



Year 16 • issue 4

Packaging Connected with ESKO to simplify your workflow

Significant growth for TTS – new energy neutral premises

Green Neenah Wide Format Media distributed by Sentec

HEXIS: Long term business plan for global awareness

Megaprint takes next step in textile transfer printing

HP PageWide XL adds 'final touch' to Greetz gifts

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And that's not all. If you buy a total of 150 linear metres of 3M™ Wrap Film* during the competition period, we'll send you a 3M™ Colourboard (worth €349 excl. VAT) FREE OF CHARGE.

The competition runs from 1st November 2018 to 28th February 2019. Purchases can be registered until 10th March 2019.

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'The Inkjet Conference' reveals plans for 2019

How to cope with the mountain of technological information

By **Ton Rombout**

Rapid and ever growing interest in technology, which is one of the strongest driving forces for development in our business, means that our profession needs permanent access to qualified information.

In sign and wide format printing, and some associated businesses, companies and organisations organise conferences, exhibitions, workshops, courses, etc. to keep people in touch with the latest state of the art technologies in our business. Looking at the progress made in industrial ink for the printing industry, it's interesting to see how, for example, developers of wide format printing are incorporating these developments into their own printing systems.

The same applies to developments in batteries (e.g. in textile clothing), displays (e.g. in digital signage and wayfinding), conductive inks (e.g. in industrial printing), printed & flexible sensors (e.g. in sportswear), OLED lightning, augmented and virtual reality, etc. SignPro Europe is keen to attend these conferences and exhibitions, even though it is sometimes difficult to assess whether certain developments are worthwhile or potentially unusable. This is why we need to keep up with what can be gleaned from these conferences.

The Inkjet Conference (TheJJC) is a typical example. It attracted 550 participants from 26 countries, which contributed to a record attendance for the 5th edition of this event. Technology users and suppliers from all areas of inkjet engineering and inkjet chemistry praised the educational and networking aspects of an intense two day conference programme.

In just five years TheJJC has established itself as the meeting point of the inkjet industry. Attended by all the major print head manufactures and

representatives from key industries, this is where the future is planned. Senior technical staff from leading system integrators such as Domino, Durst, EFI, Inca, Kerajet, Markem-Imaje and System Group were joined by innovation experts from, for example, Boeing, Bosch, Nike, Saint Gobain and Tetra Pak, as well as prominent research institutes. The conference discussed how inkjet is being adopted as a manufacturing process in aeronautics, packaging, sportswear and design, textiles, ceramics, laminates, security print and graphics. This year printed electronics were covered by several research papers and biomedical applications are starting to emerge, proving that the inkjet community continues to expand and is welcoming new applications and new players.

Matt Ezenyilimba, Manager of Water Based Ink Technology at EFI and one of 200 newcomers, stated: "The sessions and exhibits were very informative, with excellent presentations covering a variety of topics. I wish the conference lasted longer to give us time to properly digest all the information and networking opportunities." Virendra Bhavasar from the Mumbai based Asha Penn Color added: "The presentations covered a wide range of topics and yet were all connected by our common research interests. The networking opportunities afforded by a well organised schedule allowed me to make contact with other professionals in our field."

A total of 78 companies and research institutes showcased their solutions, 17 of them exhibiting for the first time. "The breadth of experience at the event was impressive. Vendors covering all aspects of the industry were readily available throughout the conference," Michael Miller (Ball) and Sergej Pauli (Phoenix Contact Identification) concluded. "All the giants of inkjet were there."

Organised by the European Specialist Printing Manufacturers Association (ESMA), in conjunction with others, TheJJC has already opened the registration process for future events. After its successful launch earlier this year, the conference is set to return to Chicago O'Hare on 22-23 May 2019 and the 6th edition of the European event will take place on 29-30 October 2019 at the Crowne Plaza Düsseldorf.

SignPro Europe tries to support these conferences and exhibitions as much as possible. We do ask organisers to provide comprehensible and simplified information, making it easy to understand for our readers, the technical managers of sign and wide format print production companies right across Europe.

Meanwhile, we at SignPro Europe would like to wish you an enjoyable, instructive and productive 2019, whilst we will continue to make every effort to provide a 'knowledge bridge' between the specialists and operators behind the machines.

**Ton Rombout, Editor-in-Chief
SignPro Europe
www.signpro-europe.com**



Intro

SignPro Europe December 2018



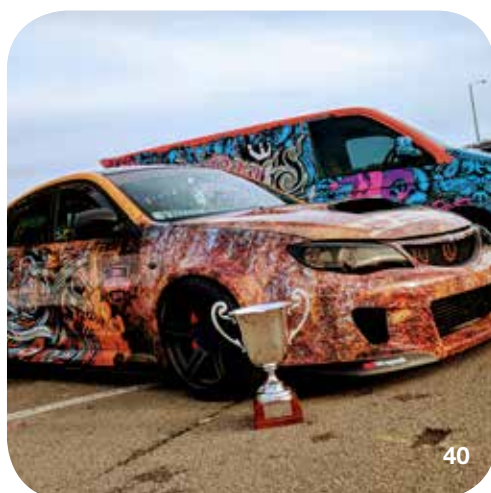
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For more product news and events, look at our website.

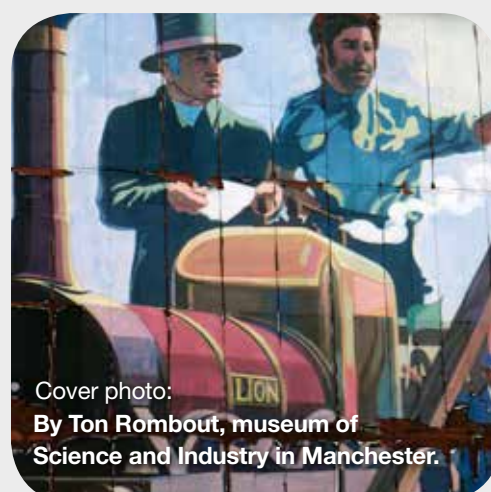
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Cover photo:
By Ton Rombout, museum of Science and Industry in Manchester.

COLOPHON

Publisher Publimore Media B.V. / John ter Meer, Avignonlaan 33, NL-5627 GA Eindhoven, The Netherlands, T +31 (40) 293 25 25, info@signpro-europe.com, www.signpro-europe.com **Editorial**

Mr. Ton Rombout (The Netherlands), Editor-in-Chief, Mrs. Sonja Angerer (Germany), Mr. Loet van Bergen (The Netherlands), Mrs. Alicia Bernal (Spain), Mrs. Ingrid Birtwistle (United Kingdom), translations, Mrs. Cristina Rossi (Italy), Mrs. Andrea Edan (United Kingdom), Mr. Koen Goederis (Belgium), Mr. Herman Hartman (The Netherlands), Mr. Rob Haak (The Netherlands), Mr. Szilárd Bévárdi (Hungary), Mr. Martin Kugler (France), Mrs. Kaisa Salminen (Finland), Mrs. Angela Starck (Germany)

Advertising T +31(0)40 293 25 255, advertise@signpro-europe.com **Design** www.mulareclamebureau.nl, info@mulareclamebureau.nl (The Netherlands) **Printing** Grafisch Perfect, Valkenswaard (The Netherlands)

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LabCampus and MIT sign cooperation agreement

Munich Airport and the renowned Senseable City Lab at the Massachusetts Institute of Technology (MIT) have reached an agreement to work together in the development of the LabCampus Innovation Center at Munich Airport.

More info: www.labcampus.de



Texo Trade Services opens new stock locations

Texo Trade Services (TTS), expert in transfer printing media and printable textiles, opens two new stock locations in Europe: in Leicester the United Kingdom and in the French capital Paris. TTS serves a concentration of customers in these regions. With this local, customer-oriented stock TTS increases the service and delivery speed: within 24 hours or even the same day. Customers can guarantee their own clients even more speed and distinguish themselves herein.

More info: www.texo-trade.com



HP announces fast 'design-to-print' portfolio

Recently, HP Inc. announced new hardware and solutions to help change the way architectural, engineering, and construction (AEC) industries design and print. Autodesk users will now experience faster HP PageWide XL printers, breakthrough simplicity with HP Solutions for Large Format printers, new Z by HP portfolio enhancements, and advances in VR.

More info: www.hp.com



EFI Grows its Portfolio of Cretaprint Printers

Tile manufacturers can achieve efficient, high-end digital decoration for nearly any size configuration or design need using the versatile and proven line of EFI Cretaprint printers from Electronics For Imaging, Inc. The company recently developed its 5th generation printer platform, featuring a new EFI e*D5 printhead that optimises printer performance by assuring better alignment and higher throughput speeds. EFI recently announced two additional 5th generation printers, the new C5 and D5 models.

More info: www.efi.com

Masserdotti invests in new Zünd Cutter

Italian Masserdotti Group again opts for Zünd digital cutting technology. By investing once more in a Zünd G3 cutter, this specialist in digital printing in Italy is able to substantially increase its routing capacity.

More info: www.zund.com



EFI Introduces Single-pass Reggiani BOLT Textile Printer

The brand-new, next-generation, single-pass EFI Reggiani BOLT textile digital printer from Electronics For Imaging, Inc. made its debut during an open house event at the EFI Reggiani facility in Bergamo, Italy. The advanced, ultra-high-speed digital single-pass printer, is providing users with high uptime and reliability, outstanding performance, superior printing uniformity and accuracy, long printhead life and minimal maintenance needs. The EFI Reggiani open house has created huge interest in global09 textile market opportunities.

More info: www.efi.com



Esko appoints Mattias Byström as President

Esko announced that Mattias Byström has been appointed President, effective January 1, 2019. Byström succeeds Udo Panenka, who is leaving the company to pursue new opportunities. "We thank Udo for his excellent service to Danaher over the past ten years, including leading Esko since 2015," reflected Joakim Weidemanis, Executive Vice President of Danaher. Mattias Byström brings with him over twenty years of general management experience. Most recently he was CEO of FlexLink, a global \$300 million factory automation solutions business with headquarters in Gothenburg, Sweden. Byström has eight years of prior Danaher experience in different leadership roles in what was then known as Danaher Motion. More info: www.esko.com



EFI appoints Bill Muir as New CEO

EFI announced that its Board of Directors has named William (Bill) D. Muir as its new Chief Executive Officer. Muir was most recently the Chief Operating Officer of Jabil, a product solutions company. His appointment is effective October 15, 2018, when he will also join the Board of Directors. Muir succeeds Guy Gecht, who informed the Board he intended to step down as CEO upon the appointment of his successor, as the Company announced on July 30, 2018. Gecht will remain a member of the Board of Directors and will be an advisor to the CEO. More info: www.efi.com

Messe Düsseldorf registers impressive booking figures

drupa will provide decisive stimuli to the global print technology industry from 16 to 26 June 2020. Messe Düsseldorf is experiencing a strong demand for exhibition space. Shortly after the official registration deadline, 96 percent of the planned 160,000 square meter space was already booked. Companies from more than 40 countries have already confirmed their participation, including the large global players as well as many smaller companies and promising start-ups. A current list of exhibitors is available on www.drupa.com



EFI Invites Syncoms for Connect Conference Sessions

EFI announced that Ali Ridha Jaffar, vice president of Print and Technology for London-based Syncoms Group, will be presenting three all-new Business Builder sessions at the annual EFI Connect 2019 conference, January 22-25 at Wynn Las Vegas. Jaffar's sessions will give attendees useful and practical information on how to differentiate their business and win customers with an eCommerce offering. More info: www.efi.com

Mutoh announces ValueJet 1627MH

Mutoh Europe announces the availability of a new member in its popular ValueJet wide format digital printer family, the VJ-1627MH. The ValueJet 1627MH is a 64" (1625 mm) wide hybrid printer featuring a hot air knife media drying system and unique resin-based inks enabling direct printing on both rigid and roll substrates. Prints are dry when they come off the printer. The ValueJet 1627MH incorporates a high end piezo drop-on-demand print head capable of producing print resolutions up to 720 x 1440 dpi, making it suited for top quality output for short viewing distances.

The ValueJet 1627MH comes with a brand new CMYK + White resin-based ink set called MP-31. All inks come in 500 ml packs. MP stands for "Multi-Purpose", which refers to the unique capabilities of the inks and their extreme versatility. The inks allow direct printing on white, transparent and coloured rigid substrates, including foam board, cardboard, alu panel; even on acrylic sheets as well as rigid sheets for thermo forming (PVC, PS, PP, APET, PLA). Printing on white, coloured and transparent roll substrates is also possible, including heat sensitive media, shrink film, recyclable non PVC media, etc...

Mutoh's MP-31 series inks have a UV durability up to 2 years outdoors without lamination.

The MP-31 inks are also extremely stretchable & shrinkable, making them equally suited for high stretch applications such as car wrapping as well as thermo/vacuum forming and shrink applications.

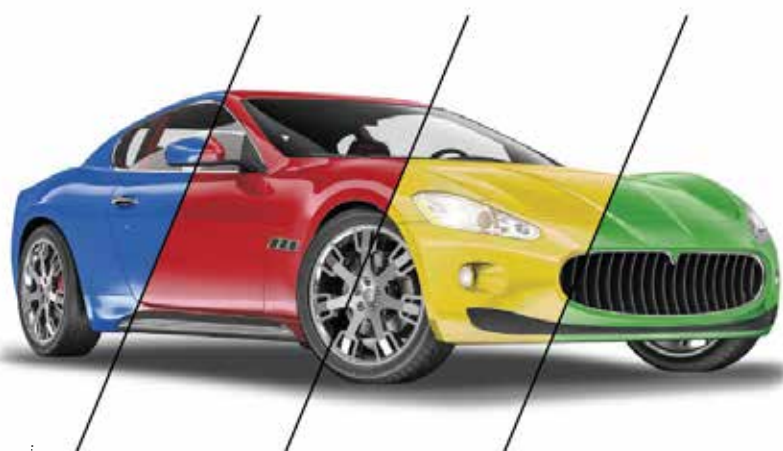
More info: www.mutoh.eu



Win an exclusive VIP Yacht trip to Monaco with 3M Wrap Films

Colour Up Your Shop with 3M and win!

By Ton Rombout



Colour Up Your Shop!

3M ColourUpYourShop_Logo.

From 1st November 2018 through to 28th February 2019, 3M is giving its car wrap customers the opportunity to win an Exclusive VIP Yacht trip to Monaco for 2 people (worth €15,000), as part of its 'Colour Up Your Shop' promotion. The company is also offering a free colourboard (worth €349, excl. VAT) to every customer who buys a total of 150 linear metres of 3M Wrap Films over the period of the promotion.

So when you receive this issue of SignPro Europe, there's still two month to go! 3M's 'Colour Up Your Shop' promotion is open to all 3M graphics manufacturer and installer customers who purchase 3M Wrap Film Series 1380, 3M Wrap Film Series 1080 and/or 3M Wrap Overlamine 8900.

Grand Prize Draw

Customers purchasing 10 linear metres or more of these films will be given the opportunity to enter the Grand Prize Draw by registering their purchase at www.3m.eu/colourboard. They will then receive one ticket that automatically enters them into the draw, which will take place in March 2019. Customers are eligible to receive tickets for each 10 lm order they place during the promotion period. Furthermore, customers who purchase a minimum of 150 lm of eligible films during the

promotional period will receive a free 3M colourboard* (worth €349, excl. VAT) that showcases 120 A5 samples of wrap films. This high spec, high quality point-of-sale tool is an ideal selling aid for car wrap installers and graphic manufacturers.

An exclusive weekend pass to Monaco

The lucky winner of the Grand Prize for 2 people will have access to an exclusive 47 m super yacht, on which they will be treated like VIPs, on both the Saturday and Sunday of the race weekend. This highly sought after package includes a luxury 3 night hotel stay, unique entertainment, fine wines, gourmet food and much more.

Once in a lifetime opportunity

"We're really excited about this promotion at 3M. For many of our customers this could be a once in a lifetime opportunity to experience, up close, the excitement of the race, with a yacht as an exceptional viewing venue," enthuses Joris Van Liefde, Customer Journey Manager, Graphic Markets Western Europe. "We are passionate about supporting our car wrap installation customers," Joris continued. "That's why we're offering every customer the opportunity to receive a 3M colourboard free of charge. It's a great selling tool for their business."

Wrap films of exceptional quality

The 'Colour Up Your Shop' promotion applies to purchases of the 3M Wrap Film Series 1380, 3M Wrap Film Series 1080 and/or 3M Wrap Overlamine 8900. These films are available from all the usual suppliers and distribution channels. Being an innovator in premium graphics films, 3M has built its reputation by developing print wrap films that meet the different requirements of its customers and deliver exceptional printing quality, faster and easier installation/removal and ever greater durability.

3M is offering car wrap installers and graphics manufacturers, not yet familiar with 3M's premium car wrap films, the opportunity to 'try for themselves' by requesting a sample swatch at www.3m.eu/colourboard.

"This promotion kicks off on 1st November 2018 and lasts for 4 months, so the sooner you get involved, the greater your chances of winning the Grand Prize and 3M colourboard," Joris concluded. "Colour Up Your Shop" is a promotion not to be missed!" •

* Customers can receive only one colourboard as part of the promotion.



3M CUYS_Colourboard Rendering.

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Lydia van der Spek – Product Development Manager at Greetz.

