

RESHORING THE TEXTILE-PRINTING INDUSTRY IN EUROPE

Reshoring production for the textile-printing industry has become a pressing concern in light of increasing supply-chain problems and sustainability legislation. Michiel Willemse, of Hollanders Printing Solutions, outlines the problems and offers potential solutions



Michiel Willemse is Managing Director of Hollanders Printing Solutions

Offshoring production to low wage countries, is becoming less feasible due to long lead times and rising transportation costs. The EU's announcement of due-diligence legislation for sustainable manufacturing

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and equal taxation of CO₂ emissions – for internal and external production – also shifts the balance. Manufacturers can answer these shifts by reshoring part of the production process closer to, or inside, The EU.

ENERGY AND WATER CONSUMPTION

Reshored production has different requirements and new challenges, starting with energy and water consumption. Traditional textile-printing processes need enormous amounts of these. Energy and water consumption are becoming increasingly difficult to access, due to water scarcity and environmental regulations. To make local textile printing profitable, a solution that is low in energy, water consumption and waste production, is necessary.

MANPOWER, SUSTAINABILITY AND RESHORING

In addition, manpower in The EU is scarce and expensive. This makes it difficult to contract people with experience and knowledge to work in this industry. Local manufacturing requires technology that runs autonomously, with minimal human interaction. Hollanders Printing Solutions, a company established in 2002, offers digital printing on textiles, that meets the reshoring parameters for sustainability and automation.

On top of sustainability legislation and



Peter Hollanders studying details of perfection on double-sided, printed silk

manpower availability, is a third challenge to consider when reshoring production. Many European companies in textiles, have specialised in-house building of their brands and a set-up of supply chain. Strangling contracts squeeze the supply chains to producers all over the world. This has resulted in a 'race to the bottom', that has an unwanted impact on people and the



ColorBoosterNF in the middle of the narrow fabrics digital print line



Narrow fabrics printed on the Hollanders ColorBoosterNF

environment. A decision to reshore, includes the challenge of taking responsibility for the production process and building up the required skills to run an operational facility. Typically, businesses now need to exploit the benefits of digital, which can be summarised as print on demand (POD), short runs and no stock of finished products. It involves a make-over of a business. For this, Hollanders offers knowledge and experience.

HOLLANDERS' EXPERIENCE

Systems manufactured by Hollanders, are optimally suitable for the establishment of local-production facilities. Hollanders has never considered the various requirements to be conflicting. It is a delicate equilibrium of an overwhelming number of variables that need to be controlled. The better understanding of this balance, produces the overall best performance of three main aspects – sustainability, quality and integral cost price per sold m².

Starting with cost price, Hollanders models depreciation, supplies and operational costs. Waste production is included as the difference between sold and printed m². The main supplies are inks, printheads and some wearables. Additionally, the hours of downtime for servicing are included. This limits the operational hours and invoices for service visits.

Energy, water and labour are also part of the company's considerations. Taking all these parameters into consideration, the rationale embodied in Hollanders engineering can be seen. In essence, make the printer as reliable as possible to minimise waste and maximise uptime. Regarding capacity, Hollanders tunes it to total annual production, with sufficient room to meet peak manufacturing. It suggests the highest achievable automation, including automatic calibration and error

recovery, opening the possibility of unmanned production. In this way, the personnel cost per m² is reduced and the annual capacity can be achieved without having to battle the unnecessary m²/h.

QUALITY AND PRECISION

Quality starts with understanding textile and colour. This opens infinite mazes of complexity and craftsmanship. Textiles come in endless variations. Colour perception and reproduction are an academic field in themselves. Hollanders' engineers find the equilibrium of all variables, to fully control the process. The company's printers reliably print the tiniest ink droplets exactly at the right location, so that the operation can run autonomously. Automated inspection and calibration open the road to unattended production.

"Hollanders is proud to serve a stable, installed base with long-standing customer relations"

Pigment inks are potentially breaking the market, due to the sustainability aspect. Many suppliers still struggle with the technology and fail to deliver quality. Due to its heritage, Hollanders' printers are optimally equipped to print pigment inks. In partnership with Farbenpunkt, Hollanders has entered the market of top-level, digital-textile printers, using the most advanced pigment inks – water-based, non-toxic Reach and Oekotex compliant.

LOWEST COSTS

Sustainability can be aligned with the lowest integral cost price, if you include all costs in your model. That means minimise waste, minimise energy and water, and operator



ColorBoosterDS in mock-up and full size

attendance. Maximise re-use of solutions in modular technology. Prepare machines for minimal maintenance, longest technical lifetime and refurbishment.

Hollanders has served an almost endless variety of applications – double-sided printing on natural silk, wool, cashmere, cotton, polyester, polyamide, polypropylene, lycra, water repellent, anti-microbial, blends of materials, recycled textiles, open and closed structures, woven and non-woven, on wide format. Applications vary from signs and banners, indoor and outdoor decoration, home textiles, fashion and technical textiles.

NARROW PRINTING

As of this year, Hollanders entered the area of narrow-fabric printing. Narrow fabrics include tapes, ribbons, straps and elastics for a variety of uses. For example, fashion lingerie, bags, backpacks and liners. The ColorBooster NF prints both sides and, on the sides of the tape as well, to obtain full coverage. By the use of pigment inks, the NF line goes from white to confection-ready narrow fabrics by POD in a waterless process with the lowest carbon footprint.

CONCLUSION

This integral approach and innovative spirit has been the backbone for all the company's developments. Hollanders is proud to serve a stable, installed base with long-standing customer relations. Each customer has its own speciality or niche demand. Hollanders Printing Solutions' portfolio is prepared for future needs that arise from global developments today. ■

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Portfolio of textiles printed on one of the Hollanders ColorBoosterDS