

# PRODUCT CATALOG

Wood working machines



*Your **move** to perfection*

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# MB Maschinenbau

Your move to perfection



## MB Maschinenbau GmbH

*Family-owned company since 1992*

Founder: Ronald Busch  
Gen. manager: Ronald Busch  
Priorities: Construction, development,  
sales and service  
Production: sanding machines and special  
machines for the woodworking  
and metal industr



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For trials you are welcomed in our test laboratory. For current exhibitions please visit our website

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## Brush sanding system

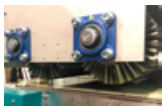
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# ROBA Tech

Surface sanding machine



The Profi Disc as optional aggregate at machine inlet or outrun



Double brush as optional aggregate at machine outrun



Conical discs with inclined sanding brushes



Micron Discs used to sand plane surfaces

## Operation areas

The patented ROBA Tech principle is used for the sanding of flat and profile surfaced

The rotational brush belt sanding system for optimal processing in the areas of:

- Intermediate lacquer sanding
- White wood sanding
- MDF sanding

Due to its innovative sanding method the ROBA Tech offers for all these areas optimal prerequisites for best surface quality.

## Sanding method

The main idea of the ROBA Tech principle is to avoid the main disadvantage of all today known drum-based brush sanding machines: Those who work with sanding drum with a diameter of about 310mm are only in a very small area of 30mm in touch with the work piece. Only in the vertex of the tool circumference a sanding process is possible.

The innovative and patented ROBA Tech is equipped with a totally new developed sanding belt. It is containing 174 sanding strips and provides a sanding area of approx. 1,300 x 1,500mm (52" x 59") in touch with the workpiece and more than 250 meters of sanding material on all aggregates. This is unique on the market of brush sanding machines.

A 360° rotation of the sanding aggregate over the workpiece makes sure that all edges and corners are uniformly sanded.

New is the reinforced disc unit, which now can also be used for light structuring and plane surface sanding. For this purpose it is placed at the inlet of the machine and adapted to the needed task by the use of special disc tools: Discs with steel wires are used for texturing, being able to brush the workpiece regardless of the wood grain direction. The plane Micron Discs are used to sand flat surfaces and create a chaotic sanding pattern that can be easily covered by a topcoat.

# ROBA Tech

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**ROBA TECH IN ACTION**

Simply scan and watch the video!



Chamfered discs make it easier to sand part edges and V-shaped grooves, allowing the sanding tool a better adaptation to the milled contours.

In order to use Micron or chamfered discs, it makes sense to install the disc unit at the

machine inlet. The subsequent efficient ROBA Tech sanding belt takes over the final fine work. Many by PLC adjustable sanding options help the operator to set the machine to his special sanding requirements.



ROBA Tech brush belt for a perfect surface sanding in all areas

## Advantages of the ROBA Tech principle summarized:

1. Large abrasives quantities in touch with the workpiece for optimal results
2. The 360° rotational sanding head with a large sanding area ensures a consistent sanding in all workpiece details
3. Free PLC programmable sanding parameter to optimize results.
4. A perfect vacuum system guarantees secure parts hold down, even of drawers
5. The low sanding speed guarantees long abrasive life span as the sanding brushes do not hit the workpiece edges hard
6. Optional aggregates that use Micron, chamfered discs or a double brush optimize the results
7. Abrasive configuration is freely selectable from the MB Flex system.



Brush belt with easy to replace sanding strips



ROBA Tech Vertical, integrated into an overhead conveyor system of a door manufacturer





# ROBA Split Belt

Surface sanding machine

## Operation areas

The ROBA Split Belt principle is used for the sanding of flat and profiled surfaces, optimized for lacquer sanding.

The brush belt sanding system for optimal processing in the areas of:

- Intermediate lacquer sanding
- White wood sanding
- MDF sanding

Due to the innovative sanding method the ROBA Split Belt offers for all these areas optimal prerequisites for best surface quality.

## Sanding method

Lacquer sanding is a very difficult task in the production of furniture and furniture components. Many factors have an influence on a desired result and only the combination of the correct aggregate and abrasives configuration, in conjunction with certain programmable sanding parameters can offer a perfect result.

MB Maschinenbau has bundled many years lacquer sanding experience in the ROBA Split Belt line and developed a machine that meets these high expectations.

Based on the ROBA Tech philosophy, that only a large sanding area provides enough performance for best results, MB developed the "Split Belt" sanding aggregate. This combines the advantages of a large sanding area in contact with the work-piece, while sanding the part with and against transport direction. An additional possibility to oscillate the Split Belt unit up to 30 ° helps to optimize the result.

In conjunction with the for lacquer sanding optimized MB Superflex brushes, the Split Belt unit, placed at the machine exit, is responsible for the final finish in the longitudinal direction.

Since most work pieces need a cross processing to sand the millings transversal to the transport direction, as well as the right and left edges, two cross belt sanding units are placed at the machine entrance.

# ROBA Split Belt

## Your move to perfection



**ROBA SPLIT BELT IN ACTION**

Simply scan and watch the video!

# ROBA Split Belt

## Surface sanding machine

Having a processing width of 200mm each, the first cross unit works from right to left, while the second from left to right. This ensures a perfect sanding of all transversal grooves and longitudinal edges.

The combination of transverse and longitudinal sanding in one machine thus enables a gentle

and effective processing in all areas, while the scratch pattern created, is always length orientated. This avoids visible scratches after the final lacquer application.

On request the machine can be equipped with a pressure roller system and a cleaning aggregate at the machine end.



Brush belt with easy to replace sanding strips

### Advantages of the ROBA Split Belt principle summarized:

1. Large abrasive quantities in touch with the workpiece for optimal results.
2. Optimized solution for lacquer/sealer sanding.
3. A split sanding belt in conjunction with two cross belt aggregates guarantee a uniform sanding in four directions.
4. Free PLC programmable sanding parameters to optimize results.
5. A perfect vacuum system guarantees secure parts hold down, even of drawers.
6. On request the machine can be equipped with a pressure roller system and cleaning unit.
7. Length orientated scratch pattern avoids visible scratches after the final lacquer application.
8. Abrasive configuration is freely selectable from the MB Flex system.



The cross belt aggregates working in opposite direction and the Split Belt unit working with and against transport direction optimize the sanding result. Here shown with a cleaning station at machine exit.

# ROBA BIG

## Surface sanding machine

The ROBA BIG line is offered with different sanding head configurations:



Double Brush



Double Brush –  
Double Brush



Double Brush –  
double brush 20°



Cross sanding belt –  
Double Brush

## Operation areas

The new developed ROBA Big brush sanding machine contains sanding drums with a diameter up to 630mm and is constructed for the following applications:

- Sealer and lacquer sanding
- White wood sanding
- MDF sanding

## Sanding method

The main idea of the ROBA Big principle is to avoid the main disadvantage of all today known drum-based brush sanding machines: Those who work normally with sanding drums with a diameter of about 310mm are only in a very small area in touch with the workpiece, about 30mm. Only in the vertex of the tool a sanding process is possible. To compensate the very small sanding area, those sanding systems must increase their rotation speed to a high level. Only this way they have a chance to be effective. But this results in a “hard touch” of the sanding paper on the parts. This

results in an aggressive behavior on the edges, high temperatures and wavy optic of the material. Hurt edges and totally denibbed surfaces are often the result. The innovative ROBA Big is equipped with a newly developed, extra-large sanding brush diameter of 630mm. This makes it possible to expand the contact area with the workpiece to approx. 300mm. The increased number of slots allows more than 500 meters of abrasive to be installed, depending on the machine configuration. This is unique on the market of brush sanding machines. In this way it is possible to achieve high cutting speeds at low rotation speeds and thus significantly increase the sanding effectiveness. The increased contact area and the soft touch on the part surface guarantees the best results. Low movement speeds of the sanding segments ensure that the sandpaper does not jump over milled grooves of the workpieces. The sanding system enables the brushes to slide into the recesses areas to sand them effectively. Many sanding options that can be set via PLC, help the operator to set the machine to his requirements. In particular mass manufacturers or users with fast running finishing lines benefit from the ROBA Big principle.