Greetz: first company to launch personalised wrapping paper

HP adds ‘final touch’ to gifts

By **Ton Rombout**



Greetz premises in Amsterdam.

Greetz, which was established in 2004 and is now located in Amsterdam-Zuidoost, is the ultimate ‘attent service’. Greetz is the place to go if you want to surprise someone or let them know you are thinking about them. Whether they are celebrating a birthday, starting a new phase in their life or are in need of a bit of support – a small gesture will make all the difference. Surprise them with a personal card, a bouquet, a balloon or one of the many (personalised) gifts.

This article is the result of my conversations with Lydia van der Spek, Product Development Manager at Greetz. She had lots to tell me. Greetz is a very popular enterprise, both in Belgium and the Netherlands, because it offers a huge and varied range of greeting cards and gifts. They are created and completed on the website. You indicate on which day the card or gift should be delivered, pay and, hey presto, a card or gift is delivered on the requested day – making it a complete surprise for the recipient.



The HP PageWide XL printer.

Development of highly versatile range

Greetz has been around for 14 years and has been extremely successful over that time. Lydia van der Spek stressed that a card through the letterbox is still perceived as a lovely surprise by the recipient, more so than a few quick WhatsApp messages with emoticons or photographs. The thought behind it is still that the sender has made an extra effort and spent money to surprise the recipient – and that still works.

Moreover, Greetz keeps up with the times. Eight years ago the company started to develop various extras: some flowers, chocolate, a bottle of wine and now also a book or baby bib. In fact the possibilities are becoming ever more varied. Greetz gives people the opportunity to tell someone that they are thinking about them in a very personal format.

Surprise platform

Lydia van der Spek refers to it as a surprise platform: “We try to develop and strengthen our product range as much as possible.” The difference with other options lies in the fact that the recipient gets an “unexpected

surprise” and perceives it as a personal gift.. Personal because the bottle of wine has a personalised label, the bib is embroidered with the baby’s name and the flowers or chocolate are accompanied by, or wrapped in, a personal card or gift wrap.

“However,” Lydia added “that’s not all. Wine can also be boxed and labelled again with a personal message, even on the wood of the box. “Our UV printers can easily print a name and/or photograph on the lid.”

Combining print orders

“In fact each print order is based on a unique design. Of course we can put orders in a queue,” Lydia explained. “For example, we are currently processing about 1,500 personalised orders each day. Orders are combined using barcodes based on the card format. We currently use approximately ten different card formats. All these cards are classified on the basis of their barcode and printed on our Xerox iGen4 printers.”

She continued: “Then the gifts, which are collected from our warehouse, are added. The barcode tells us what belongs to what. The recipient’s address is printed on – and this is where HP comes into its own - we give the sender the opportunity to design the gift wrap as well!”

Next step: personalised packaging

“Finally, this brings us to the role of our new HP PageWide XL printer with in-line cutting unit,” Lydia added with a smile. “Because, having acquired this printer, we can now also offer personalised gift wrapping. We create a repeating pattern of the design created by the customer and his or her personal message.



Double wrap, one on the chocolate and one for the mail.



Jip wrapping paper.

The paper is printed and cut into separate sections by the HP PageWide printer, i.e. for each individual order – start-stop, start-stop etc. at an incredibly high speed. We cannot risk machine failure which is why we decided, in conjunction with HP, to purchase two at the same time. If one machine fails, which hasn’t really happened, we can deploy the other one straight away whilst the first one is being serviced. No doubt you are aware that this personalised wrapping paper offers a unique benefit. And even with thousands of orders a day, each order is unique.”

HP PageWide XL printer

Lydia van der Spek is most impressed with the quality of the HP PageWide printer. “The printer is fast and delivers excellent quality. Another important aspect is that the internal cutting unit can accurately cut the desired formats from rolls of paper. In fact we work with four different rolls of paper with individual widths. This means that all formats can be cut swiftly whilst the paper, semi-gloss 100 grams, dries quickly and offers a luxury finish.”

She continued: “We use water resistant polypropylene paper for the flower bouquets, because we cannot risk it getting wet and disintegrating. One of the four rolls is the special paper for flower bouquets. The other widths are used for various gifts, including those mentioned earlier and now also shower gels and books.”

Lydia also listed a number of other advantages of the PageWide technology: “On commonly used inkjet printers the head moves back and forth, whereas on the HP PageWide all colours are applied to the paper simultaneously. We can almost work on-demand: the code is scanned and sent to the printer, and the wrapping paper emerges within seconds. We already receive about 350 printed wrapping paper orders each day and we are the first in the world to deliver it on this scale. Other companies still send you the roll of packaging paper and you have to do the wrapping yourself...”

Environmentally friendly approach

We also concentrate on the environmentally friendly aspects of the shipment packaging we supply. Lydia stated that Greetz specifically focuses on this. “It is mainly about paper, but we even include the option for children to build something, e.g. a castle, from certain types of packaging. For the flowers we have purchased a machine that erects our flower boxes for us, so we do not need excessive amounts of carton. With other products we always investigate how we can make the packaging as compact as possible.” •

About Greetz

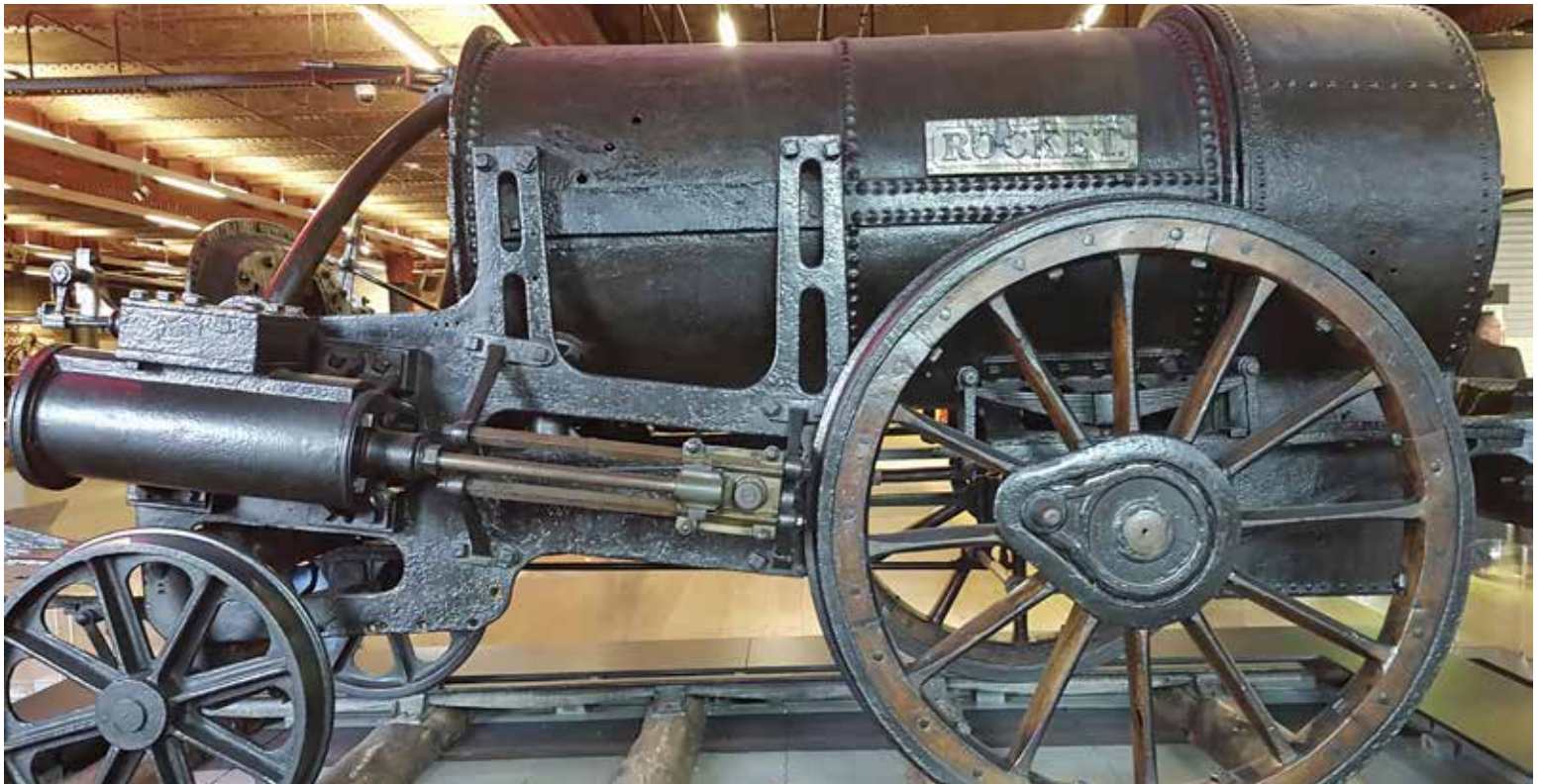
Greetz has gone from being a market leader in the Netherlands in authentic online greeting cards to the ultimate platform for personal surprises, including flowers, balloons, cakes and chocolate. Its mission is to make ‘being attentive’ simpler and more fun, introducing new surprises, functionality, personalisation options and innovative modes of delivery. In 2018 the online ‘surprise’ venture became part of the British Photobox Group, the most prominent personalisation business in Europe. The group incorporates the sister companies Greetz, Photobox, Moonpig, Hofmann and PosterXXL.



Case

Dream Big with ESKO to simplify your workflow

By Ton Rombout



What we can learn from the past.

As part of a series of sessions organised by ESKO in different countries, I was invited to visit the Packaging Connected Event in Manchester (UK). The aim was to find out what ESKO could teach its packaging converters and pre-media and wide format print customers, analysing their own production workflows using Value Stream Mapping, and explore the solutions ESKO can offer to improve these workflows. To put it in a nutshell: Packaging Connected to simplify their workflow.

The event took place at the Museum of Science and Industry in Manchester, a really interesting and well chosen location, a tribute to the first rocket locomotive used when the first railway line was opened between Manchester and Liverpool on 15 September 1830. The rocket's success was down to an innovative combination of features (see picture).

Virtually every steam locomotive since has used the same combination: hotter fire = more steam = more power has been the basic principle for many subsequent locomotives and trains.

Integral software solutions

I feel confident that the software packages ESKO has in place offer an integral solution for the workflows of packaging converters and pre-media and wide format print companies. You could stick to the standard strategy and explain the kind of solutions ESKO can offer its customers, but it might be better to persuade your audience that they all experience problems in their production workflow nowadays and let them analyse their relationships with their own customers.

It would be more beneficial to first explore how these customers of converters and wide format print production companies, including super-

markets, warehouses and large stores, operate and develop. The next step might then explain why these packaging converters and print production companies have to follow suit in order to establish a connection, and maintain contact, with the group they are working for, i.e. develop an understanding of their customers.

Ultimately this would also benefit ESKO, when it can convince the audience that ESKO solutions would be a much better option to solve their problems.

Packaging connected

The keynote speech by Jan de Roeck, Marketing Director at ESKO, which kick-started the event in the morning, focused on how customers behave and develop. He explained why brand owners, packaging suppliers and consumers need to work more closely together. Consumer behaviour and interest is

BLUEPRINT FOR THE FUTURE

Rocket's success was down to an innovative combination of features. Almost every steam locomotive since has used the same combination.

It had a multi-tubular boiler. Can you see all those holes in the back? That's where metal tubes took hot gases from the fire through the water. This increased the heating surface area, making the boiler more efficient.

The pistons in the cylinders on the side of Rocket originally connected directly to the wheels but the rod is now missing. Fewer moving parts wasted less energy.

After the steam had pushed the pistons, it went up the chimney. This pulled smoke up and out and drew fresh air in, making the fire burn hotter.

Hotter fire = more steam = more power.

Could be a blueprint for the future.

WORKFLOW SIMPLIFIED



Packaging Connected = Workflow Simplified.

changing rapidly, e.g. moving from actual high street shopping to online shopping, and the number of products continues to increase. People who like to buy online tend to focus on price first, followed by availability and convenience. Why? Because the way consumers interact with packaging is changing. 79% of consumers expect the product packaging they see online to be exactly the same as it is in-store, whilst 49% expect the image they see online to exactly match the product that arrives on their doorstep. In fact consumers expect even more, i.e. total consistency between online and offline, more and better information and an exciting and engaging consumer experience NOW. The growth rate of large global companies with fast moving consumer goods (CPGs) is stagnant. They only managed to achieve 0.7% growth between 2012 and 2016, as opposed to 7.7% between 2006 and 2011. Innovation is

ineffective: only 55% of the 60K new 'Stock Keeping Units' released each year made it to 26 weeks.

Small CPGs, however, are growing rapidly. They are usually natives who are much further advanced in the digitalization of their business than large CPGs.

The obvious conclusion is: what brand leaders need to do is create compelling omnichannel campaigns, respond faster to changes in consumer taste and cut lead times within the value chain.

Having considered and analysed developments in his clients' markets, Jan de Roeck analysed converter and premium problems - 'our own problems'.

He concluded: "Most of these are familiar, but we need to take the discussion further, i.e. focus more on issues such as shorter and faster print runs, incomplete job information, long approval cycles, inefficient manual

processes, home grown MIS, the complexity of running mixed printing processes and poor uptime of expensive equipment."

According to Jan de Roeck the answer lies in innovation. His advice is: digitize – automate - connect. In his own words: "digitize more packaging tasks, work in 3D, visualize digital assets, asset portability, automate repetitive tasks, connect the supply chain."

To summarise:

Brand leaders need to establish closer links with their consumers and converters & pre-media need to establish closer ties with their customers.

'Packaging connected' means:

- Connecting brand owners with pre-media and converters
 - Cut lead times, respond faster to changes
- Connecting packaging with e-commerce
 - Create compelling omnichannel campaigns
- Connect the technology ecosystem across suppliers
 - ESKO products to ESKO products
 - ESKO products w/PID (AVT, X-Rite Pantone)
 - ESKO products w/partners (MIS, ERP, equipment manufacturers)
 - Achieve more using the same resources.

What are your main sticking points?

One of the most interesting parts of the day was the session, again by Jan De Roeck, involving the audience in the room, i.e. managers and other staff working in packaging, converting, pre-media and wide format print production. Using yellow stickers, Jan De Roeck discussed

Read more --->



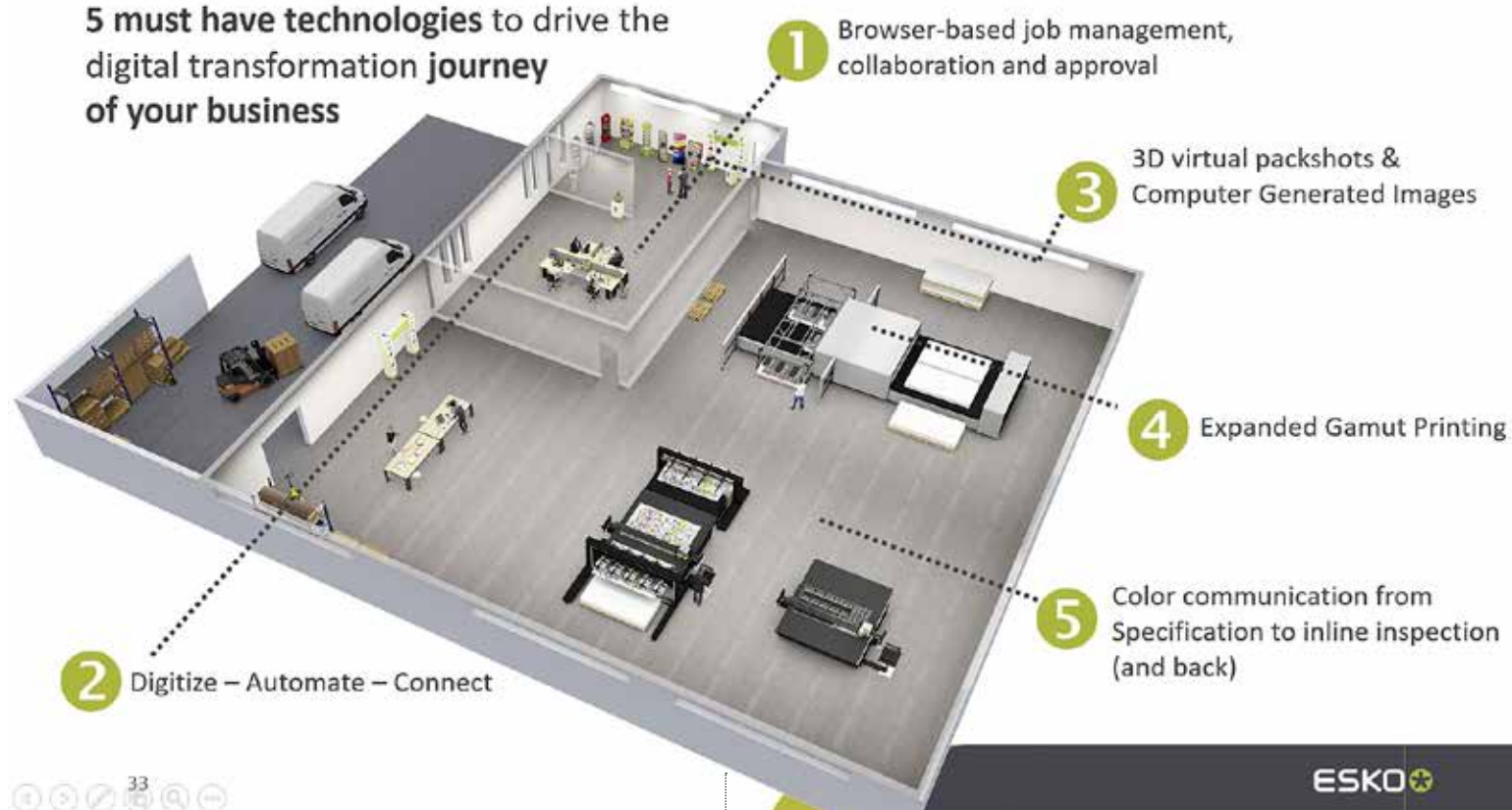
Three segments with all the ESKO Solutions.

