



Inviting you into the world of TRESU

Welcome to the TRESU BlueLine Paper

from Søren Maarssø, COO

#### Unwrapping a well-kept secret

TRESU Group is perhaps the industry's best kept secret. We have expertise at almost every stage of machine building. Several of the world's leading original equipment manufacturers choose our tooling and ancillary technology because of our reputation for precision and craftsmanship. Our multi-station flexo printing lines are driving productivity round-the-clock, at the plants

of the world's leading packaging converters.

#### Focusing on our core competences

What makes TRESU so special is that we are more than just a precision engineering company. In an industry challenged by margin pressure and tight lead-times, we understand that printers seek solutions that help them stay as lean and as productive as possible. Everything we do at TRESU is centered around overcoming these challenges.

With a strong focus on our core competences, as well as the financial backing, we are able to make long-term research and development commitments to bring unique, performance-enhancing solutions to all niches of the flexo and coating markets. Learn more about the five TRESU Group members on Page 3 and throughout the TRESU BlueLine Paper.

#### Global presence

Today, TRESU Group has over 270 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.

TRESU TIMELINE

1981: TRESU is founded in Denmark
1987: The first chamber doctor blade system is developed

#### The people

Our success is driven by our people and their unrelenting focus on delivering results the right way - by operating responsibly, executing with excellence, applying innovative technologies and capturing new opportunities for profitable growth. We realize that the best part of innovation comes through working with the customer every step of the way.

Our technicians are supporting customers around the world with training, inspection and maintenance programmes, to ensure the printing operation is performing to the max. And should the need arise, our service team is on stand-by to offer on-site troubleshooting, wherever you are.

#### Keeping you ahead of the game

With a full understanding of our customers' needs and intentions, we not only build machines with the right printing, coating, converting capabilities suited to the printer's specific niche, but continuously ensure they are optimised so that the customer is ahead of the game in terms of performance, versatility and creativity. With the technology, know-how and vision to support you every step of the way, in TRESU you have a partner to help you innovate and stay ahead in the market place.

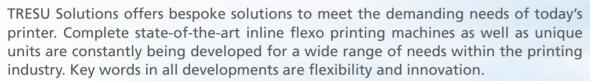
# Meet the family...

#### TRESU Group is comprised of five business areas:

#### KeyLine ••••

TRESU KeyLine offers world-leading food processing and packaging corporations a long-term, total partnership for building and maintenance of multiple lines. From the concept stage, TRESU Group works closely with the client to custom-design complete application-specific converting lines that deliver the very highest levels of performance, ergonomics and flexibility. A network of technical engineers ensures first-class global support, including on-line diagnostics, twenty-four hours a day.

#### Solutions



#### Concept •

TRESU Concept provides bespoke, multi-process, single-pass printing and converting lines for speciality folding carton, paper and film products. With TRESU Concept, we integrate the latest in flexo and gravure printing technology, with specially configured printing, converting and finishing systems from leading value-chain partners. This means almost all packaging products can be completed in one single pass.

1989: TRESU delivers the first modern 5-colour flexo printing machine

1989: The TRESU seal is patented

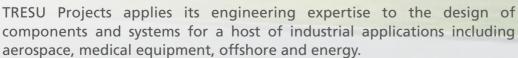
1991: TRESU Printer #1 is delivered — a complete high-performance flexo printing machine

#### **Ancillary**

TRESU Ancillary offers a wide range of high-performance offset- and flexo ancillary equipment. All products are designed to support optimum performance of the printing process within the label, flexible packaging, coating, wide web, corrugated, tissue, and other market segments.

TRESU Ancillary is the leading supplier of chamber doctor blade technology along with a wide range of complementary ancillary products.

#### **Projects** •



Based on extensive experience, the TRESU Group industry knowledge is backed up by state-of-the-art production facilities for CNC processing, drilling, turning, flame cutting, laser cutting and bending.







spaprint





U Printer ES206 SG

walli

2000: H2 - High-pressure chamber doctor blade and pump system for metallure ink is developed

clamping systems with new patented technology are introduced

2001: TRESU Italia is established in Milan

**TRESU** Solutions

The custom made solution

#### Wide range of projects

TRESU Solutions is our customised machine and component-building operation for very precise flexo and gravure printing specifications. The scope of our projects is wide in terms of size and end-use application. These range from integrating a printing or coating unit on to an existing machine, in order to add specialist features inline, to building complete multi-station printing and converting lines.

#### Competitive edge with bespoke solutions

The need for unique solutions has become more acute in an industry where brand owners and retailers are desperate to find a niche. Standard machines can limit the possibilities, in terms of materials, processes and sequences. Our team of engineers has

helped scores of customers to find competitive edge with precision

and bespoke printing solutions for many applications. In the search for the perfect solution, we know that the best part of innovation comes through working with the customer every step of the way.

The possibilities have no horizon!





## TRESU Concept

**Our newest TRESU Group Member** 

TRESU Concept – the latest addition to the TRESU Group family – offers innovative and customised product solutions for a wide range of applications within the packaging printing industry.

#### Close partnerships - unique solutions

Starting from scratch, we work in close partnership with the customer to develop unique systems of proven technologies that address the value-added part of the packaging supply business – within folding carton board, film, laminates, metallic substrates and paper.