# ROBA Big

## Your move to perfection



### ROBA BIG IN ACTION

Simply scan and watch the video!



## Advantages of the ROBA BIG principle summarized

1. Large abrasives quantities enable intensive sanding of the workpieces, while offering long abrasive life.
2. A large diameter provides more sanding effectiveness in all workpiece areas.
3. The area in touch with the workpiece is enlarged up to 300mm for more effectivity.
4. Clockwise followed by counterclockwise sanding ensures best results.
5. A perfected vacuum system guarantees that even drawers can be fed surely.
6. The low rotational speed guarantees long abrasive life span.
7. Abrasive configuration is freely selectable from the MB Flex system.



Special vacuum transport belt for save piece transport with additional cleaning device



ROBA Big in vertical execution, integrated in a hanging line



630 mm diameter: Comparison conventional (middle) – ROBA BIG (right and left)



Cross sanding aggregate



# ROBA Profi Brush

Surface sanding machine

The ROBA Profi Brush range is offered several different sanding head setting options:



Double Brush

## Operation areas

The alternative brush sanding machine for a reasonable price. Constructed for the following operation areas:

- Intermediate lacquer sanding
- Wood fine sanding
- MDF sanding
- Light texturing processes



Double Brush –  
Double Brush

## Sanding method

The starting point of the ROBA Profi Brush principle is clockwise followed by counterclockwise direction sanding: Only this procedure guarantees that in every case protruding wood fibers are cut off, regardless of the grain direction of the material, both wood or MDF.

In basic version the machine has two sanding drums and a pressure roller system. This version represents a solid basic equipment for every user who is striving for an optimum price/performance ratio.

Due to the modular structure, the ROBA Profi Brush series can be expanded with further systems such as disc, Cross Belt and cleaning units.

A vacuum transport system can be provided as an option for small workpieces. In case the customer wants maximal comfort, the aggregate positions can be motoric controlled.

A machine with a Cross Belt unit is available for the use in finishing lines. Here the aggregate constellation has been kept very compact to enable a narrow 370mm pressure roller distance. In this way even complicated workpieces offering small vacuum area can be transported safely.

An optional cleaning unit at the end of the machine includes a special brush and is equipped with an Ionization Bar and blower system.



Cross Belt –  
Double Brush

# ROBA Profi Brush

Your move to perfection



**ROBA PROFI BRUSH IN ACTION**

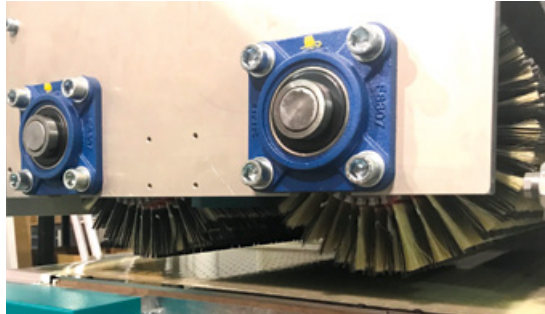
Simply scan and watch the video!

# ROBA Profi Brush

Surface sanding machine

## Advantages of the ROBA Profi Brush principle summarized

1. Clockwise followed by counterclockwise sanding ensures best results.
2. Pressure roller system will hold workpieces from 370 mm safely.
3. Optional vacuum transport system for small workpieces.
4. Best offer for small investments.
5. Infinitely variable setting of all rotational head and feed speeds.
6. Abrasive configuration is freely selectable from the MB Flex system.



Double brush aggregate work clock- and counterclockwise, equipped with easy to change sanding segments via plug-in system.



Special solution with Cross Belt and cleaning aggregate

ROBA Profi Brush with Cross Belt and double brush sanding aggregates

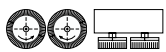
# ROBA Profi Disc

## Surface sanding machine

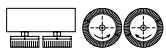
Constructed on modular basis the customer is able to decide between different configurations:



Profi Disc System



Double brush –  
Profi Disc System



Profi Disc System –  
Double brush



Profi Disc System –  
Profi Disc System

As option a cleaning aggregate at machine exit



Special solution:  
Back side sanding of  
furniture parts in  
through feed process

## Operation areas

The ROBA Profi Disc principle is used for sanding of flat and profiled surfaces. Constructed for the following operation areas:

- Intermediate lacquer sanding
- White wood sanding
- MDF sanding

## Sanding method

Many optional combinations allow the user to configure a ROBA Profi Disc for his specific demands.

The starting point is a double brush working clockwise followed by counterclockwise sanding: Only this procedure guarantees that in every case protruding wood fibers are cut off, regardless of the grain direction of the material, both wood or MDF.

The double brush is followed by a Profi Disc system that sands the workpiece in all details. This is made possible by the 3-axis disc system

which is a special MB design: four rotating 200mm disc tools are mounted on three rotating master discs. Additionally the entire unit oscillates back and forth. All axes movements can be regulated separately. Due to this, the sanding pattern can be visibly influenced. The kinematic is based on the sanding process of an eccentric sander and guarantees a uniform surface.

New is the reinforced disc unit, which can be used for light structuring and calibration work. For this purpose the unit is placed at the inlet of the machine and adapted by the use of special disc tools: Discs with steel wires are used for texturing, being able to perform regardless of the grain direction of the wood. The plane Micron discs are used to sand flat surfaces and create a chaotic sanding pattern that is invisible after the topcoat coverage. Chamfered discs make it easier to sand part edges and V-shaped grooves, since the inclined sanding brushes can reach the milled contours better.

An optional cleaning unit at the machine end includes a specially manufactured cleaning brush, an Ionization Bar and Air Knife.

In the basic configuration the encapsulated

# ROBA Profi Disc

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### ROBA PROFI DISC IN ACTION

Simply scan and watch the video!



# ROBA Profi Disc

## Surface sanding machine

machine has a pressure roller hold-down system. For small work pieces the machine can be equipped with a vacuum transport, further with a

motoric height adjustment of the aggregates.



Disc tool

### Advantages of the ROBA Profi Disc principle

1. The sanding method copies the procedure of orbital hand sanding.
2. Invisible sanding pattern.
3. Workpieces are sanded in all details.
4. Tool less change of the discs.
5. Various machine configurations possible.
6. Abrasive configuration is freely selectable from the MB Flex system .



Conical discs with inclined sanding brushes



Micron Discs used to sand plane surfaces



ROBA Profi Disc with two disc aggregates



Texturing Disc

# ROBA Bottom Sander

## Surface sanding machine

Constructed on modular basis the customer is able to decide between different configurations:



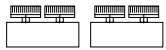
Double Brush



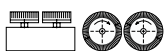
Disc Aggregate



Double Brush –  
Double Brush



Disc Aggregate –  
Disc Aggregate



Disc Aggregate –  
Double Brush

## Operation areas

The ROBA Bottom Sander machine line is constructed for bottom sanding of work pieces in a through feed process for the following applications:

- Intermediate lacquer sanding
- White wood sanding
- MDF sanding

In the basic configuration the Bottom Sander machine series contains a disc system what is a solid basic layout for those customers, who wish an optimized price-performance ratio.

