Waldrich 10'000 grinding machine



For grinding cylindrical and cambered rollers for a wide variety of productions. The rollers are located on two-point steady rests or pedestal bearings. Drive is provided by a cardan shaft or belt. The CNC control system ensures that the machine can be deployed universally and for the highest precision. All materials can be manufactured with the optimum accessories and the wide selection of abrasives. Soft coverings can be machined dry because of the dust extraction system. The flow of coolant is monitored. Software limit switches and programs ensure safety during machining. The measuring system provides measuring data for initial and final reports on shape and radial runouts.

Technical data

Year of the machine Approx. 1955 Last inspection 2002 / 2009

Control unit Sinumerik 8400 / Simodrive 6110

Biggest machining diameter Ø1800 mm
Smallest machining diameter Ø80 mm
Maximum grinding length 10,000 mm
Minimum grinding length 800 mm
Maximum load 50,000 kg
Machine weight 78,000 kg

Speeds

Grinding-wheel spindle i=1 5 -1400 rpm

Roller drive GS1 i 41.5 n=0-150 rpm GS 2 i 10.2 n=0-150 rpm

Z-feed 10 m/ min
X-feed 5 m/ min
Q1-feed 2 m/ min
Q2-feed 2 m/ min

Axis travel

Z-axis 11,019 mm X-axis 850 mm

U-axis -4.91 / + 4.95 = 9.86 mm

Q1-axis 755 mm Q2-axis 755 mm

Motor power

Roller drive (sheet 150) 51 kW / 11 8A / 487Nm /1000 rpm
Grinding spindle motor (sheet 151) 22kW/ 55A/ 210Nm / 1000 rpm
Z-axis drive (sheet 152) 27 Nm / 2000 rpm
X-axis drive (sheet 152) 27 Nm / 2000 rpm

 X-axis drive (sheet 152)
 27 Nm / 2000 rpm

 U-axis drive (sheet 153)
 1.4 Nm / 6000 rpm

 Q1-axis drive (sheet 154)
 1.4 Nm / 6000 rpm

 Q2-axis drive (sheet 154)
 1.4 Nm / 6000 rpm

Accessories

Measuring unit Ø 0-1 500mm

Drive belt for S-rollers 1

Replacement belt 3 pairs

Cardan shaft drive x 2 / 630-790 mm / 1000-1180 mm

Wearing bushings ø50 -ø350 mm

Locking bushings x 5 / ø130, ø200, ø250, ø300, ø350 mm

Clamping supports with slides
Clamping supports for steady rests

Two-point steady rests 2 pairs / 150-300 mm 290-635 mm

Underlays 7 pairs / 30, 35, 40, 45, 60, 80, 207 mm

Finishing device 1 Protech BF 30-100

Band finishing devices Various

Grinding wheel clamping flanges x 6 / ø305 x ø600 x 80

Grinding wheels Various

Dust extraction

Machine instructions and wiring diagrams

Control unit

Grinding software SIGRIND Measuring software SIWAME

















