

PLANE-HEAD AND EXCHANGEABLE **CUTTERBLOCK GRINDING MACHINE**

Holzbearbeitungsmaschinen

PLANE-HEAD AND EXCHANGEABLE **CUTTERBLOCK GRINDING MACHINE**

Made in Germany.

Everything for the grinding shop from a single supplier

The whole laborious task of tool-grinding can be ruined by incorrect transfer of the tools to the machine. But **REX** has a solution ready for such situations: with a tool trolley designed to handle plane heads and/or exchangeable cutterblocks. A limit-stop is fitted to stop the trolley tipping over, and an automatic brake prevents it rolling away by accident. Pneumatic tyres help to iron out uneven surfaces and ensure the smooth transport of your tools.





Made in Germany.

Accurate measurement requires the right tools. Tool grinding demands accuracy margins measured in hundredths of a millimetre. Tight tolerances like these can be handled with ease using **REX** measuring tools. These include digital calliper gauges, torque wrenches, measuring gauges, straight-edges, set squares and micrometers - to name just few.



The blades in a head or shaft must be ground equally in order to maintain their balance. Accurate scales are required for this purpose. Whetstones and joint stones in different hardness grades can likewise be supplied.





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The difference is R = X

- Grind plane heads and exchangeable cutterblocks on the same machine
- Circular grinding traverses of up to 220 mm
- Motor-actuated slide-unit feed
- Infinitely adjustable feed rate
- Infinitely adjustable turning speed
- Automatic operation



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A perfectly-planed surface depends on two factors:

- 1. The blade or planing adjustment setting
- 2. The coarse depth, i.e. the depth to which the blade cuts into the wood.
- 1. The blade adjustment setting (Sz) depends on the feed rate (V) and the turning speed of the tool (n) and the number of cuts (Z) carried out by the tool. It can be calculated using the following formula:

$$Sz = \frac{V \cdot 1000}{N \cdot Z}$$

This can be altered by varying the above influencing factors: the shorter the blade adjustment setting, the smoother and finer the surface finish.

2. The coarse depth (t) depends on the circular traverse of the tool (D) and the blade setting (Sz). It can be calculated using the following formula:

$$t = \frac{Sz^2}{4 \cdot D}$$

The blade setting can be influenced, as mentioned above, by the user of the planing machine, but not the coarse depth, as:

As even a blade-adjustment error measured in hundredths of a millimetre can lead to inaccuracies in the tool's circular traverse. This can result in the blades, which are set at different distances, penetrating the wood to different depths, leading in turn to varying coarse depths.

In order to prevent this happening, and thus create a perfect planed surface, a circular grinding machine supplied by **REX** becomes essential. The **SWK** lets you grind plane heads and exchangeable cutterheads with an working width up to 1500 mm to circular-traverse accuracies measured in hundredths of a millimetre. This results in coarse depths which accurately match those calculated using the above formula.



Time is money

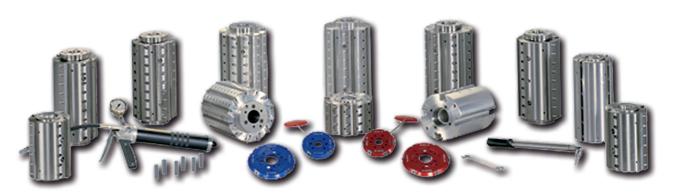
A blade pre-adjustment device is available from **REX** as an accessory for the **SWK** machine.

This bench-top device lets you adjust the blades of plane heads and exchangeable cutterblocks, before circular grinding, to accuracy margins of around five hundredths of a millimetre.

This adjustment accuracy shortens enormously the tooling times of the grinding machine, thus saving costs.

The right tool for the job

REX is a supplier of long standing of its own precision-made plane heads and shafts, and exchangeable cutterblocks. These have been subject to ongoing development work, along with our high-performance planing machines, to keep them up to the latest technical standards. A grinding machine is vital for ensuring a good surface finish, but so is access to the right tools.



REX supplies plane heads in the following configurations:

Circular-traverse diameters: 140 / 160 / 180 / 200 / 220 / 240 mm

Operating widths: 120 / 210 / 250 / 310 / 410 / 510 / 630 mm

Cut-count: 4 / 6 / 8 / 10 / 12 / 14 / 16

All heads are available in steel or aluminium configuration, as hydro-, cone-, or cylindrically-chucked tools.

Exchangeable cutterblocks are supplied in the following configurations:

Circular-traverse diameters: 200 / 220 / 240 mm Operating widths: 310 / 410 / 630 / 860 / 1100 / 1430 mm Cut-count: 4 / 6 / 8 / 10 / 12 / 14 / 16