#### New and creative product packaging

The industry is constantly evolving, and with TRESU Concept we strive to meet tomorrow's demands - and inspire brand new possibilities and creative product packaging in all categories. New ways of thinking, innovative design and strong research and development are at the centre of TRESU Concept.

2002: The high-performance TRESU Printer #25 is now operating 100% shaft-less

2003: TRESU receives DS/EN ISO 14001 Environmental Management System certification

#### True customisation from vast experience

TRESU Concept goes beyond features and benefits and offers true customisation, from start to finish – thinking, testing, researching and developing with experts in all areas of the workflow - from sleeves to finishing systems - in order to bring the customer's thoughts and ideas to life.

With 30 years of research and development expertise at hand, we offer solutions that provide ultimate flexibility and modularity in configuration.

"Through my 30 years in the packaging industry I have witnessed rapid growth and development, as well as ever-evolving demands for productivity, quality, innovation and environmental care.

This development will **continue** in the future, with **enhanced focus** on new, **creative packaging methods** – the **modern printing press** needs great **flexibility**, and we think **TRESU** Concept offers just that."



#### The First TRESU Concept solution

#### The Flexo Innovator FI 1100 – the complete flexo converting solution for the folding carton and paper market

The Flexo Innovator FI 1100 is the first solution from TRESU Concept. This mid-web flexo printing and finishing concept offers a modular platform, relatively low tooling costs and fast change-over times.

Custom-engineered and assembled at our Danish factory, the FI 1100 offers precision printing at speeds of up to 400 m/min (optional 600 m/min) throughout the run.

Available in roll-to-roll, roll-to-sheet or roll-to-die cutting line, FI 1100 offers the option to include a multitude of possible technologies, such as die-cutting, laminating, embossing, rotary screen, rotogravure and cutting.

Flexo Innovator's technology also assures precise unit-to-unit registration throughout the print run, high-end regulating web tension control technology, rigid design for minimising vibrations, resulting in very high stability throughout the printing process.

Flexo Innovator users have the option to include an inline roll-to-sheet cutting system. This combines low cost of ownership with high productivity without the high tooling costs or lengthy make-ready times associated with alternative die-cutting technologies.

The Flexo Innovator FI 1100 features front and reverse-sided printing stations, providing a single-pass print solution for folding carton, paper and numerous other substrates. Concep PHINATES SETALLIC SUBSTA STON BOARD TRESU **INNOVATOR** FILM

"Re-designing a traditionally roll-to-roll process dramatically reduces raw material, tooling and waste costs.

Whilst simultaneously providing **TRESU**'s press speeds and stability to **ensure** a **high-quality** end product, **Flexo Innovator** series gives offset printers **cheaper cost** of ownership and **significant improvements** in all elements of the workflow."

Kim-Regin Sutsmann
Sales Director,
TRESU Concept



# The source of development and construction

#### Highly skilled, highly involved

The TRESU Development and Construction team consists of 30 highly skilled engineers with a keen focus on true innovation. We take on complete projects and handle the entire process flow. This is where everything is 'shaped' – and thanks to a strong involvement from our sales department, we remain an integral part of the ongoing process and dialogue with the customer.

#### **Cooperating for continuous improvement**

In our industry it is essential to cooperate with customers on all levels – meeting and understanding customers requirements, and truly evaluating their needs and possibilities. TRESU Development and Construction continues to adapt and customise without compromising quality.

#### Understanding the machine-users

We have the welfare of those who operate the press day-in, day-out, uppermost in our minds, too.

We know that achieving the best possible performance depends on understanding and accommodating their needs and concerns, too.

We don't just want TRESU technology to be the leanest, most productive experience in town - we strive to make it the safest, cleanest, easiest and most ergonomic too.

TRESU Development and Construction is constantly trying to reduce process and production cost by developing energy-saving methods - with a kean focus on the environment.



### KeyLine-means partnership for a lifetime...

At TRESU KeyLine, we're about much more than building a machine.

We're the building block for a long-term, continuous strategic partnership - a turnkey service that includes not merely building a machine, but constant maintenance and enhancement of the technology through complete life cycles and across multiple locations.

#### **Leading edge**

Through KeyLine, we ensure our customers remain at the leading edge of competition, with the specification that is adapted to the market requirements.

#### Supporting the world's largest carton board converter

TRESU has been supporting the world's largest carton board converter of liquid dairy packaging products for 21 years. During this time, we have custom-built 57 presses for plants on four continents, and co-developed unique components, exclusive to the client, that enhance performance and versatility.

#### Top of the line - across the board

As a result, the customer, which supplies billions of products each year, is capable of including the latest substrate and ink innovations into its packaging. That means the company can deliver to higher quality and productivity standards, while meeting ever more stringent health, safety and environmental standards.



## The Best Part of Innovation



That is where we at TRESU make a difference.

**Christian Fogh** 

Head of R&D,

TRESU Group

## Design and Engineering

At TRESU Group we strive to maintain our leading position with constant investment in design and engineering.
Together with our quality partners we are innovating 24 hours a day, driving growth for our customers and redefining what's possible.

2009: UniPrint Combi for offset OEMs is released

# Project Management

We 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. 2010: TRESU introduces FlexiPrint Reservoir for the Label segment

2010: TRESU is acquired by Erhvervsinvest, a Danish financial investment company



# Let's pull together and drive INNOVATION!



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