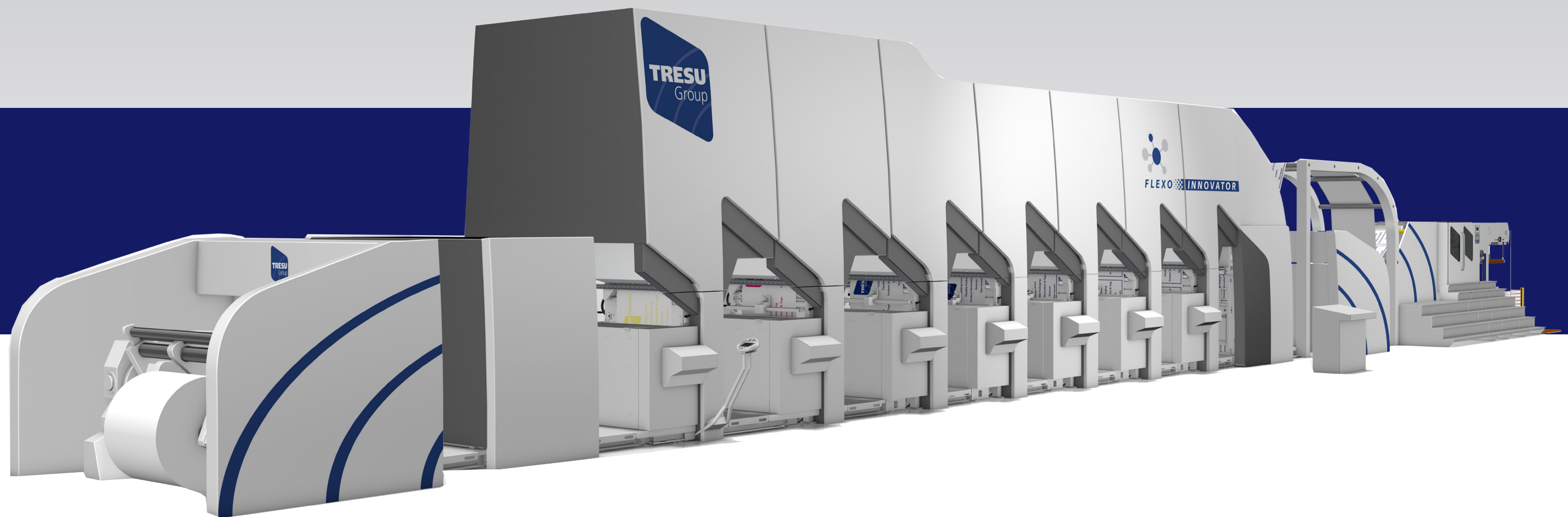


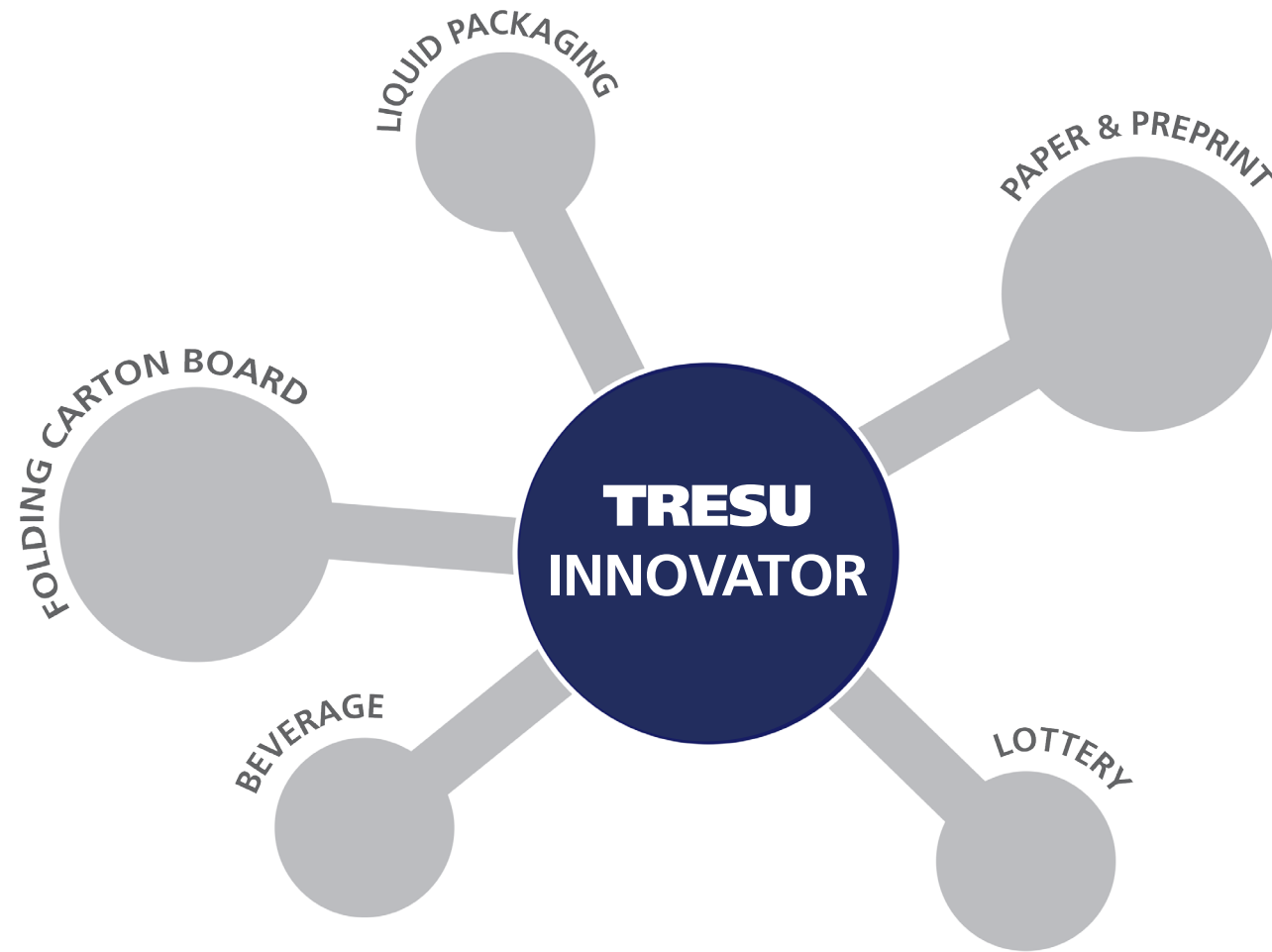
FLEXO INNOVATOR

Customize your press for a world of possibilities in packaging design and production



The Best Part of Innovation





TRESU Flexo Innovator offers the fully modular flexo machine, a custom configured mid-web flexo printing and multi-process finishing line for folding carton, laminates, metallic substrates and paper applications.

The Flexo Innovator is available in web widths from 670-1700 mm, and offers an unlimited number of print stations and numerous added-value options, including reverse-printing, cold foil, die-cutting, laminating, coating, embossing and sheeting.

This platform provides a single-pass alternative to labour-intensive sheet-fed or CI-printing situations and allows converters to deepen customer relationships by becoming a single-source packaging supplier, especially to food retailers.

Custom-engineered and assembled at our Danish factory, the Flexo Innovator is engineering and manufacturing at its finest, offering precision printing at speeds from 400-600 m/min (800 m/min).

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Smart Performance



Today's packaging market is more dynamic, diverse, and exciting than it has ever been. For the packaging converter, it has also never been more challenging. International brands demand high quality, accuracy and consistency, on a wide range of substrates – produced with different technologies and in different parts of the world.

The industry's future has seldom been brighter - TRESU will help you seize all opportunities

Finding the right niche can take your company into a segment that is less price-sensitive where higher margins are possible.



A "business as usual" approach will not deliver success.

Are you realizing your value potential?



Packaging is no longer simply function-driven, but a highly sophisticated form of printing that includes a large number of value-adding features.



