signPro europe

Year 18 • issue 2

Durst producing ‘community masks’
Sustainable corporate gifts?
Custom deco is the new cool
How is COVID affecting companies in Europe?
Multicopy personalizes travel cases for Princess Traveller
MOSS produces Personal Protective Equipment for medical use

MAGAZINE FOR THE EUROPEAN SIGN AND WIDE FORMAT PRINT INDUSTRY

'Evercover' normally produces covers for bike or ski helmets, now producing mouth masks you can wear over medical masks.

Online shop 'The Fashion Filter' strives to social acceptance of face masks in daily life.

Ton Rombout: "Perhaps it's better that we can't actually SEE the virus."

New 'Coronavirus business' for sign and WFP print

By **Ton Rombout**

After two months of draconian lockdown measures most shops, bars and restaurants throughout Europe have opened again, subject to the requirement that they allow only a few people at each table, preferably shielded from one another by face masks, face shields and acrylic or plastic walls.

Although the virus appears to be under control in several major cities around the world and the big city vibe is discernible again, there is no party atmosphere, merely relief and gratitude that we are still alive and healthy.

A bright spot in terms of the environment could be that we discovered that fashion shows and other fairs and exhibitions generate excessive rail and air traffic, resulting in unnecessary CO^2 emissions. This will no doubt be food for discussion over the coming months and years and we, in the field of sign and large format (textile) printing, should also consider to what extent we can contribute to improvements in this area.

Talking about fashion - shopping centre closures, limited travel, disrupted logistics and supply chains have had a significant impact on the industry and system, which is going through a major change. Fashion observers put it this way: "The current generation pulling the strings in the international fashion industry will most probably be replaced by start-ups that do things differently."

The decadence associated with the constant acquisition of new things is morally no longer justified. Meanwhile, fashion companies are making every effort to make the best of it.

Luxury group LVMH has shut down its production of perfumes and cosmetics to produce free hand sanitizing gel. The company also donated forty million masks from China to France. Luxury group Kering supplied three million medical face masks to France. Gucci offered to make a million face masks and 55,000 medical scrubs, providing the fashion house would get permission from the Italian authorities to reopen the factory. Balenciaga and Saint Laurent likewise. Following a request from the European Union, H&M uses its logistics knowledge to assist in the purchase of materials for face masks, protective suits and gloves.

And Zara's parent company, Inditex, intends to distribute 300,000 masks and focus on the production of hospital clothing in a number of its factories. Donatella Versace and her daughter Allegra donated two tons of material to Italian hospitals. Miuccia Prada donated six fully equipped intensive care units to three hospitals in Milan. Giorgio Armani donated 1.25 million euro to hospitals in Milan and Rome.

European sign and wide format print production companies are increasingly getting involved in many of these activities. Printers are mobilising to supply non-surgical 'face coverings' following a spike in demand after the latest government guidance issued across Europe. The wearing of face coverings, which was already a growing trend or even mandatory, is set to become increasingly commonplace following new government guidelines that will take effect in early June.
Increased mobility means governments are now advising people to wear face coverings in enclosed spaces, where social distancing is not always possible and people might come into contact with others whom they don't normally meet, e.g. on public transport or in certain shops.

Having said all that, fashion will always be around. Stores are already selling masks with different colour gradients, graphic prints or an artsy design, or in sophisticated black. There are even masks that can be worn over, and will conceal, medical face masks intended to make health care workers and others wearing them look more human. People who feel uncomfortable wearing a normal mask could also be made to feel more at ease.

But: 'Safety first'.

Ton Rombout, Editor-in-Chief
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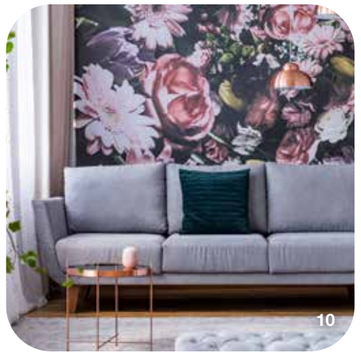
Ton Rombout



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Coverphoto: made by Durst

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Rik Maenhout strengthens MultiPress ERP software team

Dataline, market leader in ERP/MIS solutions for graphics production companies, has announced that Rik Maenhout has joined the company as of April 2020. He becomes Project Manager MultiPress for both Belgian and international operations.
Because Dataline is already thinking about how to continue its growth in the post-Corona era, the ambitious firm from Bruges is strengthening its existing team. Rik Maenhout will assist with the ongoing implementation of both national and international MultiPress projects.
Rik is a familiar face in the graphics industry. With more than 25 years of experience, he is a truly results-oriented team player and a real hands-on expert in MultiPress. With a bachelor's degree in Graphical Techniques from Higro/Artevelde, he began his career at Crea Print Group and Die Keure with roles including team leader, project manager and supply chain officer. Dirk Deroo, CEO of Dataline, comments: "MultiPress is still experiencing extraordinary growth both in Belgium and abroad. So Rik Maenhout's arrival at Dataline is extremely welcome.
MultiPress is an MIS/ERP software solution developed for the needs of the graphics industry that links all administrative, commercial, financial, and logistics processes within a graphics company. It includes a CRM function, quotations, order management, logistics & shipment management, planning and invoicing.

Info: www.dataline.eu

Roland DG announced EJ-640 DECO

Roland DG has announced the launch of its new EJ-640 DECO, a printer that uses ecological water-based ink and developed for the interior design market.
The EJ-640 DECO can be used to create various applications such as customised wallpaper, lampshades, blinds, posters, exhibition graphics and outdoor promotions.
The new device uses high-density water-based inks, compatible with a wide range of media including coated, uncoated, PVC free and standard wallpaper from sustainable sources.
EJ-640 DECO inks deliver bold, light-fast and washable prints, the inks are fast drying, to offer same-day print, finish and supply. In addition, Roland DG said users will benefit from up to 50% cost saving on inks compared to similar printer systems.
Key features of the new EJ-640 DECO are the environmental benefits of using water-based inks as a huge plus point for users, while the printer is able to work with a whole range of media. With key media characteristics such as breathability and the possibility to cover imperfect wall surfaces, almost any wall can be decorated.

Info: www.rolanddg.com

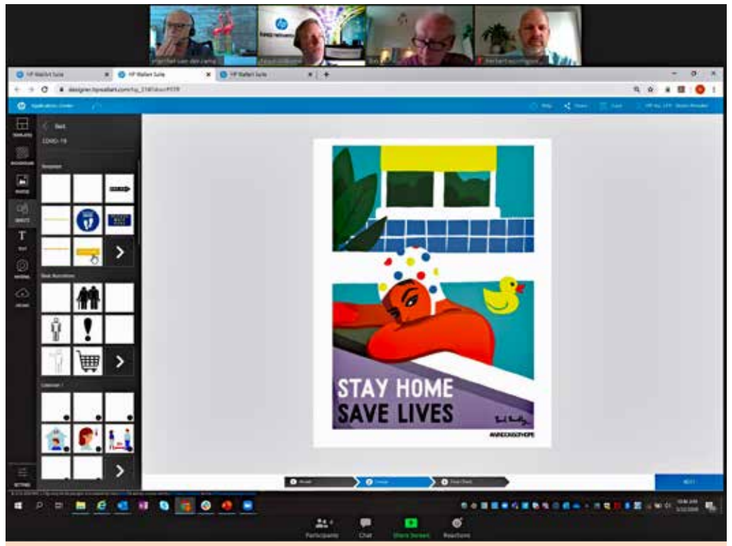
Necessity is the mother of invention for a new mask-making line

Intamac Packaging Systems is bringing a new machine for producing medical masks to the UK market. The Hampshire distributor is a sister company of Engelmann & Buckham, and its core business is the supply of packaging lines for food, drink, pharma and cosmetics.
The new mask-making machine – the IPS KZ N95 – came about because a Chinese manufacturing partner and maker of packaging systems found itself unable to source sufficient masks for its large workforce in the wake of the coronavirus crisis. As a result it decided to make its own system to produce them.

HP COVID-19 related signage for HP printer users

Web application to swiftly produce masks and public health safety prints

By **Ton Rombout**



Screenshot 2HP App.

Just before this issue of SignPro Europe went to print, I had an online session with Nigel Williams, Worldwide Large Format Solutions Product Manager, who told me about a recent add-on for the HP Applications Centre.

It came about as a result of the lack of business affecting many print service providers during the initial period of the COVID-19 outbreak. Obviously, the HP Applications Centre wanted to provide users of HP printing equipment – HP Print Service Providers – with appropriate tools to enable them to support their own customers (restaurants, factories, supermarkets, governments, etc.) with the right tools to manage during the corona-crisis, also giving them the option to produce face masks, posters, floor decals, etc.

HP Applications Centre

The HP Applications Centre was the right starting point, because it already had a number of solutions in place to support users of the DesignJet T-Series, PageWide XL series, Designjet Z-series, HP Scitex LX600/LX800, HP Latex and HP Stitch printers, as well as users of an HP print & cut solution, with tools that give their own customers the option to remotely order printed material online.

Finding solutions for customers and their prospects

Nigel and his team decided to investigate what action they could take in order to supply the right tools needed to quickly deliver the appropriate materials and solutions. They were faced with questions such as : “We are planning a strategy to reopen our business and will need to display COVID-19 safety posters from the start, but we don’t have the content or budget to achieve this in a short time. Or: “I need a simple poster – in double quick time. I have a large format printer but I don’t want to pay a designer and I am not too creative myself.” Or: “I always struggle with printing files. Fonts and cutting marks are missing, the resolution is too low and I often don’t achieve the expected result.” And: “My usual business has reduced dramatically and walk-in customers are staying away because of COVID-19. I want to help my community whilst also generating new income via online orders.”

‘Lean and mean’

Similar to most people, print service providers and their customers are having to deal with various issues. In some cases businesses were allowed to reopen the next day or weekend, and consequently needed rapid solutions. Our online app gives them immediate access to a number of prefabricated products, items with specific messages or products that can be

HP-Covid-19-posters, ready to print.