Due to the modular design of this series also other sanding systems, such as a double brush aggregate enhancement, is available. The possibility of different aggregate combinations allows the customer to arrange a machine for his specific application.

A from top working vacuum transport feeds the work pieces secure over all sanding units, which work from the bottom.

In this way the work piece backs have uniformly rounded edges and a perfect surface finish.

## Sanding method

Furniture and furniture parts manufacturers who proceed their work pieces in sanding lines, face the problem that there is the need to turn their pieces and send them through the line again, if the back side sanding needs to be addressed. This reduces the capacity of the sanding line and causes additional costs.

Therefore many of these users decide to integrate a MB Bottom Sander in their lines. In this way they sand their parts in one pass from top and bottom to be able to transfer them immediately to further processing.

# ROBA Bottom Sander

## Your move to perfection



### ROBA BOTTOM SANDER IN ACTION

Simply scan and watch the video!

# ROBA Bottom Sander

Surface sanding machine

## Advantages of ROBA Bottom Sander principle

1. Easy integration into every sanding line
2. Perfect complement to all top working MB surface sanding machines
3. Vacuum transport system feeds the work pieces secure over the sanding units
4. Machine operated with Touch Screen control, all parameters are programmable
5. Modular machine design for various aggregate configurations
6. Infinitely variable setting of all sanding movements and feed speed
7. Abrasive configuration is free selectable from the MB Flex system

Bottom Sander with disc aggregate



Easy tool change due to extractable disc aggregate



Bottom Sander with disc aggregate / double brush combination



Bottom Sander in line with a ROBA Tech



Bottom Sander with disc aggregate / double brush combination

# 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.

# ROBA Soft Touch

Your move to perfection



**ROBA BOTTOM SANDER IN ACTION**

Simply scan and watch the video!



# ROBA Soft Touch

## Surface sanding machine

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
5. Precisely determined aggregate sanding intensity
6. Continuous sanding process due to fully automatic tool change



# ROBA Profile

Molding sanding machine



The feed system consists of gummed transport roller. The side fenders and top pressure systems are easy to adjust.

## Operation areas

The sanding machine ROBA Profile is constructed for wood and intermediate lacquer sanding of moldings with the help of brush tools and compound sanding wheels.

Also appropriate for light texturing work.

Due to the solid construction and simple set-up this machine guarantees an optimal serviceability of all its components.

According to customers' demands it can be produced as a one to four sided construction.

## Sanding method

The main idea of the ROBA Profile sanding principle is the clockwise followed immediately by counterclockwise sanding: Only in this way it is ensured that, independently of the wood grain structure, all upstanding „hairs“ are denibbed. The ROBA Profile machine in all its configurations is built for sanding moldings found in various furniture, window and joinery companies. Solid, veneered or lacquered.

In the main configuration the ROBA Profile machine contains a right and top side sanding aggregate combined with a pressure roller system. Set-up this way it is a solid basic layout for those customers who wish an optimized price-performance ratio.

Due to the modular construction of the ROBA Profile series, the machine can be configured to every customers demand. E.g. a four double brush machine is able to sand profiled moldings from all four sides.

Equipped with the MB Flex brush systems the machine is very easy and fast maintained to be set-up for a new profile. Divergently to the known systems based on sanding belts the ROBA Profile brush system forgives a not strictly exact setting of the aggregates. Centralized set-up for the side guides and the top pressure roller system and programming via Touch Screen make sure that even not experienced personnel is able to maintain such a machine. In only a couple of minutes a ROBA Profile is ready to proceed.

Further on this machine type is used for intermediate lacquer sanding. For that application often feed speeds up to 150 m/min (492 ft/min) are nec-

# ROBA Profile

## Your move to perfection



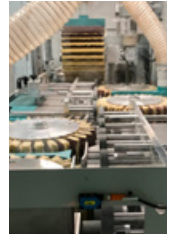
**ROBA PROFILE IN ACTION**

Simply scan and watch the video!

## Advantages of the ROBA Profile principle summarized

essary. The standard working width is 300 mm.

1. Clockwise followed by counterclockwise sanding ensures best results.
2. Pressure roller system will hold work pieces from 430mm safely. Back-to-back feeding of shorter parts is also possible.
3. Centralized set-up for the side guides and top pressure system.
4. Very easy maintenance and set-up.
5. Extra-large tools improve the sanding result.
6. Infinite variable setting of the head rotations and feed speed.
7. Oscillation of the sanding aggregates for better utilization of the abrasives.
8. High feed speeds are technical possible.
9. Modular construction meets every customer demand without complicating the machine.
10. Abrasive configuration is freely selectable from the MB Flex system.



Double brush working clock- and counterclockwise



All sanding units oscillate taking into account part dimensions.

This ensures that the abrasives are always fully utilized.



ROBA Profile configuration with double brush sanding heads guarantees best results.

# ROBA Belt

Molding sanding machine



RB300 aggregate  
with motorized  
height setting and  
oscillation

## Operation areas

The ROBA Belt brush belt sanding system is a unique development of MB for molding and panel processing.

Operational areas are solid wood, MDF, veneer, as well as lacquer sanding.

unique in the market of brush sanding machines for moldings and combines the effectiveness of an endless sanding belt with the easy setting of a brush.

Programmable and motorized aggregate positioning, spring loaded top pressure roller system and centralized side stop set-up result in fast and easy profile changes.



Calibration and  
finish endless belt  
sanding aggregate  
BA300

## Sanding method

The ROBA Belt machine is built to sand moldings found in furniture, window and joinery companies. Solid, MDF, veneered or lacquered.

The main idea of the ROBA Belt principle is to avoid the main disadvantage of all today known drum-based brush sanding machines: Those who work with sanding drums touch the workpiece only in a very small area. Only in the vertex of the tool a sanding process is possible what results in poor sanding quality.

The innovative ROBA Belt is equipped with a new developed sanding belt containing 122 brush sanding strips providing a sanding area of approx. 750 x 300 mm in touch with the workpiece. This is

The standard configuration of the ROBA Belt machine line is right-top, but the modular construction allows to customize it exactly to application needs.

This type of machine is very often used for base coat sanding. For this purpose, many customers place it in painting lines, which often require feed speeds of up to 150 m/min.

Fine tuning of the sanding result will be done with the help of the MB Flex brush system that is produced at MB exactly to customer needs.

All ROBA Belt users can rely on the easy set-up of a brush sander, without the need to take any quality disadvantages into account.

# ROBA Belt

Your move to perfection



**ROBA BELT IN ACTION**

Simply scan and watch the video!

