...solved across many industries

Folding carton with grease barriers

The technology transition in printing applications towards water-based coatings with the same barrier properties as laminates is permanent and is picking up speed.
With 40 years of experience providing coating technology to world leading brands we know printing – and coating.

Liquid packaging

Serving world's leading supplier of packaging for milk and juice with proven performance for 40 years.
World-leading food processing and packaging corporations build long-term partnerships with TRESU for building and maintenance of multiple turn-key converting lines with the highest levels of performance, ergonomics and flexibility.

Tableware

The world's largest manufacturers of paper plates, trays and bowls that are distributed through grocery, discount, club, food service industtires benefit from TRESU's inline coating technolocy and coating know-how.

General folding carton - GFC

For coating of general folding carton – GFC – applications TRESU supplies both coating of flexo printed substrates, but also coating of digital prints.
In General Folding Carton (GFC) applications, often many different types of embellishment are required to match the broad range of specifications for shelf appeal on the market.
The most efficient answer is a dual coating varnish system capable of keeping WB and UV varnish in separate circuits for short-run digital print jobs.

Decor

Recently we are applying efficient coating technology to the furniture industry where we have successfully applied WB coating with no formaldehyde in high-speed applications

TRESU is a highly specialized company offering flexoprinting machines and ancillary products and concepts for flexo, digital and offset printing as well as customer service and technical support.

TRESU has 40 years of experience and expertise in the development, production and maintenance of engineered solutions and supplies directly to end-customers, OEMs and partners worldwide.

TRESU has production facilities in Denmark and sales companies in USA, Germany, Italy, Japan and China as well as an international agency network providing local support and know-how.

For more information about inline coating and food barriers:

sales@tresu.com

Venusvej 44 I DK-6000 Kolding I Denmark
Tel.: +45 76 32 35 00 I tresu@tresu.com

TRESU

Sign up on tresu.com and stay connected
www.tresu.com

TRESU

Inline coating of food barriers

40 years of flexo technology - supplied to world leading brands

Challenges in coating technology...

Coating as clear as glass - no micro-foaming

TRESU customers are successfully switching to pressure mode. By maintaining a constant, high pressure in the chamber doctor blade systems, then a liquid barrier forms between the rotating anilox cells and the chamber, stopping any air in the cells from transferring to the coating during production.

Air and micro-foaming without pressure control.

Switch to pressure mode at the push of a button.

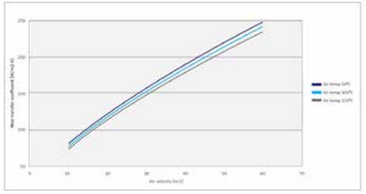
No air, no micro-foaming with TRESU automated pressure control technology.

Air velocity - the secret behind WB based drying

Today's printing and converting applications have a variety of drying methods, but all include one or more of the three ways of transferring heat: conduction, convection and radiation.

The challenge has always been to expose the substrate to enough heat to dry the ink completely, but not damage the image, coating, or the substrate. The more sensitive the substrate, the greater the control of the drying process is needed.

Speeding up the air velocity significantly increases the evaporation rate, while a rise in temperature only brings a marginal increase.

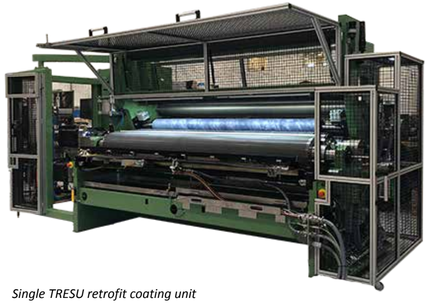


In short, the higher the drying velocity, the higher the heat and mass transfer, resulting in less drying time.