Signs related to Corona-crisis ready to print.

Inspirational Templates that can be used directly or edited and then printed.

adapted to the desired size - for PPPs (Profit for Print Service Providers) as well as end users with a web to print solution, at home or with an HP Print Provider.

Objectives for this web based service

“We developed this targeted and useful application with a number of objectives in mind,” Nigel Williams added. They include:

1. Identifying the specific problems of users of our printing systems.
2. Providing them with the means to source new business with the HP Applications Centre tool, particularly in the current situation.
3. Acknowledging that the COVID-19 crisis is here to stay for now and we are in this together!
4. That is why we developed and now supply a wide range of posters, roll-up banners and decals – either ready made or providing the basics for combinations with customers’ own designs, including mandatory, warning, prohibition signs etc.

HP Applications Centre Lite for Posters & HP Click offer an easy way to start, but customers may also be interested in using HP Application Centre Pro.

Design, or let customers create a print ready design

HP Applications Centre Pro offers a solution to prepare an extensive range of designs, from print ready files to a combination of quick design tools to fulfil specific customer requirements,
e.g. an easy designer tool for 16 decorative and signage applications. It automatically generates print ready PDF files to save time and avoid print errors, and provides multiple website integration options for Web to Print.

Signs related to the World Health Organization.

The HP Applications Centre Web to Print Designer can also be used for large format applications, ranging from professionally designed poster templates to a myriad of free premium photographs, vector graphics or pattern designs. You will be provided with print ready PDF files based on your customers’ specifications, combined with installation instructions and order confirmations.

Specific details on the face masks that can be produced with the HP app
There are two ways to produce the face masks: via web to print or via one of the HP print service providers. The masks are washable and can be reused. HP Stitch Printers, inks and media are sustainable and safe to wear. Two types of face masks are available: a simple but effective safety mask in a single colour and more fashioned ones that can be worn over another mask, e.g. on public transport. Obviously the app provides a wide range of designs.

Finally, in addition to the information provided in this article, more details will become available online and/or in issue number 3. For further information on this topic visit www.hpapplicationscenter.com and/or https://hplatexknowledgecenter.com/applications/. •

Rootring Paper now part of TTS

TTS secures service

By **Herman Hartman**

Wrapping jumbo rolls onto plotter rolls at Rootring Papier.

Floris-Jan van den Heuvel.

Texo Trade Services (TTS) recently acquired the Utrecht based Rootring Papier. “We took this decision in the interest of TTS and our customers,” explained Floris-Jan van den Heuvel, Director of TTS, on the eve of a series of measures introduced in the Benelux to combat the impact of the coronavirus. "This relates to both short and long term developments.”

TTS had been working with Rootring Papier for some time. Van den Heuvel: “We are a wholesaler and deliver bespoke work. In terms of paper, Rootring Papier remains the partner who manages aspects such as wrapping jumbo rolls onto plotter rolls in lengths or weights required by our customers, including 320 cm wide rolls. The company also cuts from roll to sheet and, thanks to a unique sawing machine, can cut jumbo rolls in half or adjust their size without creating dust particles. ”

Takeover on the cards

When Rootring Paper ran into financial difficulties as a result of changed market conditions in other parts of the paper market, Van den Heuvel decided to take over the company. The services provided by Rootring Papier are a necessary process step for TTS, since the latter works with paper manufacturers who can only supply jumbo rolls of paper. Rootring Papier continues to work independently for several clients, both manufacturers and wholesalers, serving a variety of market segments. Paper is processed from 20g/m^2 to approximately 200g/m^2. Since the takeover Rootring Papier has already attracted new interested parties and with TTS being no stranger in the international paper market, Van den Heuvel expects new clients to be added before long.

Short term

The relaunch of Rootring Papier is part of a long term vision. Back in March the impact of the coronavirus crisis on sales was already tangible at TTS. The company, which delivers its products throughout Europe, saw sales in Southern Europe drying up due to the lockdown in these countries. In Italy, Spain and Portugal TTS also supplies transfer paper and calender protective paper for textile printers that supply the fashion industry, serving both screen printing and digital printing. The fashion sector traditionally worked in direct contact with manufacturers, who knit or weave their textiles and purchase the textiles in bulk. TTS supplies specialist transfer paper for any application, including protective paper for use on calenders. To guarantee speed and efficiency TTS also has warehouses in Como (Italy) and Leicester (UK).

“There was a decline in certain segments in our own region in March, but other qualities increased. To be on the safe side customers decided to outsource assignments, which were previously done outside Europe, to textile printers in their own region. However, despite this temporary effect Van den Heuvel still expects to see a further drop. Various measures are already in place, i.e. field service employees no longer visit customers and often work from home. Internally employees have in part been assigned other tasks. TTS had a number of projects planned for this year to streamline the organization and make information about products and orders more accessible to customers. The organisation, updating and supplementing of customer information is now handled at an accelerated pace.”

Following the postponement of leading trade fairs and the termination of visits by field staff, TTS is working on other ways to inform its customers. We are developing additional samples in-house together with new products that will be sent to as many customers as possible in due course.

Although the short term forecast shows a decline in sales, the long term forecast remains positive. Van den Heuvel stressed that it is imperative that the company, which has grown year on year, emerges positively from the current crisis. We must respond decisively vis-à-vis both our suppliers and our customers.

Long term

Jan Van den Heuvel: “The volume of digitally printed textiles has been growing for some time, not only because of an increased demand for soft signage products for advertising applications, but also due to developments in the printed fashion and interior textiles market. The trend is focused on shorter production runs, which means that printing within Europe will be more visible. Sublimation printing on polyester or polyester blend fabrics and knits is becoming more popular because better yarns have come onto the market for use in clothing and interior design. The combination of polyester printing and sublimation has a relatively small carbon footprint. Polyester also scores favourably in terms of water use from raw material to the printed end result. Van den Heuvel expects the trend towards more sublimation in fashion to continue, as designers increasingly opt for fabrics with a minimal impact on the environment.

The demand for sublimation paper has increased considerably, partly due to the fashion sector. There seemed to be a tendency for a while to favour direct printing on canvas, but many textile printers now prefer to work with transfer paper. It delivers a smoother and more predictable result and in many cases the printing speed exceeds that of direct printing. ”

Lower costs

“The time when transfer paper was a significant cost item is behind us,” Floris Jan Van den Heuvel commented. There are various reasons for this. Firstly, more manufacturers entered this market after a leading transfer paper coating related patent expired, which resulted in price reductions. The current generation of printers, equipped with sublimation ink, work with transfer papers with a lower gram weight. When all costs are added together, transfer printing is no more expensive than direct printing. TTS stocks transfer paper from various manufacturers and can supply it in any desired length and width thanks to its available wrapping and cutting options.

Recent product range

TTS regularly releases new products for both (fashion) textile printers and digital print service providers and sign-makers. The following two products, originally intended to be introduced during FESPA in Madrid in March, are typical examples:

‘MuroSubli’, a PVC free polyester wall cloth that can be supplied in both 160 cm and 320 cm widths. The 315g/m^2 cloth is fire resistant in accordance with DIN4102 B1, printable with both sublimation and UV and latex, with sublimation inks delivering the best tinting strength and scratch resistance. Van den Heuvel: "We deliberately searched for a high quality product without PVC suitable for direct sublimation printing."

The second product is ‘Polaris Stretch’ for use in frames. TTS has various types of cloth in-house. Van den Heuvel: “It is always a fascinating process to ensure that dimensions are accurate for both the company that prints and produces the cloths and the client. A small deviation will result in the cloth not fitting or wrinkling following application. Adding a bit of stretch to the fabric greatly reduces this risk. We now stock various products with 3-5% stretch that can be used in frames for retail or stand construction, with or without black back coating.” •

MuroSubli, a PVC free polyester cloth.

How digitalisation could promote sustainability

The Fabricant and other circular life cycles in fashion production

By **Julia and Ton Rombout**

Digital clothing produced by The Fabricant.

Johanna Jaskowska wearing her digital dress.

Digital fashion.

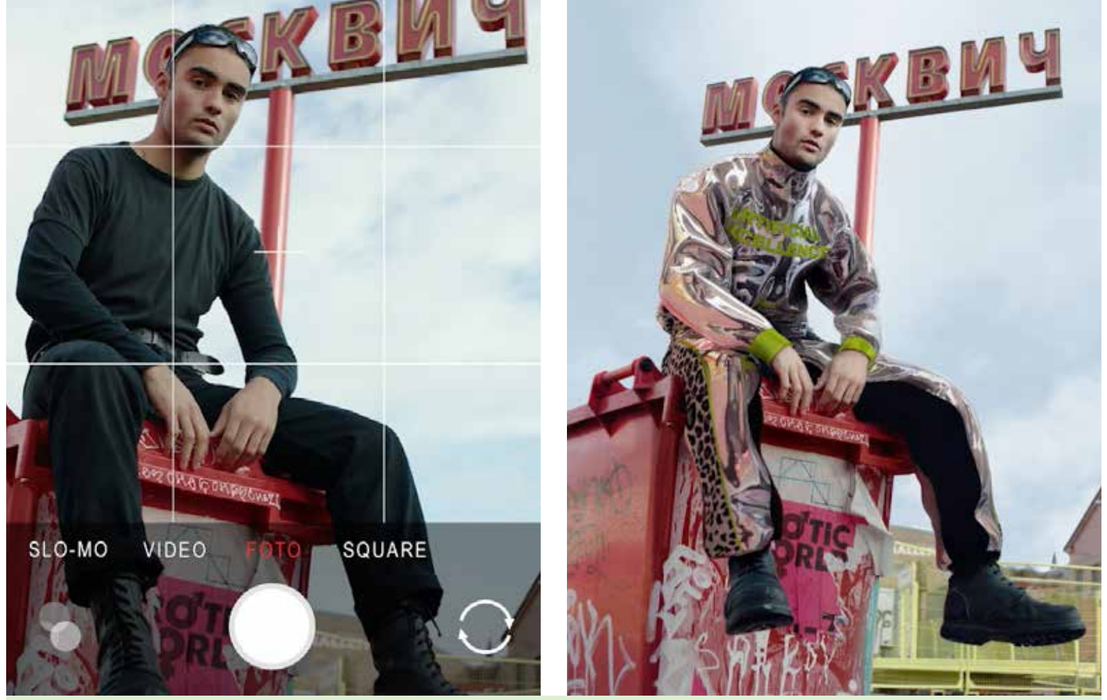
One day we will all have a digital wardrobe. The future of fashion could be completely digital, rather than physical. How might this be achieved? We need clothes; wearing nothing is not an option. Even in our own homes we still like to snuggle up in an oversized sweater or feel attractive in the perfect pair of jeans.