News

SignPro Europe December 2018

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5 must have technologies to drive the digital transformation journey of your business



Five must-have technologies to simplify and improve your workflow.

the different workflow stages with the audience ("let's mention as many steps as you like") and demonstrated that not every workflow is the same and that there are typical bottlenecks. Almost everyone in the room mentioned the relationship with customers (time consuming, approval cycles, jobs delivered efficiently) as well as internal discussions, misunderstandings in colour management, scheduling, measurements, etc.

Overview of the main sticking points (high-lighted by the audience):

- customer service!
- manual processes, manual email
- email getting lost
- messages going back and forth, misunderstandings

- different systems for communication, approval, etc.
- certain control moments not clear
- inefficient step and repeat process
- delays in estimating, disorganized estimating process, no underlying process
- internal and external communication, not at the right time, errors
- third party dependencies in the workflow
- incorrect specifications causing a lot of edits
- lack of standards
- lack of training.

The overall conclusion and the question put to the audience was: how far are you in terms of digitalization?

ESKO products on offer

In fact the links with ESKO software solutions were easy to pinpoint (no-brainer) at the end of the sessions. Jijo Dominic, Director Product Management at ESKO, presented high level roadmap information concerning ESKO with a total overview of all ESKO solutions for the different parts of a total workflow (see picture 04). The slide illustrated the overall process: SKY for Collaborate without Barriers, SITE for Produce Seamlessly, and SEAT for Create Efficiently.

In fact they accurately shadow current day to day trends, i.e. more processes online, fewer errors when all production processes are linked and mutually controlled. According to Jijo Dominic, we are still struggling with many tools and processes that are not yet completely digital, especially in terms of communication and cooperation. The ESKO solutions, however, are truly interfacing the day to day processes of packaging converters and/or pre-media companies, so they merely represent the next step.

Having attended the event my conclusion would be as follows: it was a perfect day for visitors. Upon leaving the museum they briefly surveyed the rocket locomotive in the entrance hall and some made a comparison with what they had learnt that day...

Would you like to find out more? If so, visit www.esko.com and analyse the solutions. And remember to download 'Packaging and the Digital Shopper'.



Converters & Premedia need to establish a closer connection with their customers.

Hybrid

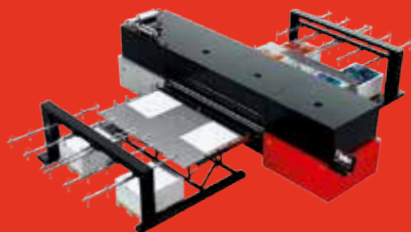
Anapurna H1650i LED
Anapurna H2050i LED
Anapurna H2500i LED
Anapurna H3200i LED



Jeti Tauro H2500 LED



Jeti Tauro H3300 LED



Roll-To-Roll

Anapurna RTR3200i LED



Jeti Ceres RTR3200 LED



Avinci DX3200



Flatbed

Anapurna FB2540i LED



Jeti Mira LED



Jeti Titan S/HS



Workflow

Asanti



Finishing

Acorta 3120



Inks

Anapurna, Anuvia, Avinci



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Adhesive coating line at Hexis Frontignan.

Long term business plan to promote global awareness

Hexis technology preview

By **Martin Kugler**

“Hexis is committed to a continual investment of 2.5% of its turnover into research and development”

- Caroline Mateu

HEXIS, the French vinyl manufacturer, is looking forward to next year. Indeed 2019 will be the company's 30th year in business churning out some 25 million m² of film, with an expected turnover well in excess of €100 million and a workforce of more than 400 people worldwide.

With its innovative technology, diversified product range and progressive marketing and distribution, Hexis has captured a respectable market share in the self-adhesive vinyl and large format digital printing business.

Core business expansion

Hexis has expanded considerably over the years, beyond its core business of vinyl film for signage applications. Since the launch of its in-house production of cast vinyl films in 2007, the range of both marking and print media for wrapping and decorating applications has brought a steady increase in volume and provided access to completely new markets. This trend is set to continue over the next few years, in line with the increasing demand for environmentally friendly and energy saving products, production and installation methods. Hexis has recently developed several PVC free products that use a water based emulsion, thus reducing the amount of solvents used in production by 85%, whilst simultaneously achieving better durability than their PVC equivalent.

Growth in different market segments

Hexis is targeting substantial growth in market segments such as interior design, retail fittings



Caroline Mateu, chairman of the board at Hexis.



Casting line at Hexis Frontignan.



Second oxidiser at Hexis, Frontignan.

and furnishings and decoration. Other promising areas include protective laminates, textile marking and industrial applications such as paint replacements, anti-graffiti and anti-microbial surface protection on unusual substrates, for example, on solar panels and touch screens.

New exciting products

In October 2018 Hexis surprised industry insiders with the launch of a new cast vinyl and patterned adhesive compound for wide format digital printers. The new product, referred to as THE190EVO in which THE stands for Take Heat Easy, consists of a multi-layered cast vinyl with a newly formulated micro structured adhesive. Needless to say, the adhesive is solvent based with its acknowledged benefits. It also uses a new formula which, combined with the flattened pyramid pattern of the adhesive, makes the film extremely easy to apply. Hexis claims that the film will slide on the target surface and remain repositionable throughout the application.

Exceptional specifications

The vinyl is a 50µm/2mil cast PVC made of several layers to achieve improved opacity, conformability and superior gloss. It is supplied on an embossed silicone liner, which gives the adhesive its pattern. Ideally the printed vinyl should be combined with the matching gloss, matt or patterned laminate for extended durability and long term UV protection.

The product is the first in a series to be produced on a new CAST4 - a 75 m long casting line at the company's manufacturing site in Hagetmau in southwest France. This site now operates two 1.6 m wide casting lines in a dust free, air conditioned building hooked up to a thermal oxidiser for environmental compliance. Using multi-purpose coating heads, the machine can be used for casting and adhesive coating purposes.

The original manufacturing site in Frontignan in the south of France benefited from the expansion of the two existing casting lines with the installation of a dedicated second thermal oxidiser to accommodate increased production rates.

Future development potential

Caroline Mateu, Chair of the Hexis Board, outlined the company's future development potential: "Our research and development laboratory is the basis for our previous success and mainstay to secure future progress. Hexis is committed to a continual investment of 2.5% of its turnover into research and development." The laboratory is led by Christophe Baudrion, who manages a team of 24 chemists and specialist technical staff. Over the years his department has delivered innovations such as multi-layered cast film and patented anti-microbial film. The team has also developed a series of specialist adhesive variants to suit a wide range of application conditions and substrates, including flat, structured, tinted and reinforced adhesives, which are required, for example, in colder climates. Caroline Mateu added: "We are proud to have received international recognition and multiple awards for our product research and development efforts." In 2014 Hexis won two trophies in the same year at the EDP (European Digital Press) awards for its HX190WG2 cast digital printing vinyl and HFLEX100P flex film for textile marking, following an in-depth review of their product quality and user value by the EDP technical committee.

Customer service

Despite the complexity of its technical processes, Hexis is committed to maintaining a business culture that goes beyond mere technological achievements. Caroline Mateu explained: "Our overall objective is to support and retain our customer base."

Hexis puts major efforts into providing its customers with a comprehensive package in order to guarantee a professional installation and consistent product quality and performance. The company has received ISO9001:2015 certification for its quality assurance management system at all its sites, which covers design, manufacture, order processing and distribution for its marking, printing and surface protection media. This type of quality service guarantees consistent quality and standardisation throughout all processes, for Hexis as well as its customers.

Certification

In 2016 Hexis gained ISO50001:2011 certification for the introduction, implementation, maintenance and improvement of an energy management system based on a systematic approach to the ongoing improvement of energy efficiency and consumption.

Choosing the appropriate product for a particular application calls for a close supplier-customer relationship, which is why Hexis is committed to delivering all the necessary tools and training to its customers. The company regularly runs training sessions at its training centre in France and at dedicated events across the globe, covering topics such as colour calibration and car wrapping. •

Developments

New business premises and two new European stock locations

Significant growth for TTS

By Ton Rombout



Artist impression new premises TTS.

With its workforce doubling in size, a rapidly growing international client base and quadrupling of its turnover in the space of ten years... TTS is particularly proud of its achievements but literally bursting at the seams! Relocation to larger premises has consequently become a necessity.

This specialist in transfer print media and large format printable textiles is set to move to brand new 6,000 m² business premises at the end of December. The relocation has been preceded by the opening of two new stock locations - in Leicester in the UK and in the French capital Paris.

New services: a step up in speed and efficiency

Over the past decade TTS has expanded enormously in terms of digitally printable textile media for visual communication, digital sublimation paper and silk-screen transfer paper. At its new premises TTS will have the space to expand even more. They provide scope to bring certain production stages in-house, including the inspection of textile and slitting of paper and textiles in line with client demand. Another new feature will be the demo centre, accommodating various Mimaki printers, Monti calendars and heat presses,

where TTS will be able to test new products and bring them to market more quickly. A loading dock will also ensure that containers and trucks can be handled swiftly and efficiently.

Corporate social responsibility, energy neutral premises

Being a modern organization, TTS wants to do business with a focus on sustainability, which is why the new premises are completely energy neutral. This is achieved using under floor heating, air circulation using heat exchangers, outstanding insulation and solar panels.

Anticipating future developments and demand

With its new building TTS will be ready for the future. Floris-Jan van den Heuvel, Director of TTS, explained as follows: "We expect that the market for digital textile printing will continue to grow worldwide. More and more textiles will be used, particularly in segments such as retail and stand construction. Companies that print textiles for the fashion and/or interior design segments are also moving over to digital production. Beyond that, the applications for digital sublimation printing are continuing to grow in the market for promotional sales items. Think in terms of mugs, hand towels, key cords and floor mats. Because our new building will



Warehouse TTS.

provide more storage capacity and an efficient warehouse, we can work more quickly at a lower cost and respond to growing market demand."

New European stock locations: bespoke range close to home

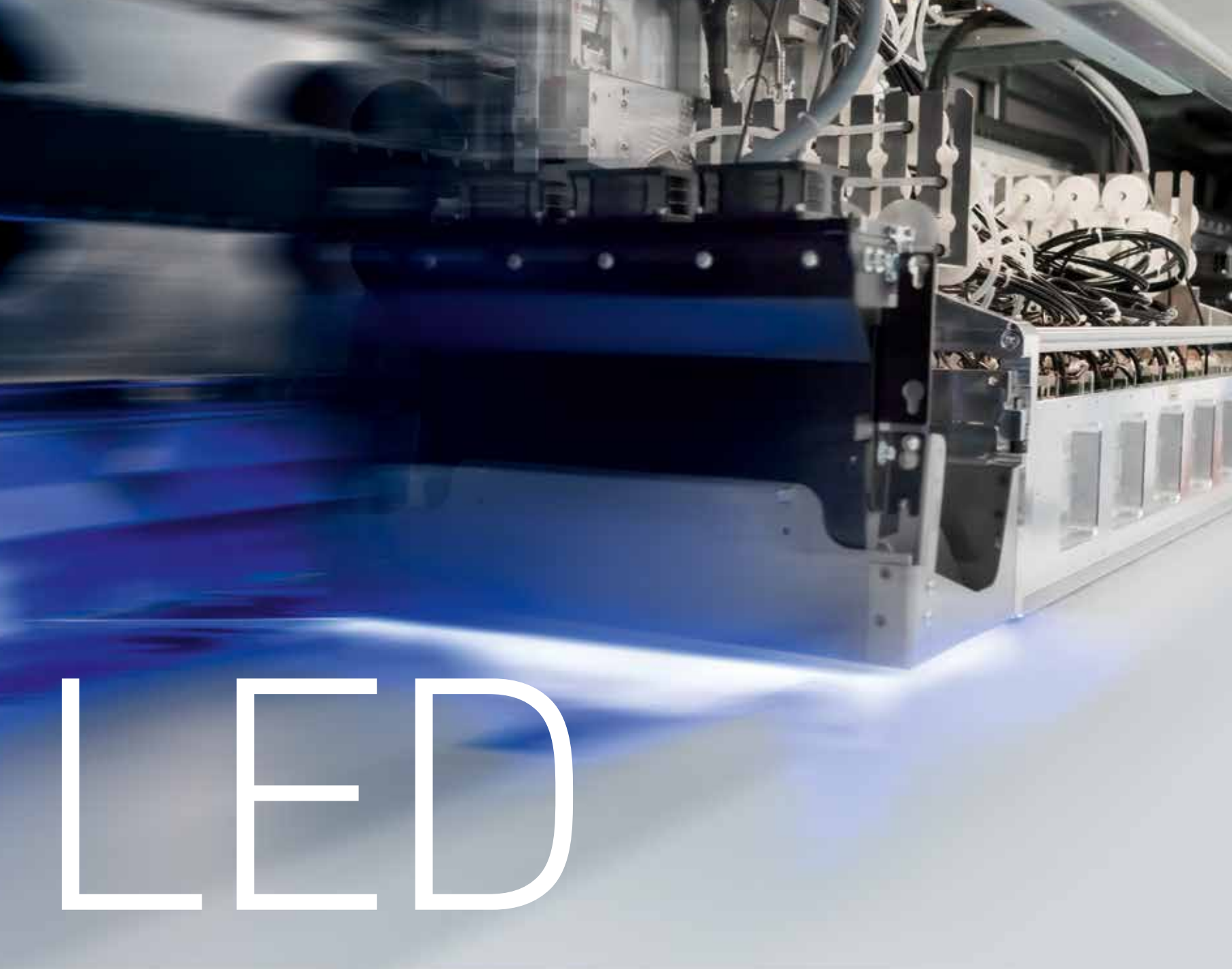
In Leicester (UK) and Paris (France) TTS serves a wide range of customers across these regions. With its local, customer specific stocks, TTS is able to increase its service and delivery speed, within 24 hours or even the same day. TTS customers can in turn guarantee their own clients greater speed and thus stand out in their field. In addition to the warehouses in Leicester, Paris and Waddinxveen (in the Netherlands), TTS has also maintained a stock location in the Italian city of Como for many years. The new warehouses will certainly not be the last to open as TTS continues to explore how it can improve and speed up the services it provides to its customers. •

As of 2nd January 2019 the new TTS address will be:

Oostbaan 601, 2841 ML Moordrecht, The Netherlands
www.texo-trade.com

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High quality paper replaces plastic film for more sustainability

Green Neenah Wide Format Media distributed by Sentec International

By Ton Rombout



Neenah Greenlight, a bright white paper, for both front-lit and back-lit poster applications.

Current market developments in the printing industry revolve around the growing demand for sustainable alternatives to plastic. This is even more noticeable in the packaging segment. The demand for environmentally friendly print media is driven by several factors: public demand, regulations put in place by governments and the ever increasing cost of disposing and recycling used print media.

That is why the use of 'green' products is currently a hot topic, with large corporations leading the way implementing PVC free, recyclable and sustainably sourced products. This is not merely to transmit a 'green' image, but primarily has a specific economic purpose, i.e. to simplify the waste stream throughout the

total life cycle cost of a product. Compared to many other products, paper is a low cost material and safe to recycle.

Solutions by Sentec and Neenah Paper

With 25 years of experience in the industry, Sentec International can offer an important additional benefit, fulfilling all your printing requirements in terms of sustainability and a greener environment. Sentec International recently decided to collaborate with the well-known American brand Neenah Paper, recognized as a world class manufacturer of premium writing, text, cover, specialty and private watermark papers. Sentec manages the wide format paper side. Neenah wide format paper media are manufactured with due regard for the environment. Both in terms of manufacturing and product

composition, all media are PVC-free, cellulose/paper based and, where possible, contain post-consumer waste.

Neenah Paper

Headquartered in the USA, Neenah Paper's operations are entirely focused on the premium paper market. The company is committed to producing only superior quality products and to developing new sustainable technologies that meet the needs of designers, consumers, printers and merchants. Its mission is to ensure that – sustainable – paper becomes and remains a vital and vibrant medium of expression.

The Neenah assortment offers the right alternatives to print hanging banners, posters, back-lit material and wallpaper for interior decoration. All these products have FSC



Neenah Blox-lite, an opaque, eco-friendly alternative for vinyl block-out hanging banners.



Neenah Digiscape is a robust, cellulose based, reinforced wall covering product.

certification and consist of partly recycled fibres. Moreover, they are totally PVC free and easy to recycle.

Easy recyclability means that these printed media can be disposed of without a need for special treatment, i.e. users don't incur additional expense to remove the waste and can cut costs throughout the lifecycle of these products.

