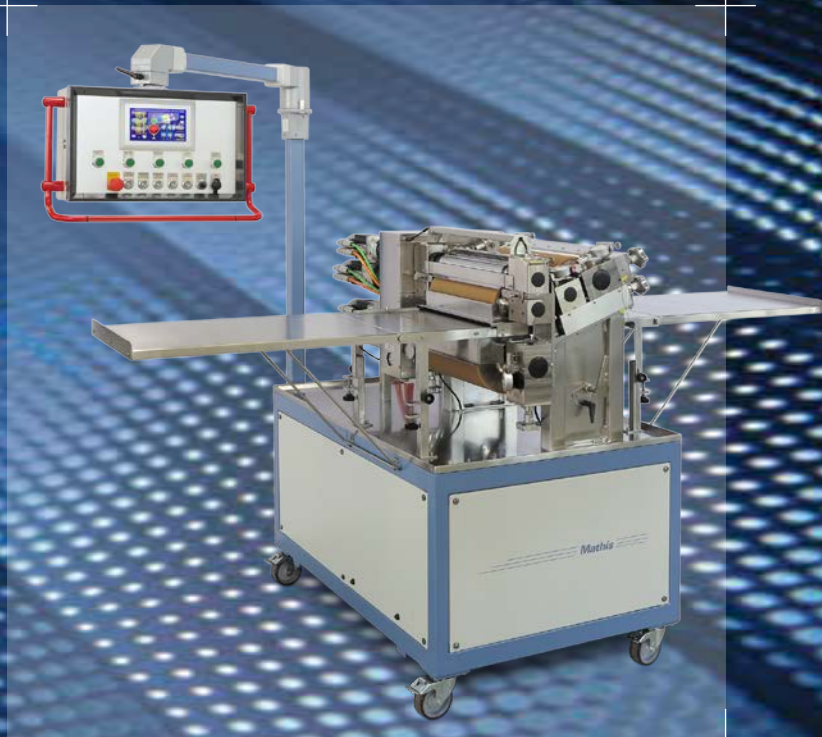


REVERSE ROLL COATER TYPE «BA-RRC»

Coating Metal Sheet Samples

Economic Use

This reverse roll coater is used for applying primers, lacquers, solvent-based, aqueous and 100% systems, UV-lacquers, and primers for the pre-treatment of aluminum, steel sheeting and other materials. The application quantity is approximately 1–100 g/m² dry weight.



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Possible Uses

In most cases, the manual doctor knives frequently used in many laboratories no longer fulfil modern requirements. This simple method of application is not at all comparable with that used in a modern coil-coating system. This can result in color shade differences, for example. It is also impossible to detect the flow behavior, the formation of bubbles and streaks, and whether or not the film is torn.

In the reverse roll coater laboratory, the production conditions of a coil coating system can be reproduced on small samples.

The application media such as primers, lacquers, etc. can already be optimized in the laboratory, meaning that no complicated and expensive trials need to be performed on a production line. The device is also excellent for creating samples.

Combined Application & Drying Option

Our hot-air oven type «LTH» can be used for drying, hardening and baking primers, paints, lacquers or similar surface coatings. Following the application, the coated sample materials such as steel sheeting, aluminum, etc. are placed in a holder and transported to the dryer for subsequent heat treatment. This combination of applicator and drying oven allows for a wide range of essential test series to be performed in the laboratory, thus making subsequent, considerably more expensive and more laborious experiments with production lines unnecessary.



Function

The dipping roll rotates while partially immersed in a trough positioned below it. The liquid to be applied is picked up from the trough by the dipping roll and transferred to the applicator roll. The liquid is transferred from the applicator roll onto the sample to be coated.

The conveyor roller with a polyurethane-coated surface passes the sample beneath the applicator roll, thus guaranteeing an even application along the entire length of the sample.

The speed of all of the rolls is infinitely variable. The distance between the dipping roll and the applicator roll is precisely adjustable and can be read off precision dial gauges.

