

FOCUS ON  
SOLUTIONS,  
NOT ON  
PROBLEMS



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**SWABIAN WORKMANSHIP**

PRODUCT  
OVERVIEW

**MACHINE CONSTRUCTION  
MADE IN GERMANY**

**Axel Wirth  
Maschinen GmbH**

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**CREATIVE, COMPETENT, RELIABLE**

Axel Wirth Maschinen GmbH has its origins in wood processing and today, under the management of owner Max Wirth is also involved in many other industries. Together with you, we want to continue our successful development and are at your side with attention to detail, expertise and many years of experience - with individual solutions as well as for complex projects, as has already been the case for several generations.

**SUCCESSFUL DEVELOPMENT IN SWABIAN:  
FOCUS ON SOLUTIONS, NOT ON PROBLEMS**

Every application has a unique requirements profile, and as diverse as the industrial branches are, so are the solutions. There are many sectors involved in the coating of liquids or pastes on a wide variety of substrates and each presents its own set of complex challenges.

Regardless of the industry, we develop concepts to successfully solve these problems, e.g. in the woodworking industry, in the automotive sector, in the further processing of sheet metal, in the coating of glass, in the spray application of 1K water-based paints on plastic profiles, in the coating of foams with shear force-sensitive adhesives or processing emulsions on ceramic tiles and much, much more.



**WE ARE HERE FOR YOU**



**WE ARE THERE FOR YOU**

You are the expert and you know your products and your customer's wishes best. Individual and effective answers help to produce the best possible results.

With our bespoke solutions for your coating applications we maximise your competitive advantage.

Just ask us, we will be happy to provide you with our expert knowledge.

Max Wirth, General Manager

## ENDLESS MATERIALS

## SHEET MATERIALS

WOOD COMPOSITES

COIL COATING

GLASS

METAL



RUBBER

SOLIDS

SOLAR

BRAKES

CERAMICS

FOAM

Successful coating concepts require comprehensive knowledge of the pre-treatment of substrates and their material properties. Practical experience and an intuition for the customer's desired end products are crucial. The transfer and application of the latest scientific know-how ensures an optimal design of our machines to the customer's specifications.

**We are manufacturer-neutral and focus on the wishes of our customers. In close cooperation with customers and partners, we develop custom solutions for economical production in various industries.**

## TYPE DWO

For the roller application of liquid media such as glue (also machine-compatible cold PUR adhesive), oil, UV oil, wax, glaze, stain, paint, lye ... on flat substrates such as metal, plastic, cardboard, rigid foam, wood, stone...

Oiling, waxing, lying and staining of furniture, floorboards and parquet are naturally just some of the uses of this machine.

Minimal application quantity e.g. UV oil 5 g/m<sup>2</sup> in small or large series production. The fluid dosage is continuously variable by adjusting the dosing roller. The type of roller surface determines the minimum application quantity.

Coarse, medium or fine grooves, large pores, fine pores, smooth.

### ROLLER APPLICATION OF LIQUID MEDIA SUCH AS ADHESIVES, OIL, UV PAINTS, UV OILS, PRIMERS ...

Various hardnesses and chemical resistances.

The individual rollers can be removed for cleaning within half a minute.

All parts - except the drivetrain - are made of high-quality stainless material such as V2A, aluminium.

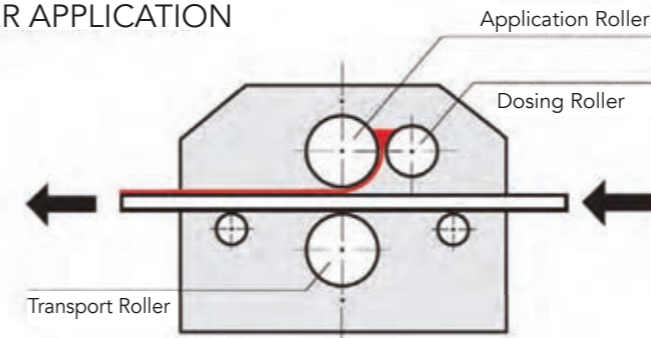
		TYPE DWO	
Nominal Width/Roller Width		450/460 mm	650/660 mm
Maximum Material Height		100 mm	100 mm
Rubberised Top Application Roller		120 mm Ø	120 mm Ø
Rubberised Bottom Transport Roller		120 mm Ø	120 mm Ø
Stainless Steel Dosing Roller		100 mm Ø	100 mm Ø
Motorised Application Roller		0,37 kW	0,55 kW
Motor Dosing Roller		0,38 kW	0,38 kW
Supply Voltage, Frequency and Phases		400/230 V, 50 Hz, 3 Phases	400/230 V, 50 Hz, 3 Phases
Adjustable Feed Rate		2 – 35 m/min	2 – 35 m/min
Machine Dimensions	Width	1130 mm	1330 mm
	Depth	800 mm	800 mm
	Height	670 mm	670 mm

