Web edge or centerline line control ensures an accurate guiding of substrate to the coating station and achieves a sharp edged rewinding.



Operation of the fully automatic plant control is managed via a Siemens touch panel with graphic visualization resulting in highest operation and production process safety. The process data are fed into the plant production network via an ethernet interface.



With a splicing station almost continuous production with minimal effort is possible.



An integrated sensor detects end of substrate and reduces the line speed.



Coating head with electro pneumatic control for continuous coating.
Optional: Adjustable coating width.



Optional: Corona pre-treatment and UV-curing

Technical data **BS-Series** 1 - 2500 Coating width in mm Width of rollers in mm 400 - 2600 Line speed m/min 0,2 - 200 Coating speed m/min 0,2 - 300 slot nozzle/roller coater Type of coating all kind of Hot Melts and PUR **Coating materials** Coating weight g/m² 15 - 1000 **Coating materials** film, paper, non woven, textile etc. included Laminating unit **Driving system** servo motors Tension control tension measuring roller **Connection Voltage** 3x400V/AC **Cooling roller** optional Web edge control included Air drying system optional included **Splicing station** Optional: Hot Melt supply with tank unit, drum melter, extruder Individual design and construction possible

* depending on the design, type of Hot Melt and surface of substrate

Original accessories and spare parts

melting volume

ICO SYSTEM

international coating GmbH







Extruder with 12–1000 kg melting volume

Options and accessories

- material buffer, fully automatic turret winders, fully automatic splicing station for endless coating
- climate reaction chamber
- plasma coated rollers and cleaning rollers
- corona pre-treatment
- UV treatment





Coating and Laminating Plants

for Hot Melt and PUR



Precision Technology

ICO Systems coating and laminating plants fulfill the highest quality demands in a wide range of applications. The hot melt coating and laminating plants of the BS-series offer best results in the processing of hot melt adhesives and dispersions applied to different carrier materials such as paper, film, fabrics or nonwoven materials.

Utilizing an intelligent control system, the coating machines can be easily integrated into existing production processes. Costum-designed production line guarantees optimal interaction between carrier materials, hot melt and machine.





Coating width up to 2500 mm



Application ranges

- the hot melt coating and laminating plants coat hot melt adhesives on various types carrier materials.
 The coating of substrates is form roll to roll.
- ranging from paper, film, fabrics, non-woven, felt
- Typical Hot melts processed are PSA, PUR, EVA, UV curable Acrylate, PE etc.
- ICO Systems services a wide range of industrial applications for automotive, paper & printing, textile, sanitary and wood and furniture

Operability

- easy to operate through touch screen panel
- multi-lingual program selection
- precise control using either web edge- or web centerline system
- diameter calculator
- operation of the complete production system via a central control unit
- communication via Ethernet, Profibus and CAN Bus



- 1 Rewinder including web edge control and shaft for quick change
- 2 Unwinder
- 3 Operation of plant via touch screen monitor
- 4 Coating unit with slot nozzle adhesive application head
- 5 Laminating unit
- 6 Unwinder including web edge control

Performance characteristics of the BS-series

 $\begin{array}{lll} \mbox{Coating width:} & \mbox{up to 2500 mm} \\ \mbox{Coating weight:} & 10-1000 \mbox{ g/m2} \\ \mbox{Thickness of carrier material min.:} & 0,01 \mbox{ mm} \\ \mbox{Thickness of carrier material max.:} & 15 \mbox{ mm} \\ \end{array}$

Operation speed: 0.2 - 300 m/min

Other configurations and performance characteristics available on request.

Flexibility through customization

- custom-designed plant construction guarantees optimal interaction between carrier materials, hot melt and machine
- modules and parts as replacements or upgrades for existing plants
- the slot nozzle system with the respective melting unit can process a range of different adhesives such as reactive hot melts (PUR) as well as pressure sensitive hot melts (PSA), UV curable adhesives EVA or PE
- construction of complete plants with all necessary auxiliary machines as well as erection, commissioning and training (turn key)
- coating of different substrates such as paper, film, foil, felt, non woven, fabric. Whether full area-, stripe-, or open pored (porous) coating
- coating weight from 10 up to 1000 g/m²
- fine-tuned web tension control synchronized with the carrier material
- stepless or segmented adjustment of coating width

Benefits

- Due to years of experience our plants are running most economical and with highest precision
- high dosing accuracy of adhesive supply by a precision gear pump system
- special application methods ensure that textures remain unchanged
- intelligent flushing function of the hot melt system when using PUR adhesives
- exact positioning of the coating nozzle to the coating roller, by means
 of a x-y-z adjustable carriage with micrometer setting
- production process safety through less frequent required maintenance
- construction according to VDE, CE and GOST regulation

