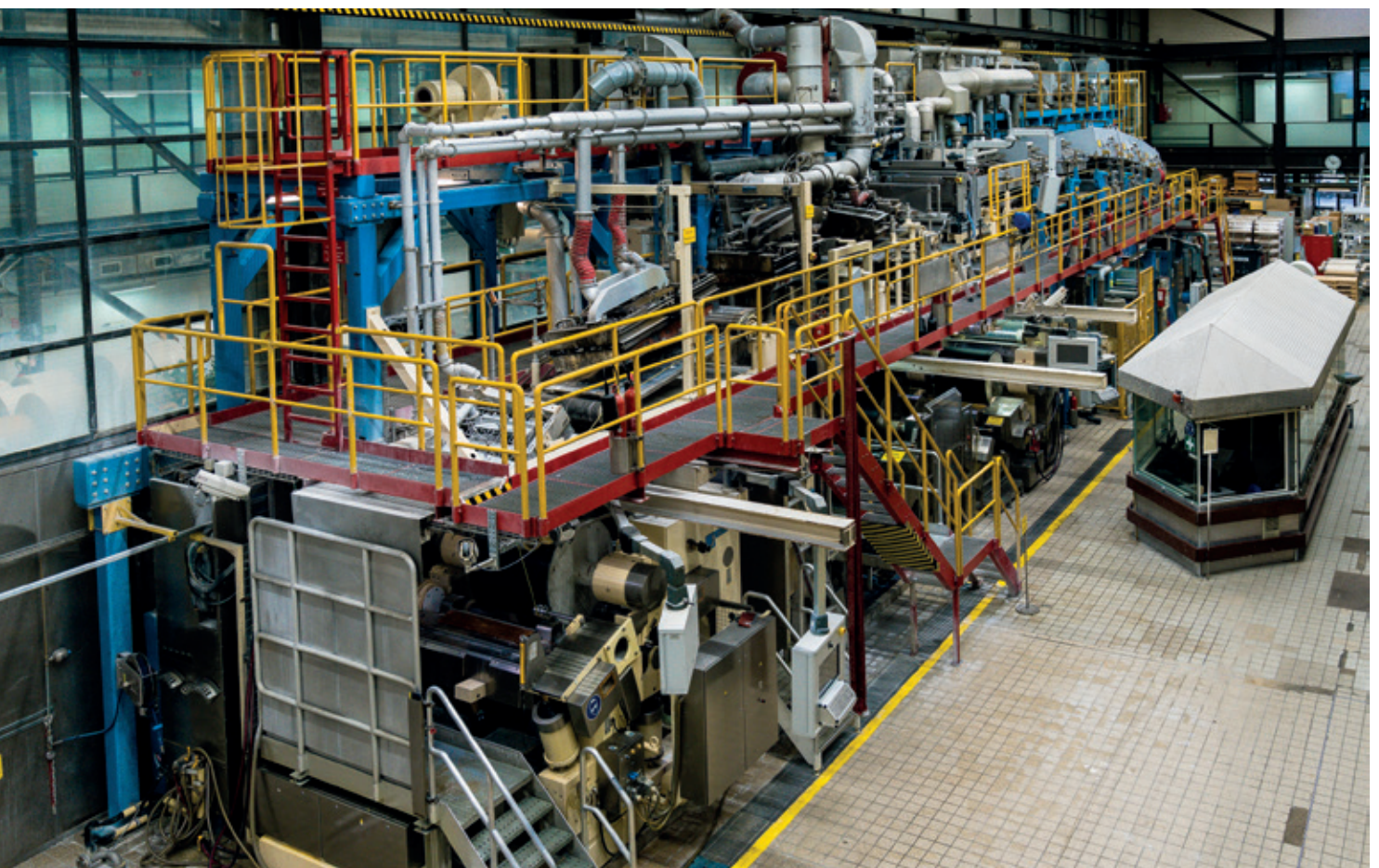


Paper & Board Coating Chemicals **Pilot Coating Center**



Pilot Coating Center

Our Pilot Coating Center underlines BASF's ongoing commitment to the paper and board industry. The combination of a pilot plant, an extensive product portfolio, a paper-specific testing laboratory and experienced, qualified employees reinforces our market position as a leading supplier of paper and board coating chemicals.

For our customers and interested third parties

We offer our customers and interested third parties the possibility to benefit from our excellent technical infrastructure, which allows us to simulate and optimize customer processes – from paper coating to printing.

At our Pilot Coating Center, we offer all industry-standard coating application methods on our state-of-the-art paper coating machine, including roll/blade, jet/blade, roll/varibar and film press. Recently we expanded our offering by investing in a new curtain coater to strengthen our application expertise and increase our strategic focus on packaging and barrier applications.

Coating colors can be produced on site. All necessary preparation facilities are available, including options for dispersing pigments at variable shear rates and preparing starch solutions with both batch and jet cookers. A 12-roll supercalender enhances sheet smoothness and gloss development. The paper produced can be cut, packaged and shipped as required.

Paper coating laboratory

Experienced lab technicians and paper-specific test equipment enable us to perform all common tests and evaluations.

Pilot coaters

Our state-of-the-art equipment, operated by our highly-skilled team, facilitates the safe and efficient transfer of technical solutions from lab to paper mill.

Printing

Close relationships with commercial printing houses give BASF access to all relevant printing methods.

Analytics

Our broad analytical capabilities enable detailed investigation of problems and their causes.

