

HL-REPRO IMPROVES ENVIRONMENTAL FOOTPRINT AND EFFICIENCY WITH CYREL® FLEXOSOL-X

BACKGROUND

From the very beginning in 1972, when hl-repro was founded by Hugo Hansson and Jørgen Larsen in the town of Hedensted, Denmark, the company was focused on packaging. Over the following decades, hl-repro grew to become one of the country's largest repro companies with 70 employees. Today, the business is run by the sons of Hugo Hansson, Niels Bjørn Hansson and Lars Bjørn Hansson, and offers a wide variety of services:

- PrePress and retouching for the packaging industry
- Flexographic plates for Flexible Packaging, Corrugated and Tag & Label
- Digital Proofing
- DIGIMARC-pioneer in Scandinavia
- Photo studio and Graphic design
- 3D visualization and mockups
- Large format digital printing



Lars Bjørn Hansson and Niels Bjørn Hansson, Co-CEOs of hl-repro

MISSION OF THE COMPANY

hl-repro identified three main points as crucial for their operation: Knowledge resources, environmental issues and research and development activities.

As the company's primary activities of production and sale of prepress services, as well as digital printing products are very demanding fields, it is critical that the company can recruit and retain employees with a high level of education and commitment in the production area.

hl-repro has prepared an overall strategy for the group's environmental work. Related to this, an environmental policy with associated objectives has been drawn up to manage the environmental conditions. This policy is based on environmentally sound operations and is a natural part of the group's objectives for product quality and production conditions.

Development activities include the development of employees, products and production processes in order to continue to be able to deliver high-quality products as a result of an efficient production process. Working based on the United Nation's Sustainable Development goals is and will be a very important tool for the hl-repro-team to develop new ways of producing and working - without consuming the earth's limited resources.

The company's strong commitment for sustainable development is clearly reflected recent actions: hl-repro is a member of the Green Network, a CSR (Corporate Social Responsibility) knowledge and training center that works to promote sustainable development and growth in their partner companies.

Also, the company has set themselves the ambitious goal to become a carbon neutral operation by 2030. Since 2015, the Danish repro house has been able to reduce their CO2 footprint by 40% through measures like optimized operations (ventilation, lighting, heating) as well as modernizing the car fleet.

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THE CHALLENGE

A large amount of hl-repro's flexo printing plates are processed through organic solvents. Optimizing the environmental impact of this part of the operation has been one of hl's concerns.



Platemaking operation at hl-repro (f.l.t.r.: Ole Bech-Hansen, DuPont; Steen Schødts, Production Manager Flexo hl-repro; Simon Hansson, Production Manager hl-repro)

SOLUTIONS AND RESULTS

With the development of a new, more environmentally friendly solvent for plate processing, DuPont™ Cyrel® is addressing this need and the Danish PrePress-pioneer was interested to become an early adopter of this product. The product offers several advantages that promise improvements in both, sustainability as well as productivity: "A lot of good things happened since switching to Flexosol-X", says Steen Schødts, Production Manager Flexo at hl-repro.

In terms of processing performance, the platemaking specialists were able to confirm improved washout speeds, less plate swelling and 10-15% reduced drying times. Furthermore, occasional surface defects, commonly described as "orange peel" have been eliminated completely. Plates look cleaner and the odor of processed plates is rated more mild than with the previous solvent. Another improvement the team observed is less foaming in the processor.

Efficiency in solvent recycling is another vital factor to the overall productivity of a platemaking operation. Also here, Cyrel® Flexosol-X performed better than its predecessor: "The distillation consistency is better, very stable over many distillation cycles and we achieve a cleaner distillation – and save 30 minutes time per cycle with a better yield", states Simon Hansson, Production Manager at hl-repro. Due to the advanced formulation of the solvent blend, the addition of an antistat agent after distillation is no longer required to guarantee sufficient conductivity. This results in cost and handling benefits.

The technical advantages have been a well-appreciated bonus, however, the main reason for hl-repro was the environmental benefits: Cyrel® Flexosol-X does not contain hazardous substances. This means lower restrictions and thus costs for transport, storage, handling and disposal. The main product feature that convinced hl-repro was the lower VOC emissions, as measured at a platemaking operation in a side-by-side comparison with identical processing equipment. A Cyrel® Flexosol-X workflow emits up to 50% less VOC into the ambient compared to the previous standard solvent Cyrel® Flexosol-i.



Discussing washout results: Steen Schødts, Production Manager Flexo hl-repro and Ole Bech-Hansen, DuPont

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"Overall I'm glad we are again able to provide the right product at the right time, improving productivity and sustainability for our customers that use solvent plate processing", sais Ole Bech-Hansen, Sales Manager Nordic at DuPont™ Cyrel® Solutions. He continues "we are happy to see that customers are coming back to us and report that with Cyrel® Flexosol-X they are able to achieve:

- Better washout performance
- Shorter drying
- More stable distillation and higher yield
- Lower effort and cost to transport, handle and discard solvent
- Lower environmental impact

... and all of that with a seamless changeover and no negative feedback from the printers that receive the printing plates."

THE FUTURE

Further optimization of hl-repro's operations are on the way. The vision of a fully-automated platemaking operation is being worked on to serve customers even more standardized and reliable.

The company is also looking into new green initiatives - together with their employees and suppliers, making circularity the clear aim for everything inside the business. One of the concrete steps to further reduce the environmental footprint is the investment into a heat-pump system.

Furthermore, a lot of the waste from various workstreams is upcycled internally into home decor lamps, waste bins etc. in the new business unit called "RELIFE STUDIO".



For further information please visit the website
www.hl-repro.dk



Further information about DuPont™ Cyrel® or other DuPont products are available on our website
www.cyrel.eu