The Fabricant, a company located in the centre of Amsterdam, devises digital solutions for the fashion industry and offers alternative suggestions in terms of how we see our wardrobes. Imagine having a wardrobe that allows you to try on and walk around in your clothes, change into another outfit, etc. - with one major difference: the entire process is digital. This would make buying clothes a whole lot cheaper. Moreover, and something that is increasingly important for a growing number of people, it would offer a greener solution. Most companies are now trying to operate in a more sustainable way and reduce their carbon footprint. The Fabricant strives to help these companies develop, amongst other things, digital fashion shows.

Fashion is shifting from the high street to social media. Instagram and TikTok have become virtual catwalks where designers can monitor what's happening amongst the population in terms of fashion. A digital identity has become increasingly important, particularly for kids growing up. Moreover, it is not just about the clothes. Also important is which Snapchat filter works best on the photograph you've just taken, or the new type of editing tool you used for your TikTok video. All this could be integrated into fashion, but designers are only starting to become aware of it.

Designing clothes in 3D

Let's start at the beginning of the process: the design. Most designers will sketch their idea using a pencil and paper, or a tablet. Whatever their approach, they always work in 2D. Taking it to the next level, they could go for a 3D design. The Fabricant uses 3D models, fabrics and patterns to make your design come to life, despite the fact that no actual fabric is involved. It is a brilliant tool to play with. You can choose which fabric you want to work with and as soon as the digital model starts to walk you can see how the fabric moves. Totally different from popular games such as The Sims that allow you to dress up your Sim any way you like, but the clothes don't move or integrate with what your Sim is doing - quite clearly because games are not devised by fashion designers. The Fabricant employs techniques that are already widely used in visual effects for films. Motion capture, the process of recording movements by people, animals or objects, is a typical example and 3D animation software could also be used to make the fashion experience as real as possible.



Carlings digital collection.

Digitally produced samples

Once your design is ready you would normally make samples intended for the catwalk. At the Fabricant, this process is also completely digital. You design your own catwalk, decide what the setting should look like and choose the type of lights and music you want to use during the fashion show. You can try, or re-try, the designs on different models at the simple click of a button in order to find the perfect match. Various options are also available in terms of how you want people to see the show. You can direct camera movements and make your show interactive. Once everything is ready, the show can start. Your audience can buy your designs whilst they are watching and you could make the show accessible to major buyers only or to individual buyers too, depending on your business model. Obviously it would be important to sell your fashion line not only via catwalk shows, but also via photo and video shoots. Similar to how you would direct a fashion show, you could produce photographs and videos with models in a digital world, choosing a specific background and location.

What would be the next step?

You have produced your designs, your fashion show, striking pictures and a commercial of your brand new line. Can people now actually wear a digital piece of clothing? The Fabricant created a digital dress for the influencer Johanna Jaskowska. It was sold at auction for 9500 dollars to the wife of a CEO of a blockchain company. She wore it on Facebook, where the dress was seen by hundreds of thousands of people rather than the several hundred people attending the event at which she was actually present.

Where does digital stop and physical printing start?

So it is feasible to use digital clothing. It could be an addition to the physical wardrobe of anyone who wears clothes. Designers could use parts of this digital process to ultimately sell actual physical garments to their clients. For example, you could digitalise the process from the beginning right up to the fashion show and then start to manufacture clothing on demand. This approach would create less waste and reduce the number of surplus garments. How are companies taking advantage of these innovative techniques right now?

Let's look at some examples.

Carlings

Scandinavian multi-brand retailer Carlings released its first digital clothing collection. The 19 gender neutral and free size pieces retail at between 10 and 30 euro, with a limited production run of up to twelve. Customers supplied photographs, which designers at Carlings manipulated to make it look as if they were dressed in the item of clothing. The company hired several influencers to promote the collection on Instagram and it sold out within a week.

Houdini Sportswear

Outdoor brand Houdini Sportswear is running an initiative in partnership with Cybercom, a digital consultancy specialising in how digitalisation can provide solutions to global challenges and drive business innovation. Cybercom has been working on Sustainable Development Goals (SDGs) with numerous companies. In 2019 Houdini Sportswear decided to explore its own positive and negative impact on lifestyle and culture and find out how it could exponentially increase the positive effects through further development, collaboration and partnerships. For instance, woven fabric is dyed or printed in appropriate colours, with sustainability high on the agenda. All the paints and inks are certified for safety,

Read more -->>

which means that, amongst other things, no toxic and/or carcinogenic substances are used in the materials and/or process. Moreover, the ink must be free from hormone disrupting substances.
Jesper Danielsson, Head of Design at Houdini Sportswear explained: “We have come a long way in the transition we envisioned at Houdini. Learning from living systems, we have moved from linear to circular product life cycles, eliminating the concept of waste. We have designed collaborative business models where access to products rather than ownership is the focus and resources are shared. Not only have we become highly resource efficient, our work strikes a chord with our customers and end users, multiplying our reach and encounters with nature, creating ripples far outside our own work sphere.”

Marks & Spencer
The retailer Marks & Spencer has used CAD/CAM for some time as an aid to develop new sample garments. The fabrics are digitally printed and the garments are designed in CAD and sewn in-house, for selection by the buying team. CAD/CAM offers a viable, sustainable solution for pre-production sampling. Key is that the software should accurately visualise the product that is created. Similar to The Fabricant, design, colour, shape, drape, flexibility and cut are important factors. Marks & Spencer still requires physical samples for most garments presented to buyers. The EFI-Optitex software is used for creative rather than for production purposes.

A WRAP certificate.

WRAP
WRAP (Worldwide Responsible Accredited Production) is a significant certification programme in the fashion industry. It is a must-have for many apparel manufacturers aiming to export to buyers and retailers in the USA. It is based on twelve principles relating to accepted international workplace standards, local legislation and International Labour Organisation (ILO) regulations. They obviously include the prohibition of child labour, harassment and forced labour, as well as environmental standards.

The Marks & Spencer store in London.

Vital component for customised manufacturing
Digital printing technologies are a vital component in customised manufacturing. Recent developments enabling print placement into nested print runs, also offer huge savings with respect to fabric, ink and production time. Maintaining stocks of printed fabrics puts a heavy financial burden on manufacturers. Moreover, in a fast paced sales environment print must be driven by accurate stock forecasting in conjunction with customised sewn manufacture. Many companies have been using direct printing on fabric, which can be designed and ordered online by both individuals and companies, for some time. There are no limits, you can order one item of clothing or thousands, with an easy to use design programme.

Positive outlook
There are many constructive and hopeful developments focused on sustainability in the market today. One of the most important aspects is that fashion can be produced in much lower quantities, offering more secure merchandising solutions to smaller numbers of customers. Customised manufacturing is not only adopting digital print production tools, it is also changing how we choose designs and estimate requested numbers in digital fashion. Online product shows could also help promote sustainability. Digital fashion could speed up production, promote sustainability and introduce us to an entirely new concept of clothing. •

Caldera introduces Version 13.1 and launches new upgraded range of PCs

By **Ton Rombout**

Range of new Caldera PCs.

Caldera sign on lamp during ITMA.

French printing software company Caldera has announced the release of the latest edition of its market leading RIP software, Version 13.1, which brings a range of innovative features, including new OS support, several new drivers together with extra features that are exclusively available to CalderaCare customers.

The company is also launching a range of three new PCs with enhanced processing power, to provide customers with a combined hardware/software solution. The C1, C2 and C3 v2020.01 have been developed in conjunction with DELL to be plug-and-print. They come pre-loaded with Linux OS and Caldera RIP. The idea is to offer users the peace of mind that comes from having a device that has been tested and guaranteed by Caldera, and is ready for immediate use. The new range of PCs will enable you to benefit from recent V13 pipelines and unleash the unrivalled power of your Caldera RIP.

Caldera Version 13.1
Rolled out in recent months to customers and distributors around the world, with a pre-stated aim of automating double-sided printing production and boosting content tracking, the new version continues to expand the award-winning software’s ability to further enhance the user experience. Caldera is constantly looking to add innovations and new features for customers that will add value to their business and improve the software’s user friendliness.
Caldera RIP users will benefit from the introduction of new OS support, which now includes Mac OS Catalina and Linux OS Debian 10. New cutter and spectrophotometer drivers have also been added. In addition to an impressive list of existing devices, users can now use V13.1 to drive Graphtec FC 9000 and Graphtec CE 7000 cutters and X-Rite i1Pro3 spectrophotometers.
A new dedicated portal, the HelpDesk, designed as an easier and faster way to fix user issues and get answers to questions, has been introduced for CalderaCare subscribers. Requests for help will be easier to track using personal accounts from within the Caldera HelpDesk portal.

Nesting Content View
User feedback had identified a need to find a way to distinguish between printed and non-printed jobs. Now, with a newly updated version of CalderaJobs, users can easily identify all the Autonest files, search for jobs included within Autonest files and archive, reprint or delete nested jobs. This will not only make the organisation of jobs easier, but also save time and cost in day-to-day operations.