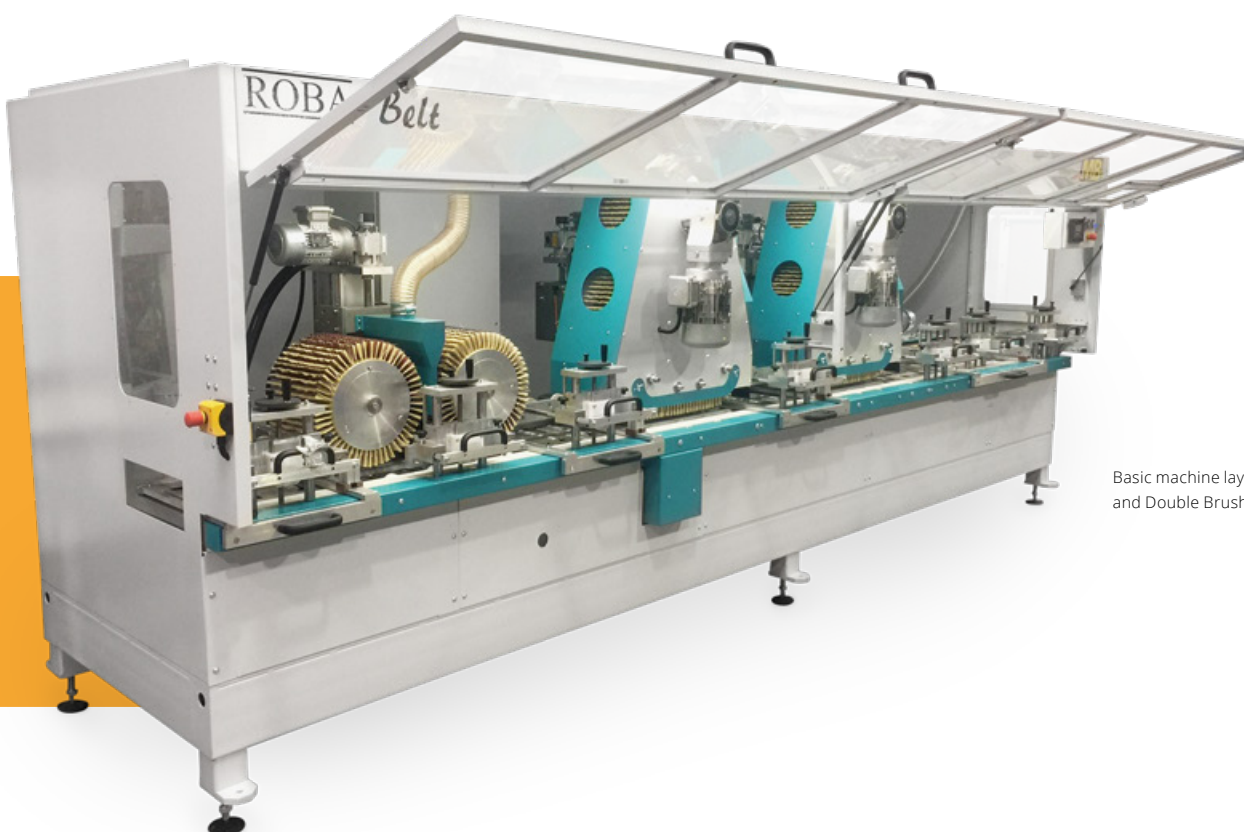


## Advantages of the ROBA Belt principle summarized

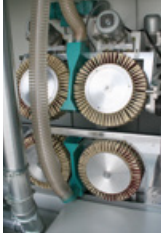
1. Large brush quantities and large sanding area are highly effective.
2. Pressure roller feed parts from 1,100 mm length safely. Feeding back-to-back of shorter parts is also possible.
3. Centralized set-up for the side stops and top pressure system.
4. Oscillation of the sanding aggregates for better utilization of the abrasives.
5. Infinite variable set-up of the head rotations and feed speed.
6. High feed speeds are technical possible without compromising sanding quality.
7. Modular construction meets every customer demand without complicating the machine.
8. Abrasive configuration is freely selectable from the MB Flex system.



ROBA Belt configuration to process floor moldings using a BA300 belt sanding aggregate. The PLC activated and motor driven oscillation movement of all aggregates takes into account, beside the sanding belt grit, also the molding width. This ensures that the abrasives are always utilized completely.



Basic machine layout with RB300 and Double Brush aggregate



Program controlled swivel axis brings the top sanding unit in position.

## Operation areas

The fully automated sander for moldings and piece-by-piece profiles in the window industry is designed for the following applications:

- Wood fine sanding
- Impregnation sanding
- Lacquer sanding



The ROBA Fentech is actually the only four sided "lot-size-one" molding sander

## Sanding method

The new piece-by-piece production style for window components offers many advantages to increase productivity within all production steps, but the biggest leap can be achieved in the surface finishing. Here a high personnel input has always been necessary, moreover the variation of parts in window production is very high. Therefore only a highly automated sanding solution is applicable. The same principle also applies to the sanding of moldings of any kind. Time-consuming adjustment of the Fentech is not necessary, what is made possible by the scanner-based part recognition at the machine inlet and the subsequent axis-controlled adjustment of the sanding units.

All profile cross-sections are recognized and implemented in a corresponding sanding program for four-sided processing.

The workpiece scanning calculates the part geometry and tells the aggregates in fractions of a second the position to move to. As soon all units are in position, the workpiece is released and send through the machine. Extra-large 400mm diameter sanding tools provide a maximized contact area with the workpiece; a jump control of the sanding heads ensures a gentle short edge treatment and prolongs the life span of the abrasives. All aggregates have an optimized PLC controlled oscillating stroke. Taking the part height and width into account, the stroke is always calculated in a way that all sanding brushes are fully utilized. A novelty is the vacuum transport system, making it possible to send all kind of parts through the machine. Even short parts, that previously could not be integrated in the sanding process, do not pose a problem anymore. This type of transport system makes it possible to work without any side stops and top pressure roller, what considerably simplifies operation. The operator has the option to use the machine as a through feed machine or enable a part reversion function in the sanding program.

# ROBA Fentech

## Your move to perfection



### ROBA FENTECH IN ACTION

Simply scan and watch the video!

# ROBA Fentech

## Molding sanding machine

In this case the parts are sent through the machine with 20m/min for sanding and after this returned to the operator in high-speed mode. In this way a one-personnel-operation is possible at any time. Parts that require an intensive treatment even can be sanded a second time during the return process. For large volumes of similar workpieces, the throughfeed option is ideal, since the repeated parts scan can be dispensed.

The machine does not need any set-up to be able to sand any incoming profile. The machine operator only needs to fill and unload. Molding batches stay together and do not need any sorting for the sanding procedure. This increases productivity tremendously.

### Advantages of the ROBA Fentech principle

1. Automatic workpiece detection by scanner at machine inlet.

2. Motoric positioning of the sanding units.
3. Oscillating aggregates optimize the abrasive utilization.
4. Tool diameter of 400mm to optimize sanding quality.
5. Inclined profiles will be top sanded in the respective best angle.
6. The machine can be used in throughfeed or reversion mode for one-personnel-operation.
7. Vacuum transport system enables processing short parts.
8. Encapsulated design for increased safety and dust-free environment.
9. Compact and space saving design.



Fully automatic and all-round profile sanding



The large variety of parts in window industry needs a fully automatic solution.



Large brush diameter to optimize the surface quality. Vacuum transport system also enables short parts.

ROBA Fentech lot-size-one sander.



# ROBA SSM

Molding sanding machine



Side stop setting  
with the help of  
scales

## Operation areas

The molding sanding machine ROBA SSM is specifically designed for MDF and intermediate lacquer sanding of moldings using sanding wheels.

The ROBA SSM is distinguished by its robust construction and easy adjustability of all components. It is manufactured as a one- to three-sided machine, but also available in customized designs according to customer requirements.

## Sanding method

The main idea of the ROBA SSM sanding principle is the clockwise followed immediately by counter-clockwise sanding: Only this way it ensures that, independently of the wood grain structure, all upstanding fibers are denibbed.