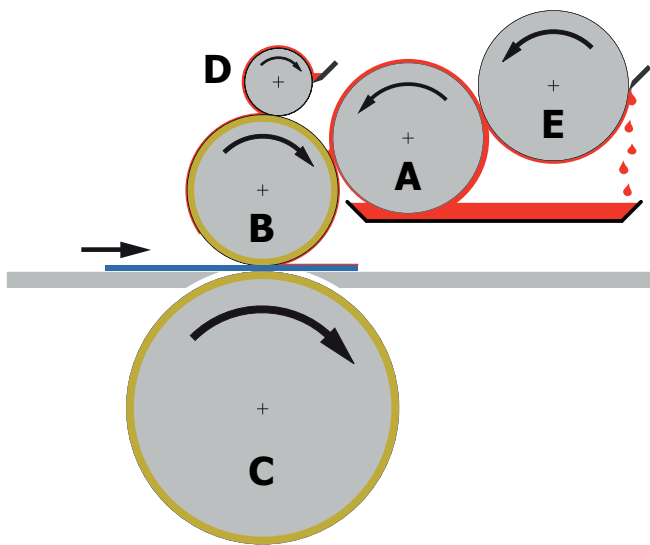
The distance between the applicator roll and conveyor roller can be adjusted to the required sample thickness. The conveyor roller is pneumatically adjustable. The conveyor roller's direction of rotation is reversible, thus allowing for application in the same and opposing directions.

Dosing Roll

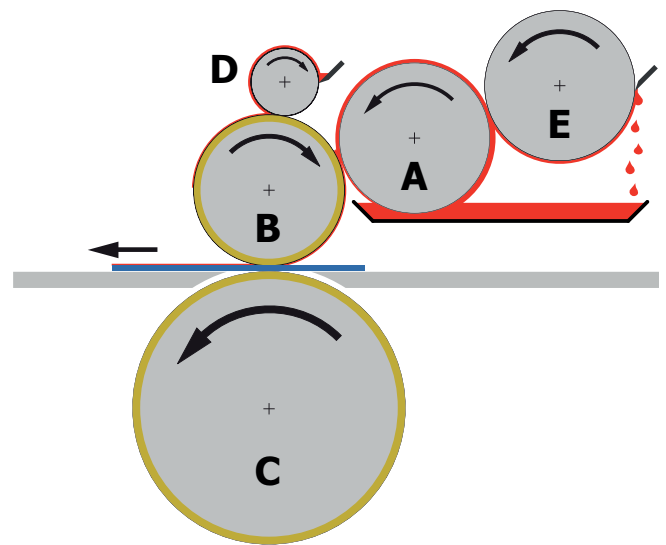
With the dosing roll, the liquid film can be dosed even more precisely on the dipping roll. A doctor knife for distributing and removing the liquid film can be added at the dosing roll.

Lick Roll

The pneumatically adjustable lick roll picks up the liquid film from the applicator roll. As a result, a homogenous new film is always built up on the applicator roll. This guarantees an even coat along the entire length of the sample. A doctor knife for distributing and removing the liquid film can be added at the lick roll.



Operation in opposing directions



Operation in the same direction

- A Dipping roll
- B Applicator roll
- C Conveyor roller
- D Lick roll
- E Dosing roll

Additional Design

Conveyor Belt Instead of Conveyor Roller

A conveyor belt is also available as an alternative to the conveyor roll mentioned above. The conveyor belt is available in different materials:

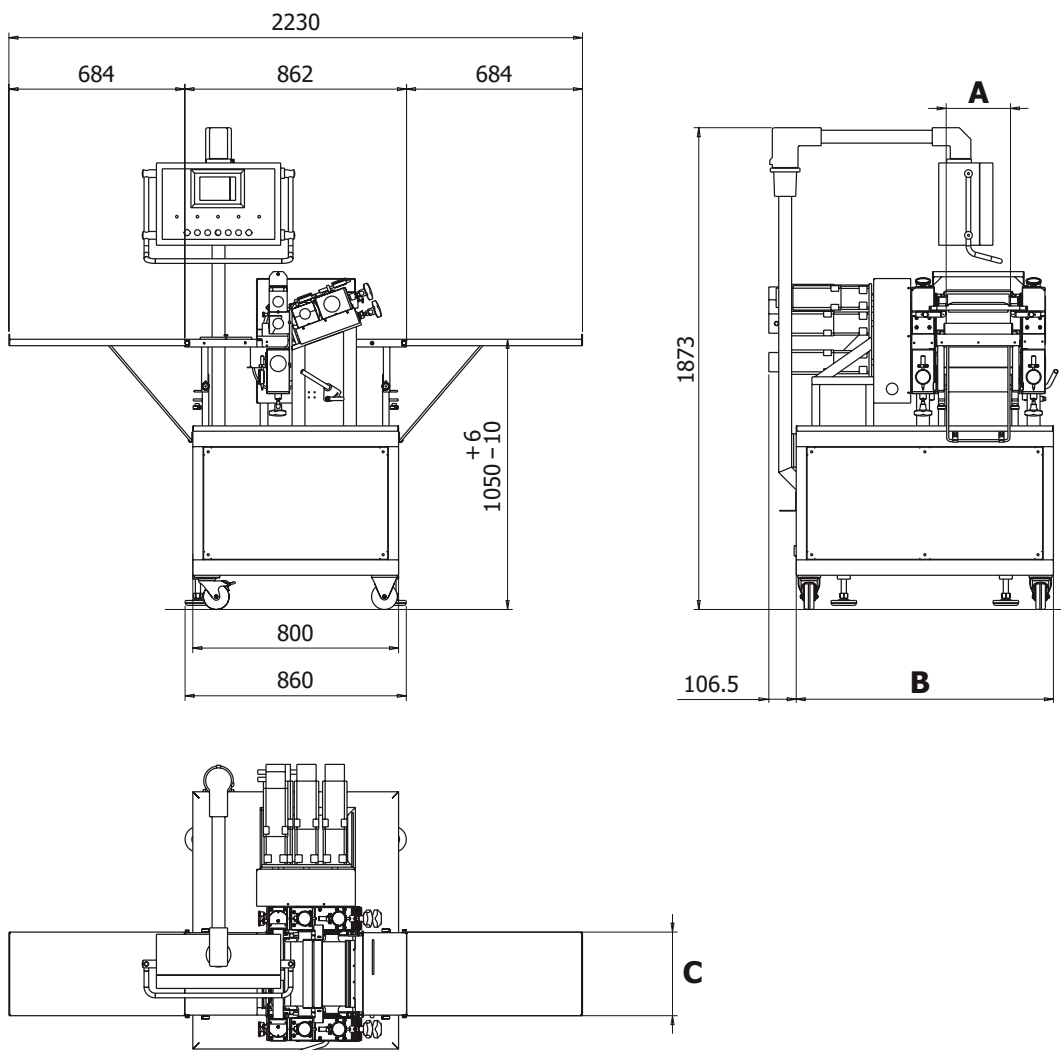
- Conveyor belt made of teflon/viton is used for applying solvent-based media due to its good resistance to solvents.
- Silicone conveyor belt - this belt is better suited for use with aqueous application materials. Using a conveyor belt reduces the amount of cleaning required, especially for test series. However, the conveyor generally requires a more precise applicator roll distance adjustment.