The trend to shorter runs requires fast make-readies and job changeovers – on optimally fitted printing and finishing lines.



The Printing Performance

Digital

Laminating



Embossing

Cold foil

Metallized coatings

High-quality flexo printing

CMYK, Hexacrome and spot colours. Water-based, solvent or UV-flexo inks.

Substrate

The Innovator is extremely versatile - designed to handle, carton board, metallic substrates, laminates, and paper products.

Pre-settings follow the job, and the type of substrate, and the intelligent mix-management of air and heat ensures safe handling of very different and sensitive substrate materials.

Faster job changeovers

The printing unit is designed for easy-access, allowing super fast change of print- and anilox rollers.

Perfect varnish

The printing unit easily handles any kind of varnish: matt or glossy, UV-varnish, solvent-based, or water-based. Full surface- or spot varnish, in perfect register. And heavy layers of varnish is no match thanks to the high-speed drying capacity.

Water-based inks

Perfect for water-based inks. The large drying sections - single or extended - deliver outstanding performance at high speeds.

UV-ink

On a single printing unit - or on all units - with single or multiple UV-lamps.
In combination with hot air dryers or as pure UV-station.

Solvent-based inks

If required, the Innovator can be designed to handle solvent flexo inks - ATEX explosion certified.

State-of-the-art coating

Front-side and back-side coating in one pass. Pre-coating barrier function to avoid migration.

The superb drying system - single or extended drying - allows heavy layers of coating as well as metallics.

Web tension control

Perfect web tension control. The zone-based control ensures optimal web tension.
And the design allows easy adaption of web tension to various types of substrates.

