

PRECISION CNC FLAT GRINDING

Fine grinding (depending on the machining task):

Width: max. 1,000 mm
 Height: max. 800 mm
 Length: max. 4,000 mm

Stöckel Precision Flat Grinding Machine:

max. 600x4,000 mm, all main elements made of granite for optimal accuracy.

Waldrich-Coburg CNC Guideway Portal Grinding Machine:

max. 1,000x3,000 mm, with horizontal spindle and swivel spindle for grinding angled surfaces or undercuts, table drive and cross-axis with linear motor.

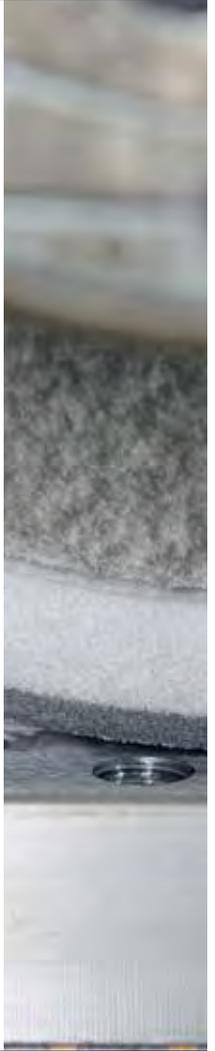
Göckel Flat Grinding Machine with Grinding Segments:

max. 600x6,200 mm with $R_a = 4\mu\text{m}$ (depending on material and component).

The machine data represent typical and maximum values. In total, we operate over 20 grinding machines with a table load of up to 3,000 kg and processing areas of up to 600x4,000 mm and 1,000x3,000 mm, and in cross grinding, up to 600x6,200 mm. The total grinding area exceeds 35 square meters! However, it's not just the high machine precision that is crucial for the high component quality; it's also the experience and skill of our employees when it comes to precision straightening of workpieces by hand.

At the Recknagel factories in Hückeswagen and Christes, more than 100 people work with great care on your components.

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PRECISION CNC PROFILE GRINDING

With our **high-performance grinding machines, Mägerle MFP**, we grind components up to 2,600 mm in length with the highest precision, depending on the machining requirements. Thanks to the path-controlled longitudinal axis of the machine, not only profiles but also radii, angles, and, for example, inlet bevels with transition radii can be precisely manufactured. Wear-free hydrostatic guides allow for the highest accuracy, especially when using the low-deformation materials Toolox 33 or Toolox 44. Due to the high spindle drive power of 75 kW and flexible profiling with diamond-shaped rollers, both individual pieces and large series can be produced economically.

You can receive an optimal offer by providing us with contour data in CAD format:
 (DXF or DWG in 1:1 scale, STEP, JT, NX native): schleifen@stahlnetz.de.

Fine grinding (depending on the machining task):

Width: max. 650 mm
 Height: max. 550 mm
 Length: max. 2,600 mm

Spindle drive: 75 kW, water-cooled, conditioned cooling water with vacuum high-performance fine filter system
 CNC control Siemens 840 D
 Profile generation on the grinding tool with diamond-form roll or profile roll, max. 180 mm width
 Make use of our excellent capabilities for your demanding tasks.



PRECISION CNC MILLING

We combine powerful CNC machining centers with experienced specialists, whom we primarily train in-house, and complement them with efficient CAD/CAM systems (MASTERCAM, Siemens NX CAD/CAM) to transfer your design data into our CNC programs.

The optimal synergy of these three components ensures the rapid, reliable, and precise production of your workpieces. Whether it's single parts or series, small components or large-scale parts (up to 10 tons), we are equipped to meet your requirements.

We manufacture CNC-milled parts from low-alloyed steels as well as high-alloyed and tempered or hardened tool steels. The right parts for your needs.

Precision in steel.

CNC MILLING

10 CNC machining centerse.g. Hedelius BC 100 1,000×700×4,500 mm. Workpiece clamping with magnet or CNC-controlled hydraulic clamping system, 55 kW main spindle drive, 30-tool changer.

CONTRACT MANUFACTURING

Utilize our machines and expertise for contract manufacturing of your workpieces. We are happy to assist you with our cost-effective transportation logistics even for longer distances to our facilities.

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MEASUREMENT + TESTING

- **Metrology Equipment**
Zeiss UMC 850 + UMM 550
Measuring Range: max. 850x600x2,400 mm
- **Hardness Testing Device**
Gnehm Type OM 150
Testing in Rockwell (HRC) and Brinell (HB)
- **Spectral Analysis**
belec compact port
Mobile spectrometers for accurate determination of steel materials.

We also provide spectral analysis services for steel grade

determination: Spectral Analysis:

1st workpiece 25€
follow-up-workpiece each 20€

Spectral Analysis + Hardness Testing:

1st workpiece 30€
follow-up-workpiece each 25€

Utilize our material expertise in cases of damage or doubt, or simply to enhance your products.

CNC SAWING

- **3 CNC panel saws Kasto and Danobat**

Cutting lengths: up to 1,250x4,800 mm

- **1 block saw Kasto**

Up to 800x1,060 mm saw section, piece weight up to 10 tons.

- **4 CNC bar saws Kasto and Behringer**

Up to diameter 520 mm or flat 620x520 mm saw section.

- **10 conventional band and circular saws**

Cutting lengths: up to 2,100 mm.

- **1 carbide circular saw**

Cutting length 1,060 mm.

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