The used sanding wheels need be negative shaped in relation to the profile contour. This is either done during the ongoing process or on a separate contouring machine.

Are the incorporated tools in process, an automatic wear compensation takes care of the decreasing tool diameter.

The tools are constantly re-shaping themselves what guarantees a high profile accuracy. In this way all molding details are always sanded precisely while avoiding an undesirable strong rounding of the contour edges.

During processing the sanding pressure is kept continuously on the value stored in sanding program, resulting in a consistent surface finish. An implemented sanding wheel step-in and step-out automatism ensures a preserved use of abrasive tools and protects the front and trail edge of the workpieces from over rounding.

As a special feature the side units, provided that they do not sand profiled contours, can be used with an oscillation mechanism. In this case the workpiece thickness will be saved in the sanding program and will be considered by the PLC to calculate the oscillation stroke. In this way the sanding tool is always used in full extension and there is no incorporation of the profile into the sanding wheel. This avoids a tool change of the side sanding units in most cases if new moldings are coming to the machine.

In case the given molding requires a negative shaped tool, the oscillation stroke can be deselected within the sanding program.

# ROBA SSM

## Your move to perfection



### ROBA SSM IN ACTION

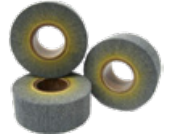
Simply scan and watch the video!



Further all aggregate positions will be stored in the sanding program and will be approached automatically. In addition all other sanding parameters such as feed rate, wheel rotations, sanding pressure and cycle time of the wear compensation will also be deposited.

Spring preloaded pressure rollers and scaled stop settings make the conversion to a new profile very comfortable.

The modular design of this series can be configured for all conceivable tasks and feed speeds.



MB Flex sanding wheels used in the ROBA SSM

## Advantages of ROBA SSM principle

1. Clockwise and counterclockwise sanding wheel rotation improves the result.
2. Spring preloaded pressure rollers minimize the adjustment effort.
3. Central adjustment of the side stops and the pressure roller using scales.
4. Sanding aggregate oscillation ensures an optimal tool wear and improves the surface quality.
5. All sanding parameters and aggregate positions are stored in sanding programs.
6. Encapsulated machine increases safety and eliminates dust strain.
7. Technically also high feed rates can be realized.
8. Modular construction meets every customers demand without complicating the machine
9. Abrasive configuration is freely selectable from the MB Flex system.



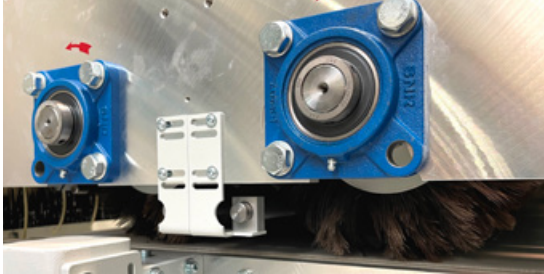
Machine with twelve sanding aggregates for high speed sanding of MDF moldings

Fully encapsulated machine for secure and dust free operation

# ROBA Anti Dust

Surface cleaning machine

Includes two double brush beater bars to release the dust from the brushes.



Special feather brushes already used in the automotive industry. The Anti Dust takes advantage of this experience.



An ionization bar with integrated air knife takes the static load off the work pieces.



## Operation areas

ROBA Anti Dust, cleaning solution for furniture parts is suitable for the following operation areas:

- Cleaning of furniture parts before lacquer application
- Cleaning of furniture parts before lamination
- Cleaning of furniture parts before packing

## Cleaning method

The ROBA Anti Dust as throughfeed or stand-alone solution guarantees high productivity with best cleaning results. Mostly the machine is placed directly in front of a finishing line or right after a sander. Many companies have the problem of imbedded dirt and dust residues after lacquer application. These particles are not removable anymore, as they are placed under the lacquer layer. That means a perfect cleaning of all parts before finishing is a must. Standard machines solve the cleaning problem only insufficient due to several reasons: cross drums are only able to remove dust from the grooves in feed direction, leaving dust in the transversal

# ROBA Anti Dust

## Your move to perfection



### ROBA ANTI DUST IN ACTION

Simply scan and watch the video!

grooves. Wrong configured brushes and small tool diameter don't offer the capacity to collect large dust volumes. The new ROBA Anti Dust line solves the problem with the help of an additional cross unit, a double brush rotating clockwise and counterclockwise, a Noodle Blower at the machine exit, several Ionization Bars and extra-large brushes equipped with very effective Ostrich Feathers. This combination takes care that the whole part is completely cleaned, even in complicated details. Cleaned this way, the parts will pass the so called "Black T-Shirt Test". On demand the machine is also deliverable with a bottom cleaning unit.

## Advantages of the ROBA Anti Dust principle

1. Optimal cleaning from dust and dirt residues
2. Cleans all contours, even millings transverse to feed direction
3. As option the machine can be delivered with bottom unit for backside cleaning



Transverse cleaning unit, optional also from bottom.



# ROBA Profi Clean

Surface cleaning machine



The ROBA Profi Clean is suitable for cleaning of all kind of laminated furniture parts

## Operation areas

- Backside cleaning of thermofolied doors
- Cleaning of laminated furniture panels

## Advantages of the ROBA Profi Clean principle:

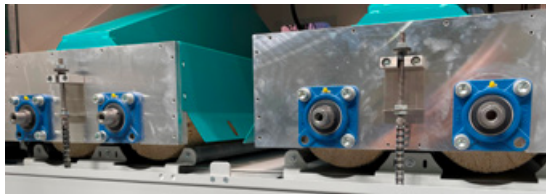
1. Optimized cleaning from dust and glue residues.
2. Optimal rounding of sharp edges.



Double brush aggregate work clock- and counterclockwise, equipped with special cotton brushes for secure cleaning.



A Noodle Blower at the machine outrun removes dust residues.



## Cleaning method

The machine series ROBA Profi Clean guarantees high productivity as a throughfeed solution. As a single machine, or directly after the turn-over and foil trimming machine in a production line.

As a machine offering 1,300mm work width, the ROBA Profi Clean is the only solution that can pass a complete door batch coming from a membrane press through the machine.

While passing through the machine, glue residues are removed from the laminated fronts without the risk of edge delamination. All four edges, which are untreated razor-sharp and represent a risk of injury, are slightly rounded.

This is ensured by the two or four cleaning drums that run in clockwise and counterclockwise directions and are equipped with brushes specially made for this process. Product labels, which are usually attached to the back of the parts, are retained.

In addition, a Noodle Blower at the machine outlet blows off any dust residue so that the parts can be directly forwarded to packaging.



## ROBA Profi Clean

Your move to perfection



Simply scan and watch the video!

ROBA Profi Clean equipped with two double brush cleaning aggregates



# ROBA Struktumat

Distressing machine

## Operation areas

ROBA Struktumat is the alternative in the area of distressing applications for a fair price relation. The concept is used for:

- Creating rustic styled surfaces on solid wood or veneered panels
- Cleaning after distressing processes

The Struktumat machine line guarantees as a through feed solution high productivity.

## Distressing method

The machine is equipped with a constant desk level and strong and solid motor drives up to 15 KW power. Machine for industrial use satisfying high expectations. To be integrated into every production line. The basic machine is Set-up with two units but can be equipped with further aggregates to achieve even more intense results.

Depending on customer demands the machine will be set-up with special distressing tools.

According to the intensity of distressing MB uses steel brushes that brush out the soft grain while leaving the hard grain untouched. The following Nylon brush will give the rustic style an even more optical depth and removes wood fibers that would negatively interfere the finishing.