Distribution by Sentec International

With offices in the Netherlands and conversion and warehousing facilities in Germany, Sentec International is the ultimate partner to distribute these Neenah paper products in the EMEA region. All products are meticulously tested again by Sentec in their own laboratories. They

understand the technologies involved and the requirements of their customers.

With in-house conversion facilities, Sentec has the flexibility to produce special sizes, whilst custom labelling and packaging are available to suit specific individual requirements. Sentec is an experienced specialist able to offer better levels of service than can be expected from manufacturers or paper mills, and provides first-rate marketing tools and support. Working with Sentec, you will be able to minimise your supply chain and procurement efforts, with access to all kinds of large format printing products. By offering these recycled and alternative fibre products to its customers, the company can continuously focus on reducing its own environmental footprint.

Neenah assortment

Neenah controls the raw material flow, from tree to final product, for most of its products. All cellulose fibres used in the manufacturing process are sourced from sustainable sources and are FSC® certified. Being a specialist in the complex process of latex impregnation, Neenah has developed a series of innovative, latex saturated papers that have unique characteristics: excellent wet and dry strength, high opacity in dry and wet conditions, no cracking when folded, high flexibility and good lay-flat characteristics not found in standard paper and plastic film products.

Purpose: Sign & Display Graphics

Neenah IMAGEase®, a latex saturated multi-purpose paper with excellent wet strength, dimensional stability and opacity under both dry and wet conditions, is used for durable indoor and outdoor display purposes and as an affordable and eco-friendly interior decoration/wall covering material, available in 212 and 140 gram versions.

Neenah Blox-lite®, an opaque, eco-friendly alternative for vinyl block-out hanging banners, retractable displays and window signage. Blox-lite® does not curl and is printable on both sides. This material is 100 % recyclable as a paper product, minimizing disposal costs after use.

Greenlight® II Plus! is a bright white paper, with a uniform translucency and excellent image definition in both front-lit and back-lit poster

[Read more --->](#)



Neenah FlexArt, an alternative to textile canvas, is made from cellulose and synthetic fibres.

Media

applications. Its high resistance to moisture warping and wrinkling makes it an environmentally friendly alternative to back-lit films. The material is 100% recyclable as a paper product, minimizing disposal costs.

Endura®, is a durable premium poster material saturated with latex for indoor and temporary outdoor use.

Purpose: **Photo & Art products**

FlexArt®, an alternative to textile canvas, is made from cellulose and synthetic fibres and strong enough to be stretched on a regular frame. Its excellent lay-flat characteristics and strength make it suitable for use with retractable banner stands and hanging signage.

Neenah® Photo Satin is specifically designed for proofing, photo quality reproductions and everyday poster applications.

Purpose: **Decorative Graphics**

DigiScape® is a robust, cellulose based, reinforced wall covering product available in a smooth, canvas or sand like finish, in a 260, 370 and even a heavy duty 420 g version. DigiScape® is a perfect alternative to PVC coated wall covering media.

DigiScape® Stick-R is supplied with a removable/repositionable adhesive. This offers a solution when water based/wet adhesives cannot be used and is a good alternative to self-adhesive plastics.



Neenah EnviroScape Smooth, made by www.accentwall.eu for DoubleTree by Hilton Hotel Cluj – City Plaza, Romania.

EnviroScape® wall covering products are easy to apply and remove after use, and are pre-pasted. Their water activated adhesive backing makes them easy and efficient to use, not just as a wall covering but also as an alternative option for self-adhesive trade show displays and indoor POP displays. Available in a smooth and soft sand-like textured version.

Purpose: **Rigid & Board Material**

conVerd® Board is a white fully recyclable, paper based rigid board - making it an ideal alternative to traditional foam boards. conVerd® board is moisture and crush resistant, easy to cut and anti-static. The fact that it is fully recyclable as a paper product reduces the total life cycle cost and offers environmental benefits. conVerd® boards are available in a range of thicknesses.

conVerd® Zebra is a white/black/white fully recyclable, paper based rigid board making it an ideal alternative to traditional foam boards.

conVerd® Tuxedo is a white/black/white fully recyclable, paper based rigid board making it an ideal alternative to traditional foam boards.

Preferred choice

The combination of the Neenah Wide Format assortment of sustainable branded papers and the prominent presence and market surplus of Sentec International, gives customers in the EMEA easy access to a wide range of recycled

and alternative fibre products. The use of recycled paper enables us to reduce the solid waste disposal burden and lessen landfill dependency. We would like you to experience the unmatched level of product quality, innovation and service we offer to all our designers, printers and end-use customers.

With a customer base of more than 200 distributors and OEMs across the world, Sentec is now one of Europe's leading suppliers of specialist media for the digital printing industry. Our multilingual team of professionals will manage the process from order intake through to product delivery at your premises. They will respond to any questions concerning product availability, logistics or other order related issues. Our marketing experts will support customers by putting together the right product portfolio and providing the appropriate support tools. Typical examples include user guide templates, technical documentation, certification, product sales, technical training, instruction videos and much more – ready to give you a jump start. •

For more information visit:
<https://www.sentecinternational.com>

For more information visit:
<https://www.neenah-europe.com>



Neenah-Sentec display at FESPA 2018 Berlin.



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Superior quality, productivity and long term investment protection

Béflex installs new EFI VUTEk h Series printer

By Ton Rombout



László Bárány, CEO of Béflex in front of the new printing system.

Budapest based Béflex, a PoC (Point of Communication) print expert, purchased its new EFI VUTEk h3 hybrid flatbed/roll super wide format printer from EFI. Béflex was the first company to install the printer in Europe, enabling it to offer its customers superior quality, innovative products.

As a PoC (Point of Communication) print expert Béflex is involved in the branding and/or rebranding of companies such as SPAR, Groupama, Sony Stores and many more. The company has been a long term EFI VUTEk user, supporting customers with numerous signage products for in store and out of store communication.



Work for Groupama.

Béflex

Béflex, a true trendsetter in the sector, was founded by the father of László Bárány, the current Béflex CEO. His sister, who also works for the company, is in charge of new business development. The company, which was established 25 years ago, is expanding very rapidly.

László explained: "At the start we only had a few roll to roll machines, followed by a flatbed machine. Most of our products were intended for marketing use, e.g. headers, HORECA, POS etc. Our main customers originated from TELCO, FMCG and the banking sector. Several years ago we noticed that the packaging and cardboard display industry was rapidly expanding and our customers were increasingly asking for cardboard displays. That's why we decided to buy a new flatbed printer in 2012, the first time we really consulted with EFI/Vutek to discuss our options. We wanted a machine that was fast and flexible and delivered superior quality. Having installed our new machine, we decided to set up a cardboard division and hire a team to manage this side of the business. We managed to increase our portfolio with this new product, which pleased existing clients and attracted new

ones, thus achieving our goal with the new machine."

He continued: "As demand grew, we decided to invest in an LX3 Pro machine, which we are currently still using and are very satisfied with. This machine is faster and offers a hybrid option that we particularly appreciate because of its flexibility, which fits in with our production. Our clients include SPAR, TCC, Nestlé, Mars, SC Johnson and many others. They expect us to be very flexible in capacity and timing - given the industry this is not a surprise as our projects are usually intended for marketing campaigns. Deadlines are consequently crucial. We are expected to deliver high quality at a low price. Our production is optimized to deliver exactly what this industry and our clients need. As you can see our collaboration with EFI/VUTEk has been particularly rewarding. We were the first in Europe to buy the 3.2 m wide VUTEK LX3 Pro hybrid LED in 2016 and once again in 2017 the first to buy the VUTEK 5R (5 m wide roll-to-roll LED) in Europe. We believe that these machines will help us to continue what we've been doing for the past few years, i.e. delivering high quality at reasonable prices with efficient production."

Now with the emphasis on high quality

"We are constantly on the lookout for opportunities that will enable us to provide our clients with the best products," László Bárány commented. "We are no longer interested in merely increasing volume, unless we can deliver top quality whilst maintaining constant production levels."

The next logical step for Békéscsaba was, therefore, to purchase its latest printer at the FESPA tradeshow in May 2018, where the VUTEK h series made its global debut. The h series is a next generation 3.2 m hybrid roll/flatbed LED inkjet printer platform, with a print resolution of up to 1,200 dpi, eight or optional four colour modes plus white and up to five-layer print capability in a single pass. The new VUTEK h3 model prints up to 74 boards per hour. László Bárány: "The printer is an extendable platform as well, one that gives users the option of increasing throughput capabilities in line with demand. The VUTEK h3 model can be upgraded to an EFI VUTEK h5 model on site. The upgrade gives users even greater speeds and capacity - up to 47% higher productivity with top print speeds of 109 boards per hour."

New advanced print management tools

And there's more in terms of higher quality. The VUTEK h series comes equipped with a camera based vision system for sub-pixel alignment, print head density balance and step and bi-directional set-up, a feature that particularly impressed Bárány. "The VUTEK h3's camera

based vision system for sub-pixel alignment is a key feature when it comes to improving quality and reliability," he explained.

He also mentioned features such as new, high velocity UltraDrop Technology 7-picolitre greyscale print head imaging for precision dot placement and consistency from print to print at high production speeds. The printer also offers mechanical crash and wrinkle detection and media height measurement for even greater printing accuracy and consistency.

Onboard diagnostics system

The printer's onboard diagnostics system will continuously provide Békéscsaba with information on the status of the machine. "We were told that it will even help prevent problems proactively, making in-house maintenance and service with minimal remote assistance a reality," Bárány added. "The built-in power monitoring and onboard diagnostics features cover a large number of issues, which can be remedied more quickly, ensuring continuous production." László Bárány concluded: "The faster throughput and superior output quality of our latest VUTEK addition meets our two main priorities: continuous development and advancement, and fulfilling customer requirements using the latest technologies. Premium, high velocity 7-picolitre imaging and a field upgrade option will deliver greater productivity at Europe's first VUTEK h3 installation." •



Work for MediaMarkt.



László Baran: "our main priorities: continuous development and advancement, and fulfilling customer requirements using the latest technologies"



Work for Spar Supermarket.



Work for Spar Supermarket.

More on the VUTEK h series platform

The VUTEK h series platform is also equipped with 'ImageEdge' technology, facilitating fast and easy print head replacement, and a new modular drop-in ink delivery system design eliminates ink waste and provides fill-while-printing functionality for continuous productivity. VUTEK h series LED printers can run high volumes on a wide range of rigid and flexible substrates of up to 5.08 cm thick at full rated speeds, thanks to features such as skip white and automated material handling options to accommodate virtually any production requirement. EFI VUTEK h series printers also have a significantly improved user interface with touch screen control monitors on both the input and delivery sides. The printers are part of a complete, integrated system for world class production workflow automation and production management, available only from EFI. The latest version EFI Fiery proServer Premium digital front end (DFE) used on the printers combines faster RIPing with enhanced colour management and screening features.

Case

Caldera to use 'SportsFactory' model for new clients

By Ton Rombout



Caldera to use 'SportsFactory' model for new clients.

French RIP software expert Caldera has announced its intention to offer project management services based on its recent 'SportsFactory' concept collaboration with MS Printing Solutions, JK Group, Monti Antonio and Zünd, and showcased at FESPA Berlin 2018.

Caldera will be involved in solutions projects that will show clients how to connect the dots on their E2E (end to end) digital workflows across digital printing applications. These solutions will comprise the implementation of standardized digital printing set-ups tailored to deliver colour management, workflow and bi-directional business data between brands and print contractors.

Micro-factory and workflow solutions

The SportsFactory Project has been introduced to meet clients' needs for micro-factory specifications, RIP and workflow solutions, a drive towards greater automation and textile

ecosystem E2E. Caldera is able to use its experience and expertise to offer project management and colour management solutions. Together with strategic partners, and bringing in other strategic partners as required, Caldera will project manage the creation of bespoke micro-factory and workflow solutions that might involve e-commerce storefronts, configurators, RIP and workflow software, integration services, colour management, printers, ink and finishing equipment.

Seamless connections between brands or websites and print producers

"The aim is to create seamless connections between brands or websites and print producers," Caldera's Vice President Marketing & Communication, Sébastien Hanssens, explained. "We will be using APIs to build connections between web applications and the RIP software, via our StreamLive SaaS application. This will allow for job

management, tracking and production agendas and can be up-scaled to cover multiple suppliers or multiple brands."

The intention is for the project to provide a combination of bespoke solutions – micro-factory and project management, e-commerce, product configurator, RIP software, workflow solutions, integration services and colour management – to clients ranging from brands to print contractors and industrial printers.

Sébastien Hanssens concluded: "We will be using the 'SportsFactory' concept developed for FESPA earlier this year to demonstrate how this new project management concept works. It involves showing clients and trade show delegates a live printing application that demonstrates what a workflow solution looks like in action. We will then explain how the SportsFactory model can be tailored exactly to their own E2E digital workflow."

Caldera and Dover

Over the past 25 years Caldera has come to be recognised as the leading developer of raster image processing software, colour management and workflow solutions for the graphics and textile space. Additional information is available on the company's website at www.caldera.com. Dover is a diversified global manufacturer with an annual revenue of approximately \$7 billion, delivering innovative equipment and components, speciality systems, consumable supplies, software and digital solutions, and support services through three operating segments: Engineered Systems, Fluids and Refrigeration & Food Equipment. Dover combines global scale with operational agility to lead the markets they serve. •

Additional information is available at www.dovercorporation.com

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Trend: Closer ties between manufacturer and distributor

Dover and ColGraphix join forces

By Ton Rombout



The DDP SportsFactory at FESPA Berlin 2018.

Marcel Hulsman, the Managing Director of ColGraphix in Goor, has observed a distinctive trend: major investors are becoming aware that digital printing, and textile printing in particular, is becoming a highly lucrative market. On a global scale digital printing is still a small market, particularly in terms of textile printing, because the bulk of the work is still analogue and based on (rotation) screen printing.

Although textile printing still tends to be a niche market within digital printing, it is gaining ground at quite a pace. A number of parties are rapidly taking an interest in this market for textile printing as a result, which means that it will quickly develop towards digital printing.

Typical examples include: EFI recently bought Reggiani, Mimaki took over La Meccanica, Epson acquired Robustelli, whilst SPG Prints and Konica Minolta are also venturing into this segment.

Horizontal chain integration

A second development envisaged by Marcel Hulsman is that of horizontal chain integration, i.e. not so much top-down but more on a level, moving towards total packages involving machines, software and ink. The investment company Dover is obviously also aware of this, judging by the current product range it has acquired over the course of the past few years and is now widely offering. The company has acquired a wide range of digital printing machines (from MS Solutions), two ink

manufacturers (J-Teck and Kiian, together with the JK Group) and a leading RIP-software producer (Caldera) in recent years. It is also involved in the development of textile printing systems in partnership with Mutoh. The Dover Digital Printing division is now a fact and has quickly established itself as a leading sponsor of the recently held FESPA exhibition in Berlin, with the sponsoring of the SportsFactory stand during FESPA 2018 as a high point.

Changing role of distributors

The third development observed by Marcel Hulsman relates to the fact that the role of distributor has to increasingly focus on delivering more added value. The present status of distributors still appears to be associated with huge proliferation, little



Marcel Hulsman with the Management of Dover Digital Printing
From left to right:
Claudio Savelli - Dealer Manager JK Group | Marcel Hulsman - CEO ColGraphix | Andrea Barbiani - Vice President MS Printing Solutions | Ricard Serra - Sales Manager MS Printing Solutions

exclusivity, few exclusive rights and a kind of battle fought by small distributors and agents to capture a share of the sale of new products. This leads to lower prices as a result of competition in the market and in some cases even poor service, a trend that is frequently encouraging factories/manufacturers to take their products direct to their end customers. Marcel Hulsman, former Commercial Director

of Coldenhove Papier (and together with ColGraphix still a distributor of this paper mill's (sublimation) papers) wondered how to approach this. In his view the answer lies in a vertical integration of distributor and manufacturer. To put it in a nutshell, a good distributor should not aim to supply an unlimited number of products, but rather enhance and utilise his market knowledge in closer proximity to manufacturers and their factories, in order to deliver the desired added value and resist price pressures. He presented this vision and message to Dover Digital Printing some time ago and they felt that it was a great idea.

Vertical integration

Marcel Hulsman: "Our message was to do away with the existing jungle of distributors and agents. Briefly, the proposal was based on the following: appoint a number of distributors for each region in Europe, who in terms of knowledge and operations, including service and maintenance, are au fait with the products of Dover Digital Printing. Revert to a smaller number of dedicated partners to serve the European market, in which each one is allocated a specific region and given the necessary exclusivity."

This model has been on the table and discussed in detail with Dover since last year. Dover Digital Printing offers loyalty to the platform and operates in close cooperation on various business models: major clients are served directly by DDP, but in conjunction with the manufacturer and distributor. Other

customers are served directly by the distributor. The distributor also maintains a stock and warehousing facilities for both groups to guarantee rapid deliveries.

Collaboration ColGraphix - Dover Digital Printing

"Our assortment already included several products from the Dover Digital Printing range. After all, we have been specialists in textile printing, both direct digital and via sublimation, for many years. We also have subsidiaries in several countries, including the Netherlands, Poland and Germany, which resulted in an agreement with Dover Digital Printing that I would be their distributor for Northern and Western Europe. We are their dedicated business partner in these regions offering advantages such as the fact that we already have local subsidiaries, are familiar with the region and, because we also already marketed some of the products, know the market very well," Hulsman explained.