Caldera has developed automated double-side printing for this latest version. The new feature for CalderaCare subscribers allows jobs to be sent to both roll-to-roll and flatbed printers in an optimized way, enabling users to manage their print module more effectively. Side B is generated automatically on the basis of the design and shape of Side A. It also allows for images to be rotated, mirrored and aligned as required. The new double-sided print capability is compatible with a wide range of other advanced Caldera modules, resulting in higher productivity and a more flexible workflow.

Upgraded range of PCs
The three new PCs offer improved processing power over previous Caldera PCs – starting with the C1, which is 27% faster on halftone and 51% faster on contone compared to the previous C1. These figures move up to 32 and 70% respectively for the C2, and 44 and 75% for the C3, compared to their previous equivalents. All three come pre-loaded with Linux OS and Caldera RIP, and all feature independent recovery thanks to the inclusion of a restoration USB stick. •

For more information visit www.caldera.com

Fespa Global Print Expo 2020

PrintMakeWear spotlights Sportswear Manufacturing

By **Ton Rombout**

PrintSportswear presentation during FESPA.

Printsportswear by HP Latex.

FESPA these days is not the same as FESPA – let's say - five years ago. In fact FESPA today aims to attract the attention of many more potential exhibitors and attendees than in the old days. In terms of the textile printing industry, PrintMake-Wear has already been a partially separate, but integrated, part of the Global Print Expo for several years.

Sportswear Pro is the next arrival in the range of specialized, more focused parts of the FESPA show. Why? FESPA is becoming a giant event that needs to be divided into different sections of interest in order to guide visitors originating from many different industries and show them where to look. Moreover, when it comes to PrintMakeWear and Sportswear Pro, perhaps also to attract visitors from the 'original' textile printing industry.

Textile industry moving towards digital

Visitors from large textile print production companies in China, Thailand, India, Pakistan, Turkey, Spain and Portugal usually attend the leading ITMA shows in Europe (in Barcelona last year, next show to be staged in Milan within the next 3 years) or similar shows in Turkey, China, South America and the Middle East. They will also visit FESPA to see how digital textile printing in smaller units is developing. Obviously these visitors will be joined by leading vendors of digital textile printing equipment, formerly involving (rotary) screen printing and now manufactured by SPGPrints, EFI Reggiani and/or MS Solutions. Naturally they will also include companies such as Roland DG, Mimaki and Kornit Digital, producing equipment that can handle very small, personalized items of 'cloth wear', i.e. mostly sportswear.

Focus on global sportswear market

The first Sportswear Pro event is aimed specifically at business decision makers in garment production looking to streamline manufacturing processes, reduce inventory and waste, and enable on-demand and just-in-time production in response to shortening fashion cycles. The line up of exhibitors covers all aspects of production from digital printing and cutting, to embroidery and heat sealing, along with software solutions for process automation and supply chain management.

Michael Ryan, Event Manager for Sportswear Pro, commented as follows: "For this specific audience, and for visitors with an interest in garment production crossing over from the co-located FESPA Global Print Expo, these diverse exhibitors promise valuable insights into new business opportunities and enhanced production processes."

Related to Print Make Wear

He continued: "The synergies between print and sportswear production will be exemplified primarily by Print Make Wear, FESPA Global Print Expo's popular fashion feature, which will link directly to Sportswear Pro and focus exclusively on customised sportswear production. Visitors will be able to get an up close look at the garment production chain from initial design to final product, whilst also being given the opportunity to print a personalised sportswear garment on site. Roland DG is just one of a few renowned digital printing brands that will contribute towards the recreation of the live end-to-end production process for sports and athleisure garments. Fellow Gold Sponsor HP will also have a presence at the event and will exhibit its newest digital textile printer. As part of HP's effort to help customers access work in expanding sectors of the wider textile print market, the HP Stitch S500 is designed for high production operations and delivers fast, precise colour matching alongside efficient, simplified processes. These qualities make the HP STITCH S500 fully equipped to handle the on-demand customisation requirements of the sportswear manufacturing industry.

Printsportswear by Astana.

PrintSportsWear competition.

Cutting

One of the fundamental processes in garment and sportswear manufacturing, cutting has a major presence at Sportswear Pro 2020. Based in Italy, the FK Group has specialised in cutting since 1961 and has an established reputation amongst eminent Italian and international companies in textile production. The FK Group will launch its Tecno Freccia automatic cutting system in this market. Laser cutting will also feature prominently, with innovations from several exhibitors. Seit Elettronica will show its Laser Bridge SL10, an advanced cutting and engraving system that utilises galvanometric technology. It enables users to perform cuts and etchings on a wide range of fabrics and materials, integrating perfectly with embroidery machines.

Embroidery

ZSK Stickmaschinen GmbH, a German vendor of industrial embroidery machines, will launch two new systems: the Racer 1 XL, featuring a large embroidery field and 24 needles, and the Racer II 4 WL, which includes 18 needles, fast colour change and head selection as standard. Both systems are defined by their high speed, precision, flexible operating modes and longevity.

Tajima will display two new embroidery systems: the TMEZ-SC1501, an advanced single head machine featuring full touch screen and Tajima iTM Intelligent Thread Management, and the TMBR-SC1801, its first 18 colour system, as well as its first pickerless trimming machine.

Heat sealing

Heat seal machines are used for the thermal transfer of labels, emblems and repair patches to garments and textiles of all kinds, with companies such as Perma Press AB, Transfer-Press and Seri Press Transfer Solutions all exhibiting in this area. The Swedish manufacturer Perma Press AB, a specialist in heat presses and screen and digital heat-seal transfer systems, will exhibit its range of environmentally friendly, stretchy soft heat-seal transfers for sportswear.

MACPI, a Milan based manufacturer of stitch-free technologies for the garment industry, will display its user friendly, energy efficient 336.59T hot seal taping machine, equipped with the 'cold chute' feature from previous models for standard textile applications, with an added 'hot chute' for more challenging materials. MACPI will also exhibit its Ultrasonic Machine, a system designed for fabric cutting, welding and decoration which, used in conjunction with the 336.59T, allows fabrics to be joined without any stitching.

Software

Design is one of the main focus areas for Sportswear Pro and a number of companies will present their design software solutions for garment manufacturing. Meepl, a Swiss specialist in smartphone based 3D body scanning, leverages artificial intelligence and visual computing to enable brands and retailers to reduce return rates, digitise supply chains and deliver interactive and personalised 3D shopping experiences. Crea Solution will demonstrate how its integrated digital workflow solution streamlines the garment manufacturing process from initial 3D design to final fabric cutting.

A Sportswear Pro visitor ticket also provides free entry to the FESPA Global Print Expo, including the Print Make Wear feature and content programme, and to the European Sign Expo. •

For further information on Sportswear Pro 2020 visit www.sportswearpro.com.

Focus on durability and mass customization

Interior design: when inkjet printing offers a valid alternative

By **Cristina Rossi**

Today's interior design industry has to concentrate not only on aesthetics, but also on durability and mass customization. This is where the flexibility of digital printing, which can both replace and complement existing analogue processes, comes into its own.

Interior design is a constantly changing reality, very much linked to the evolution of fashions and tastes, which features in an extremely diverse range of areas, including domestic and/or commercial settings that require some kind of decoration.

Trend towards personalization and smaller volumes

The printing options for interior design have multiplied over the years in response to diversification trends dictated by designers, architects and end users, who favour personalization, small volumes or one-off productions that are practical, convenient and profitable.
The interior design trend in homes, offices and other commercial sites such as hotels and restaurants focuses on customized decoration linked to premises and/or brands, frequently with a local appeal, i.e. based on demographic and geographical positioning.

Moving on from traditional printing processes

Until recently the production of interior design work for private homes and sales outlets relied on analogue methodologies such as flexography, screen printing and gravure.
These technologies simplified the possibility of repeating certain models or creations.
However, because of the high set-up costs they were always associated with the disadvantage of economy of scale, with volumes that had to justify the initial expense.
Whilst interior design had to rely solely on analogue printing, personalization could only be achieved using the expertise of a specialized decorator with the necessary artistic skills. Professionals generally executed the work from start to finish, with a risk of human error and a significant impact in terms of time and cost. Moreover, the end quality of the work, which was irreproducible, ultimately depended on their artistic abilities.
Finally, this production method also generated considerable warehousing costs, another burden in a market heavily influenced by unexpected fashion rules. Interior design is by its very nature predominantly influenced by trends, which requires an ability to understand, and even more importantly, anticipate them in order to minimize stock related risks.

More options with digital printing

With the advent of digital printing the sector has now changed gear. In interior design also, the new technology offers designers and architects more versatility and freedom, making it possible to develop a series of new applications that can be customized and produced competitively in minimum quantities – even down to a single item. Whilst the sector has witnessed the introduction of a wide range of innovative support tools, customization has become the dominant element in terms of creativity, the only limit now being the imagination of those who develop a project. Wallpapers in a variety of patterns and surfaces, glass, fabric, wood, concrete, metal, acrylics, ceramics, etc. customized with impact patterns and motifs,

Ceiling and wall.

Sit down and listen.

Printing on everything.

themed decorations reproduced on different objects and furnishing elements are now within reach of an ever wider audience.
Thanks to inkjet printing we have entered the third millennium of interior design.

Advantages of migrating to digital

Over the years the materials and support tools used in interior design have been of both natural and artificial origin. For example, traditional woods and metals can be reproduced using printing and painting techniques.
Digital printing has definitely expanded the range of basic products that can be used: rigid or flexible surfaces that lend themselves to emulating more expensive materials, thus decreasing not only the price per unit but also the weight. They can also be customized, produced in limited editions or in unique reproductions, leading to increased profit margins that benefit the entire supply chain from manufacturer to sales channel.