Safety device: Safety edge at the workpiece inlet. CE certificate.

Subject to technical modifications. Other sizes: 850 - 1100 - max. 2800 mm

## DOSING ROLLER MACHINE

### ROLLER APPLICATION



EASY TO CLEAN, BECAUSE IT CAN BE DISMANTLED QUICKLY. EASY HANDLING. ROBUST CONSTRUCTION. EFFICIENT AND POWERFUL. RUSTPROOF.

## TYPE DDWO

## DOSING ROLLER SYSTEM REVERSING MACHINE

For the roller application of liquid media such as glue (also machine-compatible cold PUR adhesive), oil, UV oil, wax, glaze, stain, paint, lye ... on flat substrates such as metal, plastic, cardboard, rigid foam, wood, stone...

Oiling, waxing, lying and staining of furniture, floorboards and parquet are naturally just some of the uses of this machine. Minimal application quantity e.g. lacquer 3 g/m<sup>2</sup> in small or large series production. The fluid dosage is continuously variable by adjusting the dosing roller. The type of roller surface determines the minimum application quantity. Coarse, medium or fine grooves, large pores, fine pores, smooth.

### ROLLER APPLICATION OF LIQUID MEDIA SUCH AS ADHESIVES, OIL, UV PAINTS, UV OILS, PRIMERS ...

Various hardnesses and chemical resistances. The individual rollers can be removed for cleaning within can be removed for cleaning within half a minute.

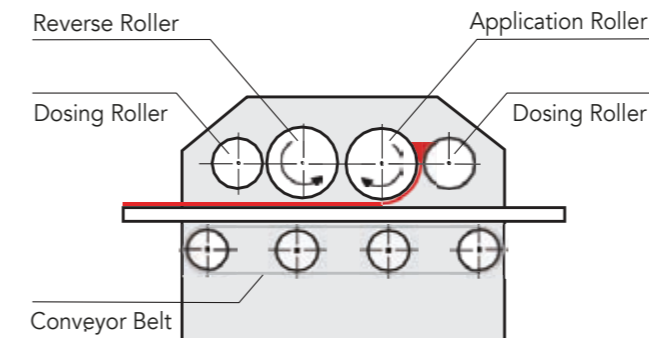
All parts - except the drivetrain - are made of high-quality rustproof material such as V2A, aluminium.

		TYPE DDWO	
Nominal Width/Roller Width		450/460 mm	650/660 mm
Maximum Material Height		100 mm	100 mm
Rubberised Top Application Roller		120 mm Ø	120 mm Ø
Stainless Steel Dosing Roller		100 mm Ø	100 mm Ø
Reverse Roller		120 mm Ø	120 mm Ø
Dosing to Reverse Roller Gap		100 mm Ø	100 mm Ø
Removable Conveyor Belt		410 mm	610 mm
Motor Conveyor Belt		0,48 kW	0,48 kW
Application/Transport Roller Motors		0,38 kW	0,38 kW
Motor Dosing Roller		0,38 kW	0,38 kW
Pneumatic Pump			
Supply Voltage, Frequency and Phases		400/230 V, 50 Hz, 3 Phases	400/230 V, 50 Hz, 3 Phases
Adjustable Feed Rate		2 – 35 m/min	2 – 35 m/min
Machine Dimensions	Width	1195 mm	1395 mm
	Depth	1000 mm	1000 mm
	Height	1550 mm	1550 mm

Safety device: Safety edge at the workpiece inlet. CE certificate.