The ROBA Struktumat can be Set-up with different tools according customer demands

## Advantages of the ROBA Struktumat principle

1. Optimal distressed and finished surfaces
2. Optimal fine-tuned results due to motorized axis setting
3. Programming and machine control with the help of a Touch Screen



Distressing disc brushes used in the new developed Profi Disc aggregate



Distressing aggregates for rustic style and sanding applications. Set-up to customer requirements.

**ROBA**  
**Struktumat**  
Your move to perfection

Simply scan and  
watch the video!



# ROBA Fusion

Double end tenoner

## Operation areas



Tool changer  
for 12 tools.

The Double Side Tenoner ROBA Fusion has been developed for the shaping of edges of furniture and interior doors.

- Interior work and joinery
- Industry
- Cabinet door producers
- Interior door producers



Left and right side  
shaping aggregate  
carrier with two  
HSK63 spindles  
each.

## Working procedure

Modern "lot-size-one" production puts high demands on production planning and technical equipment. Part of this is the formatting and edge shaping of cabinet and interior doors. This is usually done by double end tenoners who have integrated all necessary milling and sanding units and enable high performance with components of same size. But in this case the necessary long machine construction has disadvantages for those producers who have to process completely variable part sizes. There is the need to empty the entire machine before you can make the next width adjustment. This is a not practical solution for parts of random sizes.



Climb and conven-  
tional rotation.

So it takes a smart solution to enter furniture fronts that come with completely variable outer dimensions to a double end tenoner to perform high-throughput edge processing. The ROBA Fusion from MB Maschinenbau tackles the problem with a completely new concept. In order to make the required fast width adjustment, the machine has been designed to be particularly short and compact. The faster the workpieces leave the machine, the earlier the new adjustment. Further the needed aggregate position must be determined fully automatically in through feed.

The completely redesigned ROBA Fusion consists of a fixed left and a high-speed magnet servo drive positioned right milling unit carrier. On the infeed conveyor belt the cabinet door width, which outer dimensions are unknown so far, is determined in through feed by means of two lasers. The determined dimension is communicated to the machine and the right-hand milling units move in high speed to the required position. The furniture front is drawn into the work area and as it passes through the zone, the edge contours are processed by two or four cutters. Two 11KW HSK63 spindles per machining side, cutting climb and conventional, are loaded by a

# ROBA Fusion

## Your move to perfection



**ROBA FUSION IN ACTION**

Simply scan and watch the video!

changer with 12 tools. The required tool values have been stored in advance in the controller and calculated as the necessary information to position the units. This is done by means of high-precision and dynamic servo drives in high-speed mode.

A solid welded steel construction with a high-precision aggregate carrier, powerful spindle design, freely programmable milling speed, climb and conventional rotation of the tools and a sophisticated part transport by means of a driven top pressure system, ensure a high cutting quality and dimensional accuracy of the parts. A jump control of the spindles ensures a tear-free milling of the door corners in the end grain area.

If required the random sized parts can be pro-

cessed from a job list coming out of an ERP system. In combination with the laser measurement the software decides which door of the list is coming in. Accordingly the needed tools will be entered to the spindles and all aggregates positioned.

After all four edges have been shaped the door will be marked as processed within the job list.

If there is no job list available, the needed information can be taken from a Barcode or RFID.

In case the ROBA Fusion edge shaper is in line with a ROBA REP edge sander and a return system, that moves the fronts back to the beginning of the line to shape the unprocessed two sides, you have perfect complete edge machining. With



# ROBA Fusion

## Double end tenoner

a capacity of up to 2,500 four-sided machined fronts per shift, without any adjustments, the ROBA Fusion / ROBA REP combination is a highly effective solution.

In a two machine line, either in L-Shape, horse shoe or straight configuration, the output can be raised up to 5,000 doors per shift.

The concept is competing with the double end tenoner solutions coming from the well-known industry players. In contrary to their system MBs solution is able to process random door sizes without any set-up efforts. Practically the machine only needs to filled and unloaded, all rest is full automated.

## Advantages of the ROBA Fusion principle

1. Only existing "lot-size-one" high volume double end tenoner solution.
2. Production with minimal tolerances in terms of external dimensions and angularity.
3. Servo controlled and dynamic axis movements for high part throughput.
4. Highest shaping quality for door edges and panels.
5. Processing of lots by automatic laser measurement, Job List, Barcode or RFID.
6. Flexible configuration with extremely small footprint.



# ROBA Twin Flat

## Edge sanding machine

### Operation areas

The ROBA Twin Flat is developed especially for the window manufacturers who do piece-by-piece production of window rails. However, it also finds possible implementations in joinery workshops and industrial plants.

Operation areas:

- Wood fine sanding
- Impregnation sanding
- Intermediate lacquer sanding

### Sanding method

The ROBA Twin Flat machine stands out due to the simple operation and optimal denibbing results. Processing time is shortened considerably.

The machine sanding aggregate is divided into two areas: The flat part of the work piece is

sanded in an area with a short sanding paper setting. This area is 150 mm wide. The shaped profile part is sanded in a second area, set-up with narrow slotted paper, to be able to get easily into the depths of the profiling. This area is 100 mm wide.

In this way the four sided denibbing process lasts only a few seconds and does not strain the employee due to the ergonomically favourable construction of the "lying" sanding aggregate.

The new constructed Twin Flat contains two brush belts which movement directions are outward orientated. This avoids a too aggressive rounding of the edges and burn through during sealer sanding procedures. Another advantage is the improved handling of long work pieces.

In this way the Twin Flat is also favourable for companies who need to sand small batches of long parts fast and price reasonable.



Easy to replace sanding segments



Two different sanding areas: 100 mm and 150 mm for different sanding paper settings



Impregnated wooden window profiles waiting for the sanding with the Twin Flat. Without set-up time the window batches are always held together, no sorting before or after sanding necessary.

The profile diversity in the window industry is very extensive. For efficient sanding of these parts, a sanding machine has to be very flexible without any set-up efforts.



**ROBA  
Twin Flat**  
Your move to perfection

ROBA Twin Flat: New constructed machine for improved material handling of long parts. The movement direction of both belts is outward orientated to avoid too hard edge treatment.

# ROBA REP

## Edge sanding machine



Machine with return conveyance for four sided edge sanding.

### Operation areas

The ROBA REP sanding machine has been developed for MDF, white wood, primer and intermediate lacquer sanding of edges.

- Joiner's workshops
- Industrial plants
- Cabinet door producers
- Door production



Machine can be randomly loaded with different part dimensions.

### Sanding method

Edge sanding of solid wood and MDF doors in furniture and interior construction industry is a major challenge in terms of results and effectiveness. Straight or profiled workpiece edges, with constantly changing workpiece sizes, need to be processed. The new ROBA REP edge sanding machine from MB addresses this task with a completely new concept. It is developed with the aim of sanding furniture and interior doors, starting at lot size one, with high quality and high throughput. Even large quantities, which

come from modern CNC-controlled production machines, can be handled by the ROBA REP. For this purpose the sanding units, which consist of a left and right double brush, are placed in a short, fully encapsulated machine body. The sanding brushes turn clockwise and counterclockwise to ensure that all wood fibers are safely cut. A brush head jump control ensures that the part corners are not rounded, an automatic up and down oscillation ensures that the abrasives are always fully utilized. Depending on the contour of the edges, the aggregates can be arranged vertically or at an angle. By means of an automated width detection the workpieces are automatically measured, passing the machine inlet and the processing units are positioned with high-speed servo axes accordingly. This means that all parts can be fed to the machine indiscriminately and the use of the MB brush technology eliminates the need for any additional set-up work.