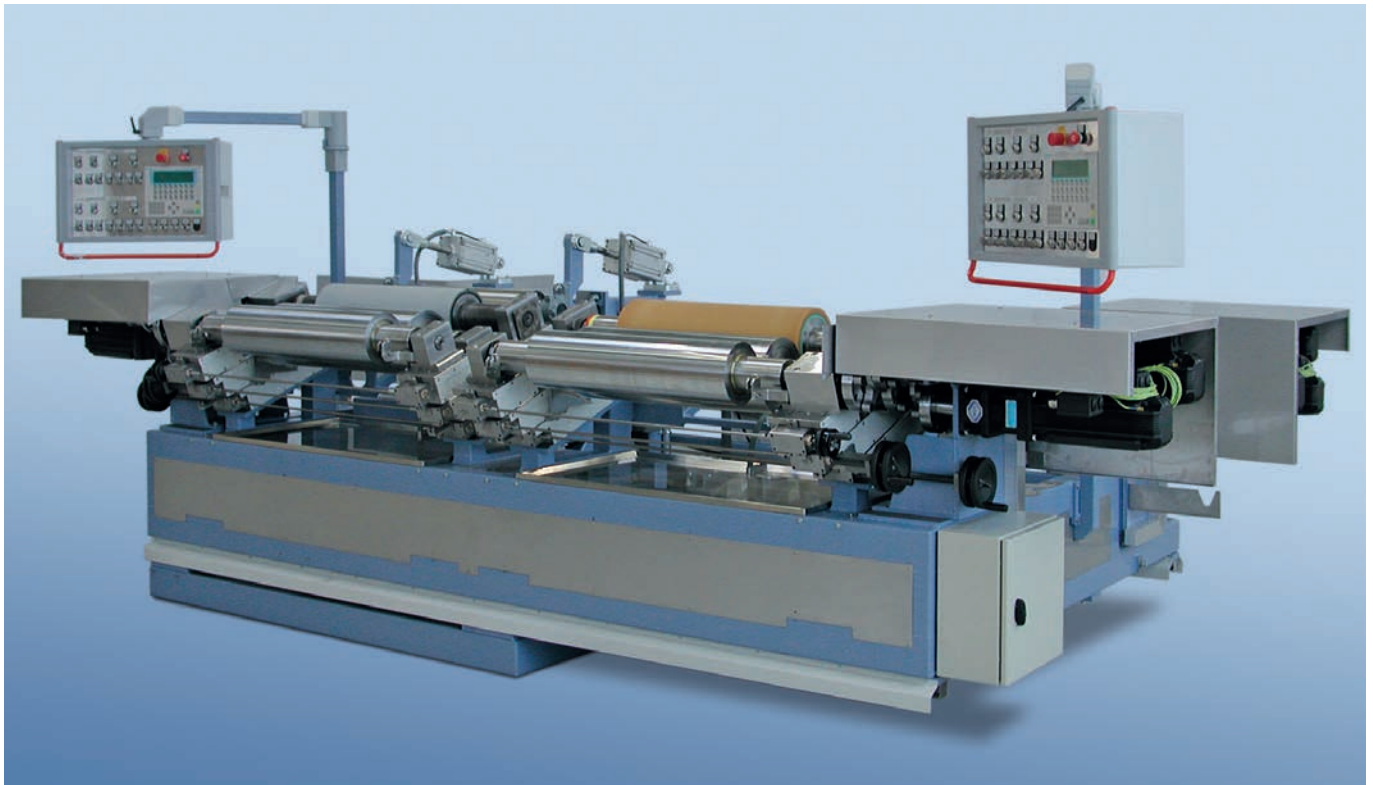


4 Standard Widths Available

Technical information

	Type 250	Type 350	Type 500	Type 650
Sample width:	180 mm	280 mm	430 mm	580 mm
Sample thickness:	0.2 – 5 mm			
Sample length:	400 mm			
Sample length with additional table:	up to 1 m			
Weight:	~500 kg	~530 kg	~560 kg	~600 kg
Dimensions:				
Measurement A	250 mm	350 mm	500 mm	650 mm
Measurement B	1000 mm	1100 mm	1250 mm	1400 mm
Measurement C	325 mm	425 mm	575 mm	725 mm