New challenges for manufacturers

If the use of digital printing has expanded the opportunities with regard to interior design materials and print media, the new challenge for manufacturers is to exploit this by delivering a quality that is convincingly close to that offered by natural materials. This challenge is often governed by the resistance and finishes required on some surfaces, the tactile quality of some fabrics and the need to eliminate static electricity from rugs, carpets and textile furnishing accessories.
As with other sectors of the printing industry, we are also witnessing a change in demand dynamics in interior design more focused on unique, individual, on-demand products - a move away from analogue technology and its lack of flexibility when it comes to generating low runs.
The advantages of having reduced warehousing requirements and being able to produce just in time have necessitated more cutting edge technologies. Digital technology overcomes many of the analogue drawbacks, making it possible for a design to be produced, printed and modified on the fly and, if necessary, facilitating the production of samples, unique copies and small batches.
Set-up times and machine changes are kept to a minimum and equipment can be programmed to meet print queues on different media. Furthermore, digital inkjet technology on wide format machines has facilitated maximum widths of up to 5 m. Whereas with traditional technology items had to be produced with narrow printing cylinders, they can now be produced digitally in a single large piece, avoiding the risks of spliced designs.

Different value changes

The removal of cumbersome systems, in terms of both machinery and workflow, and the relative cost have also had an impact at a logistical level, encouraging more localized production and reducing transport and delivery times. The aforementioned underlines that two key factors are encouraging printers to migrate from traditional to digital: shorter delivery times and the possibility of customization. Delivery times are crucial for the success of a new range, whether seasonal or dictated by a particular trend. The design parameters are fashion related and must be

Printing on floor and wall.

Read more -->>

referred to as quickly as possible to ensure that manufacturers don't lose the opportunity to add a new concept or colour to their portfolio.
Inkjet printing of textiles, rugs, glass, natural substrates and flexible and rigid plastics also has a decisive role to play in the production of samples and bespoke items that have a transversal function between interior design and branding. This applies, for example, to potential hospitality markets (e.g. hotels, conference centres, airports) that exploit the advantages of digital printing to create temporary decorations for specific occasions or to frequently introduce a new look.
Geographical and demographic variations also generate differences in style and design: digital technology can accommodate local preferences and can produce samples, which makes it possible to test whether a certain design meets the set requirements and to make appropriate modifications where necessary.

Green credentials of digital
One of the key aspects that pushed the market towards digital technology, in interior design as well as many other segments, is that production processes use fewer chemicals, resulting in a reduction in waste and delivering environmental benefits. Similarly in the textile sector, where traditional printing is strongly criticized for its high energy consumption and water waste, digital processes offer a significant alternative with inks that require minimal post-print treatment. From an environmental point of view digital printing is perceived in a very positive way. Production on demand reduces waste and consumes far less energy than using analogue printing. Production processes consume less because the extraction of slag and ventilation are less demanding. In some cases inkjet printing has also removed the need to incorporate inorganic pigments into the dyes, eliminating combinations of lead, zinc and cadmium from the formulas.

Where digital can still improve
The very nature of inkjet printing brings with it some critical issues that do not affect analogue printing. The latter has processes that do not involve 'spraying' and consequently has the ability to manage heavier viscosities and formulations that are not always compatible with digital technology. Strength and durability are two very important factors in certain interior design applications and, even though the combination of some inks and materials offers specific sealing parameters without having to add over-lamination, the texture and finish of some inks is not suitable for applications intended for environments subject to abrasion or rubbing. The relationship between quality and print speed in interior design is based on the same principles that can generally be applied to wide format, i.e. the higher the number of passes the slower the print speed. The quality of the final result tends to be more crucial in interior design because most applications are intended to be seen close-up, as opposed to billposting or retail applications.
Other critical elements include the resistance of the inks and the relationship between the surface of the material, the performance of the print head nozzles and the redundancy capacity. Thanks to the development of ever wider print bars applications are increasingly moving towards single pass technology rather than scanning. However, when it comes to the deposition of the ink it is of primary importance that, irrespective of the width of the item, digital printing is not compromised by print head malfunction.
Equally important are the resistance and properties of chemical adhesion to materials, substrates or pre-painting. The ink formulation must also be compatible with the final painting processes. In some cases a combination of digital finish and analogue print that generates the best of both worlds offers the best solution. •

Furniture and wall.

"Plastic ducks, squeeze balls and boxes of peppermints"

Sustainable corporate gifts?

By **Herman Hartman**

It is imperative to prevent these kinds of gifts from polluting the environment.

Even a ballpoint pen could be more durable.

The annual PSI fair took place in Düsseldorf in January, coinciding with Promotex Expo and the German Viscom edition. Hypes come and go in the market for promotional gifts. Until a few years ago virtually no one wondered what the environmental impact of these "freebies" might be.

PSI takes its name from the Promotional Product Service Institute, a trade association with approximately 6,000 members in Europe. The PSI fair is co-produced with fair organizer Reeds.

Undermining the term 'sustainable'
The concept of 'sustainability' is frequently used on the exhibition floor, unfortunately sometimes all too readily. What about rubber ducks made from recycled plastic? They are often found in nature amongst real ducks, having been left behind by children.
Although stand holders tend to use the label to indicate the origin of raw materials, sustainability is about much more, covering the production process, energy requirement (CO^2) and use of an object as well as its potential recycling options.

Appreciation and use
During a press conference at the fair in January, the PSI organization focused on the appreciation and use of business gifts, indicating that in more than 90% of cases recipients of promotional gifts tend to use them themselves. "A fair number of gifts are retained by the recipient for more than two years. These figures demonstrate that promotional gifts are not a waste of raw materials and energy, as is sometimes claimed."
You may well ask yourself what you do when you receive boxes of peppermints, squeeze balls, plastic animals, etc. Do they end up in the bin after spending a year or so wrapped up in a bag or on a shelf?
The use of plastics was advocated because of its durability and longer service life, which is associated with lower CO^2 emissions than gifts made of metal, etc. We felt that PSI's vision did not touch on the issues of the 'plastic soup' and the recovery and reuse of plastics. There's no need to shy away from plastic, but it should be processed in such a way that there is zero risk of a product ending up as litter in the natural environment (i.e. no rubber ducks please).

Range on offer
There were fewer environmentally harmful promotional gifts on the exhibition floor. Notably absent were battery-powered giveaways such as key rings and other flashing LED objects with a glued-in battery, which were present in abundance just a few years ago. More functional gifts offering value to the recipient are on the increase. This ties in with data from the PSI study. A number of exhibitors focused on the environmental aspects of the clothing they offer. A special corner was set up highlighting various sustainable initiatives. However, despite these positive developments disposable, i.e. 'throw-away', textiles were still widely available.

Renewable, biodegradable raw materials make this bag sustainable according to its makers.

Use
Long term use by the recipient or those around them is important, plus the possibility of recycling the product when no longer in use. To achieve this the industry must focus not only on its customers, but also on customer relationships.
One aspect that PSI has not researched is the fact that there are significant numbers of unused gifts lying around company warehouses. In such cases digital technology, digital engraving on demand or pressing smaller batches of gifts could offer a solution. This might perhaps be a theme for future PSI fairs. •

‘Le confinement’ and how businesses in France cope with Coronavirus

Confined but not resigned

By **Martin Kugler**

Nathalie Robin, president OXY, interviewed on French TV, photo TF1.

Cap with visor, photo OXY Aubagne.

Full face visor, photo OXY Aubagne.

Times are hard. With the Coronavirus pandemic we are going through a global crisis that has serious personal and professional consequences for people and businesses. The sign and large format printing industries try to manage the transition from the initial wait and see to taking various initiatives to cope with the consequences and opportunities of an as good as global lockdown: working remotely from home, introducing social distancing, converting to produce gels, protective masks and shielding, dedicated signage and more.

Acrylic shields

All over France printers are mobilising to put their tools and know-how to good use to produce distancing materials and equipment. Sign makers and large format printers used to making Plexiglas based signage now provide gear to protect against Covid-19 for retailers, offices and organisations in contact with the public. In France the strict ‘confinement’ ended on 11 May when employees were encouraged to return to their place of work.

Faire Valoir Group Le Mans and Tours

Frédéric Roux, CEO at the Faire Valoir Group, drew a provisional conclusion after almost two months of severe restrictions. Two of his companies, AMEGA in Le Mans and FIGAROL in Tours, both part of the FAIRE VALOIR Group, are major production businesses for large format printing, exhibition and interior design. They suffered an immediate impact in the early stages of the Coronavirus pandemic. He explained: “FIGAROL works mainly for the event industry and suffered order cancellations right from the start of the lockdown, as soon as the ban on holding of events, initially involving more than 5,000 and then 1,000 people, was imposed. For AMEGA, which is aimed at retailers, the lockdown rules have put an end to the possibility of continuing building and construction work at our customers' sites.”
Regrettably, there have been temporary partial staff lay-offs at both companies. However, the company swiftly initiated specific partial activities on both sites and adapted to the production of protective equipment and devices by using its available capacity and technical competence.

Face masks

At FIGAROL this resulted in the conversion of the entire textile finishing workshop to the manufacture of reusable, washable face masks and gowns for health care centre staff.
AMEGA converted its production to the manufacture of protective visors and separators for its own staff and for customers' premises (shops and offices etc.) in order to prepare for the run up to the end of the lockdown.
The FAIRE VALOIR Group is justifiably pleased with its achievements, as they are proof of the adaptability and organisational capabilities of its teams and show a real pride in making a contribution, through skills and know-how, in the fight against Covid-19.
Frédéric Roux concluded:”We have successfully coped with the pandemic by adapting our workstations so as to limit contact, in particular to maintain social distancing, and by fully exploiting our existing technology and know-how.”

Hexis to make masks

Hexis, the manufacturer of self-adhesive media based in the south of France, recently hit the headlines in the local press announcing its plans for a dynamic production restart after the end of the lockdown. Similar to many manufacturing companies, Hexis is part of a global supply chain and thus depends on both the capabilities of its suppliers and the level of business of its customers.

Sales staff with visor, photo OXY Aubagne.