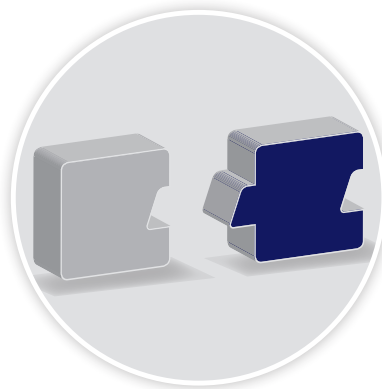


The Base of Performance

Step 1-7

1. Real Modularity

Highly modular and flexible with three modules in each printing unit: a printing module, a chilling module, and a drying module.



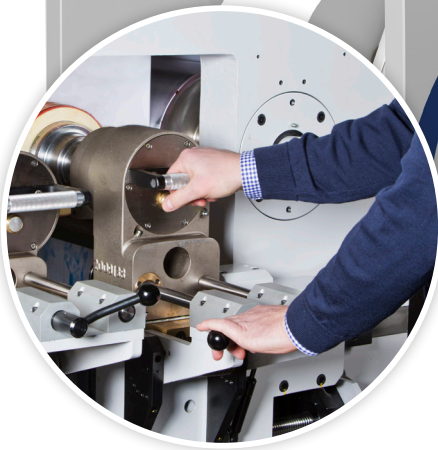
7. Print Management System

Easy-to-operate HMI-print management system with advanced visualization and operator interface.



2. Solid Construction

Easy-to-operate, and with great ergonomic working conditions.



3. Infeed Station

Fully automatic pull-and-brake system for advanced web tension control. Dancer roller eliminates irregularities.



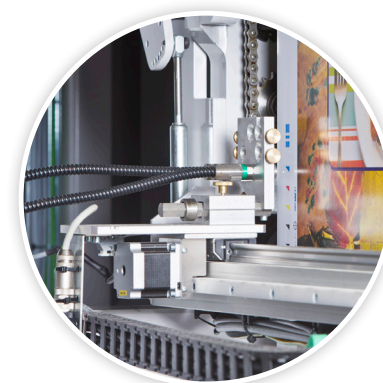
4. Printing Unit

Free standing unit, solid and stable cast iron construction with easy walk-through access. For tight-register process printing and full-face printing/coating at high production speeds.



5. Register Control

Fully automatic traverse. Eltromat register control system with complete, automatic pre-setting ability.



6. World Class Press Speed

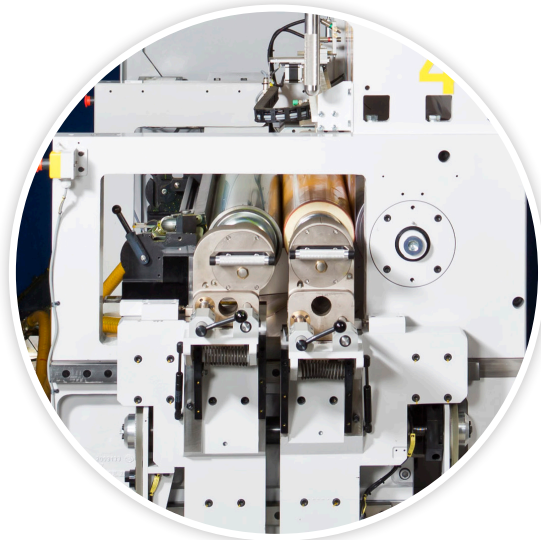
The rigid/sturdy press construction and the super efficient drying system makes 400-600 m/min. production speeds possible.





The Base of Performance

Step 8-14



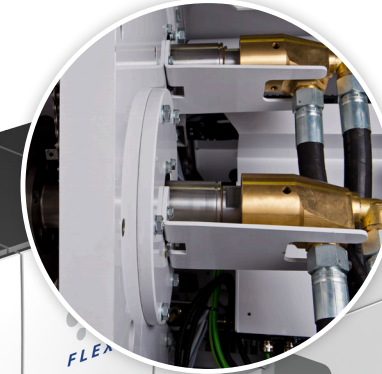
9. IDP System

Ink Deck Positioning System for accurate settings.



8. Plate and Anilox Rollers

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



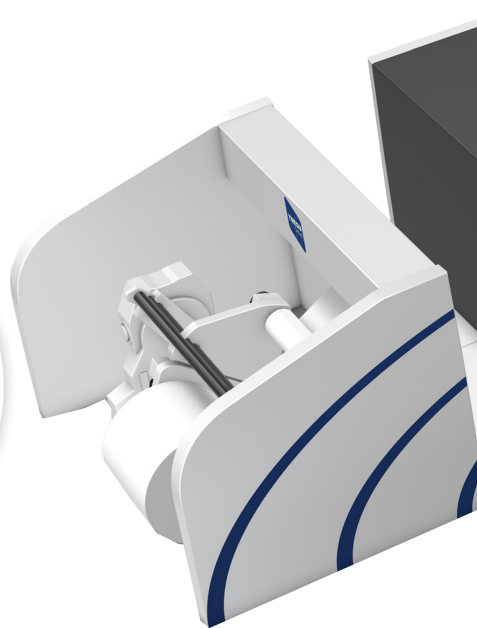
14. Cooling

The efficient cooling system ensures an optimal web temperature.