Equipment

- Coating color preparation facilities
- 2 Pilot coaters
- Supercalender
- Rewinder
- Sheet cutter
- Paper testing equipment

Lab testing equipment

Our lab, located at the Pilot Coating Center, offers the following measurements during trials:

Coating colors

- pH value
- Brookfield low-shear viscosity
- Solid content (microwave and oven)
- ACAV high-shear viscosity
- Gradek water retention (2 µm and 5 µm membranes)

Paper tests

- Bendtsen air permeability
- PPS smoothness
- Calliper (thickness)
- Lehmann paper gloss (Tappi / DIN 45° and 75°)
- Elrepho CIE/LAB

Additionally, with our fully-equipped paper-coating laboratory, we can perform all common tests and evaluations.

Technical details: Pilot coaters

	Pilot coater 1 (Small)	Pilot coater 2 (Big)
Machine width	320 mm	800 mm
Machine speed	10 – 150 m/min	120 – 3300 m/min
Unwind diameter	max. 600 mm	max. 1500 mm
Core diameter	70, 76 and 150 mm	76, 100 and 150 mm
Coating application	<ul style="list-style-type: none"> ▪ Roll applicator 	<ul style="list-style-type: none"> ▪ Roll applicator ▪ Curtain coater ▪ Filmpress ▪ Jet applicator
Metering system	<ul style="list-style-type: none"> ▪ Stiff blade or bent blade ▪ Airknife ▪ Metering bar (Barflex) 	<ul style="list-style-type: none"> ▪ Stiff blade or bent blade ▪ Metering bar (Vari-Bar)
Drying system	<ul style="list-style-type: none"> ▪ 6 drying tunnels ▪ Temperature max. 170°C 	<ul style="list-style-type: none"> ▪ Up to 45 lines GAS IR Dryers ▪ 3 hot air dryer hoods

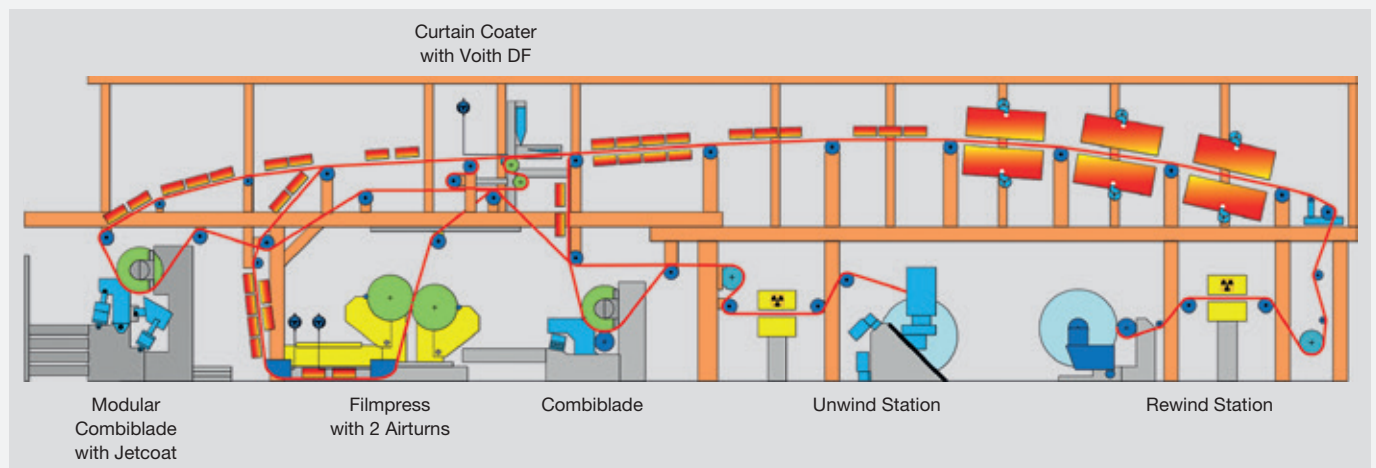


Image: Pilot coater 2 (Voith Jagenberg)

Supercalender

Web width	800 mm
Number of rolls	12 (avg. diameter 320 mm)
Paper rolls	Hardness: 84 Shore D ±1 Material: FiberunWB 1A white (cotton)
Machine speed	50 – 400 m/min
Linear pressure	110 – 300 N/mm
Core diameter	70, 76 and 150 mm
Heating and cooling system	Flexitherm (2 circuits, max. 90°C surface)
Measuring systems	Honeywell 4012 device measuring moisture; Lehmann (75°) devices measuring gloss (TS & BS); infrared moisture

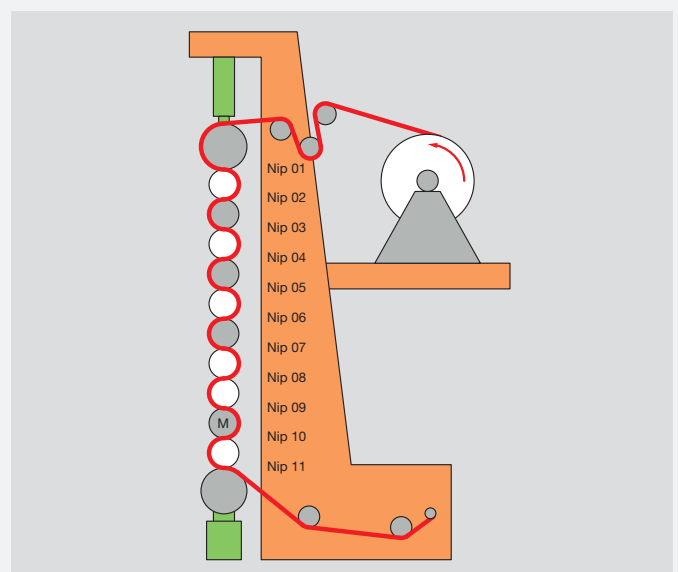


Image: Supercalender (Bruderhaus)



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