

## ROI in 3 months from a retrofitted coating supply system



2019 TRESU implemented a retrofit solution for a customer – a leading key player in the market of protective plastic films. This kind of film is used to protect new windows, steel roofs and other metal profiles during transportation and handling.

The plastic film is printed with gravure technology and then coated inline on a gravure unit with water- or solvent based glue on the back of the film. The coating is the last process before the web goes into the drying units.

The customer's water-based production used to suffer from a build-up of foam and the customer's goal was to minimize this foaming as much as possible. In the customer's solvent based production, the goal was to minimize evaporation and stabilize the viscosity. Overall a 30% increase in web speed as well as minimizing time consumption during job changes were also among the customer's major goals.

When TRESU engaged with 35 years of expertise and know-how, the coating supply was upgraded with a system including auto-refill functionality in order to handle the vast amounts of glue in

a more consistent and accurate way: TRESU retrofitted 2 F10iCon pumps and 2 UniPrint S-Line chamber doctor blade systems in the application.

Steen Rasmussen, Area Sales Manager TRESU: "We monitored the production process for a while in order to take all process aspects into account and soon we had an idea how to solve the issue. We know that controlling the coating all the way from the bucket to the anilox is key in applications with foaming issues. The problem with foam build-up is universal and we have seen this many times – and have efficient engineered and proven solutions to such problems."

The production used to operate with significant deviations. In some places the thickness was 6  $\mu\text{m}$  and other places up to 15  $\mu\text{m}$  across the web, even though the end-customer criteria was 10  $\mu\text{m}$ .

In short, much more glue was applied than actually needed - just to be sure, that the layer met the customer criteria of 10  $\mu\text{m}$  across the web.



## RETROFIT SOLUTION

### TRESU F10iCon - ink and coating supply system

The F10iCon pump is the ideal coating supply solution for stable and controlled circulation. The F10 iCon features fast and reliable automatic ink and coating control and automated cleaning procedures.

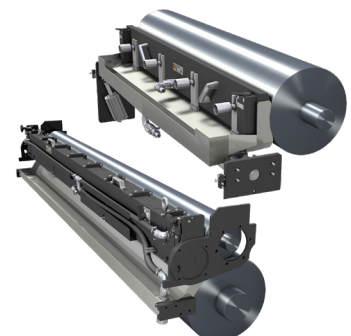
- Pressure control
- Viscosity control
- PH control



### TRESU UniPrint - Chamber doctor blade system

The UniPrint chamber doctor blade system from TRESU is a universal solution for high quality doctoring for a perfect application of coating. The S-Line version is often used for open flow circulation systems with a screw-based clamping.

- TRESU Pressure control Technology



By retrofitting a TRESU F10iCon pump and the UniPrint chamber doctor blade system, a very precise application of glue on the anilox roller was possible and in fact a 25% reduction of glue consumption was achieved.

With the upgrade of the TRESU F10 iCon pumps and the TRESU UniPrint S-Line chamber doctor blade systems, the customer's operators now have full control over the layer and volume of the application, and they change anilox roller with another requested grammage if needed.

All the improvements add up to a picture of a much leaner and faster production.

"We know that by retrofitting a TRESU ink supply system, which is able to control flow, viscosity, pressure, pH and temperature, we can eliminate almost any foam related coating problem – and our well proven concept also worked here", said Steen Rasmussen.

With no more foam or evaporation problems and an accurate application of consistent layers of glue, in fact the production speed increased with more than 60% - or twice the expectation from the customer.

On top of this, a great deal of energy is saved in the drying process, where less energy is involved in drying less glue.

## ...the customer's operators now have full control over the layer and volume of the application

The customer banked a return of his retrofit investment in 3 months and the next projects are already being discussed. For competitive reasons the customer has requested to remain anonymous, but TRESU is able to visit the facility on request.

If you wish to receive further information on retrofitting ink- or coating supply systems or have questions to the installation described here, pls. contact TRESU Area Sales Manager Steen Rasmussen on [str@tresu.com](mailto:str@tresu.com).

## SIGNIFICANT RETROFIT UPGRADE RESULTS

- ROI in 3 months
- 60% increase in production speed
- 25% reduction in consumption of glue
- 80% less wasted substrate per job change
- 50% reduction in downtime due to automated cleaning

## About TRESU

TRESU is a highly-specialized company offering flexible, customized solutions of flexo printing machines and ancillary products for flexo, digital and offset printing to the graphic industry. TRESU has over 35 years of experience and expertise in the development and production of engineered solutions for this industry and supplies directly to end-customers, OEMs and partners. TRESU is a strong player on the global market, and has production facilities in Denmark, sales companies in Germany, Italy, Japan and China, USA and an international agency network providing round-the-clock, local support and know-how. Visit the company's website at [www.tresu.com](http://www.tresu.com)

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