

ROBA Soft Touch

Surface sanding machine



MB orbital sander with high sanding efficiency and service life



Tool changer with sanding disc magazine



Exclusive MB orbital sander as in-house construction

Operation areas

The ROBA Soft Touch has been designed for two main tasks: the sanding of flat workpieces and the removal of cross grain scratch marks on frame constructions. The machine is designed for the following applications:

- Orbital sanding to remove cross grain scratch marks
- Sanding of surfaces and frames
- White wood sanding
- MDF sanding
- Intermediate lacquer sanding

Sanding method

The ROBA Soft Touch uses orbital sanding aggregates, which are an exclusive MB Maschinenbau in-house design and assembled at MB. The units are characterized by a solid construction, powerful 0,65kW motors, infinitely variable pressure intensity and speed setting up to 10.000rpm. The chaotic sanding pattern created is intense while barely visible.

One application, that the ROBA Soft Touch targets, is the removal of cross grain scratch marks.

These can be found on the cross rails of frame constructions after calibration and finish sanding with wide belt sanders. The wide belt sander scratch pattern on the cross rails is very aggressive and is perceived by customers as unnatural and disturbing.

The resolution of this sanding pattern can only be achieved with a multi-stage orbital sanding process from coarse to fine grit, without sanding too fine at the end, which will lead to color deviations. The ROBA Soft Touch has four orbital sanders connected in series on two parallel working stations which are equipped with sanding discs of different grit.

Both stations are mounted on a rail system and moved into the required sanding position by two magnetic motors in high-speed mode. These positions come either from the upstream machine, such as the MB ROBA Fusion double-end tenoner, or from a measuring system.

The aggregate jump control of the units prevents rounding and white lining of the edges, the infinitely variable pressure adjustment optimizes the desired sanding result.

Thus, two frame rails in transport direction are sanded and the aggressive cross scratches are replaced by a chaotic orbital sanding pattern.

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Your move to perfection



ROBA BOTTOM SANDER IN ACTION
Simply scan and watch the video!

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A second application is the sanding of surfaces to eliminate unevenness and to create the necessary roughness for paint adhesion. The usual wide belt sander process often creates white lined edges and an aggressively longitudinal sanding pattern.

This is where the ROBA Soft Touch principle comes into play, whereby this machine execution uses the orbital sanding units in two rows, one behind the other, on a working width of 1300mm. The sanding pressure, which can be precisely adjusted, as well as the exact positioning of the aggregate jump points, avoids white lined and rounded areas. The 150mm sanding pad ensures that there are no unsanded areas in the part surface. The orbital sanding system does not produce any disturbing sanding marks that would

e.g. holograph through a topcoat. The result is a completely sanded and homogeneous surface.

To ensure an uninterrupted process with constant sanding quality, both versions of the ROBA Soft Touch have a tool changer filled with fresh sanding discs. From there the orbital aggregates retrieves new tools by stripping off worn discs, picking new discs from the magazine to add them to the units. This is a fully automatic process and the change sequence is programmable.

The ROBA Soft Touch can be configured as a stand-alone machine, but also in line with other machines.



Typical frame construction with cross grain scratch marks on the transverse rail



Reliable removal of cross grain scratch marks in frame constructions



Typical surface sanding task on an interior door

Advantages of the Roba Soft Touch principle summarized

1. Orbital sanding process leaves no visible scratch pattern
2. Optimal blurring of sanding marks
3. Precisely determined aggregate jump points
4. Precisely determined aggregate sanding intensity
5. Precisely determined aggregate sanding intensity
6. Continuous sanding process due to fully automatic tool change

