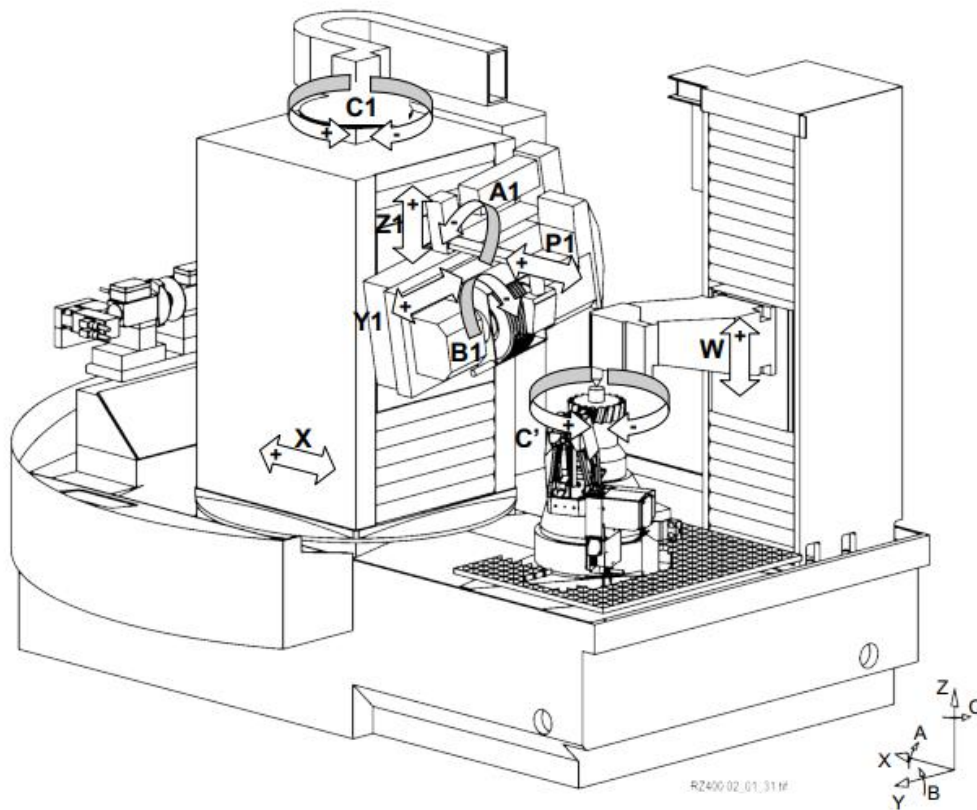
Manufacturer	REISHAUER
Type	RZ 400
Control	SINUMERIK 840 D
Built	2008



The REISHAUER RZ 400 is designed for continuous generating grinding of gears with dressable, cylindrical grinding worms.
Both gears and shafts up to a diameter of \varnothing 400mm and a length of max. 700mm can be processed on this machine.

Working area

Nominal workpiece diameter	400 mm	
Tip width with fixed standard tips	60 - 700 mm	
Max. Workpiece weight	300 kg	
Number of teeth	5 – 999	
Max. Radial travel (X axis)	490 mm	
Max. Tangential travel (Y axis)	220 mm	
Max. Tooth width	300 mm	Max. axial travel (Z-Axis)
Module range gear grinding	0,2* - 8 mm	*) depending on geometry
Helix angle (A axis)	+/- 45 Deg	



Axis scheme RZ400 – Source: Reishauer

Worm grinding wheel

Outer diameter	Ø 205 - 300 mm	
Max. Width	145 mm	
Bore diameter	160 mm	H7
Number of flights of the grinding worm	1 – 5	
Max. Pitch	32 mm	

Grinding spindle drive (B-Axis)

Max. speed	4.700	1/min	
Power	10	kW	
Max. cutting speed	75	m/s	
Integrated balancing unit			make REISHAUER

Workpiece spindle C'

Torque	180	Nm	
Grinding feed per workpiece revolution	0 – 5,0	mm/U	
Speed	0 - 480	min-1	
Workpiece spindle nose	like DIN55026, size 6	mm	Short taper with face
Collet diameter			
Small	30	mm	
Standard	65	mm	
Big	120	mm	

The clamping devices are mounted on the workpiece spindle nose or by means of quick-change devices

Feeds and rapid traverse

X axis (Infeed worm grinding wheel)	15.000	mm/min
Y axis (Shift axis)	5.000	mm/min
Z1 axis (axial travel worm grinding wheel)	5.000	mm/min
A-Axis	50	°/s

Dimensions and weight

Machine dimensions ca. L x B x H	3,3 x 2,7 x 2,5	m
Machine weight ca.	11.500	kg

Electrical connection data

Total connected load approx.	42	kVA
Operating voltage	400	V
Rated current	60	A
Back-up fuse	80	A
Operating frequency	50	Hz
Control voltage	24	V DC

Equipment and accessories

- Basic machine REISHAUER RZ400 with control Siemens Sinumerik 840D
- REISHAUER-operating software
- Counterholder with tailstock center
- Automatic balancing system make REISHAUER VM24RZ
- Electronic handwheel on control panel
- Coolant and filtration unit HOFFMANN
- Separate profile dressing system in two disc design
- Exhaust system including fume separator
- Hydraulic- and pneumatic unit
- Full enclosure of working area
- Machine light
- CO2-fire extinguishing system by Kraft+Bauer (without CO2-bottle)
- All axes and spindle drives in digital technology SIMODRIVE 611 D
- 1 pc. basic clamping pot
- 1 pc. Adapter for König clamping system
- 1 pc. calibration arbor
- No grinding wheel arbor or flange included
- Power ON approx. 40.600 h / Working hours only approx. 10.000h