He concluded: "Our assortment now consists of Dover Digital Printing products and the Coldenhove (sublimation) paper that we have been marketing for many years. They complement each other beautifully. These activities mean that we are familiar with the distribution channels in Europe and even worldwide, and au fait with the commercial activities and production flows. And yes, we're not quite part of Dover, but we are a highly committed partner for this manufacturer." •



The Colgraphix stand at FESPA.

Mimaki continues development of great new products and additions

By **Ton Rombout**



Some examples of textile printing with TS55-1800.



Matte finish on transparent film gives the appearance of frosted glass.

Mimaki recently announced the availability of its new LUS-170 clear ink to be used on the UCJV300 Series. The additional LUS-170 clear ink offers a host of new design possibilities and expands business opportunities by creating compelling displays using gloss, matt or textured finish.

Almost simultaneously, the company announced the launch of the Mimaki TS55-1800, a revolutionary new digital heat transfer sublimation printer that brings high end features to the entry and mid level textile market.

Clear ink for UCJV300 series

“With this new development, we have employed our proprietary Mimaki Clear Control (MCC) technology for the first time in a roll-to-roll printer,” stated Ronald van den Broek, General Manager Sales EMEA at Mimaki Europe. “This unique feature shortens the time needed for ink curing to prevent dust from sticking, ensuring smoother, cleaner clear effects such as matt or gloss finish. This new ink opens up more possibilities for Mimaki users and enhances the versatility of our UCJV300 series even further.”

To simplify the process of creating clear effects Mimaki also offers the ARTISTA UV Textile

Library, which users can access when they install Mimaki’s RasterLink6Plus RIP software on a UCJV300 printer. The ARTISTA UV Texture Library features 129 texture swatches for use in Adobe Illustrator to add even more visual effects.

Available in four different print widths, ranging from 80 cm to 1.6 m, the Mimaki UCJV300 series delivers a remarkable range of applications and versatility with layered print technology, including newly developed four and five layer capabilities. The integrated cut functionality enables volume production of labels, decals, window clings, vehicle markings, etc. The use of flexible UV inks that cure instantly enables customers to quickly print and immediately laminate or deliver the finished product without having to wait for the ink to dry. These printers also feature white ink, enabling users to produce brilliant colours on transparent, coloured or metallic substrates.

Possibilities with layered printing

With its layered printing capability, the UCJV300 series can deliver dynamic back-lit graphics, or graphics that are transformed with different light sources, which are certain to command high margins. UV-curable inks also offer greater opacity with less ink consumption than other ink formulations. Moreover, Mimaki’s LUS-170 ink is GREENGUARD Gold certified,

meaning that it meets the rigorous low emission standards for volatile organic compounds (VOCs) and is acceptable for use in environments such as schools and health-care facilities.

Next step in textile printing

Other interesting news is the launch of the TS55-1800 textile printer. Combining high-end features with availability to everyone, including low running costs, industry leading productivity and reliability. These include high speed one pass printing at a high resolution and high ink density, unattended printing with the new Mini Jumbo Roll and Mimaki’s Nozzle Check and Recovery System for continuous operation.

With the release of the TS55-1800, Mimaki makes high-end digital textile printing features available to a much broader market. Textile professionals can now effortlessly scale their operation with an affordable heat sublimation printer that accommodates the high quality and fast turnaround times demanded in the dynamic textile and apparel industry. The new model prints at a resolution of 480 x 600 dpi with a high ink density using one pass printing at 140 m²/h (1,506 sq. ft/h). The unique Mimaki Advanced Pass System (MAPS4) also improves the quality of two pass printing by eliminating banding.

High volume unattended printing

One of the key features of the TS55-1800 is the optional use of the new Mini Jumbo Roll unit that can continuously feed 2,500 linear metres of heat transfer paper to the printer. This enables customers to substitute the use of Small Plotter Rolls with Mini Jumbo Rolls, which can save them more than 20% in print media cost. Furthermore, Mini Jumbo Rolls of Mimaki Vision Jet-X transfer paper supplied by Neenah Coldenhove, will be offered as a package deal with the TS55-1800. The 2,500 m1 Mini Jumbo Rolls are the perfect way to upgrade to high volume unattended textile printing. •



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With the PIKE® printer, SPGPrints® sets a new benchmark for image quality, uptime and design flexibility. PIKE redefines the digital textile printing landscape and opens up new creative possibilities for printing blotches, fine lines, geometric designs and intense colours. The combination of the Archer® print bar with PIKE inks offers an image quality that no other digital printer can match.

The PIKE® Digital Printing Line represents a new performance benchmark for textile printing with its industry-leading speeds, precision geometrics fast throughput and low running costs. PIKE is based on a full-width array of Fujifilm Dimatix Samba print elements, specially modified in a joint project for optimum performance in textile printing. These elements are incorporated in a highly accurate but user-friendly print-bar technology, including specialised electronics as well as an ink conditioning and ink delivery system, called 'Archer® technology'. It is optimised for using a new range of high performance inks for maximum print quality and uptime.

■ Fast delivery

PIKE provides the highest net productivity available

■ Reliability

guaranteed production capacity and image quality

■ Design versatility

PIKE combines the flexibility of digital printing with the familiarity and productivity of rotary printing



Leading Norwegian print company acquires Durst Rhotex 325

Megaprint takes next step in textile transfer printing

By Ton Rombout



Wall covering based on print on translucent vinyl and with white underprint.

A few months ago, during the summer, founder and managing director Sigurd Hammerstad and his team made the decision to purchase their latest Durst Rhotex 325 printer, to use it as a transfer printer mostly to print textiles.

Although the company was already familiar with Durst printers, albeit for different purposes, this and several other acquisitions are now keeping it well ahead of the competition in Norway in terms of quality and speed.

Different kinds of products

Sigurd Hammerstad explained: "To understand why this type of printer is so important to Megaprint, you have to know what kind of products we make. We produce anything our customers demand with respect to LFP production. Even though the same workforce and production equipment are involved, we communicate two different levels of quality to the market and to our customers: 'Market material products' and 'Décor products'. There's a huge difference in the effort involved in producing a 1 m² highly detailed map on

glass or a square metre of outdoor build wrap. Both are equally important to us and require high quality printing for their specific purpose. We use a SwissQ printer for highly specialised printing jobs because it accommodates more colours and extra width for high quality fine art purposes. For textile we now have a Durst Rho 325 with a special Jumbo roll for printing on transfer paper. The quality is excellent and good enough for the purposes we use it for, and it operates at an amazing speed of 200 m²/hour."

Examples of Décor Products made by



Wallpaper project for Hotel Verdandi in Oslo. All guest rooms and public areas covered with Textile Wall Covering

Megaprint include: fine art on different materials, glass, wooden plates, acrylic plates, high quality maps on plate materials, wallpaper, signs, and LED frames with textile for museums, TV studios etc.

Examples of Market material produced by Megaprint include: self-adhesives for outdoor/public transport, banners, boards and posters on a variety of materials, display systems such as beach flags, roll ups, pop-ups etc. Textile is one of the favourite materials nowadays, because it is flexible and light and therefore easy to mount and less expensive to transport.

Customer behaviour

Sigurd continued: "We have been offering customers an online shop solution in recent years. However, it will not really come into its own until we are fully automated. We focus web2print, even though we are aware that many of our customers still know where to find us for a more personal approach. Most of our customers are resellers, including exhibition companies, design agencies, media companies, offset printers and sign companies. They represent 90% of our sales. The other 10% are direct customers such as Ikea and other well-known retail companies, Museums and TV studios, to mention but a few. We also work for major events such as the World Championship Biathlon, Eurovision Song Contest, etc. We are the absolute number one in this area in Norway. We are currently exploring the possibility of producing a new wallpaper on the Durst Rho 325, but we already produce high end and thicker wallpapers on the Durst 313 UV printer. On our Durst textile printers, whatever ink technology, we can create 3 m panels, high quality wallpaper at very high speeds. And that's what mounting specialists like: a single piece to cover the entire wall."

Megaprint: emphasis on quality

Being a member of a family of entrepreneurs in graphic arts (offset print), young Sigurd Hammerstad decided to set up his own company, Megaprint, in 1993. The company went into operation in April 1994, which means that it will be celebrating its 25th anniversary in April next year!

Megaprint was a 100% start-up based on the world's first true high volume large format printer, the legendary Scitex Outboard, printing 60 m²/h in 10 dpi. The print heads were based on Image's continues ink jet technology - a technology better known in the labelling and barcode industry.

"I discovered a prototype of this printer in a small garage in the village of Hertzlia, not far from Tel Aviv (Israel), and purchased printer number 5 one year later. Prior to buying it, I visited a company in Luxembourg that had bought number 3. Megaprint became one of the early pioneers in what is today known as the large format print industry."

After almost 25 years this sign and wide

format print production company located near the capital Oslo, employs more than 20 people and uses a relatively high degree of automation (Filemaker, ESKO Automation Engine) combined with seamless printer, finishing and fulfilment equipment.

Sigurd Hammerstad added: "As mentioned earlier, automated order and file flow is a priority in our development, but we still have some way to go. It's worth mentioning though that we have been "paperless" using our own FileMaker system since 2006. The ESKO Automation Engine is helping us to automate our production workflow."

He continued: "Megaprint was founded in Oslo, but in 2011 we moved south to the existing location in Røyken (about half an hour from the capital). We needed more space and found the perfect spot here. The company has continued to grow successfully ever since, focusing on the latest technology and quality production rather than rapid growth."



Sigurd Hammerstad, Managing Director of Megaprint.

Market situation in Norway

Sigurd Hammerstad described the situation in Norway as 'fragmented' with many small players. "A lot of print is imported, mainly from Poland and Sweden, because Norway has traditionally been expensive because of high salaries and a strong local currency (NOK). This has changed dramatically though and led to a turnaround. We are now looking now for export possibilities in neighbouring countries. We are a national supplier, but most of our work

originates from the Oslo area."

He concluded: "In terms of Unique Selling Points we obviously all think that we are good at everything, don't we? I am very proud of what we have achieved. We were one of the pioneers and history has shown that we are a safe bet and can always be relied upon. AAA rating for 18 consecutive years, not many in the industry can make such a claim."

[Read more -->>](#)

Case



Print on 12mm Birchwood for the National Library. Megaprint is the main supplier of prints for all National Library exhibitions.



Print and cut wooden plates sign in combination with Kiss Cut vinyl.



Durst Rhotex 325 Jumbo transfer at Megaprint.

Learning from the best

Things are changing rapidly though. There's much more available on the market than ten years ago, which is why Megaprint is constantly looking at possibilities to improve workflow and output.

Sigurd Hammerstad also wanted to highlight that he is extremely grateful to several of his European colleagues. "I think we are very fortunate in that we regularly have the opportunity to learn from the best. One great thing about Durst management is that they take advantage of their network and sometimes put us in touch with major players in Europe. For example, we visited large and highly knowledgeable printing companies in the past and had the opportunity to learn from them. Probo in Holland is very impressive indeed and I have much admiration for Erwin Postma and his project. Marx & Moschner in Germany is another example. Before deciding to invest in our latest textile printer, we were invited to visit them. The way they use the Durst Rhotex 325 totally convinced us and they even invited our production management team for training prior to the installation. Excellent company, great team - thank you for connecting us! It's great that these amazing companies are prepared to take the time to talk to us. We are very grateful because learning from the best is never a bad idea."

What about the environment?

"Do you have particular environmentally friendly targets or products? Does Norway set specific standards you have to comply with or



Light Box print at Oslo Airport for Clear Channel.

subscribe to?" I asked Sigurd Hammerstad. He replied as follows: "We have been awarded Norwegian "Miljøfyrtårn" certification, an environmental certificate similar to an ISO certificate. Overall Megaprint has always promoted environmentally friendly products. We acquired our first water based ink printer (Hollander Colour Booster) for textile printing in 2004 and got rid of our last solvent ink printer in 2009. Norwegians in general are pretty focused on the environment. We spend a lot of our leisure time in nature. Approximately 50% of all new cars sold are electric and of course the Megaprint management has been driving electric cars for many years."

Final comments

Sigurd continued: "We will see what our new system will bring in terms of 'green' printing. In fact the 325 recently received approval, following some final set-up adjustments, for transfer printing. Most of our wallpaper production has been made on our former Durst 312. But we just finished a 10 000 sqm. hotel project, the Hotel Norge in Bergen. The customer was very happy, not one print went wrong!" •

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Delving deeper into the decision making process with SPGPrints

By Ton Rombout



Impression of Archer Technology.

“High end digital textile printing allows printers to benefit from new business models, the most significant one relating to printing what’s already been sold rather than trying to sell what’s already been printed.”

- Jos Notermans

In an earlier article in SignPro Europe (refer to article SPE no.3-2018 on our website www.signpro-europe.com) we discussed some of the arguments relating to when high-end textile printers should favour digital textile printing over screen printing.

In the article we already highlighted three advantages of digital textile printing (also see box below), but we should also mention another key advantage that is becoming increasingly important in terms of the sustainable production of clothing and other textile products.

Sustainability ever more significant

Let’s start with the sustainability issue, which is increasingly a key issue for textile printers. Digital textile printing can effectively help printers reduce their carbon footprint and improve their green credentials. With their low dye consumption and reduced waste material (95% less waste), printers could cut costs whilst contributing to the environment. Digital textile printing also helps printers reduce water consumption by 60%, power consumption by 55% and cuts back on the use of chemicals. Choosing a new business model in high end textile printing is also much greener than conventional screen printing.

Figure 1: The environmental impact per kg screen for rotary screen printing (cradle to gate)

Figure 2: Environmental impact of digital textile printing per kg ink (cradle to gate)

Three key investment reasons for digital textile printing

Instead of being driven by cost advantages, the main investment reasons can be found in indirect parameters underlining the advantages of digital textile printing.

1. Speed to market

In rotary screen printing the printing process is slowed down by various processes. Firstly, the printing design has to be adjusted with special separation software to ensure it only consists of 6 or 8 colours (colour separations). Then a special screen has to be engraved for each colour used in the design. This process involves extra cost and time. Once the screens are finished, they have to be installed in the printing machine and registered to ensure a perfect colour match. That's why the process from digital design to printed fabric can take up to 3 to 6 weeks.

In digital textile printing the printing process is much shorter. First the digital design has to be ripped (raster image processing), which takes a few minutes (depending on the size of the file) and then the design can be printed directly onto the fabric. Within an hour you can already have printed hundreds of metres of fabric.

With digital textile printing a delivery time of weeks or even months can be reduced to a matter of days.

2. Design flexibility

As mentioned before, in rotary screen printing designs have to be brought back to a limited amount of colours (typically 6 or 8 colours, maximum 24 colours). Moreover, the design engraved on the screen repeats itself every turn of the screen (typically every 64 cm). Both these rotary screen printing characteristics seriously inhibit the flexibility in designs that can be used.

These limitations do not apply to digital textile printing. Designers can experiment with new colour combinations and extend their designs.

3. New business models

The accelerated speed to market facilitated by digital textile printing opens up new business models for printers, who are ready to make the transition. Instead of selling what has already been printed, digital textile printing enables fashion brands to print small batches and place repeat orders if a certain type of clothing is selling really well. There is also no need to sell surplus stock at large discounts.

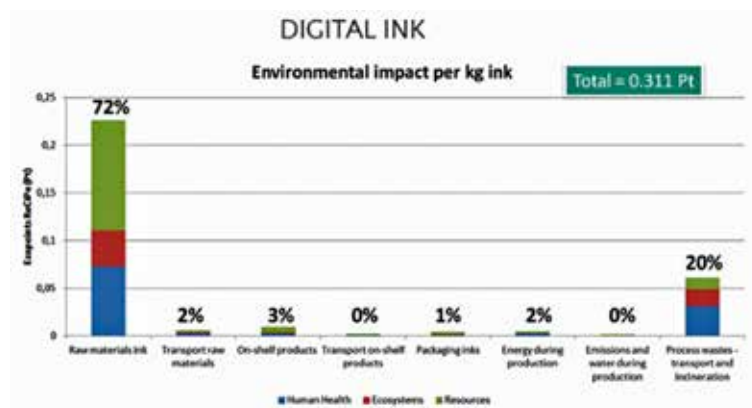
printing, the run length plays a crucial role. For short runs digital is cheaper up to runs of typically 1.000 – 2.000 meter (mainly depending on the number of colours). For larger runs, the cost of using digital textile printing for one metre of fabric is approximately 1.5 times more expensive than conventional printing.

Multiple factors determine the investment cost of a specific textile printing machine. The additional costs involved in digital textile printing are associated with:

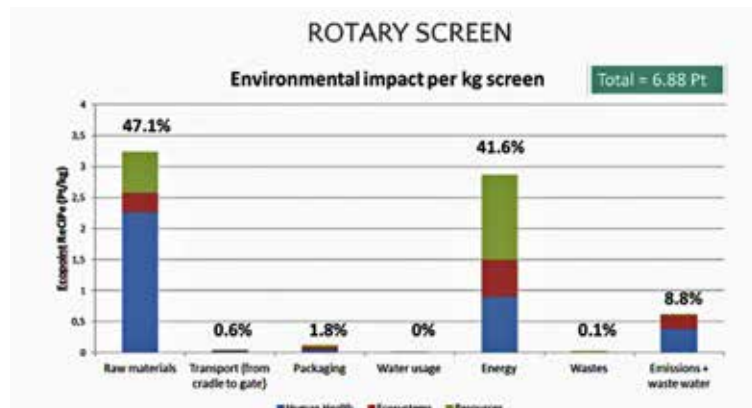
The digital printing technique

Digital textile printing offers two different kinds of printing techniques: multi-pass scanning and single-pass. In multi-pass scanning textile printing the print heads move across the substrate from left to right (hence the term 'scanning') and the image is build up in several layers, to mask printing errors in one layer (hence the term 'multi-pass'). In multi-pass scanning printing only a few print heads are needed to get the desired result, which reduces the investment cost of a multi-pass printer.