Shuttle Reverse Roll Coater

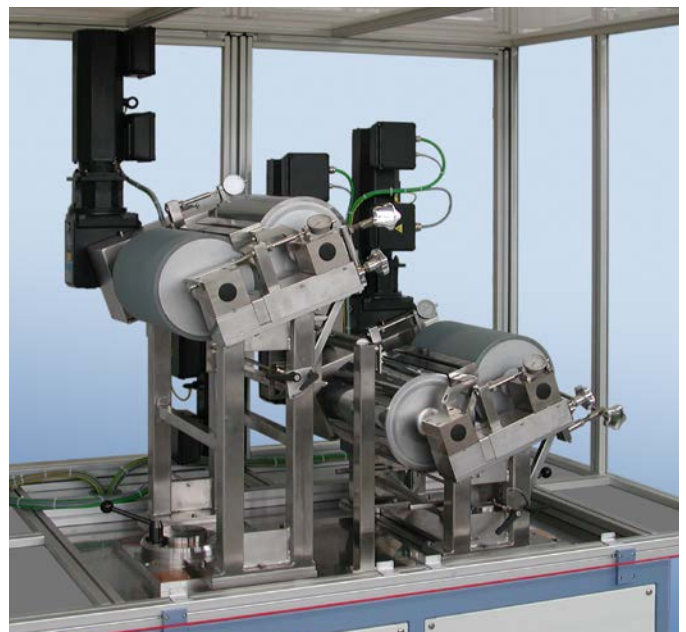
In this design, the coater can be used in production lines where, for example, relatively short quantities of product are required in different shades. 2 reverse roll coaters allow the product or color to be changed while the line is running and without stopping the product.

The coating unit installed on a base frame is moved away to the side while a second unit is simultaneously moved to its operating position. Once adjustment is complete, the coating of the second product is commenced. This fast product change makes it possible to achieve a considerable increase in production.

Rotating Coater

The longitudinal edges of metal bands can also be coated continually with this design. The angle adjustment makes it possible for both edges to be coated completely.

With the appropriate product guidance, all surfaces of the band can be coated in one single pass. This system is in productive use for the all-round coating of narrow metal bands.



«UNIVISION Touch» – the User-Friendly Process Controller

The programmable «UNIVISION Touch» process controller is optimally designed to meet the requirements of its users and the functions of the «BA-RRC».

It is very easy to use thanks to the following features:

- Clearly structured graphic visualization of the process with all functions.
- Simple, easy-to-remember function pictograms.
- Menu-guided parameter entry.
- Updating and visualization of all process data during operation.
- Information displays (error and fault displays) in plain text.
- Comprehensive help file.
- Update-compatible software.
- Import and export of process data to other «UNIVISION Touch» process controllers or on PC.

The «BA-RRC» combined with the «UNIVISION Touch» process controller will prepare your business for processes, both today and in the future.

Optional «UNIVISION Touch» Functions

Process Control with PC

It is possible to connect the «UNIVISION Touch» to a LAN network with an Ethernet interface TCP/IP connection. Process data and complete programs are then created centrally and forwarded to the «UNIVISION Touch». Even an ongoing process can be changed in this manner.

With a connected PC, for example, it is possible to create «UNIVISION Touch» process reports for ISO 9001 compliance.



Operating panel with «UNIVISION Touch»

Options

The following options are available:

- Pneumatically adjustable lick roll with wiping knife. This roll guarantees a continual renewal of the liquid film on the applicator roll and thus an even coating along the entire length of the sample.
- Dosing roll - this roll is mostly used when the results achieved with a 3-roll reverse roll coater on a production line need to be reproduced in the laboratory. As a general rule, a thin application film is also achieved with several reverse roll coaters. A dosing roll often also prevents the formation of lengthwise streaks.
- Load cells between the dipping roll and applicator roll including a digital display for displaying the contact pressure between these two rolls. This option allows for the application of very thin coatings as the contact pressure is measured and a reproducible film thickness is thus guaranteed.
- Load cells between the dipping roll and dosing roll including a digital display for displaying the contact pressure between these two rolls.
- Explosion protection on the system
- Hood with integrated extractor fan

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