Right at the beginning of the emerging pandemic, to mark its commitment Hexis donated 7000 FFP2 masks and 300 disposable suits and decided to get involved in the manufacture of hydroalcoholic gel.
An initial batch of 5000 masks, 70% of its stock, went to six local pharmacies and a medical surgery. The final 2000 available masks were handed over to the emergency service of the local fire brigade. Today Hexis remains mobilised with the launch of the manufacture of hydroalcoholic gels to be provided free of charge to hospitals.

Cast film production line at Hexis.

Hexis manufacture anti-bacterial laminates.

Frédéric Roux, Managing Director of the Faire Valoir Group.

Hexis hydroalcoholic solution.

Hexis to restart production

Hexis has been producing and marketing antimicrobial films since 2013. This patent protected technology consists of a self-adhesive film laminate loaded with silver ions that are activated on the surface layer when in contact with moisture. The antibacterial action provides 24-hour preventative protection against a certain number of bacteria by blocking their metabolism and thus preventing their proliferation between normal cleaning or disinfecting procedures. Hexis are quick to point out, however, that no tests were carried out on viruses or their subfamilies (Coronavirus, SARS, Covid-19). Although the effectiveness of antimicrobial technology on viruses, and in particular on Covid-19, is not proven (and indeed not intended), the antimicrobial films made by Hexis can nevertheless make a relevant and reliable contribution to general hygiene and safety precautions. Hexis antimicrobial films are available as gloss, matt or textured laminates.
Unhindered by the pandemic, Hexis continues to supply its conventional range of self-adhesive media for signage applications designed to respect social distancing, such as striping, non-slip floor markings and specialist laminates.

OXY in Aubagne

Like many companies in the sign and digital printing trade, OXY Signalétique in Aubagne tried to maintain its activities and remained largely open during the lockdown, with on site production staff reduced by half, the remaining staff working from home and a small number of temporary lay-offs.
Sébastien Trautmann, Director at OXY, explained: “We had to take some unusual steps, including changing our work habits and arranging childcare, but by adapting and fine-tuning our product offer we were able to satisfy demand from both professional and private consumers.”
OXY successfully launched a protective visor made from polycarbonate and attached to a cap with snap buttons. The polycarbonate sheet material is widely used in OXY’s production to make screen printed signage for aircraft and helicopter cockpits. The material boasts anti-scratch and anti-reflection properties and has excellent durability. The cap plus visor is a registered design and almost 100,000 pieces have been produced so far.
OXY also received a number of orders from high profile clients, directly linked to the requirements of social distancing rules. “For instance, we supplied anti-slip floor markings to the Gare du Nord railway station in Paris, which were made with Hexis films and Hexis floor laminate,” Sébastien Trautmann concluded.

Hexis hand sanitiser.

Heidelberg study on impact of Covid-19

With Europe entering a long phase of lockdown relaxation, Heidelberger Druckmaschinen has released a new study on the global economic climate for the printing industry. It measures the weekly evolution of print production volumes worldwide. The data is derived from connected machines that enable Heidelberg to remotely monitor the status, output and performance of its customers’ printing equipment. Although limited to the packaging, label and commercial printing market, the Print Media Industry Climate report published in April 2020 provides valuable insights into the impact of the Covid-19 pandemic.
How sign making and large format printing businesses will be affected by indirect consequences from other branches of industry and what lessons can be learnt from breaking with established habits remains to be seen. •

www.fairevaloir.com
www.heidelberg.com/pmi-climate
www.hexis-graphics.com
www.oxy-signaletique.fr

Specialist printing application through collaboration with Roland DG

Multicopy Diemen personalizes travel cases for Princess Traveller

By **Ton Rombout**

Florentine Ouborg is the Commercial Director of Princess Traveller, a global manufacturer of travel suitcases based in Breda. Travel cases that can now also be printed with specific, personalized messages.

“Entrepreneurship is entertainment”

You might well have come across them (before the coronavirus crisis) travelling by train or in the airport: travel cases printed directly onto the ‘skin’ of the case, rather than using traditional stickers. Even though there may be little difference, assuming the sticker isn’t damaged, this new method has a much longer shelf life.

The ink used by the printer, developed by Roland DG, has specific shelf life properties. Version 2 of this UV eco ink from Roland is scratch and moisture resistant. The applications are many, and Princess Traveller and Multicopy Diemen can no doubt look forward to a high level of interest and sales. The photographs accompanying this article speak for themselves.

Entrepreneurship is entertainment

Let's take a look at Princess first. As far as Florentine Ouborg, Commercial Director at Princess Traveller, is concerned her father's statement that “doing business is entertaining” still stands. He founded the Princess household brand many years ago. Together with her brother, Florentine expanded the company using the Princess Traveller brand, which markets cases produced in many

Multicopy Diemen uses a raised Roland LEJ-640S-F400 UV flatbed printer with eco-friendly inks to deliver personalized printing.

different shapes and sizes, delivering to companies, organizations and retailers mainly in Europe, but also beyond. Princess Traveller has been a well-known brand of (travel) suitcases for many years.

Florentine Ouborg

Princess Traveller also has extensive experience in the retail industry. Their suitcases are available at Albert Heijn, Kruidvat, Blokker and other retail stores. Clearly the brand is already well established, but their reputation will obviously be boosted even more with this unique application, targeted at companies such as KLM and Coca Cola that would be keen to have their brand prominently displayed on suitcases. Some categories of customers, e.g. travel agencies or retailers, might be interested in smaller numbers and end users purchasing a suitcase may like to have an individual text, message and/or logo displayed on their case. Edition 1 is also an option, if you would like to display something unique on your own suitcase.

How does Multicopy Diemen produce these printed cases?

Having consulted the printer manufacturer Roland DG, the company purchased a 1.60 m wide Roland LEJ 640S-F400 UV flatbed printer with a 3.60 m long extension table. At the request of Multicopy Diemen, Roland DG raised the machine slightly from 23 cm to 43 cm, so that cases can be accommodated underneath.

Martijn Tromp, an entrepreneur and Director of Multicopy Diemen, invented the principle of the construction boxes. Initially there were 4 bins containing 2 suitcases, but due to high levels of production this was quickly scaled up to a matrix of 4 bins alongside one another and 5 bins in a row, making it possible to print 20 bins in one pass.

As mentioned earlier, Roland's eco friendly, UV drying inks deliver a hard, scratch resistant print. They can even print irregularities, channels or edges up to 3-4 mm deep on a suitcase.

How does order delivery and distribution work?

Martijn Tromp explained that there is a tipping point with 32 copies of a print job. “Less than 32 copies mostly relate to relatively smaller or particular customers, incidentally from 32 back to edition 1 and everything in between, to companies and private individuals. In such cases we deliver the printed suitcases ourselves using different distribution channels, e.g. mail, truck or pick up deliveries or to the customer’s individual specifications. ”

He continued: “For larger print runs, Princess Traveller supplies the cases and we take care of the distribution and delivery of ready made products to the end customer. In principle, the number of cases that can be printed is unlimited. ”

How did Multicopy Diemen manage to secure this lucrative assignment?

Entrepreneur Martijn Tromp, and his production assistant Martijn van de Riet, commented with a smile: “As is often the case, coincidence came into play. The Princess purchaser, who lives in Weesp, was initially looking for personalised sticker printing but then joined Multicopy Diemen to devise this application for Princess. They scored a bull's eye and the rest is history, on a large scale. The product is immensely successful and there is little or no competition because the process requires a very specific printer, as well as the appropriate insert table. ”

Can this application be used for other items?

Martijn Tromp confirmed that this is indeed possible. He explained: “We are now starting to produce individually printed cardboard and eco-friendly tents for a festival organizer. Tents that can subsequently be recycled into other applications, which is now an increasing necessity for festival organizers. The raised printer and special table structure enable us to realise various other ideas. ”

"However, the suitcase orders are keeping us busy for the time being” Martijn Tromp concluded. “We are currently working on several ideas together with Florentine Ouborg of Princess Traveller. They are most impressed with our achievements so far.” •

The entrepreneur, Martijn Tromp, is also the Director of Multicopy in Diemen. In collaboration with Princess Traveller, he devised an application for the individual printing of travel cases.

Roland raised its Roland LEJ-640S-F400 UV flatbed printer to accommodate a large construction table underneath to facilitate the printing of multiple cases.

Printer operator, Martijn van de Riet, was keen to demonstrate how both text and images can be printed, with the image flowing seamlessly into suitcase slots.

Interior decoration switches to lifestyle mode

Custom deco is the new cool

By **Martin Kugler**

Hexis deco HEX'PERIENCE the full Monty.

Hexis printed floor graphics with laminate.

With new designs, materials and technologies readily available, customised interior decoration is rapidly becoming a global phenomenon. After T-shirts, mobile phone cases and car roofs, graphic designers and decorators are now turning to our four walls to convert a habitat into a cocoon.

With a wide choice of materials and increased use of digital printing there are huge opportunities to transform our utilitarian homes into an expression of individual lifestyle. More than ever, after the Coronavirus pandemic and the severe restrictions imposed on our traditional ways of living and our consumerist habits, the home is becoming a safe haven where we want to express our personal taste and incidentally spend the money we saved by not going out and forfeiting our holiday trips.

Digital printing interior design with Hexis vinyl.

More money to spend on home decoration
According to the French newspaper 'La Tribune', consumers in France spend between 16 and 24 billion euro each year on decorating their homes and 71% of the population take a keen interest in looking after their own interior decoration.
But which direction is the market headed? The French newspaper Les Échos reports that traditional wallpaper manufacturers took a steep 75% drop in turnover since the end of the golden age of wallpaper in the 1970s.