Single-pass printing is a newer printing technique that enables faster printing, producing higher quality. However, more print heads are needed for faster printing. Single-pass printing is, therefore, more expensive than multi-pass printing because more print heads are needed to cover the entire width of the printer. Since print heads are expensive components, the more print heads there are



Sustainability of Digital Printing compared to...



Sustainability of Screen Printing

Investment versus earnings

Jos Notermans previously analysed these processes in his column 'The Note' on the SPG Prints website: "Digital fabric printing costs: investment versus earnings". His arguments are as follows:

The extensive investment associated with digital textile printing is one of the main reasons why printers may be hesitant about making the transition. But how much does digital textile

printing really cost? And – more importantly – what are the benefits?

Digital textile printing investment cost

Digital textile printing machines require a higher investment than conventional printing machines, mainly due to the high costs of printheads and the electronics needed to drive those heads. When comparing the total cost of ownership (water, energy, operators, service costs, ink, post-treatment of the fabric, etc.) between conventional printing and digital

incorporated in the printer the more expensive the printer will be. The additional expense for driving electronics for these print heads also adds to the cost of the printer.

The type of printing ink

Digital textile printing machines require a different type of ink. In digital textile printing the ink is printed onto the substrate by numerous tiny nozzles inside a print head. This printing

[Read more --->>](#)

process requires ink with a higher runnability to prevent nozzle blockages and print head failures, f.i. through corrosion.

The inks also need to be extremely pure in order to prevent corrosion of the heads, making an extra purification step essential in the production process. Digital textile printing also facilitates high quality printing, but only when ink with a large colour gamut is used. Because of these special characteristics digital inks are more expensive than conventional printing inks, thus increasing the cost of digital textile printing.

Digital textile printing revenue

The additional investment in digital textile printing also offers textile printers a number of significant benefits that help save costs or generate new income:

Lower labour costs

Conventional printers have to be handled by several operators, because of the many manual tasks that have to be performed during the printing process. As a result conventional printing generates high labour costs. Digital textile printing machines, however, are almost entirely automated, which means only one or two operators have to be present to handle the machine. Operators can even run more than one machine simultaneously.

No screen engraving costs

In digital textile printing a digital design is printed directly onto the fabric. No rotary screens are needed. This saves printers valuable engraving time and removes the additional cost of screens and their engraving.

Longer print head life

SPGPrints digital textile printers are equipped with Archer® technology, which reduces print head damage by positioning the print heads further away from the substrate. Archer technology will consequently extend the operational life of print heads and save on repair costs. SPGPrints offers a unique 30 months full warranty on print heads in Archer. Since print heads are amongst the most expensive parts of a digital printing machine, extending their life can save printers a substantial amount of money over time.



JAVELIN in operation at Tekboy.



Javelin in the showroom at SPGPrints.



Presentation in Istanbul.

Shorter turnaround time

Using digital textile printing, printers can increase their production rate and shorten their turnaround times. This enables them to speed up deliveries, keep up with customer demands and take on more printing jobs. Fast fashion brands are willing to pay more for a metre of fabric if it is delivered within a couple of days rather than weeks. This means that the additional cost associated with digital textile printing can to a large extent be passed on to the brands.

Printing what's been sold instead of selling what's been printed

Because digital textile printing accelerates the printing process it enables fashion brands to print small batches and place repeat orders if a certain type of clothing is selling very well. In an

ideal world there would be no such thing as 'discount sales' anymore, because fashion brands could have the desired amount of textile printed quickly.

Reduction in ink usage

Despite the fact that digital ink is more expensive than conventional printing ink, the digital printing process, and Archer technology in particular, helps printing companies to reduce their ink usage – 20% lower with Archer technology than with other printing technologies. •

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Touring the UK with 3M wrapped cars

Leading vehicle wrappers geared up for 3M Wrap Tour

By Ton Rombout



The winning car.



The 3M Wrap Tour set off from 3M's UK headquarters in Bracknell.

3M recently organised a 665 mile trip, from 3 to 7 October 2018, to highlight the best that modern vehicle wrapping has to offer. Leading vehicle wrappers prepared to showcase their talents during a 5 day, event packed, road trip across the UK – the 3M Wrap Tour. The tour, the first of its kind, was organised by the 3M Commercial Solutions Division (CSD) to put the spotlight on its AVWs and demonstrate what can be achieved using the latest 3M products.

Fourteen of the science based technology company's Authorised Vehicle Wrappers (AVWs) were taking part and each one had wrapped a vehicle especially for the occasion, resulting in a diverse selection ranging from a Ferrari 458 Italia wrapped in a mix of gloss, matte and metallic films to a 1968 MG Roadster Speckled Hen, which had been given a modern twist.

Touring the country

Together, the AVWs set off on a tour of the country in these vehicles, starting from 3M's UK head office in Bracknell, Berkshire and stopping off at various locations and events. They included an outdoor exhibition on Baltic Square in Gateshead, Tyne and Wear, and Santa Pod Raceway in Wellingborough, Northampton, where it went on show at the National Drag Racing Championship Finals. The tour ended at TRAX Silverstone, the UK's largest performance car show, where the vehicles joined the stand of Fast Car magazine.

From paint to film

Vehicle wrapping is a method of creating a new exterior for a car, van, lorry or even boat, from a simple colour change to more creative designs. It involves covering the vehicle in a highly stretchable print wrap film, which can be made to fit any recesses by skilfully – and artfully – applying heat and pressure. It has become an increasingly popular alterna-



Stops included Baltic Square, where the fleet set up an outdoor exhibition.

tive to spray painting in recent years, in part because innovative new wrap films can create various effects that paint can't. For example, recent additions to the 3M Wrap Film Series 1080 range include innovative colour flip shades, which display lively polychromatic effects that change at different viewing angles and in different lighting.

First stop - the BALTIC Centre for Contemporary Art

Seven cars and vans wrapped by leading experts from across the UK attended the first stop of the 3M Wrap Tour on Baltic Square, outside the BALTIC Centre for Contemporary Art in Gateshead, Tyne and Wear. The Art exhibition showcased the best of British vehicle wrapping, highlighting the skills of 3M's talented Authorised Vehicle Wrappers. Pen Webley, Marketing Manager for 3M's Commercial Solutions division, commented: "Vehicle wrapping truly is an art form, so it's great to see it recognised at such a wonderful venue. To the best of our knowledge, this is the first exhibition of its kind."

He continued: "Visitors, who came to admire the fabulous paintings and sculptures at the adjacent BALTIC Centre for Contemporary Art, also enjoyed something less conventional at the outdoor exhibition created by our AVWs, who are amongst the best in their profession."

Second stop - the Briggs Automotive Company

Seven leading 3M Authorised Vehicle Wrappers also visited the Briggs Automotive Company (BAC) factory in Liverpool. Staging an 'inspirational' factory tour, the supercar manufacturer demonstrated to leading vehicle wrappers from across the UK what the city's automotive industry has to offer.

They were given a behind the scenes look at the facility on Compass Point Industrial Estate on Spindus Road, home of the 'one of a kind'

Mono supercar and given an insight into how it is made. The Mono has been exported to more than 35 countries across the world, each one starting its journey from the Liverpool factory.

The Mono is the world's only single seater, road legal supercar famed for being the ultimate tool for the sport of driving. It is designed and built using the latest racing technology and 3M's guests were given an insight into the entire process from design to manufacture. Pushkar Godambe, Project Engineer at BAC, who led the tour stated: "It was a real pleasure to host the 3M AVWs and show them what Liverpool's automotive industry is capable of producing. They all seemed really impressed, which was a great accolade from some of the country's top vehicle wrappers."

Next stop - the Santa Pod Raceway

The next stop on the 3M Wrap Tour, on Saturday 6 October, was at the Santa Pod Raceway in Wellingborough, Northampton, where the AVW fleet went on display at the National Drag Racing Championship Finals.

Final stop at TRAX Silverstone

The 3M Wrap Tour ended on a high, with the company's Authorised Vehicle Wrappers (AVWs) wowing visitors at the UK's largest performance car show. On the final day of the event packed 665 mile trip, 9 of the vehicles joined the stand of Fast Car magazine at TRAX Silverstone, at the Silverstone Circuit in Northamptonshire.

3M Wrap Tour Champion 2018

Visitors voted for their favourite vehicle, which included everything from sports cars and vans to a classic roadster, all wrapped using the latest 3M products. The winner, Ben Hamblin owner of Wrap Kings in Cradley Heath in the West Midlands, was presented with a trophy and crowned 3M Wrap Tour Champion 2018



The AVWs were also given a tour of the Briggs Automotive Company (BAC) supercar factory in Liverpool.



The tour ended at TRAX Silverstone, where the vehicles shared a stand with Fast Car magazine.



Wrap Kings owner Ben Hamblin (centre) was voted the 3M Wrap Tour Champion 2018 for his car wrap. Pictured with his friend Dave Green, the owner of the car (left), and 3M Sales Supervisor Stuart Bennett (right).

for his car wrap, which used products from the 3M IJ180mC series of print wrap films. Ben's van also achieved third place.

Pen Webley, Marketing Manager for 3M's Commercial Solutions division, commented: "TRAX Silverstone was the perfect way to end what has been an amazing 5 days. Visitors were amazed to see what leading vehicle wrappers can achieve using 3M's innovative product range. The 3M Wrap Tour has been a brilliant opportunity to celebrate the fantastic talents of some of our AVWs, who are amongst the best in their profession. They all appeared to have had a great time and their vehicles attracted lots of attention. The AVWs can now enjoy a well earned rest." •

For more information about 3M, or to find your nearest 3M AVW, visit www.3M.co.uk/graphicsolutions.

What small business owners should prepare for

Brexit timeline - December 2018

By Martin Kugler



The white cliffs of Dover - the new frontier.

On 25 November 2018 the 585-page Brexit deal to end the UK's 46-year long membership of the European Union was unanimously signed off by the UK government and the remaining 27 EU member states.

With the withdrawal agreement the special EU council meeting on 25 November signalled the end of 21 months of lengthy negotiations and endless setbacks.

What about Ireland?

The Irish backstop, to keep the border between the Republic of Ireland and Northern Ireland open to travel and trade, has been a difficult sticking point throughout the negotiations. Brexit hardliners in the conservative party and the representatives of the northern Irish Democratic Unionist Party reject any special deal for the intra-Irish border, arguing that customs checks would create a border between Great Britain and Northern Ireland and keep the whole of the United Kingdom subject to EU customs rules indefinitely. Both the UK government and the EU have continuously refused to reinstate a hard

border between the two parts of Ireland, given the risk it poses to the Good Friday Agreement of 1998.

Final trade deal

However, beyond Brexit the final trade deal between the EU and the UK, as outlined in the political statement on the future relationship, will probably not be ready until the end of 2020 at the earliest. This free trade agreement will not come into force until sometime after the end of the transition period.

During the recent Council meeting Theresa May promised a future of opportunity and prosperity by taking back control over money, borders and law. But not everything is signed and sealed as yet. In December all eyes will be on the final hurdle in the British parliament, which is expected to either ratify or reject the agreement. So, in spite of repeated assurances by the Commission and the EU governments that the deal on the table is final and not renegotiable, there will still be uncertainty during the final months of the UK's membership of the EU, until the end of March 2019.



Brexit, the concord of discord.

A printer's Brexit countdown

What happens next? During the transition period between April 2019 and December 2020 the UK will no longer have any representatives in the EU institutions (Commission, Council, Parliament and Court of Justice). In practical terms, however, not much will change as the UK will remain in the single market and the customs union and follow all its rules during that period. But what does the deal (so far) and the remaining uncertainty mean for small businesses in the printing industry? Similar to all other



Brexit talking to each other.

businesses - manufacturers, printers and sign makers both in the UK and in the EU will be concerned if they have customers or suppliers on the other side of the Channel, or if they are set to provide or receive services across the future UK-EU border. Even small businesses trading locally may be affected, as they may indirectly depend on cross-border supplies of consumables or components and business via their clients.

No-deal scenario possible

If the withdrawal agreement is rejected by the UK parliament after all, a no-deal scenario will have to be envisaged.

Both the UK government and the EU commission have published a series of technical notices to provide businesses with information regarding a potential no-deal outcome of the parliamentary ratification process. Under a no-deal scenario the UK would leave the EU and become a third country at midnight on 29 March 2019, with no withdrawal agreement and/or plan for a future relationship in place.

The printer's readiness and survival plan

The risk of the UK leaving the EU without an agreement is still a possibility and businesses on both sides of the Channel should be preparing for how they will manage such an eventuality. As there is no specific technical notice for the print, converting or manufacturing industry, any advice and/or recommendations can only cover generalities such as commercial risks, logistics and general administrative measures:

- Plan to build a little extra stock in supplies, where affordable, to be more resilient in case of unexpected delays;
- Raise awareness concerning additional administrative work and new tariffs and taxes;
- Consider insurance cover for business losses in case of customs or transit delays;

- Check maintenance contracts for machinery for revised deadlines and extra costs;
- Check ongoing supply contracts for changes in prices and lead times;
- Talk to your bank about the currency risks;
- Remain aware of the indirect impact that other industries may have on your business;
- Establish whether you need to hire new staff to cope with regulatory and administrative requirements;
- Check with your forwarders about any changes in their rates and delivery times;
- Think about planned holidays and periodic maintenance breaks.

Brexit timeline: the dates to watch out for

10 or 11 December 2018: the Brexit agreement is debated in the UK parliament where a majority of MPs need to vote for the deal in order for it to be ratified.

13 & 14 December 2018: The final EU Council summit this year, during which EU member states are supposed to vote on the withdrawal deal to confirm the approval by the heads of government at the November special Council meeting.



Brexit, two-way communication.

21 January 2019: If the withdrawal agreement did not get a majority in the UK parliament, the UK government has to make a statement on how it proposes to move forward: leave without a deal, ask for an extension to the article 50 process or possibly hold a fresh vote (either a second referendum or a general election).

February 2019: If the UK parliament has approved the withdrawal agreement, it will start legislation to convert the terms of the deal into law. This will cover vital points such as citizens' rights, the financial settlement and procedures for the transition period, and needs to be in place in time for the leave date on 29 March.

March 2019: The European Parliament and the European Council will hold a final vote to ratify the Brexit deal.

29 March 2019: The UK leaves the EU and the transition period begins. The UK starts talks with the EU and other countries concerning new trade agreements, although they cannot come into force until after the end of the transition period. In the event of a no-deal Brexit without the proposed withdrawal agreement, there will be disruption to traffic with overnight changes to the way customs and border checks and trade between the EU and the UK are regulated.

21 December 2020: The transition period ends, but it can be extended once by two years. The UK has now left the single market and the customs union. If there is no trade agreement with the EU in place that avoids a hard border between the Irish Republic and Northern Ireland and the transition period has not been extended, the Irish backstop in the withdrawal agreement will come into effect and keep Northern Ireland in the single market and the whole of the UK in the EU customs union. •

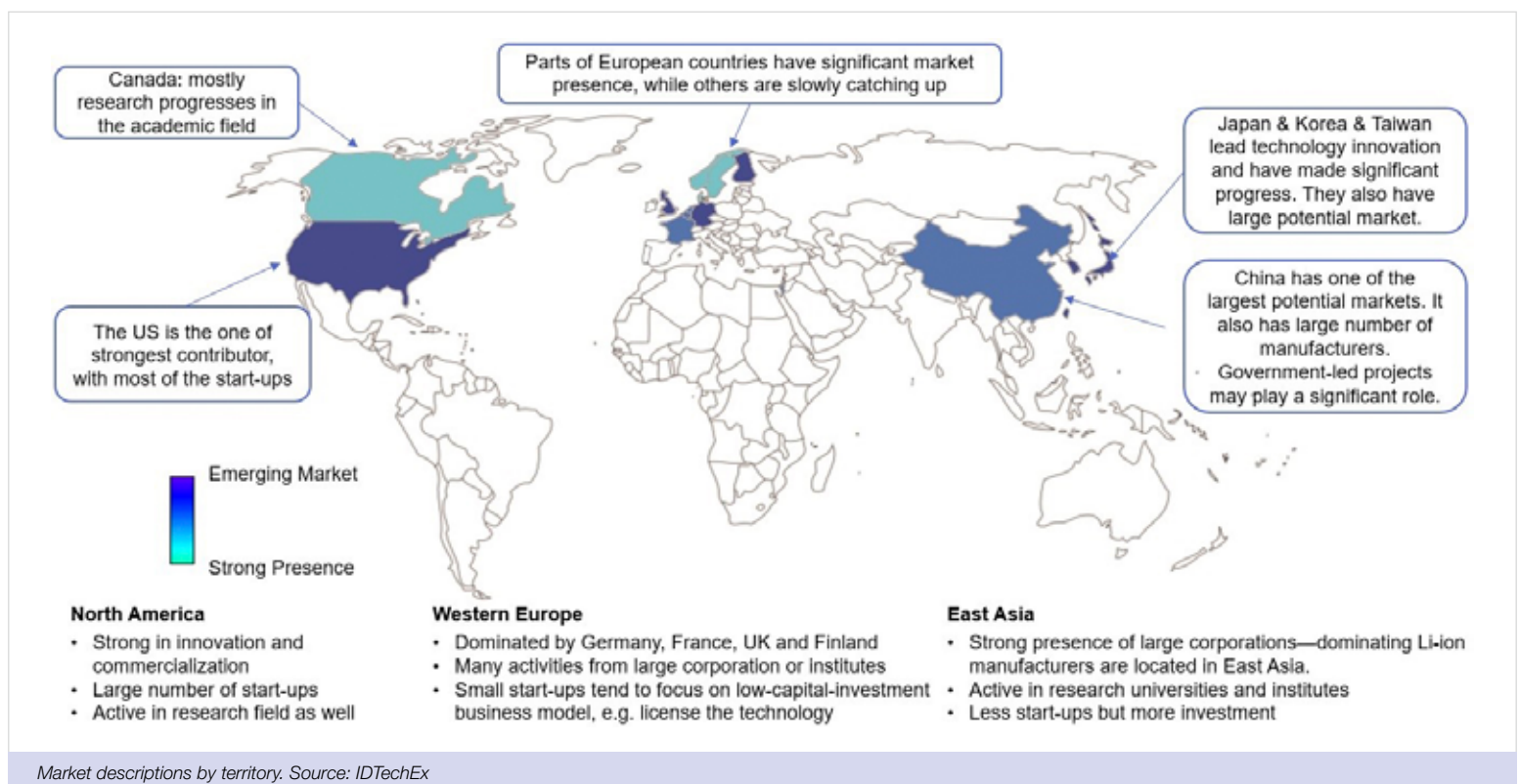


Brexit leaves an empty chair.

