



InCo 800

Applications



Nano release coatings



Packaging



Anti-block coatings



Optical films



Anti-scratch coatings



Solar panels

InCo 800 (A)

The InCo 800/800 A coating station enables KROENERT to offer single and double-sided inline coating in stretching lines for BOPET and BOPP films.

This gives the films extra functionality and improved properties.

The coating station can be integrated in existing and new film stretching lines.

A time-consuming and expensive offline coating process on a separate line is no longer necessary.

Single and double-sided
INLINE COATING
 for film stretching lines





Possible applications for the InCo 800 (A)

The coater is available as either a fixed station (InCo 800) or as a trolley station (InCo 800 A). Because it requires little space, this coater can be integrated between the MDO (longitudinal stretching) and TDO (transverse stretching) of film stretching lines.

The InCo inline coater is also suitable for use in simultaneous film stretching machines.

Applications

With water-based functional coatings in the nanometer range, specific surface properties for various applications can be obtained in film production.

These include, for example:

- Top coats (e. g. for printed film)
- Primers (e. g. for metalized film)
- Anti block properties (e. g. for optical film)
- Anti slip
- Anti static
- Anti fog
- Anti scratch (scratch resistant)
- Anti micro (microorganism resistant)
- Release (silicones)
- Matting
- Barrier properties (for packaging, OLEDs, solar panels, fuel cells etc.)

- Optical film (smart phone screens, flat screens etc.)

Coating Process

Single or double-sided coating is performed using KROENERT ceramic gravure roller technology and a closed chamber blade system (T chamber) at speeds of up to 550 m/min.

The KROENERT pressure chamber blade MPG 600 CI is used in conjunction with KROENERT gravure roller-sleeve technology for special applications.



Coating Media

The gravure coating technology employed serves to produce high-precision and reproducible coatings. Commercial, aqueous dispersions based on:

- Acrylates
- Polyurethanes
- Polyester

The coating weight range of approximately 1,5 - 30 g/m² (wet) at a viscosity of 5 - 500 mPas (and higher in pressure chamber versions) is achievable (multiple gravure rollers are required).

Features of the InCo 800/800 A

- Compact, solid construction for vibration-free operation
- Excellent access to all coating and web guide components, even during production
- Uninterruptable, switchable film bypass for the non-coating mode
- Cleaning of the coating unit without removing the gravure rollers and chamber blade
- Pneumatic blade clamping for blade changes during film web operation
- Chamber can be pivoted to on and off pneumatically
- No cutting of the film web to remove the gravure roller
- Reproducible and motor-driven precision settings of the kiss coat rollers for different surface weights
- Quick and simple width adjustment, even during production

- Special stainless steel system for coating compounds, including circulation pump, filter with monitoring system, level and flow regulators
- Anti-static equipment in front of coating station
- AC motors as direct drives
- Electrical and control system integration of the station in the film stretching line
- Visualized display of all settings and changes including formula management of all production parameters
- Special solutions for high foaming media
- Integration of a Corona pre-treatment station if required

Options for the InCo 800/800 A

Supplementary to the standard InCo version, the following custom solutions are also available:

- Coating of optical film with thicknesses of up to 4,2 mm
- Indirect coating process with transfer roller
- Coating with backing roller
- version for clean room technology

Technical Data

Web width	500 - 3.500 mm
Production speed	2 - 550 m/min
Substrates	BOPET, BOPP, BOPA, BOPLA, shrink films
Coating weight	1,5 - 30 g/m ² wet
Solids content	5 - 30 %
Coating media	aqueous
Viscosity	
T-Chamber	5 - 500 mPas
Pressure chamber MPG 600 CI	5 - 1.000 mPas
Ø Gravure rollers	250/300/400 mm