Leisure and pleasure on demand
Conventional wallpaper is dead, no more grimy pasting: today leisure and pleasure are the buzzwords. Contemporary, easy to install wall covering solutions use vinyl in a large variety of colours, patterns and textures and, applied as self-adhesive films or laminates, can cover not only walls, floors and stairs but also windows, furniture and even appliances - boasting an extremely professional look.
Decorative coverings made with vinyl films add visual accents and texture. Indeed beyond colour, vinyl films can also reproduce a wide variety of graphic and natural patterns combined with tactile experiences such as metal, carbon fibre, wood, brick, leather or brushed surfaces.

Hexis, for a tried and tested range of vinyl films
Hexis, the French manufacturer of self-adhesive vinyl media, is no newcomer to this market sector. The company built its reputation with a tried and tested range of high performance vinyl films for signage and markings, and cast vinyl films for vehicle wraps. Hexis realised early on that decorating products are a welcome addition to its line and its etched glass film for windows has been a bestseller for the past 30 years. Over time Hexis has continuously widened its range of decorating media acknowledging a fast growing sector with the potential for greater market share to complement the somewhat saturated market for sign making.
Hexis also offers clear protective laminates for specific applications: most laminates include UV resistance and there is gloss finish for easy cleaning, anti-scratch for sensitive paint, anti-slip for floors and anti-bacterial for substrates where hygiene is important.

Hex'Perience product range
At the 2020 C!Print show in Lyons Hexis expanded its Hex'Perience product range to include a dedicated showroom for resellers and distributors. When originally launched Hex'Perience consisted of a library of printable high resolution patterns, textures, pictures of completed projects and ideas and suggestions for the interior decoration of shops, offices, restaurants etc. Customers could select and download the files from the Hexis website and then print their films to suit their own requirements and preferences. Once printed the films could be further enhanced with laminates adding highly realistic surface textures such as wood, alligator and others to achieve both visual and haptic perception.

New Hex'Perience showroom
The new Hex'Perience showroom is a concept targeted at printers to allow them to put together a customised set of decorative graphic elements for a specific project actually in the presence of their clients. Hexis provides a kit of printable files to create a dedicated demo showroom to highlight the options on offer, complete with samplers and swatches, for use in the showroom, at trade exhibitions or during open days. In a way the showroom is the shop window of the printer's business,

Use of blackboard vinyl for interior decoration.

Wood textured vinyl from Hexis.

displaying the choice of products and options with the aim of awakening the customer's curiosity, his interest and eventually to seduce him and make him want to buy 'his' or 'her' project.
Indeed, there are a fair number of different films and laminates to choose from according to the type of substrate (smooth, grained, porous etc.), indoor or outdoor exposure, expected durability and desired finish.

Hexis HEX'PERIENCE wall sampler.

Cleaners, tools and instruction videos
As for the installation of the films, Hexis supply surface preparation cleaners, tools and instruction videos. The application itself is straightforward with only a small set of knives, brushes and squeegees required. Noisy machinery, dust and messy wallpaper glue are all things of the past — an important point as this means that shops and offices can carry on with their usual business during the installation, thus avoiding temporary closures and consequent loss of revenue.
As a branded showroom Hexis also achieves a complete and consistent high profile appearance of its Hex'Perience concept. Concept showrooms have already been implemented successfully in France, Spain, the United States and Australia, with further distributors and subsidiaries set to follow. •

www.hexis-graphics.com/hexperience

Printing with latex on rigid media

New HP Latex R series: an overview

By **Ton Rombout**

HP latex R1000 2020 edition right.

Initially when latex was introduced, HP started printing on roll materials with latex. Later, starting with the HP Latex R1000, latex was also used to print on rigid materials. It has taken HP some time and effort to realise its objective of printing on plate materials with latex inks. In May 2018 the company introduced the 2.5 m wide HP Latex R2000 and in August 2018 the range was extended with the Latex R1000, with a maximum print width of 1.6 m.

This spring (just before the postponement of FESPA) HP unveiled an updated version of its Latex R-series of printers, with the aim of offering greater versatility and productivity to users in markets across the globe. The manufacturer revealed that the new HP Latex R-series 2020 editions feature a number of software productivity advancements, including expanded queue management capability and automated updates.

More upgrades

Other upgrades to the printers include more efficient multi-sheet media loading and handling, which according to HP will significantly help boost output. All these updates will also be made available to existing users of the HP Latex R-series.

According to HP, the new R-series models will help boost the capability of print service providers (PSPs) to grow applications such as custom, short-run packaging, POP corrugated displays and printed thermoforming, with users benefitting from fine details and saturated colour image quality on cardboard stock.

Javier Larraz, global HP Business Director Large Format Production, stated that it is important for the manufacturer to continuously evolve technology in order to keep up with ever-changing customer demands. “The market around us is changing very rapidly and we at HP always work very hard on improving all aspects of our products, i.e. cost, value to the customer, application versatility and productivity,” Larraz added. “The new 2020 Edition incorporates all these features”.

Different range of customer profiles

He continued: “Our customers have a variety of profiles, from large PSPs using the R-series from colour proofing to short run production, to specialised manufacturers who use it to print high quality applications such as exclusive furniture, and online print providers who print on-demand applications and send work directly to customers.”

The HP Latex R-series comprises three core models: the R2000 Plus, R1000 Plus and R1000. The largest of these machines, the HP Latex R2000 Plus printer, can handle materials in roll-fed or sheet-fed configuration up to 2.5m wide.

The HP Latex R1000 Plus printer can run media up to 1.64m wide in roll-fed or sheet-fed configuration with white ink printing capability, while the HP Latex R1000 is an entry-level solution that can also handle media measuring up to 1.64m wide.

Wide range of rigid substrates

All three of the devices can handle rigid substrates such as paper and plastic foam board, PVC foam, corrugated board, acrylic, polycarbonate, compressed cardboard, honeycomb board, aluminium composite panel and wood. Roll substrates include PVC banner, self-adhesive vinyl, coated paper, polypropylene, polystyrene, polycarbonate, polyester, textile and canvas. Even difficult materials such as mirror glass can be printed on. However, the material must not be porous so that the ink does not permeate and reach

HP Ink Cartridge.

HP Latex R1000 plus – 2020.

the transport conveyor. Also thanks to the use of an overcoat, the print feels a lot smoother than a comparable print produced using UV ink.

Characteristics of latex inks

Latex ink is a resin ink. With water based HP Latex inks heat is the trigger for phase change, i.e. the ink changing from a liquid into a solid. Once hardened the print can be processed immediately. Prior to the phase change the water has to evaporate, a process that also uses heat. Since the introduction of the first generation of water based HP Latex inks, now more than 10 years ago, HP has improved the properties of the inks in two ways. The adhesion, scratch resistance and hardening temperature of the ink have been improved and energy consumption has been reduced. Latex ink can be processed immediately after curing and can be hot or cold laminated. It is still flexible when it is dry, which means that bending or stretching isn’t a problem and the ink layer doesn’t fragment during cutting or milling.

The generation 3 ink has also been further enhanced to print plate materials on the new hybrid R series printers. The latex inks have been extended with white ink in addition to the commonly used 6 colour set with light magenta and light cyan. An extra pouch is provided for the white ink so that it can be circulated.

HP Latex R1000 printer

This model is able to print beautiful colours on rigid media up to 1.6 m (64 in) wide, using a vibrant HP Latex colour gamut. HP Latex Inks offer great versatility, from indoor and outdoor signage to thermoforming and premium decoration. What is special about the UL ECOLOGO certified water-based HP Latex Inks is that they will produce odourless prints. A wide variety of applications are now available with the glossiest white that resists yellowing. There is no waste between white print jobs with removable HP thermal inkjet print heads in an offline rotating compartment, so you can perform white print jobs instantly with automatic recirculation and print head cleaning. Print up to 15 outdoor plates per hour thanks to a conveyor system with smart vacuum function, a simple loading support interface and advanced queue features. Maximize uptime with automatic maintenance and smart service programs for quick diagnosis and troubleshooting.

HP Latex R1000 Plus Printer

Move to higher value rigid/flexible jobs with HP Latex quality and a media look and feel. There is no waste between white print jobs. You're always ready to print white with features that eliminate manual purging. Absorb production peaks with high-speed quality from the belt system and smart vacuum, maximising uptime with automatic maintenance and smart service tools for fast diagnosis, maintaining control with the help of HP PrintOS software tools.

HP Latex R2000 Plus printer

This printer delivers high quality, beautiful colours on hard media up to 2.5 m (98 inch) for sustainable production environments, using a vibrant HP Latex gamut for printing on rigid and flexible media, and attracting new customers with UL ECOLOGO certified water-based HP Latex Inks to produce odourless prints. Prevents manual cleaning and performs white print jobs instantly with automatic recirculation and print head cleaning.

This printer can cope with production peaks with lightning fast quality delivering up to 28 outdoor plates per hour and has a conveyor belt system with smart vacuum function. It will increase your productivity with multi-plate printing, load support and advanced queues. Maximize uptime with automatic maintenance and smart service programs for quick diagnosis and troubleshooting. Maintain full control of your production and costs with HP PrintOS software programs. •

HP Latex R2000 plus – 2020.

Durst has the equipment to make community masks.

New initiative focused on digital, fully automatic production

Durst producing ‘community masks’ at its Brixen headquarters

By **Ton Rombout**

Durst, the manufacturer of advanced digital printing and production technologies, recently launched a new initiative, producing ‘community masks’ at the demo centre in its Brixen headquarters in South Tyrol (Italy). Community masks are actually less complicated to produce than medical masks, but of course there are restrictions in terms of the inks and materials used in the printing process.

Durst also pointed out that it does not intend to become a production printer and take over the role of its wide format print production print equipment buying customers. The masks are initially being produced for employees of the Durst Group and its sister company Alupress, but the production capacity will subsequently also become available to other companies. “The production know-how for community masks will be made available through our branches to interested print service providers worldwide,” Christoph Gamper, CEO and co-owner of the Durst Group, explained.