Since the actual sanding cell is very short, the workpieces leave the work area very quickly, which makes the machine immediately ready for a new workpiece. Thus, large quantities can be processed with very short cycle times.

# ROBA REP

## Your move to perfection



### ROBA REP IN ACTION

Simply scan and watch the video!

# ROBA REP

## Edge sanding machine

Four-sided sanding is done in combination with a fast material return system. After the workpiece left the sanding cell, they are laterally pushed by a high-speed servo pusher onto conveyor belts that return parts back to the operator. He rotates the parts by 90° and repeats the process to sand the missing two edges. Now the pusher system, which has previously moved the parts onto the return transport system, can be used to place them side by side to be processed directly into a subsequent machine.

Large cabinet door producers have already successfully implemented a line in combination with the ROBA REP, ROBA Tech and ROBA Anti Dust.

The latest development is the combination of the ROBA REP with the automated high-performance double end tenoner ROBA Fusion from MB Maschinenbau.



A right and left double brush unit is responsible for the sanding of the edges.

## Advantages of the ROBA REP principle

1. Fully automated sanding process for edges.
2. Loading the machine without any consideration of part dimensions.
3. No set-up work.
4. High throughput.
5. Perfect sanding results thanks to MB brush technology.



ROBA REP sanding machine with automatic width detection on the infeed belt which initiates the high-speed sanding aggregate positioning.

# ROBA Duplex

Edge sanding machine

ROBA Duplex with 350 und 400 mm sanding area is often preferred for the sanding of boxes in all dimensions.



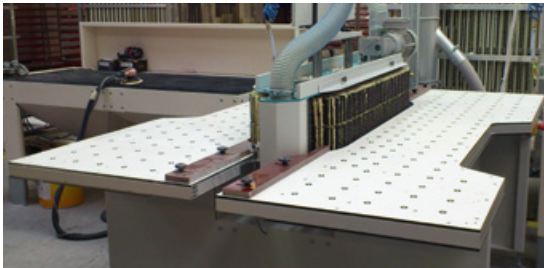
## Operation areas

The belt edge sander has been developed for MDF, white wood, sealer and primer sanding purposes.

Customers:

- Joinery
- Industrial plants
- Wooden stairs manufacturers
- Cabinet door producers

Twin Duplex with two sanding areas placed in a sanding island



The ROBA Duplex is famous for its simple operation and optimal results. Processing times are essentially shortened.

Two sanding areas



# ROBA Duplex

Your move to perfection



**ROBA DUPLEX IN ACTION**  
Simply scan and watch the video!



## Sanding method

The ROBA Duplex uses a divided sanding belt that is equipped with slots. 100mm long sanding brushes with the desired grit are inserted from above and below into these slots.

This means that two different abrasive trimmings can be used, for example a K120 grit at the top for coarse sanding and a K240 grit at the bottom for lacquer sanding. The pneumatic lifting from sanding area to sanding area is executed by a switch. This means that there is no time-consuming machine set-up necessary if you want to change the process.

The machine is based on a belt system instead of cylindrical sanding brushes. The advantage over cylindrical tools is obvious: the belt ensures a flat and wave-free sanding. The workpieces are only pressed against the sanding belt and do not have

to be laboriously guided past the tool. This results in significantly shorter processing times, while offering improved sanding quality.

A constant oscillation of the unit ensures better utilization of the sanding media and blurs possible sand marks.

MB has developed a Twin Duplex for companies who need more capacity when working with the ROBA Duplex. This machine has a sanding belt accessible from both sides and, equipped with two worktables, can be used by two operators at the same time.

If long workpieces, such as tabletops, must be edge sanded, MB offers the ROBA Duplex XL. Here the user has a work area of approx. 1,950mm. For very high workpieces, such as drawers, a ROBA Duplex with a 350mm sanding area is available.



ROBA Duplex aggregate side view: 30 mm oscillation and pneumatic height adjustment to change sanding area



ROBA Duplex for edge processing of furniture doors



Simple operation of all control elements



# ROBA Profi Edge

## Edge sanding machine



Double brush can be configured in different tool combinations: two stacked chamfered tools.



Double brush can be configured in different tool combinations: chamfered and cylindrical tool.

### Operation areas

The edge sanding machine has been developed for MDF, wood, lacquer and primer sanding.

Customers:

- Joiner's workshops
- Industrial plants
- Stairs manufacturers
- Cabinet door producers
- Window producers
- Tabletop production

### Sanding method

The ROBA Profi Edge is a solution for sanding profiled edges and panels.

It is available in three versions: 1,100mm, 2,400mm and 3,600mm working area.

The machine uses the typical MB double brush unit, which is attached to a mobile support that

moves in the background along the stationary workpiece.

Extra-large sanding tools, which rotate frequency-controlled clockwise and counterclockwise, ensure an excellent sanding of the workpieces.

A jump control avoids over rounding the corners and the unit oscillation ensures that the abrasives are fully utilized. A pneumatic pressure bar clamps the workpiece, which is particularly advantageous for large workpieces, as the parts do not have to be moved. Rather, the workpiece rests and the sanding unit moves in the encapsulated machine, creating a safe and dust free environment.

The tools, which rotate in two directions, ensure that the end-grain areas of solid workpieces are perfectly sanded. When sanding MDF, protruding fibers are removed and the surface is smoothed. In both cases the further processing in the painting department is made considerably easier.

# ROBA Profi Edge

## Your move to perfection



**ROBA PROFI EDGE IN ACTION**

Simply scan and watch the video!

# ROBA Profi Edge

Edge sanding machine

Different tools can be flexibly mounted on the 200mm long spindles: A 200mm high cylindrical brush or two 100mm stacked tools, which can be equipped with different grits.

Also tools with a chamfered sanding area are used for complicated edge contours. The combination of these options makes the machine very flexible.

Which tool is used for a specific process is stored in the sanding program and will be pneumatically positioned.

The working cycle is typically executed in a way that e.g. a cabinet door, starting with the short side, is rotated by 90° after finishing a given edge till the four-sided sanding is complete.

The actual sanding position is approached in high-speed mode, while the sanding area itself is passed at a programmed processing speed.

## Sanding can be done in different ways:

- Sanding starting from the right parking position to the left, then back to the parking position in high-speed mode.
- Sanding starting from the right parking position to the left, waiting in this position until the workpiece has been rotated, to sand on the way from left to right.
- Sanding starting from the right parking position to the left, to sand again on the way from left to right.
- Sanding starting from the right parking position to the left, waiting in this position until another tool on the spindle has been called up in order to sand now with the new tool on the way from left to right.

These functions can also be used if you place and clamp several workpieces next to each other. This makes sense if the sum of the long sides does not exceed the working area and increases productivity.



# Material handling

Material handling



Part conveyor to out feed and align work pieces



Transport conveyors in customized execution



Return system with part buffer for on-personnel-operation of sanding lines.

## Operation areas

- Machine feeding
- Machine linking
- Material handling

Part handling by linking machines and equipment loading is another product leg of MB Maschinenbau.

In particular the window and furniture industry likes to use MB products, as these often need to be customized to special demands. High cycle rates and complex processes can be realized with MB handling systems.