10. Full Electronic Drive

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



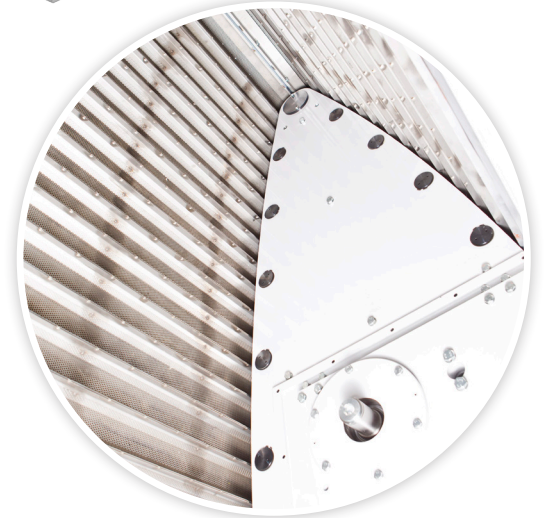
11. Electronic Cabinet

An electronic cabinet is positioned on each printing unit. A single communication cable and a single power cable connect one printing unit to the next, making press configurations extremely modular and flexible.



12. Chamber Doctor Blades

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



13. Hot-Air Drying System

The hot-air drying system achieves air speeds of up to 60 m/min – thus preventing web shrinking. Automatic regulations means that approx. 15-25% of the air is constantly renewed. The system provides easy web access for cleaning and comfort, great color consistency and very few recirculation losses.

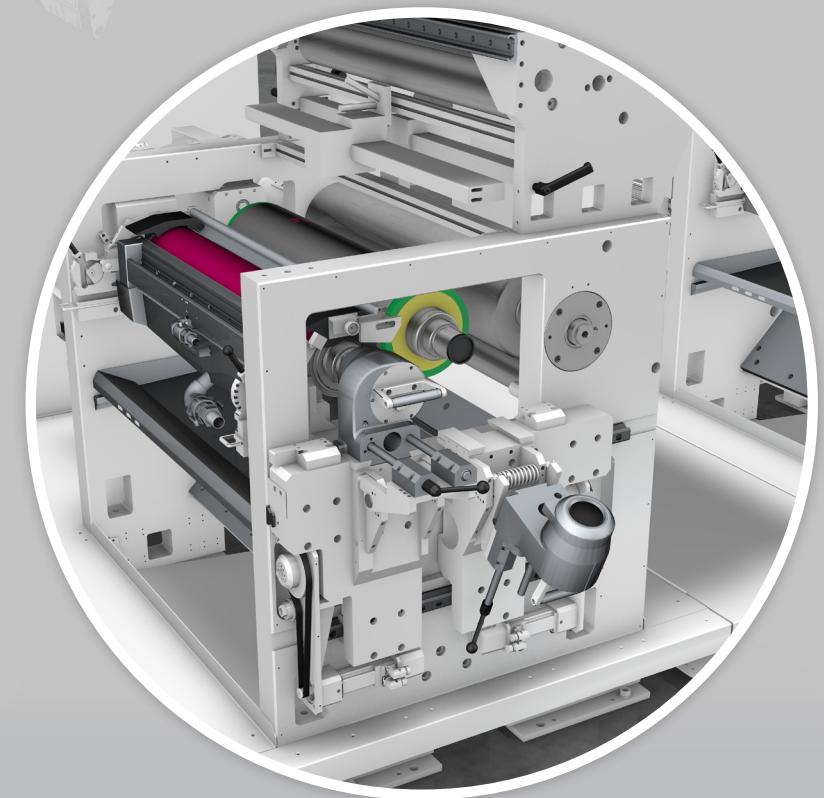
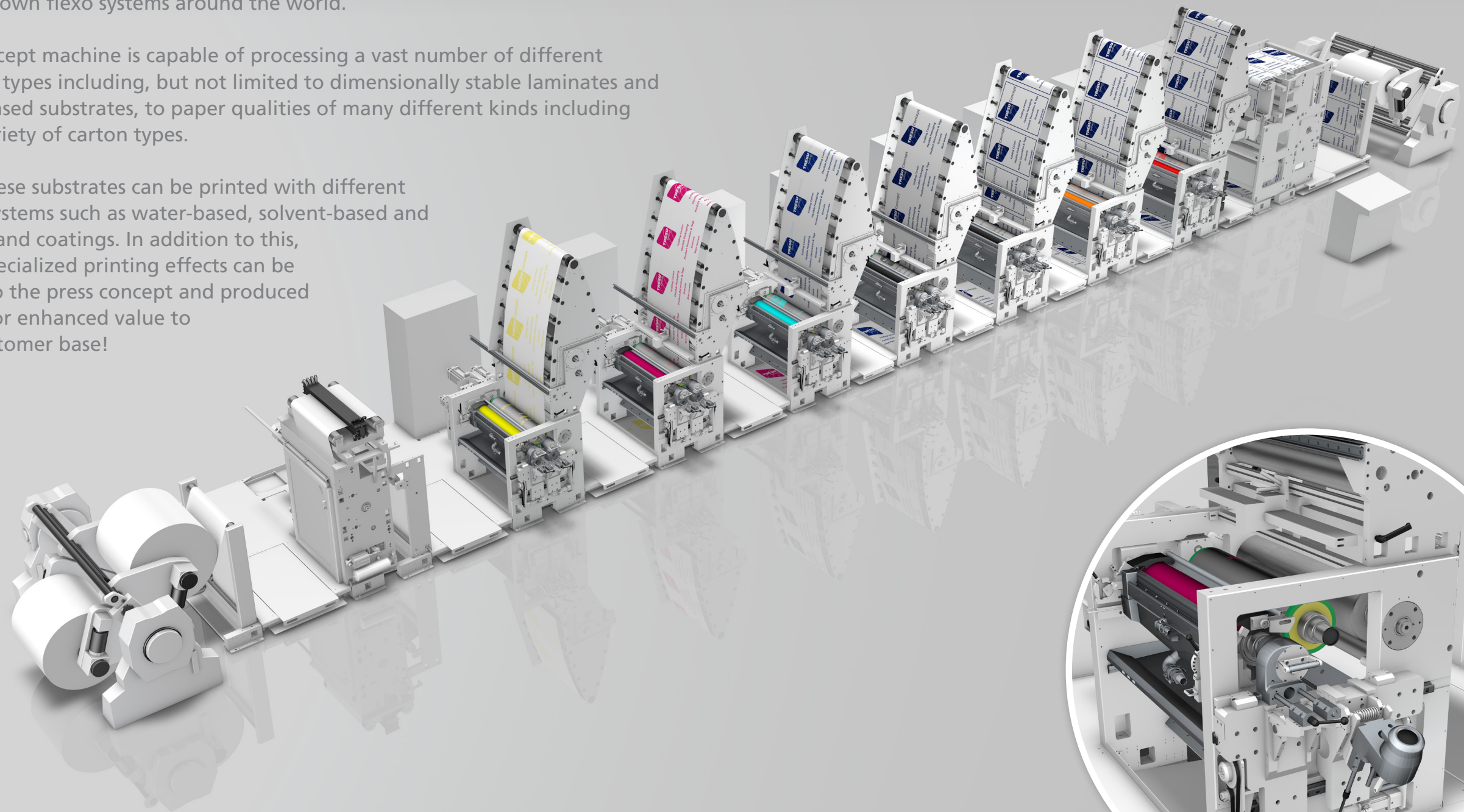