Subject to technical modifications. Other sizes: 1100 - 1300 - max. 2800 mm

### ROLLER APPLICATION



EASY TO CLEAN, BECAUSE  
IT CAN BE DISMANTLED  
QUICKLY. EASY HANDLING.  
ROBUST CONSTRUCTION.  
EFFICIENT AND POWERFUL.  
RUSTPROOF.

## TYPE LW 100

For one- or two-sided roller application of liquid media such as glue (also machine-compatible cold PUR adhesive), oil, wax, glaze, stain, paint ... on flat substrates such as metal, plastic, cardboard, rigid foam, wood, stone...

Versatile use in traditional woodworking, from furniture production and laminating to one-sided gluing of 0.6 mm thick veneers. Oiling, waxing, lying and staining of furniture, floorboards and parquet flooring is of course possible.

The liquid dosage is continuously variable using an eccentric lever. The type of roller surface determines the minimum application quantity. Coarse, medium or fine grooves, large pores, fine pores, smooth. Various hardnesses and chemical resistances.

### ROLLER APPLICATION OF LIQUID MEDIA SUCH AS OIL, WAX, ADHESIVE, PRIMER...

The container and rollers can be removed for cleaning within half a minute. All parts - except the drivetrain - are made of high-quality rustproof material such as aluminium, V2A/stainless steel.

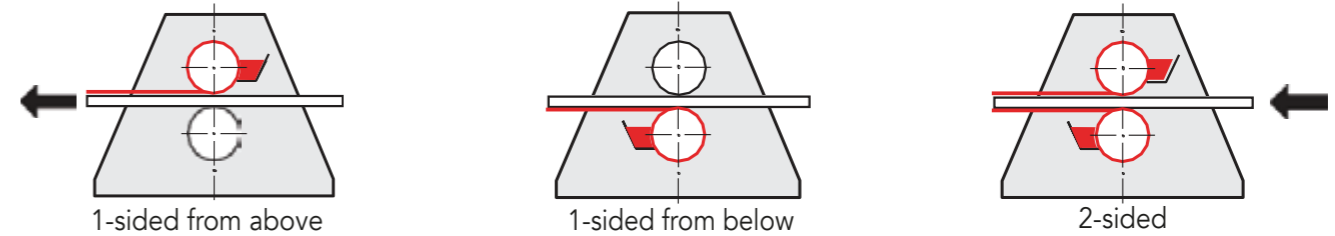
	TYPE LW 100/300	TYPE LW 100/450	TYPE LW 100/650
Nominal Width/Roller Width	300/310 mm	450/460 mm	650/660 mm
Maximum Material Height	80 mm	80 mm	80 mm
Rubberised Application Roller at the Bottom, Smooth or Grooved	100 mm Ø	100 mm Ø	100 mm Ø
Capacity per Glue Container	ca. 1,5 l	ca. 2,3 l	ca. 3,25 l
Drive Power with 230/400 V, 50 Hz	0,37 kW	0,37 kW	0,55 kW
Feed Rate (Other on Request)	24 m/min 6 – 35	24 m/min 6 – 35	24 m/min 6 – 35
Machine Dimensions	Width	860 mm	1010 mm
	Depth	630 mm	630 mm
	Height	540 mm	540 mm
Optional Features	Increased Maximum Material Height: Material Heights Exceeding 80 mm Motor Control 6 - 35 m/min Custom Voltage		

Safety device: Safety edge at the workpiece inlet. CE certificate.  
Subject to technical modifications. Other sizes: 850 - 1100 - 1300 mm

## ROLLER COATING MACHINE

THE MACHINE CAN BE COMBINED TO MEET YOUR REQUIREMENTS:

### ROLLER APPLICATION



EASY TO CLEAN, BECAUSE IT CAN BE DISMANTLED QUICKLY. EASY HANDLING. ROBUST CONSTRUCTION. EFFICIENT AND POWERFUL. RUSTPROOF.