Connection with sign and large format print is obvious

Battery technology will transform the industry

By Ton Rombout



Flexible, Printed and Thin Film Batteries

IDTechEx recently released a new report entitled 'Flexible, Printed and Thin Film Batteries 2019-2029'. IDTechEx has been tracking the technological development, market progress and player activities of global flexible, thin film, printed batteries (or batteries with novel form factors) since 2014. Flexible, thin and/or printed batteries are back on the agenda as a result of the increased popularity of the Internet of Things, wearables and environmental sensors. These applications require new features and battery designs that traditional battery technologies simply cannot provide. This has opened the door to innovation and added a new dimension to the global competition between battery suppliers.

The battery market has suddenly seen a revival in recent years. On the one hand, because batteries are moving to new form factors, becoming ultra-thin, flexible, rollable, stretchable etc. and on the other hand, because manufacturers are scrambling to offer large batteries for large sized electric vehicles, residential and grid applications.

In the sign and wide format print (textile and more) market there are already implementations involving the integration of smaller batteries and electric devices in sports and professional work clothing, and prints for home decoration. With batteries becoming smaller and more sophisticated, more widespread use in printed objects of different kinds is anticipated.

Transforming the industry

The IDTechEx research demonstrated that this is a fast-changing industry, with technologies in a state of rapid progress with new designs,

methods and modified chemistries introduced in quick succession. The business landscape is changing dramatically as many companies are now gearing up to progress their lab scale technologies into mass production. These are exciting times for this emerging technology. The structure of the target market is undergoing drastic change, driven by the emergence of new addressable market categories. Traditionally, micro-power thin and printed batteries were used in skin patches, RFID tags and smart cards. Today, however, countless new applications have emerged, with many major players entering the foray and thus transforming a business landscape that was once populated predominantly by small firms. IDTechEx provides detailed technology assessments and benchmarking, 10 year market forecasts segmented by application and technology type, and detailed interview based business intelligence and profiles on key players and large end users. The study provides details of at least 27 direct interviews and visits to key suppliers and major

end users from a variety of sectors, and details of years of accumulated experience and market knowledge for end use applications such as active RFIDs, smart cards, skin patches, smart packaging and, more recently, wearables and IoT.

Complex landscape to navigate

The market and technology landscapes are complex. There are no clear, black and white technology winners and the definition of market requirements is in a constant state of flux. Indeed, on the technology side, there are many solutions that fall within the broad category of thin film, flexible or printed batteries. These include printed, thin film, advanced lithium-ion, solid state, micro and stretchable batteries, as well as thin flexible super capacitors and a few more. It is consequently a bewildering technology landscape to navigate and betting on the right technology is not straightforward. On the market side, many applications are still emerging and the requirements are fast evolving. The target markets are also highly diverse and not overlapping, each with different

requirements for power, lifetime, thinness, cost, charging cycles, reliability, flexibility, etc. This diversity in requirements means that no thin film battery offers a one-size-fits-all solution.

Applications

Wearable technology and electronic textiles are a major growth area for thin film and flexible batteries. Conventional secondary batteries may meet the energy requirements of wearable devices, but they struggle to deliver flexibility, thinness and light weight. These new market requirements open up scope for energy storage solutions with novel form factors. Indeed, the majority of thin film battery companies tell us that they have ongoing projects in the wearable technology field. High energy thin film batteries have the highest potential here, followed by printed rechargeable zinc batteries, providing the latter can improve. The healthcare sector is also a promising target market. Skin patches using printed batteries are already a commercial reality, whilst the market for disposable medical devices

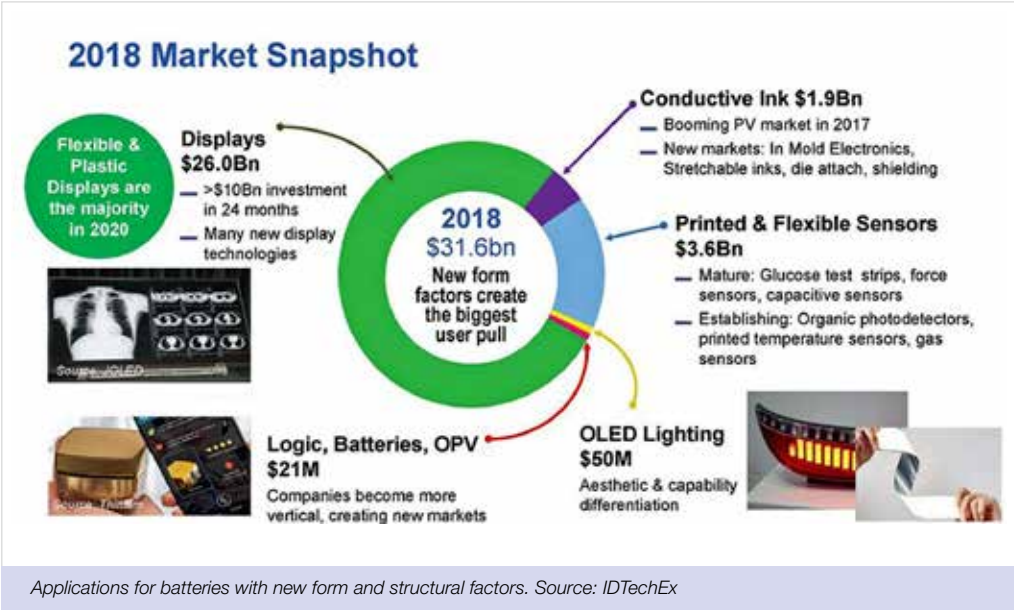
requiring micro power batteries is also set to expand. This is a key area as the number of skin patch companies is rising rapidly. Here, printed zinc batteries have the highest potential, but prices need to continue to drop before a higher market uptake takes place. Again new form factors will be the key differentiator, compared to the high volume incumbents such as coin cell batteries. Medical diagnostic devices and sensors are also promising markets, although the current thin battery technology is not mature enough yet to be applied straightaway. Wireless sensor/network applications is another important trend, especially when combining special form factor and harsh temperature requirements. In this case there is a trend to combine energy harvesting with thin batteries with superior form factors.

RFID still potentially a growing market

Active and battery-assisted passive RFID is another potential target market, although coin cells are the main solutions unless there is a stringent requirement for laminar or flexible design (as in car plates). Particularly in these small niche markets thin film batteries might find a place. Smart cards also remain an attractive sector and several thin film battery technologies have been optimised to meet the lamination requirements for card manufacture. The price, however, is too steep to enable widespread market penetration. The emergence of online and mobile banking carries a long term threat in terms of substitution.

Market forecasts

IDTechEx has developed detailed and granular market forecasts, segmented by both technology type and end use applications. These forecasts are based on (a) primary information obtained from its direct interview programme with suppliers and end users, from attending conferences globally and organising its own conferences on wearable technologies, RFIDs and printed electronics, and (b) from critical technical assessments of competing technologies. •



IoT, MEMS, CMOS memories, Medical implantable	Smart cards, Skin patch, RFID	Wearables, E-textile, Medical device	Smartphone, Tablet, Power tool, Toy	Transport	Large-scale energy storage
Capacity range					
1 mAh	10 mAh	100 mAh	1 Ah	100 Ah	> 1 kAh
Important features					
<ul style="list-style-type: none">RechargeableSmall footprint, many micro-batteriesLong life timeRapid dischargeTend to incorporate with energy harvesting	<ul style="list-style-type: none">Can be both disposable and rechargeableLaminar and thin, some with special form factorRelatively low powerCost sensitive	<ul style="list-style-type: none">High energy density for small volumeLong working hoursFlexible, stretchable or thin, some with special form factor	<ul style="list-style-type: none">Light-weight and small volumeLong working hoursSome with special form factorsHigh power	<ul style="list-style-type: none">SafeReliableHigh powerHigh capacity	<ul style="list-style-type: none">Cost advantageLong life timeReliableHigh capacity
Technology Status					
Small volume production	Available, mostly customized	Prototypes available	Research to prototype	Research	Very early stage

Applications for batteries with new form and structural factors. Source: IDTechEx

A show dedicated to brands and creative minds

Print in Progress Paris

By Catherine Mandigon



The technical partnership with Renault, involving the supply of their graphics vinyls, is of great importance to HEXIS.

Fewer printers were exhibiting – a collateral effect of the nature of their activities. Some market leaders were present (HP, Mimaki, Roland DG, Epson, Hexis etc.), but others obviously decided to solely attend C!Print in Lyon (5-7 February 2019), which is also organized by 656 Editions.

However, Print in Progress, which took place 10-11 October 2018, achieved its goal of bringing together 60% of brands, agencies and advertisers and 40% of printers and visual communication professionals.

A quote from the organization:

"Print in Progress does not seek to duplicate its Lyon concept in Paris, but wants to introduce a new event format with a focus on market leaders and an extensive and varied programme of conferences dealing with the major issues affecting our sectors," Aurélie Lamandé, the director of the show, explained. And yes, conference topics included augmented reality, personalized or connected packaging, new web-to-print, digital media trends, new uses of printed textiles etc.

Mimaki

Mimaki demonstrated the wealth of potential applications in digital printing to ensure that brand representatives and designers left its booth with many new ideas. The company showcased three printers: the UJF-6042MkII flatbed printer for personalized promotional items, packaging and other retail products; the JV150 for signage and visual communication and the UCJV300 to print and cut finished products online.

HP

HP introduced the HP Latex R1000 printer, designed for printing on flexible and rigid media, for the first time in France. Jean-Damien Riccobono, President of the French family group Riccobono, was present at the stand to



The technical partnership with Renault, involving the supply of their graphics vinyls, is of great importance to HEXIS.

talk about his recent investment in the top model (R2000), the first installation in France. "The R2000 represents the revolution I've been waiting for for many years, enabling us to print on rigid media!" The attractive HP booth focused specifically on applications, from floor to ceiling.

Promic BV

Still relatively unknown in France, Promic BV, an international producer/importer of mobile presentation systems for visual communication and the event market, demonstrated its high quality, fast to implement Pop-Up solutions.

Hexis

Hexis also paid particular attention to interior decoration and personalized applications, offering a "HEX.perience" and introducing new customization print systems with printable films, laminates and prints with original textures such as concrete effect, camouflage, rust, marble, birch, etc.

Patrice Salvan, the company's Marketing and Communications Manager, did not fail to mention the exceptional technical partnership Hexis has just entered into with Renault. It involves the supply of vinyl supports that will be used for the implementation of the Renault Sport Formula One Team multi-site graphic charter, both at racing circuits and the racing team's headquarters.

"Hexis will also develop a range of bespoke products for the team, obviously geared to the high technology requirements typical of F1." •



Print in Progress gave Promic the opportunity to raise awareness amongst French sign makers.

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Eye-catching digitally printed glass design at Education Park

‘The Beacon of Ezinge’

By Ton Rombout



Ezinge Park in Meppel, the Netherlands.



Printing on glass.

During the recent Pure Digital held at the RAI in Amsterdam, Hil Driessen’s presentation focused on what’s been achieved at the Ezinge education park in Meppel, a city in the north of the Netherlands. Between the railway line and a cluster of sports fields, Atelier PRO architecten designed a park with elongated, bronze tinted buildings accommodating five secondary schools and a sports complex for approximately 3,000 students.

The overall complex features a multi-storey building, referred to as the Heart of Ezinge, which serves as a landmark for the education park. The artists Driessen + Van Deijne, who are based in Amsterdam, created a digitally printed glass design specifically for this building. The opposing facades, measuring 11 x 21 and 18 x 21 m, are sited alongside a central ‘tower’. The abstract graphic is derived from plant motifs. Art and culture are key parts of the curriculum, which means that the tower accommodating all these creative subjects is the perfect canvas for this monumental 600 m² artwork.

The Beacon of Ezinge

This part of the building is the location for ‘CKV’ subjects, including fine arts, design, music and drama. It is a multi-storey building

with a theatre and dance hall, as well as art and music rooms. Creativity and imagination play a key role in the school community of Ezinge’s vision of education. Its education



Hil-Driessen, designer of the artwork.



The Beacon of Ezing.

philosophy and the building's function and location were the inspiration for the design put forward by Driessen + Van Deijne.

Both glass facades feature unique, but interconnected, images. The absorbing images are not easy to interpret. The crystalline structure depicts gigantic flower and star shapes. The brilliant effects are particularly striking, with clear, highly saturated colours such as orange, pink and yellow. Driessen + Van Deijne conceived this landmark in the landscape as an eye-catching glasshouse of creativity conveying its message to the outside world.

Realisation

To achieve the highly reflective effects the artists worked in partnership with Si-X, a specialist in unusual glass solutions. The design was digitally transferred and printed using ceramic ink. To optimise the transfer of the source image and maximum colour saturation in the picture Diptech, a producer of ceramic inks, was pushed to the limit. The company's inks are developed specifically for glass. They contain sub-micron glass particles and inorganic pigments that merge with the glass during the hardening process. To create reflections with great intensity from the colour printed inside the glass, the added colour was given a white backing. Some areas had no backing, which allowed penetration from the inside to the outside.

Visual representation of the objectives

Together with the mechanical Spirograph patterns, Rohrsach spots - coincidental symmetrical ink spots sometimes used to analyse the psyche that require visual interpretation capacity - were the elements that formed



Parts of the design printed with ceramic inks.

the basis of the image. They were photographed through a kaleidoscope specifically constructed for this purpose. This is how a multiplying image of abstract crystalline forms was created. The tower facades appear to be a visual representation of the objectives of the education park of Ezing: it provides scope for an education based on imagination, creativity, diversity and the power of synergy - a place where knowledge is exchanged, bundled and shared again.

Anodised aluminium

With its glimmering tints of bronze the building has a striking appearance. Light bounces off the distinctive flat and sloping facade cassettes made of anodised aluminium. Ribbed

aluminium panels on the plinth form a light-coloured band that wraps around the building. The tower stands out as a landmark with its colourful artwork. The specification envisaged a limited range of windows for the façade. Their depth and playful arrangement contribute to the building's dynamic appearance. •

Pictures: Photographer Maarten Noordijk.
Artists: Hil Driessen and Toon van Deijne.
Realisation: Si-X.
Technology: Diptech.

Integrated Systems Europe to stay in Amsterdam for two more years

Visitor registration open for largest ever ISE show

By Ton Rombout



ISE will be at the RAI Amsterdam for two more years (2019 and 2020).

Increased floor space, an additional venue and an expanded conference programme are set to guarantee the most exciting Integrated Systems Europe (ISE) ever. The largest show for AV media and digital signage will again take place at the RAI Amsterdam (5-8 February 2019) and feature more exhibition space and a more extensive conference programme than ever before.

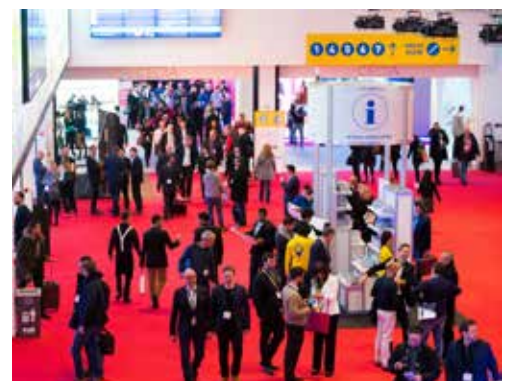
Launched in 2004, ISE is the world's largest tradeshow for the professional AV and electronic systems industry. ISE 2019 is expected to attract more than 1,300 exhibitors and more than 80,000 registered attendees to its Amsterdam RAI location. In response to the growing demand for exhibition space at the RAI Amsterdam ISE 2019 will feature an extended Hall 5, approximately one third larger than before. ISE is also extending beyond the RAI, hosting a range of new and established conferences at the nearby five star Okura Hotel.