Flexo printing

The Concept machine is based on an extremely stable platform structure consisting of a basic printing machine founded on well-known and unique TRESU flexo components, which for many years have been the core principle in many known flexo systems around the world.

The Concept machine is capable of processing a vast number of different material types including, but not limited to dimensionally stable laminates and metal-based substrates, to paper qualities of many different kinds including large variety of carton types.

All of these substrates can be printed with different inking systems such as water-based, solvent-based and UV inks and coatings. In addition to this, other specialized printing effects can be added to the press concept and produced in-line for enhanced value to your customer base!





The Base of Performance

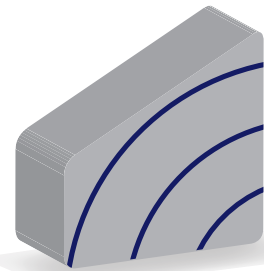
Web/print width		670 mm	900 mm	1100 mm	1400 mm	1700 mm
Min Web width		335 mm	450 mm	550 mm	700 mm	850 mm
Print speed/optional	400 m/min / 600 m/min / 800 m/min	x	x	x	x	x
Repeat length	450-1060 mm	x	x	x	x	x
Substrate	Paper, paperboard 60-600 gsm	x	x	x	x	x
Ink	Water based, UV. Solvent optional	x	x	x	x	x
Unwind	Flying splice with options	x	x	x	x	x
Infeed	Dancer, pull & brake, edge guide. Web cleaner, pre-heating and web-treating. Optional.	x	x	x	x	x
Print units	Chamber doctor blade system, sleeve change on anilox and plate, full servo on rollers, ink deck positioning system	x	x	x	x	x
Back side print	Optional	x	x	x	x	x
Drying	Hot air and/or UV or E-beam	x	x	x	x	x
Cooling	Chill rollers after hot air drying and/or chill roller combination with UV lamps	x	x	x	x	x
Outfeed	Pull & brake, edge guide, dancer. Print inspection optional	x	x	x	x	x
Rewind	Flying splice with options	x	x	x	x	x
Sheeter	Optional	x	x	x	x	x
Die cutter	Optional	x	x	x	x	x