## TYPE LW 120

## ROLLER COATING MACHINE

For one- or two-sided roller application of liquid media such as glue, adhesive (also cold machine-compatible PU), oil, wax, glaze, stain, paint ... on flat substrates such as metal, plastic, cardboard, rigid foam, wood, stone ...

Widely used in traditional woodworking and furniture production, from laminating moulded wooden furniture to one-sided gluing of 1.0 mm thick veneers. A further industrial application is gluing metal to foam. Oiling, waxing, lying and staining of furniture, floorboards and parquet are naturally just some of the uses of this machine.

The liquid dosage is continuously variable using an eccentric lever. The type of roller surface determines the smallest application quantity. Coarse, medium or fine grooves, porous or smooth. Various hardnesses and chemical resistances.

### ROLLER APPLICATION OF LIQUID MEDIA SUCH AS ADHESIVES (ALSO COLD PU), GLUE, OIL, WAX, LYE, STAIN, PAINT ...

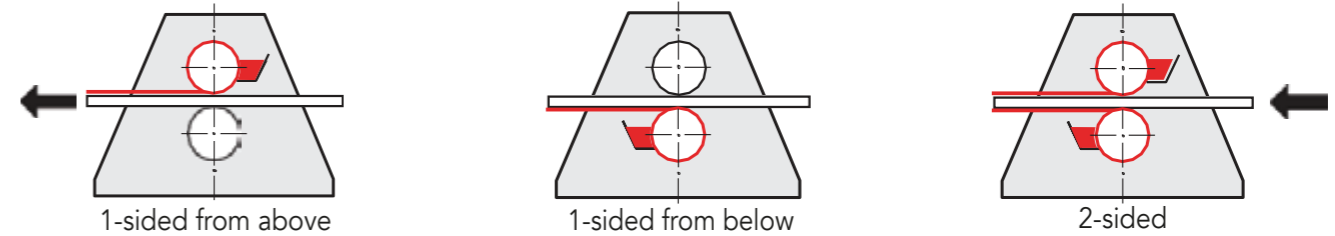
The container and rollers can be quickly removed for cleaning. Important for cold PU adhesive. All parts - except the drivetrain - are made of high-quality rustproof material such as V2A, stainless steel.

	TYPE LW 120/850	TYPE LW 120/1100	TYPE LW 120/1300
Roller Width	850 mm	1100 mm	1300 mm
Maximum Material Height	100 mm	100 mm	100 mm
Upper Stainless Steel Roller, Application Surface Rubberised Smooth, Grooved, Porous	120 mm Ø	120 mm Ø	120 mm Ø
1 or 2 Stainless Steel Basins for Glue, Oil ...	850 mm	1100 mm	1300 mm
Drive Power at 400 V, 50 Hz, 3 Phases	0,75 kW	0,75 kW	0,75 kW
Feed Rate (Other on Request)	18 m/min 6 – 35	18 m/min 6 – 35	18 m/min 6 – 35
Machine Dimensions	Width	1460/1660 mm	1760/1960 mm
	Depth	630 mm	630 mm
	Height	540 mm	540 mm
Optional Features	Increased Maximum Material Height: Material Heights Exceeding 100 mm Motor Control 6 - 35 m/min Custom Voltage		

Safety device: Safety edge at the workpiece inlet. CE certificate.  
Subject to technical modifications. Other sizes: 300 - 450 - 650 mm

THE MACHINE CAN BE COMBINED TO MEET YOUR REQUIREMENTS:

#### ROLLER APPLICATION



EASY TO CLEAN, BECAUSE IT CAN BE DISMANTLED QUICKLY. EASY HANDLING. ROBUST CONSTRUCTION. EFFICIENT AND POWERFUL. RUSTPROOF.

## TYPE VE

With the combination of application machine and VE spreader belt, craftsmen, plank manufacturers and parquet factories can apply oil, wax, oil stain, protective coating, protective paint, ... from above and process the surfaces and chamfers. The continuously variable roller pressure of the application machine and the smooth roller surfaces apply the oil evenly onto and into the wood. The amount of oil is continuously variable. Surplus medium is undesirable and can be avoided. Depending on the type of wood, sanding, structure and surface temperature, the wood needs a moment to become fully saturated with oil. Greatly absorbent areas do not receive more oil than less absorbent areas. Due to this simple fact dark stains are avoided. Oil remains on less absorbent areas of the wood, such as knots. Traditionally, the surface is wiped with a cloth. However, we do not remove the excess oil, but distribute it evenly to other areas. The mechanical brushing is carried out by the distributor unit. The disk brushes and pads are available with a diameter 400 mm or 635 mm so that they protrude beyond the workpiece. An improved surface quality with an excellent consistency is thus achieved.