**Material  
handling**  
Your move to perfection



## Operation areas

- Customized solutions for special applications
- As supplement for all MB sanding machines

MB Maschinenbau has always been watching closely the needs of its customers. If sanding tasks cannot be covered by the existing range of machines, MB is able to solve customer requirements with new designs.

An example of such a requirement is a side sanding unit specially designed for a customer which is now a standard option for all MB surface sanding machines:

The effective and easy to operate MB series of surface sanders such as ROBA Tech, ROBA Profi Brush, ROBA BIG, ROBA Profi Clean and ROBA Profi Disc are appreciated by many customers. But quite often there is the need for an additional edge sanding in one operation. With the new



MB sanding machines integrated into a robot cell

sanding unit customers are now able to integrate a side processing.

Individually set-up this additional unit can be integrated into any MB surface sander. Up to five vertical units are positioned against each other by means of a spindle, or if necessary, completely moved out of the working field.

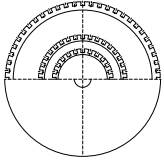
## Special machines

Your move to perfection



# MB Flex

## Brush sanding system



The MB Flex system can offer sanding cores from 56mm up to 280mm

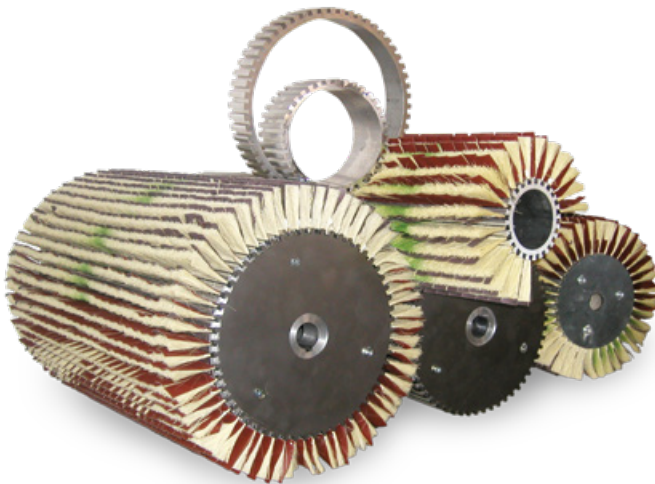
### Operation area

The MB Flex brush sanding system is used in the woodworking industry for wood and lacquer sanding, as well as for polishing oil and wax applications. The sanding brush consists of a core to accommodate the abrasive segments. The core is not a subject of wear; thus he can be used with new sanding segments for different jobs at any time.



The MB-Soft support brush offers more rigid sanding on highly profiled surfaces

Due to the plug-in brush system the sanding heads can be set in different configurations. With this possibility the customer can prepare a brush which is suitable for a wide range of workpieces with different requirements.



### Configuration

The MB Flex program consists of a wear-free sanding core which has, depending on the core diameter, a varying number of keyways. Starting with a sanding core of 56mm diameter and 12 slots, up to a sanding core with a diameter of 280mm and 54 slots, 11 different combinations are possible. The MB Flex standard core has a diameter of 280mm with 54 keyways.

Different brush height of 30mm, 45mm, 60mm and 75mm are available. Grit ranges from K24 to K400, using Aluminum Oxide or Silicon Carbide, can be delivered.

Depending on the local possibilities the core diameter, in combination with the selected abrasive strips, should always target a maximum diameter. The larger the diameter, the more abrasives are involved, the better the sanding result and the life span of the tools.

The selection of the abrasive slotting depends on the sanding task. The finer the contour to be sanded, the narrower the slit must be chosen. Plane work pieces demand a wider slit of 15mm

# MB Flex

Your move to perfection

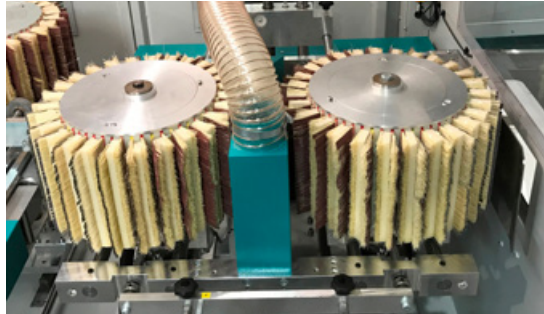
## MB Flex

### Brush sanding system

or more. A combination of different cuttings in one brush makes the tool very flexible for all thinkable sanding jobs.

In case of burned through edges during a base coat sanding processes the slot width should be reduced. Another variation on the MB Flex system is the “Super Flex” support brush. This brush is recommended whenever surface scratches or burned through edges must be avoided. Particularly in the field of sealer sanding this soft support brush has proven to be very useful.

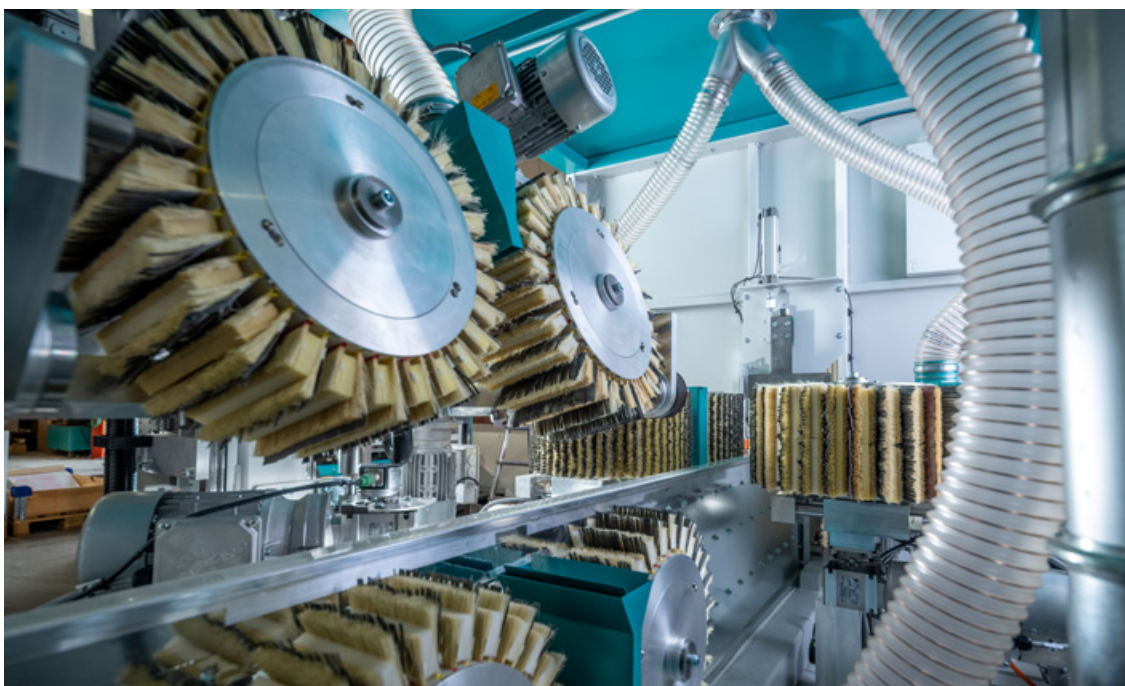
Since the MB Flex brush system must also be suitable for machines of other brands, MB offers dovetails in different dimensions. In this way the customer can be sure that he is always able to use the proven MB quality on his machine.



MB Flex sanding head installed in a double brush



Even highly shaped work pieces can be sanded with the MB Flex system to achieve perfect results.



MB Flex sanding heads are available in various diameter and lengths

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