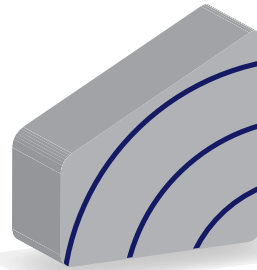


The Variation of Performance

Elements of Configuration



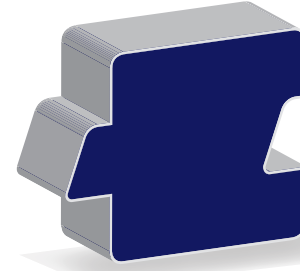
**Un-winder/
Infeed section**



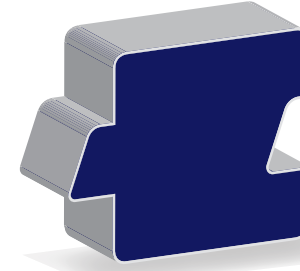
Fastoon/buffer



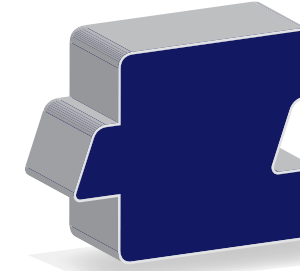
TRESU Concept
Web/printing width
900-1100-1400-1700 mm