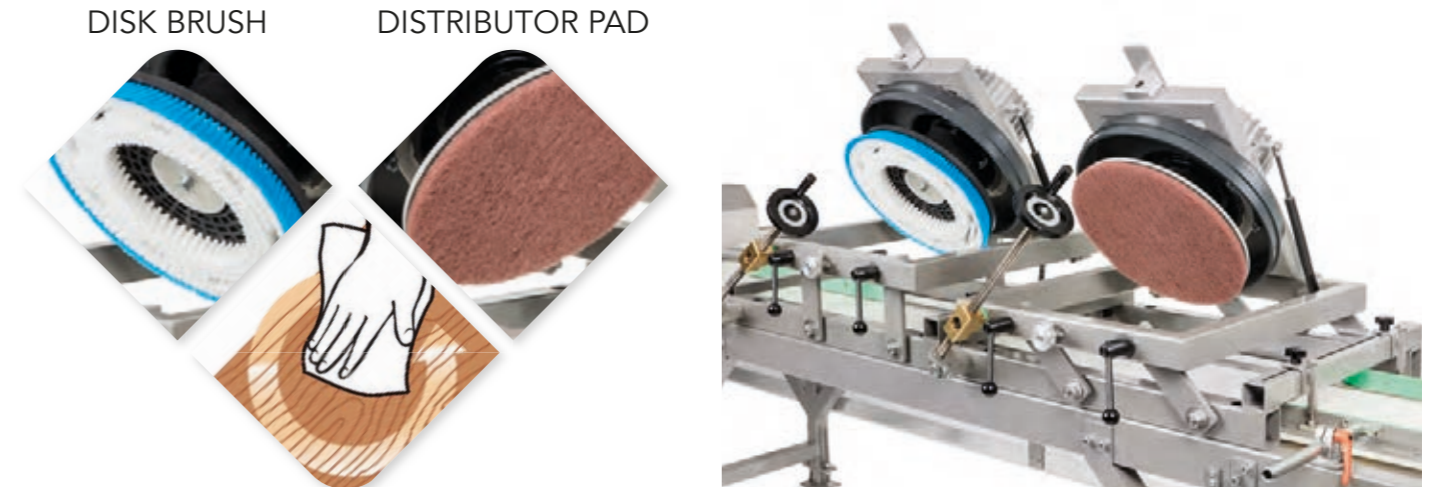
In addition to colourless liquids, coloured oils or pigmented roller-compatible oils are quickly and reliably spread out. The combination of the upstream application roller and the distributor unit ensures that the bevels are evenly wetted and processed. The conveyor belt can withstand the shear force exerted by the rotating disks on the wood being processed due to its laterally stiff construction. The transport speed of the wood and the rotation speed of the disks is continuously variable. The height and pressure of the plates are also continuously variable. Brushes and pad disks are convenient to replace. The pads are simply attached with Velcro and thus can be changed quickly.

Up to 4 distributor units, can be used in series on our standard machine. In the event that more liquid is applied than the wood can absorb, we have installed vertical stainless steel plates next to the horizontal disk brushes to collect the excess. Before the conveyor belt, the LW 100 or DWO roller application machine is flange-mounted on a prepared surface and connected to the control box via a plug. For application machines, see brochure LW 100 and DWO.