About Integrated Systems Europe

The event is a joint venture between the Audiovisual and Integrated Experience Association (AVIXA) and the Custom Electronic Design and Installation Association (CEDIA). Leading trade associations and ISE co-owners AVIXA and CEDIA are building on the success of previous ISE shows by offering informative and thought provoking content aimed at both members and non-members.

Creating integrated AV experiences

AVIXA is the Audiovisual and Integrated Experience Association, the organiser of InfoComm tradeshows across the world, co-owner of Integrated Systems Europe and the international trade association representing the audiovisual industry. Established in 1939, AVIXA has more than 5,400 members, including manufacturers, systems integrators, dealers and distributors, consultants, programmers, live events companies, technology managers, content producers and multimedia professionals from more than 80 countries. AVIXA members create integrated AV experi-



Impression of an overcrowded ISE 2018 in Amsterdam.

ences that deliver outcomes for end users. AVIXA is a hub for professional collaboration, information and community, and the leading resource for AV standards, certification, training, market intelligence and thought leadership. Additional information is available at avixa.org.

Life Lived Best at Home

CEDIA is the international trade association and central contact point for 3,700 member

companies who design, manufacture and install technology for the home. It is committed to helping members at every level and providing a pathway to prosperity by offering industry leading education, training and certification. It delivers market intelligence through proprietary research, provides opportunities to foster community within the channel and cultivates awareness amongst industry partners and consumers. CEDIA founded the largest annual residential technology show, now in its 27th year, and co-owns Integrated Systems Europe, the world's largest AV and systems integration exhibition. CEDIA members deliver technology solutions that give people the opportunity to enjoy the best of what's on offer from the comfort of their own home. To learn more about CEDIA visit www.cedia.net.

ISE conference programme

The largest ever ISE conference programme reflects the show's increasing segmentation into vertical markets and a desire to accommodate the information needs of increasing numbers of end user visitors. Five of these conferences will be held at the



Ambarish Mitra will be given the opening speech at ISE.



Augmented and virtual reality are disrupting technologies.

Okura. New for ISE 2019 will be the Digital Cinema Summit ISE and AttractionsTECH by blooloop. Another highlight is the debut of the HTNG Insight Summit ISE, which will focus on hotel and hospitality technology. The XR Summit ISE and Digital Signage Summit ISE will also return.

Ambarish Mitra to present the opening address

Integrated Systems Europe has announced that Ambarish Mitra, the co-founder and CEO of the augmented reality technology company Blippar, will present the ISE opening address on 4 February 2019. Blippar's mission is to enhance everyday life with augmented reality and computer vision – a field of artificial intelligence. Blippar has been pushing the boundaries of what is possible in AR since 2011. It has helped thousands of brands, retailers and agencies to use AR/AI across the consumer journey to intensify customer engagement, drive footfall and increase sales. The company gives access to an AR ecosystem with products and professional services to meet specific business needs – from consultancy to AR creation tools that publish AR content within a client's own app, or rich media banners that do not require an app.

Blippar's technology has been used by leading global brands such as PepsiCo, Porsche, Nestlé, L'Oréal, GSK and Procter & Gamble to create exciting and award winning experiences. Blippar has been ranked in CNBC's global 'Disruptor 50' list three years running – alongside the likes of Uber, Airbnb, Snapchat and Spotify in 2017.

Augmented reality and artificial intelligence

In the opening address at ISE 2019, Ambarish Mitra will discuss how augmented reality and artificial intelligence are disrupting key vertical sectors served by the professional AV industry, and what future developments are likely to bring.

Mitra commented: "Augmented reality is a horizontal disruptor and will have a positive impact on every industry. What we are seeing today is just a glimpse of the potential of this technology. Blippar is at the forefront of this and I look forward to sharing my vision with ISE attendees."

The opening address will take place in the Forum of the RAI Amsterdam, shortly after the conclusion of the Smart Building Conference. It will be followed by the ISE Opening Reception. Both events are free to attend. •



In 2021 ISE will move to Fira de Barcelona.

ISE to relocate to Barcelona in 2021

Integrated Systems Events has announced that its 2021 edition will be held at Gran Via, part of the Fira de Barcelona exhibition complex in Spain on 2-5 February 2021. The new venue will become the permanent location for the world's largest AV and systems integration show.

The decision to relocate the ISE exhibition comes after 18 months of research into the viability of remaining at the RAI Amsterdam. With annual growth in ISE exhibitors and attendees approaching 10%, and the international AV market forecast to grow by 5% per annum through to 2021, it was decided that ISE was outgrowing its popular Amsterdam location.

Mike Blackman, Managing Director Integrated Systems Events, commented as follows: "The RAI and Amsterdam have provided a fantastic location, been great partners and contributed to the success of the show. In spite of all our best efforts this was not an issue we felt could be solved by staying at the RAI Amsterdam."

The Fira de Barcelona is one of Europe's most prestigious convention and conference locations. The complex has two exhibition venues and hosts 140 international trade shows each year, featuring more than 30,000 exhibitors and attracting more than two million visitors. Overall it provides more than 400,000 m² of floor space across 14 halls.

Meanwhile, we will make every effort to ensure that the remaining two editions of ISE (2019 and 2020) at the RAI Amsterdam are the best in its illustrious history and a fitting way to bring our 14-year relationship with the venue and city to a close."

Exhibitions

Live experiences for sign makers and wide format printers

The new viscom January 2019

By Ton Rombout



Home decoration at viscom.

Viscom 2019, which will be held from 8 to 10 January 2019 in Düsseldorf, is set to turn sign making, digital printing and textile finishing into a one-off experience. Together with PromoTex Expo and PSI, it will give you the chance to discover new possibilities and opportunities in sign making and wide format printing.

The exhibition aims to be a hands-on trade fair offering much more than just a chance to try out new technology live. Over the course of the 3 show days, experienced digital printers and sign makers will present their designs and get you close to the action in all the processes involved in the creation of stunning products and solutions.

Themed routes

A clear and simple signposting and programme guidance system will point out the highlights of the trade shows – giving you the opportunity to learn more, network, try out as much as possible and/or discover new business. The organisation will provide full guidance for your voyage of discovery across viscom, PromoTex Expo and PSI.

Forum 13, a specifically dedicated area, puts the focus squarely on applications. This is where you'll meet sign making experts sharing their know-how and highlighting news and trends in textile printing and finishing, digital large format printing, sign making and modern workflows.

New live event for car wrappers

Viscom, the hands-on trade fair for sign making and digital large format printing will host a brand new car wrapping experience: the Nations Wrap Cup. After ten years of the European Wrap Star, organiser MR Clipart has created a thrilling competition with an even more international flavour, more categories and features and an even larger female contingent. Sixteen national teams will get a chance to compete against each other in the Nations Wrap Cup. Each team will consist of four people, including at least one female car wrapper. "There are numerous highly skilled female car wrappers across the globe," stated MR Clipart's Dirk Möbes. "And we aim to involve them much more." Twelve teams have

already registered for the new competition, representing Germany, Austria, Switzerland, the Netherlands, the UK, Hungary, Russia and the US. Team Adria, a multinational line-up of car wrappers from countries of the former Yugoslavia, has also registered.

Sponsored by GEWA, the German Wrapping Association, the competition has prizes in store for all the teams – with a total value of more than €100,000.

Special marketing and sales programme

The core of the new trade show event, which consolidates the power of the PSI, viscom and PromoTex Expo exhibitions, will be the 'Marketing Innovations' forum. This is where marketing decision makers, creative professionals and designers will be able to glean all there is to know about new marketing strategies, merchandising & licensing and advertising at the POS, and discover new sign making and wide format printing tools and media.

Every prominent embroidery manufacturer represented

Textile finishing will be an even more attention-grabbing theme at viscom 2019: every leading supplier of embroidery machines and materials will be exhibiting their equipment, technologies and consumables at the Düsseldorf trade show between 8 and 10 January. Right next door – and freely accessible to viscom visitors – the new PromoTex Expo will present innovations in advertising textiles, job fashion and sportswear. This will give textile finishers and sign makers an overview of what's happening in the markets that are relevant to them.

The main port of call is viscom hall 13, where trade visitors will be able to see how yarns are dyed during the embroidery process. The mastermind behind this globally unique process is the Swedish development company Coloreel. Until now only a limited number of colours could be used in embroidery, depending on the number of needles on the machine. In future, however, a single white yarn is expected to suffice. The process will be



Mounting signs.

demonstrated live by the German distribution partner Barudan Stickmaschinen GmbH, using machinery from the Japanese manufacturer Barudan.

Deratex, the specialist dealer originating from Neuss, will be showcasing the new X-Stitch series of machines. Stickmaschinen Center Köln will bring the new machines of the EmbroStar and BlueLine brands to viscom. Heinz Walz GmbH will be demonstrating the embroidery systems of the Krefeld based manufacturer ZSK Stickmaschinen. The equipment of the Japanese manufacturer Tajima will be exhibited by the German specialist dealer Mountek. Textile finishers and sign makers will also be given an insight into operations involving Pulse embroidery software.

Experience technology live

The Swiss embroidery machinery manufacturer Melco will be represented, not only with their own stand in Hall 13, but also with a single-head embroidery machine at the live 'viscom Werkstatt' sign making workshop. This dedicated exhibition area right next to Hall 14 is the backbone of the new live experience area at the trade show. Here viscom visitors will see hands on how experienced digital printers and sign makers design a fan shop for sign making

with real fan items that are finished / personalised on site. Some of the products in the viscom fan shop window will not just be on display; they will also be for sale. Any revenue generated will be donated to a charitable cause. All trade show visitors are invited to join in and try this out.

Adobe & Corel Forum

Creative professionals amongst the trade show visitors may well be interested in a little detour to Hall 13. Experts from both software companies will be on hand at the Adobe & Corel Forum to share actual practice based tips with users. Topics will include Adobe Creative Cloud and the best advice for everyday professional work with Photoshop and InDesign.

Hands-on trade fair

Viscom in Düsseldorf is the hands-on trade fair for sign making and large format printing. Being staged at the beginning of the year, it kicks off the new business year for sign makers, print service providers, illuminated advertising specialists, media producers, exhibition stand builders, shop fitters and car wrappers. Specifically focussed on real-world skills and experiences, the trade fair will give them the opportunity to try out the industry's latest equipment, materials, processes and applications. The next viscom will take place in Düsseldorf from 8 to 10 January 2019, concurrently with PSI – the leading European trade show of the promotional products industry and PromoTex Expo – the international trade show for promotion, sports and work wear. Together, the three events make up Europe's largest combination of trade shows on advertising and selling, which is expected to attract more than 1,000 exhibitors and approximately 25,000 trade visitors from around the world. •

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Viscom is going to pay a lot of attention to life experiences.

Exhibitions

SignPro Europe December 2018

Heimtextil: a climate and trend barometer for the new business year

By Ton Rombout



Heimtextil: trade fair for home and contract textiles.

The Frankfurt based Heimtextil exhibition, which has been the leading international trade fair for home and contract textiles for many years, will be held in Frankfurt am Main from 8 to 11 January 2019.

The first trade fair of the year for its sector, it is always a climate and trend barometer for the new business year. Heimtextil is the season opener for new trends and textile innovations (perhaps somewhat confused by the fact that viscom Düsseldorf starts on the same day and will have an extra day on 11 January).

Viscom versus Heimtextil

Heimtextil is indeed huge and has traditionally tended to focus more on textile. Frankfurt will offer everything in one place: interior textiles, interior design and interior trends. It is where you will find many international trade visitors and decision makers searching for the patterns, colours and trends of the season. In addition to highly promising newcomers, many established exhibitors will be returning in 2019.

What to expect at Heimtextil

Heimtextil is the annual meeting place for retailers, wholesalers, designers, furniture and bedding stores, interior decorators, interior architects, architects, hotel outfitters and many other decision makers. They mostly find what

they're looking for: from decoration and furniture fabrics to bedroom, bathroom and table textiles, wallpaper and sun protection systems.

More importantly, it is where they (try to) discover what's in store for the future. The new Heimtextil Trend Space will showcase the 2019/2020 trends under the theme 'Toward Utopia'. Leading exhibitors will be joined by many promising newcomers in 2019. Introducing this new concept, the organisation once again underlines its position as the largest event in the industry. Exhibitor directories and a clear navigation system will make it easy to navigate through the halls. Numerous lectures and high-calibre tours will tell visitors what's going on in the industry and will offer vital inspiration.

Trend Space in Hall 3.0

Hall 3.0 will give visitors the opportunity to discover tomorrow's design trends today. The first port of call in terms of interior design trends will be the new Trend Space (formerly Theme Park) in Hall 3.0, which will provide an overview of the latest market developments and trends for 2019/20. Together with Heimtextil, international design and trend experts have analysed the latest trends and prepared the trend themes that will be shown in an extravagant presentation at the fair.

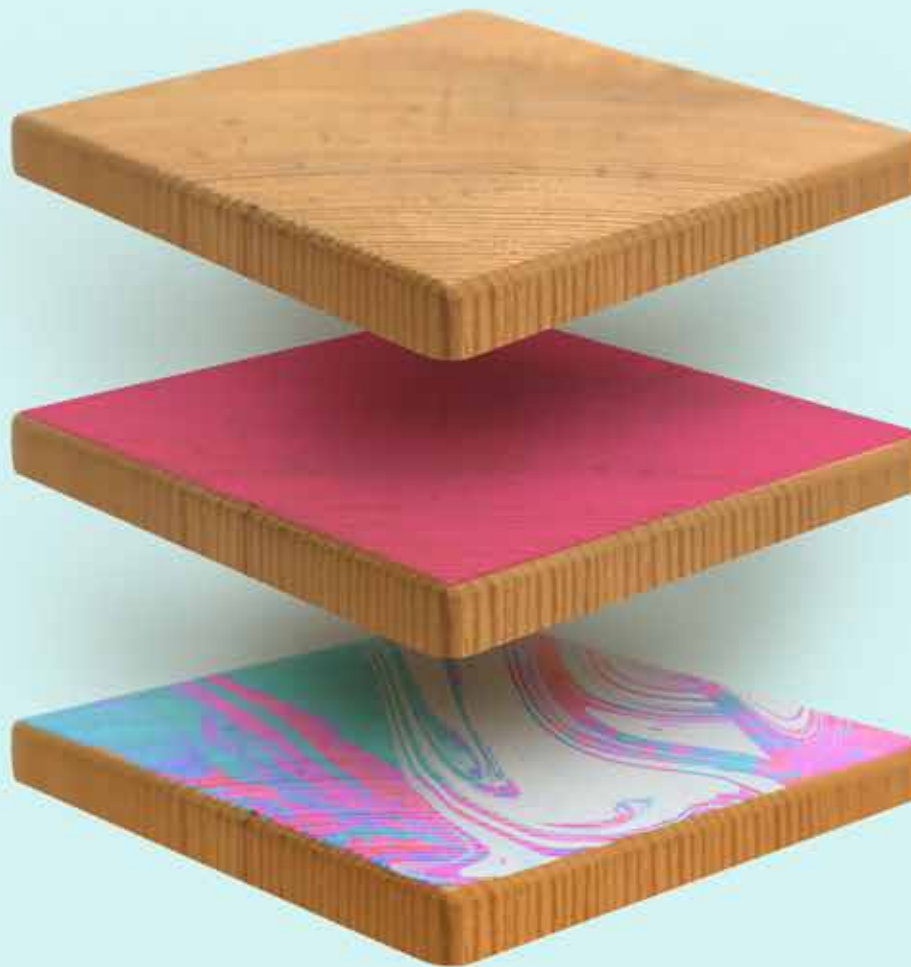


Towards Utopia

The 21st century is presenting us with diverse challenges, with the mega topic of sustainability continuing to occupy our minds. In response we look for a new utopia - a society that respects human beings and their environment, and builds on individual responsibility, positive action and optimism. Heimtextil will ask visitors: 'What is your utopia?'

Visitors will be able to experience 5 interactive future living concepts: experience a playful PURSUE PLAY scenario, find refuge from the hectic pace of modern life with SEEK SANCTUARY, disappear from the screen and the web and take on new challenges with OFF-GRID, escape into a digital universe with ESCAPE REALITY and rethink their attitude to luxury with EMBRACE INDULGENCE. •

Info: www.heimtextil.de



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¹ Glossiest white on transparent and colored media. Glossiest white based on internal HP testing in January 2018 compared to the HP Scitex FB750/FB550 Printer using UV-curable ink technology. White ink measured for the level of gloss at 50 degrees on a rigid material (acrylic). Tested using Glossmeter BYK micro-TB-gloss (20°, 60°, 85°), compatible with ISO 2813 and ASTM D523 relative to glossiness measure. White ink capability may be optional, requiring purchase of the HP White Ink Option Kit.

² Most vibrant colors based on internal HP testing, January 2018 compared to leading competitive printers under \$350,000 USD. Tested in High Quality print mode on rigid (white acrylic, 12-pass, 6-color, 120%); internal HP testing with HP GamutViewer, Alpha Shapes v50000.



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