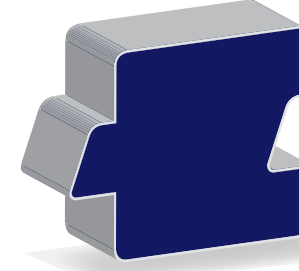
Cold foil



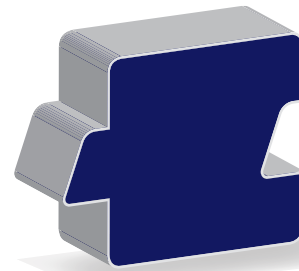
Coating/Varnish



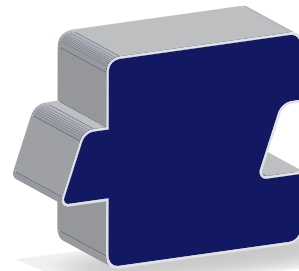
Laminating



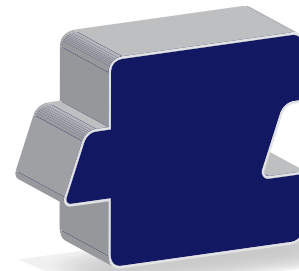
**Digital
integration**



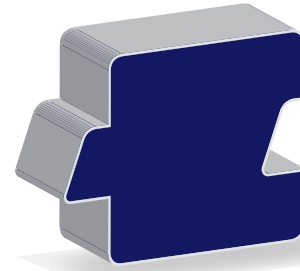
**Unit for special
requirement**



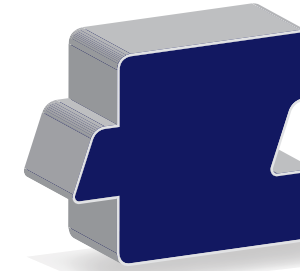
Embossing



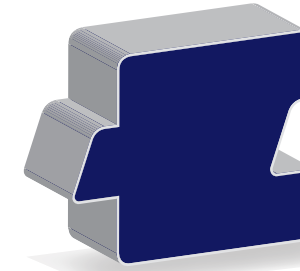
Die-Cutting/Creasing
Rotary



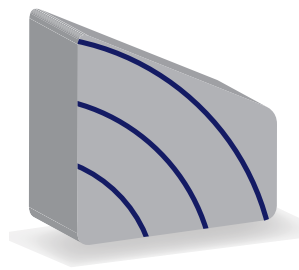
Die-Cutting/Creasing
Flatbed



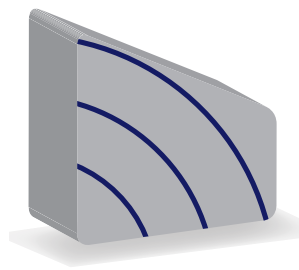
**Sheeting and
stacking**



Conveying



Slitter

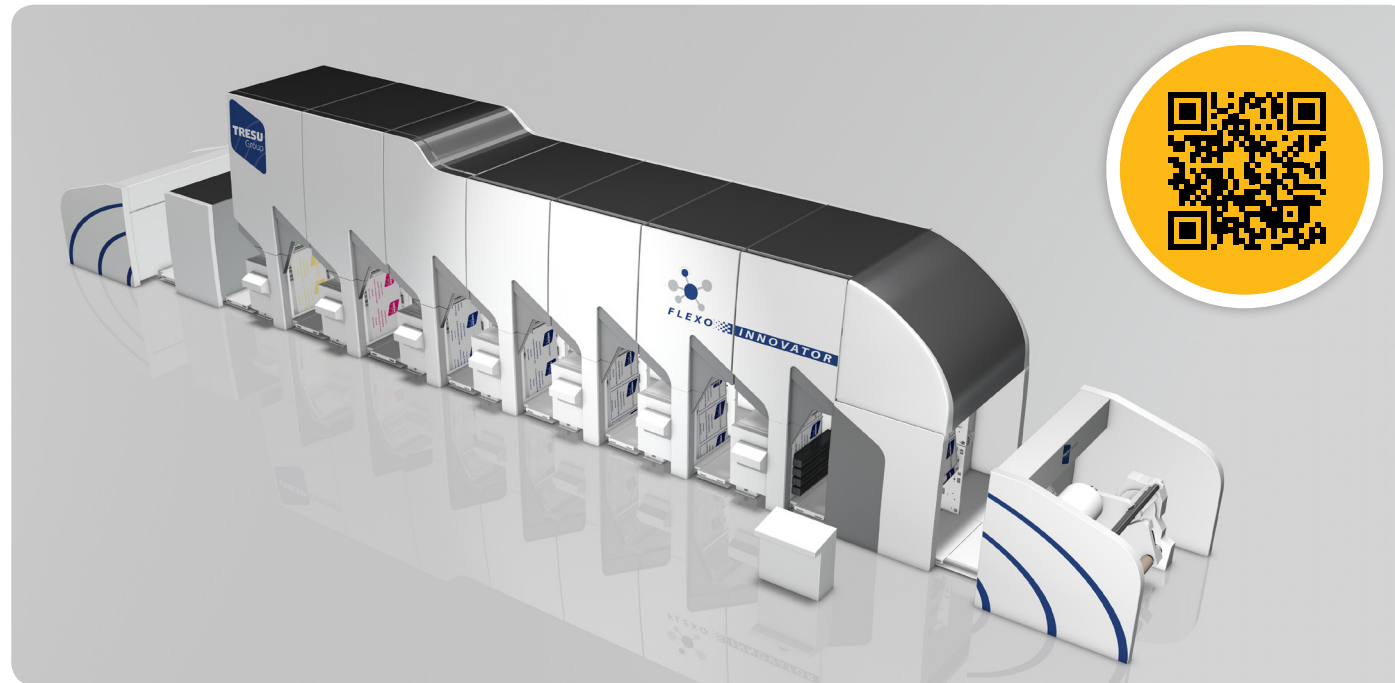


**Non-stop turret
re-winder**
Fully automatic

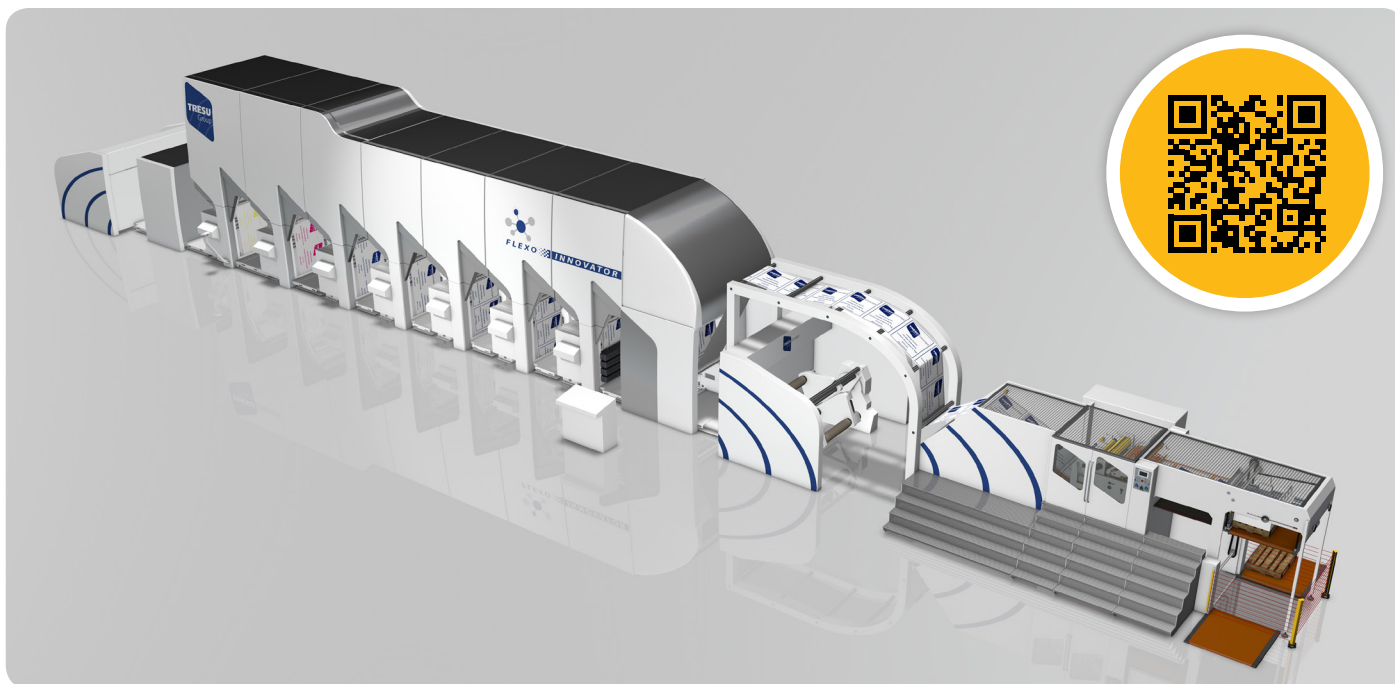


The Variation of Performance

Configurations



Roll-to-Roll configuration for high speed printing on paper, laminates, metallic, and flexible substrates. 7-colour flexo printing press with optional front- and backside printing on the first two units. Hot-air drying on all printing units, and on the last unit - hot-air drying in combination with UV-curing for i.e. high-gloss varnish. All printing units handle hot-air drying for water- and/or solvent-based inks, UV-curing - or a combination of all drying options. Also configurations of a large number of various types of un- and re-wind solutions are possible.



The 7-colour Roll-to-Sheet configuration, supplemented with an in-line, high-output sheeter, allowing printing of Roll-to-Sheet in full format, and up to 36.000 sheets/hour. The configuration is optimal for traditional sheet printing companies - producing paper products, labels, folding carton packagings, in-mould materials, and materials suited for sheet processing.



10-colour press, configured with a special high performance un-wind unit for paper and carton board. Similar solutions for a wide range of substrates are possible. The press is supplemented with a high speed, inline die-cutting unit to achieve single-pass printing and die-cutting of i.e. folding carton board.



The Proof of Performance

The Flexo Innovator starts with R&D

Research & Development starts with you - our customer. Interaction is at the centre of our approach - working closely together, identifying problems and needs in order to optimise, innovate, and simplify production processes. Our skilled engineers are with you every step of the way, managing and achieving your unique project goals and objectives, while honouring the scope, time, and budget involved.



The Flexo Innovator benefits from accredited ancillary products

Accredited ancillary products, guaranteed to perform, is not to be underestimated. And as a world-leading supplier, TRESU Ancillary solves this challenge with a range of flexo, offset and gravure printing consumables, including pressure-controlled, sealed closed chamber doctor blade systems, that ensure even ink and coating laydowns at fast speeds as well as high gloss values.

See the Flexo Innovator in our Showroom