DISTRIBUTION UNIT VE	
Dimensions of the Complete Installation	Length 6000 mm Width 1200 mm (Optionally 1400 mm) Application Machine Exit to 1st Distributor Head 2400 mm
Conveyor Belt	Belt Width 450 mm (Optionally 635 mm) Length of Surface 6000 mm Motor 1.5 kW Speed 7 - 30 m/min Continuously Variable
Tool head	Motor 2.0 kW, Disk Ø 400 mm (Optionally 635 mm) Brush Material Plastic or Natural Bristle Natural Bristle Pad Material Commercially Available Quick-Change System for Brushes and Distributor Pads Standard Number of Disks 2 Pieces, Optionally 1 - 4 Pieces
Supply Voltage, Frequency and Phases	400 Volt, 50 Hertz, 3 Phases

Subject to technical changes.

## DISTRIBUTION UNIT



The LW 100 roller coater is used to apply oil, stain, . . . over the whole surface. The surfaces are generally then wiped, soft-brushed or polished immediately or shortly after application. The excess is spread out.

Plank/parquet manufacturers combine the roller applicator with the VE spreader unit. Oil is applied to planks from above. A transversely stable conveyor belt guides the wood underneath the strong spreader heads with a width of 400 mm. Disc brushes and pads work the oil into the surface. After a short distance the surface and bevelled edges are completely oiled and finished.



EASY TO CLEAN, BECAUSE IT CAN BE DISMANTLED QUICKLY. EASY HANDLING. ROBUST CONSTRUCTION. EFFICIENT AND POWERFUL. RUSTPROOF.



## BRUSH SANDING MACHINE

Sanding or smoothing the surface is necessary for many coating processes.

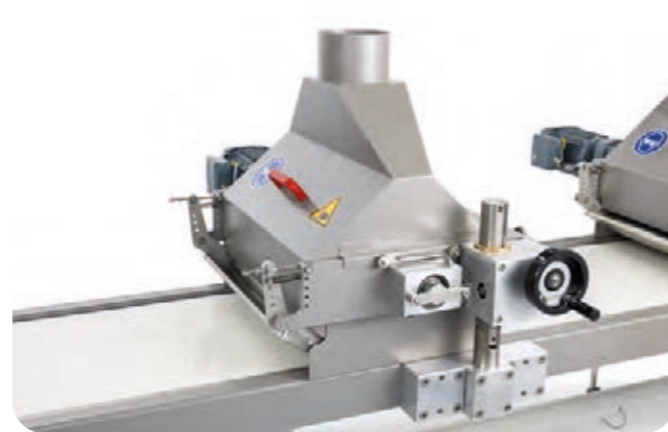
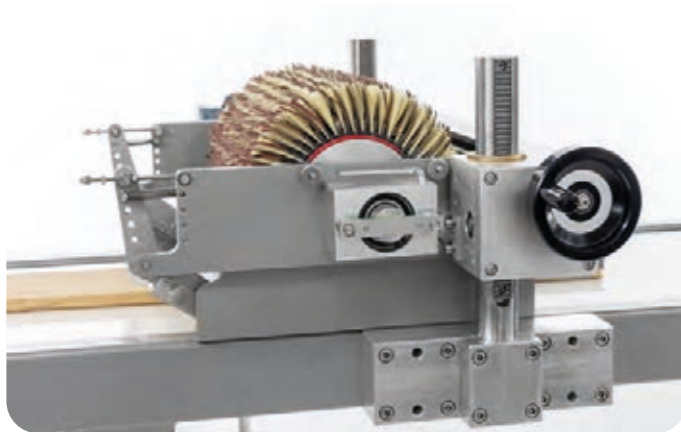
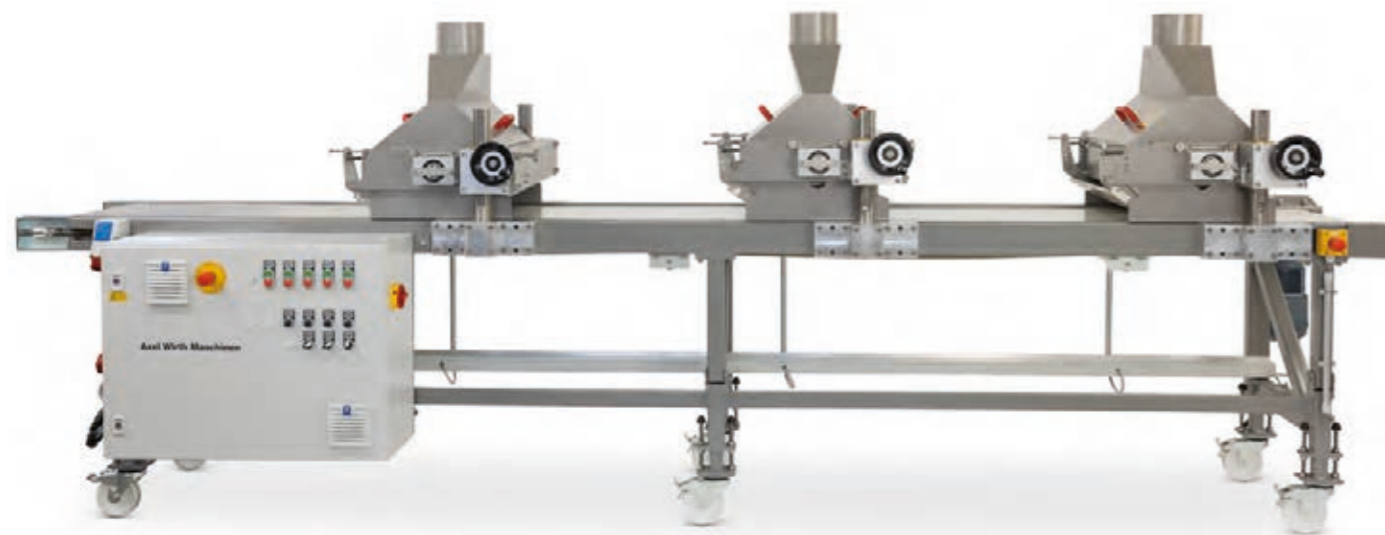
Use our solidly built Wirth brush sanding machine made of high-quality materials for this purpose!

