

Curtain coating from the RECO 800 and 800 A series

SWC (single wet curtain) and MWC (multi wet curtain): the innovative coating processes that deliver superior quality

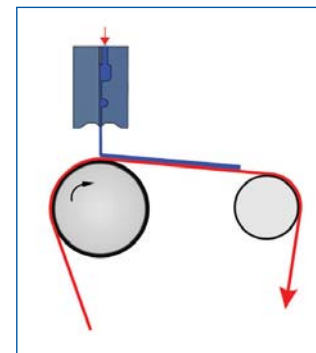
In curtain coating, a highly precise slot die is installed at an adjustable distance of several centimeters above a web of material running horizontally. The coating compound falls freely from the slot, creating a curtain and leading to an unstructured, enclosed, and very even contour coat on the substrate.

Our numerous patents, including for water-based adhesives (process patent), side limiters to eliminate thickening at the edges, suction cleaning at the edges, variable coating width settings for multi-slot techniques, and a vacuum box to remove trapped air, demonstrate our competence and provide users with the necessary security.



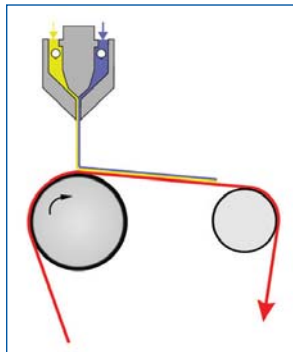
Whether the technique chosen uses one, two, or three slots, the product advantages hold true in all cases.

- Non-contact coating (no contact with the substrate web)
- High coating speeds
- No compound circulation and recirculation
- Contour coats with application weight tolerances of up to $\leq 1\%$
- Low wear, low maintenance (no rolls, blades, etc.)
- Short cleaning times

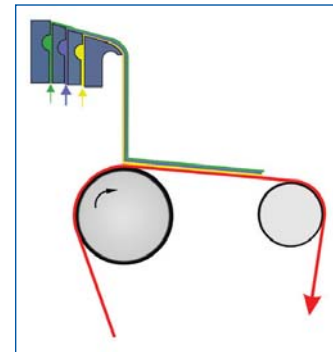


SWC Coater

The advantageous features of the one-slot technique can be further expanded upon through multiple-slot curtain coating (wet-into-wet).



MWC Coater with Slot Die



MWC Coater with Slide Die

- Just one coating station for multiple functional coats (e.g., peelable labels, solvent-based varnish undercoats and top coats)
- Reduced raw material costs (e.g., multilayer structure, improved barrier properties due to multiple, but thinner layers)
- Greater range of application weights through opening and closing of slots
- Improved adhesion between layers
- More-compact coating systems – lower investments (fewer coating stations and dryer sections)

Of course, we have to work closely with the potential user when applying curtain coating as well. The specific requirements of curtain coating demand close coordination between chemistry and mechanical engineering.

Curtain coating is used with water- and solvent-based coating compounds in the following areas:

Single slot

- Water-based adhesive application at $\geq 1,200$ m/min
- Inkjet > 800 m/min.
- Thermal coating > 800 m/min
- CB/CF coatings $> 1,000$ m/min
- Pigmented coats for the painting industry
- Decorative papers
- Laminate for floor coverings
- Solvent-based coating compounds

Multiple slots

- Packaging (solvent-based lacquers)
 - Heat sealing lacquer
 - PVC primer/PVC heat sealing lacquer
- Photography
- Digital imaging
- Inkjet papers
- Laminate for floor coverings
- Adhesive tapes and labels
- Pharmaceuticals
- Medical diagnostics
- Decorative papers
- Fuel cells
- etc.

Technical data

Working width	:	600 - 3,300 mm
Working speed	:	To be determined per product through test runs, experience with acrylate adhesives 60 gm ² wet at 100 m/min or 6 gm ² wet at 1,000 m/min
Viscosity	:	100 - 300 mPas (at 1,000 1/s)
Surface tension	:	<30 mN/m dynamic
Min. coating weight, wet	:	1 g/m ² *
Max. coating weight, wet	:	500 g/m ²

(* depending on production speed and product)

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