TRESU's showroom serves as the perfect showcase for the Flexo Innovator. Experience the potential of the press, and see print demonstrations on both standard and customer-specific jobs, and on a variety of substrates.



Supporting the world's largest carton board supplier

Over the past 21 years, TRESU has custom-built more than 60 large presses for the world's leading carton board converter of liquid dairy packaging products. The presses are operating on five continents, and during the cooperation period, TRESU has co-developed unique components, exclusively to the client, that enhance performance and versatility.

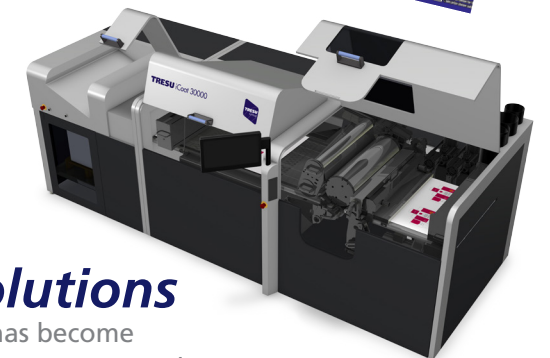
Supporting the global lottery and gaming industries

The scope of TRESU projects is wide in terms of size and end-use application, and building and delivering complete multi-station printing and converting lines to one of the leading innovators in the gaming industry, is another achievement.



Competitive edge with customised solutions

The need for unique solutions has become more acute, and our team of engineers are constantly helping scores of customers to find competitive edge with precision and bespoke printing solutions for many applications. Among the latest, innovative developments are the TRESU iCoat 30000 and the TRESU Pinta - advanced, inline coating solutions for the new HP Indigo 30000 digital press and the Xerox iGen™ digital press.





24 Hour Hotline

The TRESU Service Team is happy to assist you in case of breakdown, repairs and maintenance. The Service Team is directly connected to our worldwide Engineering Group that will help you with information and recommendations for special requests.

The Best Part of Innovation

Global Presence

The TRESU Group has 250 employees worldwide, production facilities in Denmark, Lithuania and the USA, sales subsidiaries in Germany, Italy, China and Japan, and an international agency network providing round-the-clock, local support and know-how.

Service and Preventive Maintenance

The TRESU service department consists of highly specialised service technicians. They cover every field of activity, bringing you all their expertise and experience in TRESU equipment, ensuring that installations, repairs and maintenance are done professionally.

Preventive Maintenance is an increasingly important subject today because of customer demands for punctual and high quality deliveries. Therefore TRESU offers our customers a Preventive Maintenance program called "Machine Condition Analysis". The service concept is a preventive maintenance check of your printing machines, ensuring that your machines are at the peak of their performance at all times.

TRESU WebShop

In TRESU Original Parts Webshop our worldwide customers can order ancillary, spare parts and consumable products directly, at highly competitive prices, with full guarantees.



*The Best Part
of Innovation*

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