We build these in working widths of 450, 650 or 850 mm.

We can also manufacture other dimensions that you may require.

All speeds are adjustable. The brushes can be changed in minutes.

Applications include intermediate sanding of LED or UV oiled surfaces, smoothing after lye or stain treatment.



## PRIMER INSTALLATIONS



### Primer application for solvent-based or water-based media.

Primer application is a common industrial challenge.

This new type of machine was specially developed in our technical centre for the plastics and metal industry. It can coat a wide variety of materials precisely and with an efficient use of resources.

With our system, continuous material or rolls can be coated quickly and reliably with primers.

The machine is easy to use, for example the following settings: Quantity feed, material thickness and throughput speed can be adjusted effortlessly.

Like all our systems, this machine can of course be integrated into production lines.

We will work with you to develop the optimum setup of the units.

## TECHNICAL CENTER - TEST WORKSHOP

You can imagine many things in theory, but you can only see whether they work when you try them out. In our in-house test room, you have numerous innovative options available to you. Each machine is equipped with various tools, including up to 50 different roller surfaces that can be tested for varying requirements.

### SIMPLY TEST YOUR APPLICATION IN OUR TEST WORKSHOP.

- ◆ Glue Application Machine LW 100
- ◆ Roller Coating Machine LW 120
- ◆ Dosing Roller Machine DWO
- ◆ Roller Coating Machine DDWO
- ◆ Distributor Unit with Disk and Cylinder Brushes
- ◆ Drying
- ◆ Sanding Brushes
- ◆ Structuring Machine

Our test room is often the starting point for new production processes. Here, new ideas and concepts can be implemented and tested thoroughly. Our experts will support you achieving the best possible results.

In our test room, the motto is: impossible, does not exist. We are always looking for solutions and new approaches to meet your requirements. Test your application with us and experience the versatile and flexible possibilities offered by our test room.



## CHALLENGE US!

Successful coating concepts require extensive knowledge of the pre-treatment of the substrates, their material properties and the specific details of the coating agents, stains and adhesives.

A great deal of practical experience and intuition for the customer's desired product are also essential. The transfer and application of the latest scientific know-how ensures an optimal design of our machines to the customer's specifications.

When it comes to substrates, coating agents and adhesives, we are manufacturer-neutral and focus on the wishes of our customers.

### WHAT DOESN'T FIT IS MADE TO FIT.

We look forward to your challenge.