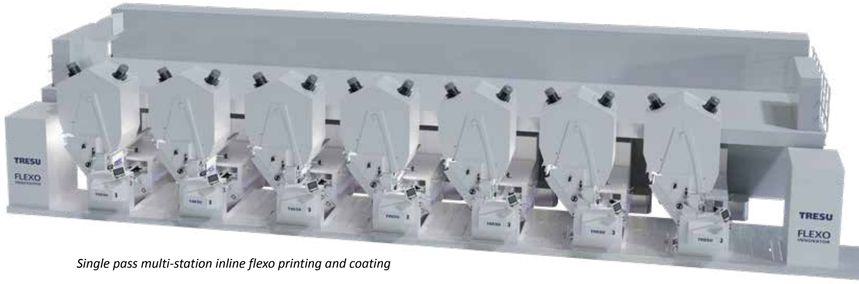
...solved with proven technology solutions from TRESU

TRESU flexo printing and coating technology:

- Retrofit units or complete inline printing solutions
- High speed printing and coating quality
- High performance chamber doctor blade systems as well as ink and coating supply systems



Single TRESU retrofit coating unit



Single pass multi-station inline flexo printing and coating

WEB/PRINT WIDTH (MM)		670	1100	1400	1700
MIN WEB WIDTH (MM)		335	550	700	850
Print speed/Standard Optional	400 m/min, 600 m/min, 800 m/min	X	X	X	X
Repeat lenght	480 - 1060 mm	X	X	X	X
Substrate	Paper, paperboard 60-600 gsm	X	X	X	X
Ink	Water based, UV, Solvent (optional)		X	X	X
Unwind	Flying splice with options	X	X	X	
Infeed	Dancer, pull & brake, edge guide. Web cleaner, preheating and web-treating (optional)	X	X	X	X
Print units	Chamber doctor blade system, sleeve change on anilox and plate, full servo on rollers and ink deck positioning system	X	X	X	X
Back side print	Optional		X	X	X
Drying	Hot air and/or UV or E-beam	X	X	X	X
Cooling	Chill rollers after hot air drying and/or chill roller combination with UV lamps	X	X	X	X
Outfeed	Pull & brake, edge guide, dancer. Print inspection (optional)	X	X	X	X
Rewind	Flying splice with options	X	X	X	X
Sheeter	Optional	X	X	X	X
Die cutter	Optional	X	X	X	X

Pressure control printing and coating equipment

TRESU L10i Aqua/UV & L30i Combi G3

Pushing the boundaries for automation, connectivity and level control

- Separate circuits for aqueous or UV coatings
- Flow - and pressure control for microfoam elimination
- Industry 4.0 connectivity
- Auto adjusting, auto cleaning and automated operations
- Modular platform adapting to future demands

TRESU XL5i G3

Efficient circulation of sensitive media

- Compact coating circulator with 2 peristaltic pumps
- TRESU Pressure Control Technology for micro foam elimination
- Industry 4.0 connectivity
- Modular platform adapting to future demands
- UV or aqueous-standard, special or sensitive coatings

TRESU H5i G3

For special applications in offset and for special coatings

- High viscosity, high pressure, high flow, high speed and high temperatures.
- WB, UV or e-beam special coatings.
- Flow -and pressure control for micro-foam elimination
- Spot or flood coating for demanding coating tasks
- Dual Pump circulator
- Auto adjusting and automated operations
- Modular platform and industry 4.0 connectivity

TRESU FlexiPrint

Basic competitive, efficient and compact design

- Fixed mechanical chamber positioning
- Compact and robust design
- Proven TRESU E-line clamping system
- WB, UV, solvent-based inks and coatings

TRESU UniPrint

Universal chamber design for any ink or coating system

- Pneumatic chamber loading and positioning system
- Open or closed ink and coating circulation
- TRESU Pressure Control Technology
- Proven TRESU clamping systems: E-Line, P-Line or S-Line
- WB, UV, solvent based inks, coatings and glues

Efficient inline drying technology

Today's printing and converting applications have a variety of drying methods, By adding high-velocity drying technology, your press line can run faster and increase your output and productivity – while maintaining print quality and achieving energy efficiencies.

Moreover, these benefits are possible while using your existing press, ink, coatings, substrates, workflow software and workforce.

Equally, with enhanced speed and reliability, more jobs per shift are possible.

- WB-based coating up to 2,600 ft/min or 800m/min
- Spot or flood coating
- Flexo, gravure or digital
- Carton, shrink sleeve, label, bags, films, paper or packaging
- Retrofitting with vertical or horizontal drying units