

Next Generation

TRESU Flexo Innovator

Unbeaten performance for single pass printing of packaging materials



Next Generation TRESU Flexo Innovator #1 for single pass printing of packaging

Answering our customers' relentless commitment to strive for operational excellence, we now present the next generation of the TRESU Flexo Innovator.

TRESU presents the next generation of single pass printing presses significantly improving automation, flexibility, Overall Equipment Effectiveness (OEE) and sustainability.

- Improved automation features
- Modular design with shorter web path & less paper waste
- Small physical footprint taking up less sqm. of factory area
- Any combination of Single- or Dual ink Decks
- Highest flexo printing speed & largest throughput
- Improved ink logistics less ink waste & improved printing quality
- Improved UX: New HMI design and portable tablets
- Improved serviceability

We offer modular service- and maintenance solutions for every step of the journey and respond quickly to any issue. Based on customers' requirements we put together unique service agreements or servitization concepts optimizing OEE throughout the entire product lifecycle of your press.

> REFURBISHMENT ONCE LIFECYCLE SERVICE CONCEPTS HELPDESK UPGRADES

For packaging materials, the TRESU Flexo Innovator is the industry standard used for liquid packaing and paper board materials by some of the biggest converters in the world working with aseptic and liquid packaging, paper cups, paper board and folding carton materials.

Typical configurations for this segment has up to 1.700 mm (67") web width running at speeds up to 800 m/min (2,600 feet/min) printing and coating with WB, UV or EB.

Add to this a modular service concept targeting any part of OEE that customers wish to work with, and you have the picture of the #1 printing press in packaging and converting.



Partnership Performance

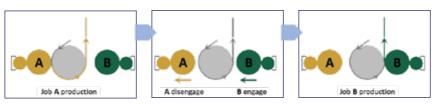
TRESU is a highly specialized company offering inline flexo printing and coating machines, ancillary equipment and concepts for flexo, digital and offset printing as well as customer service and technical support.

With more than 40 years of experience in the development, production and maintenance of engineered flexo printing technology, TRESU supplies proven solutions directly to leading converters and brand owners, OEMs and partners worldwide. – either integrated inline or as stand-alone solutions.

TRESU is headquartered in Kolding, Denmark and is part of the Altor private equity group



Modular design allows for any requested combination of Single- or Dual-ink-Deck units



Dual-ink-Deck: Job change on the fly reduces waste significantly

Packaging – too valuable to waste

We understand that sustainability and new ways of printing will change custom-

We are ready to face these challenges and adapt our proven flexo technology solutions to the needs of customers' future applications and today's sustainability agenda - and at the same time move sustainable value to their bottom lines.

We see a shift towards paper-based packaging made from renewable and recyclable resources.

At TRESU we believe that winning in the new age of packaging requires being able to print more sustainably.

Recyclable, compostable or biodegradable

Today we supply the most efficient drying technology in the industry enabling water-based ink and coating to dry faster at higher speeds – while recirculating the heat and using less energy overall.

Our ink- and coating supply systems together with our pressure control technology increase print quality – and at the same time reduce waste significantly.

We understand that new sustainable ways of printing are changing customers' value chains. Reducing carbon footprint does not come in a box, and our commitment to provide future solutions is yet another step that we are taking.

TRESU has joined the Science Based Target initiative SBTi to ensure that our climate actions to reduce carbon emissions are in line with the latest science.



DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

VelociDryer - High-capacity unit-to-unit drying performance

High output with heavy laydown on paperboard. The hot-air drying system with integrated nozzle dryers achieves air speeds of up to up to 65 m/min (215 ft/min) – thus preventing web shrinking. Automatic regulation means that approximately up to 75% of the energy is recirculated.

and E-beam curing

Apart from hot air drying the TRESU Flexo Innovator can also integrate and handle UV curing and / or E-beam curing.

Optional UV, LED-UV

The efficient cooling system ensures an optimal web

Cooling

temperature.

Full Electronic Drive

Each print unit is equipped with eight servo motors – for the anilox roller, the plate-, and the impression cylinder.

Features of Next Generation TRESU Flexo Innovator

- Improved automation features
- Modular design with shorter web path & less paper
- Small physical footprint taking up less sqm. of factory area
- Any combination of Single- or Dual ink Decks
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- Improved UX: New HMI design and portable tablets
- Improved serviceability

Ergonomics

Easy walk-through access and great ergonomics for operators and maintenance staff when working around the printing units.

Web and tension control Accurate web and

tension control system.

Infeed For web tension control.

Unwinding

Automated splicing for non-stop operation.





TECHNICAL SPECIFICATIONS

1,100mm (43")

550mm (21.6")

1,070mm (42")

480mm (19")

800m/min (2,625ft/min)

Front: +/- 0,08mm (3 thousands

Front/back: +/- 0,25mm (10 thousands) (Sigma 1)

Uncoated/coated/metallized paper board 4–30pt (60–600gsm)

Flying splice with options

Flying splice with options

Optional: Platen or Rotary cut, perforation and crease

Water or UV Hot-air, UV, LED-UV and E-Beam

1,400mm (55")

700mm (27.5")

1,700mm (67")

850mm (33.5")

670mm (26")

335mm (13")

Web width, max.

Web width, min.

Repeat length, max.

Repeat length, min.

Register print

Substrates

Unwinder

Rewinder

Backside printing

Inline die-cutting

Inks & Coatings

Drying & curing

Production speed, up to

TRESU ink and coating supply systems

Key to our printing capabilities is the VelociDryer[™] technology, enabling printing and coating speeds up to 2,600 ft/min - 800 m/

TRESU WEBSHOP We ship 24/7

TRESU drying technology



Print side up

The web exits the press with print side down for easy cut and crease – no turnbar and less tension and waste. On request the web can exit the press with print side up using a turnbar as illustrated above.

TRESU control system

Inspection and quality control.

High production speed

Front and backside printing. Security coating. Inline cold foil solution. Flexographic HD overprint. WB, UV, EB coatings/inks.

Front/back Single pass front- and back side printing available.

Register Control

Fully automatic traverse. Camera or optic based register control system with complete, automatic pre-setting ability.

Plate and Anilox Rollers

Sturdy design with roller bearings on the operator side for easy change of plate and anilox rollers.

Sleeve Change

Easy-to-operate system on all print and anilow rollers for fast job changes. Great ergonomic working conditions.

IDP System

Ink Deck Positioning System for accurate settings and job memory.

Print Management System

Easy-to-operate HMI-print management system with advanced visualization and operator interface located locally at each print unit.

TRESU's world leading chamber doctor blade system for perfect doctoring at high speeds, and quick job changeovers.





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 more than 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.

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