Showcase for production companies

He continued: “At the beginning of April our printing technologies for the label and packaging industry were classified as systemically relevant and we were able to return to partial operation. Our textile printing and processing systems, used in the demo centre for customer demonstrations, will now also be used for the production of community masks. In line with our ‘pixel-to-output’ strategy, we employ a digital and fully automatic production process. Using a web shop with a specially programmed editor, the masks can be individualized with graphics, images, text. Our workflow software then sends the design file directly to the printing machine and the printed material is processed by a cutting system. The announcement of our initiative on social media has generated huge demand and print service providers worldwide are adapting our concept, and consequently Durst technology, to their own production processes.”

What exactly is a community mask?

As mentioned earlier, the community masks produced by Durst are meant for people like you and me: factory operators, sales personnel in shops, employees in office environments, journalists conducting an interview, people travelling by train or plane, and many more who prefer, or have, to wear a mask for protection from the virus currently haunting us all.

The masks are equipped with a high efficiency filter membrane, combined with excellent air permeability. They are based on a 3-layer structure and the polyester fleece textile material is comfortable to wear and washable. The filter membrane can be disinfected with alcohol and reused. The selected filter membrane was subjected to detailed effectiveness tests in the Durst laboratories and Durst has the measured values verified by an independent institute. Durst specifically pointed out that this is not protective equipment in accordance with VO (E) 2016/425 or a medical device in accordance with Directive 93/42 / EEC.

Why Durst?

The company has extensive experience with filter systems, as they take on a type of ‘cleaning function’ in the printing press to filter out micro particles in the ink supply systems, to prevent the print heads from being blocked and make sure that they are always ready for use. The filter membrane selected by Durst Development for the community masks was subjected to in-depth effectiveness tests in the Durst laboratories and the company has the measured values verified by an independent institute.

Not to be forgotten: processing and assembly

To ensure that the project remains a non-commercial venture, the management of Durst asked ‘VergissMeinNicht’ (www.vergissmeinnicht.bz.it), a social cooperative based in Bruneck which provides job opportunities for young cross-border workers and people with disabilities, to partner with Durst for the processing and assembly of the masks. Having adopted the motto ‘appreciation and added value’, the specialist sewing service finishes the masks in a protective environment, also focusing on sustainability in packaging.

Where can the masks be purchased?

The community masks can be purchased from end customers in South Tyrol (on the web: “made in Südtirol, not in China”), via Kunst & Dünger Solutions (http://www.maskenmacherei.online). They can also be personalized and are available in print runs of up to 300 items. For larger quantities, or inquiries about pixel-to-output software and hardware solutions for production, please contact: protection@durst-group.com.

For further information on the Durst community masks initiative visit: www.durst-group.com/masks.

Individual washable textile face masks

The masks are entirely made in South Tyrol and sewn from 100% Ökotex material or recycled PES.

Prices are consequently cost based, because machinists are paid fair wages even in times of crisis. The company commented as follows: “These are not medical grade protective masks. Those must be reserved for medical staff or people who cannot maintain a distance of 1m at this time.

These masks have a more cosmetic and "altruistic" purpose, i.e. they are meant to protect others from infection when we wear them!”

Technical data

- Ergonomic fit and comfortable to wear thanks to over the ear elastic bands;
- Machine wash at 60°C and tumble dry;
- 100% polyester fabric, made in Germany;
- ÖkoTex certified;
- Wash before wearing for the first time;
- Non-returnable;
- The company cannot accept liability for the product.

Keeping a distance of preferably 2 m and thorough hand washing are still the most important actions we can take to protect ourselves and others. •

Three community mask models in a line.

Shorter runs, quick turnaround times and on demand sample production

Tekboy Tekstil enabling high-quality production at a faster rate

By **Ton Rombout (courtesy of Jos Notermans)**

“We were most impressed to see the JAVELIN produce challenging designs, such as geometrics and blotches, at relatively high speeds.”

- Süha Artun, Factory Manager at Tekboy

JAVELIN in operation at Tekboy.

The current shift in customer demands (see other articles published in this issue and in former issues of SignPro Europe) and turnaround times is forcing the textile industry to improve production efficiency. This also applies to Tekboy Tekstil in Turkey, as the company became aware that brands wanted to print more elaborate designs and demanded faster production rates.

Tekboy needed to find a fitting solution to keep up with this evolving industry. The Turkish manufacturer managed to fulfil its customers’ requirements and increase production rates with the help of digital printing. Using the JAVELIN digital printer supplied by SPGPrints, Tekboy Tekstil can now produce at a faster rate, create intricate designs quickly, maintain a consistently high level of quality, print knitted fabrics in a wider range of colours and produce samples efficiently.

Challenges in the production process

Tekboy did face a number of challenges and obstacles hampering growth and development. Firstly, traditional printing is a time-consuming process. Facing growing demand as a result of the increasing popularity of fast fashion, Tekboy Tekstil had to find a way to supplement its production capacity.
Secondly, Tekboy’s customers now want to produce smaller units and change collections frequently. To satisfy this demand Tekboy had to shorten the development process, enable shorter runs and reduce turnaround times.
Thirdly, Tekboy Tekstil wanted to show small samples of customers’ designs when visiting them or attending an exhibition. With traditional printing producing small fabric samples is a time-consuming and costly process - a drawback that could stand in the way of attracting new clients.

Brief introduction to Tekboy Tekstil

The Turkish textile manufacturer Tekboy Tekstil was founded in 1981. As the years went by Tekboy expanded and became a leading supplier and printing facility in Turkey. The company’s main challenge was to keep up with the changes in the industry and to be able to fulfil its customers’ demands. Despite not being the first company to introduce digital printing, Tekboy wanted to be the most innovative, providing customers with a unique, high-quality product. Digital printing, and the JAVELIN printer specifically, enabled Tekboy to deliver more detailed and higher quality products and to remain one of the largest industrial organizations in Turkey, particularly in the textile manufacturing industry. As a result Tekboy Tekstil decided to purchase a second JAVELIN printer in order to keep up with customer demand and enable further growth.

Süha Artun, Factory Manager at Tekboy.

Solutions to overcome these kinds of problems

Before being introduced to the JAVELIN printer, Tekboy used traditional printing techniques and had almost no experience in digital printing. To keep up with changes in the textile industry and tackle the challenges facing the business, Tekboy Tekstil decided to add the JAVELIN digital printer to its current line of conventional printers. Joining forces with SPGPrints, the company discovered step by step what digital printing could do for its production process and products. The JAVELIN digital printer now enables Tekboy Tekstil:

- To keep up with its customers’ requirement to frequently change complex designs with lead times often measured in weeks.
- To deliver constant quality even combined with a fast production rate thanks to the JAVELIN printer’s ink delivery system.
- To instantly produce on demand samples.
- To reduce overall damage because of the unique positioning of the JAVELIN’s print heads at a distance of 4mm from the substrate. Traditional print heads are often positioned much closer to the fabric (approximately 1.5 to 2mm). This means that there is a higher risk of a head crash, which could cause considerable damage and could be very costly.
- To print knitted fabrics with JAVELIN print heads that are positioned further away from the fabric.
- To produce a broader spectrum of colours and fine tonal gradations because of the printer’s colour gamut, which enables Tekboy to print more complex and detailed designs.

Javelin-HR.

Create new business models

Jos Notermans added: “Digital textile printing enables us to benefit from new business models, the most important one being that we can print what we’ve already sold rather than trying to sell what we’ve already printed. The flexibility of digital textile printing allows fashion brands to have small batches of a particular design printed and to place repeat orders if the product is selling well. Ideally, this would mean that discount sales will no longer be necessary going forward. The fashion industry is also changing as a result of digitalization. People now like to buy clothing online and are used to having a lot of different options to choose from. Fashion brands are under pressure to produce a large variety of designs and rapidly respond to changing trends. Digital textile printing helps us to print a new order immediately and have it delivered to the customer in a short time frame. This enables fashion brands to satisfy customer demand, which means that they will be more inclined to collaborate with digital rather than conventional printing companies. It gives your customers a competitive advantage over others who do not have benefits of a digital textile printer at their disposal. Moreover, customers are able to respond more specifically to market demand.”

SPGPrints-Javelin.

Obvious results

Implementing the JAVELIN digital printer in its current line of conventional printers helped Tekboy Tekstil to tackle the challenges it was facing and keep up with customer demand. Using the digital printer, Tekboy Tekstil can now produce at a faster rate, change designs quickly, maintain a consistently high level of quality, print knitted fabrics in a wider range of colours and efficiently produce samples on demand. This made Tekboy Tekstil decide to purchase a second JAVELIN in order to promote further growth.

Süha Artun, Factory Manager at Tekboy, is clearly delighted with the benefits of the JAVELIN: “The JAVELIN’s outstanding quality and productivity were significant factors affecting our investment decision. We were most impressed to see the JAVELIN produce challenging designs, such as geometrics and blotches, at relatively high speeds.”

The JAVELIN digital printer also enables Tekboy Tekstil to:

- print variable dot sizes (2-10pl) at 1200 x 1200 dpi resolution, facilitating the production of unique, refined designs;
- bring new ideas to the market in 3 to 4 weeks, with shorter runs and rapid turnaround times;
- reduce the risk of damage to the print heads and therefore accelerate the return on investment;
- offer customers high-value solutions and instil loyalty so that they come back for this unique, high-quality product.

Note: Are you interested in digital printing and would like to see for yourself how the JAVELIN prints your designs on your fabrics in high quality? If so, visit the website at www.spgprints.com where you can plan a visit to the Experience Center. One of the specialists will be happy to give you a personal demonstration, including the possibility of printing your own designs on the JAVELIN digital printer. You can also see the single pass ultrahigh speed printer PIKE live in action there. •

Company set to make 6 million face masks per week

MOSS produces PPE (Personal Protective Equipment) for medical use

By **Ton Rombout**

Moss US Automated Face Mask Production, part of the equipment.

Peter Bottenberg, Managing Director of Moss Europe in Germany.

In response to the COVID-19 pandemic, Moss Inc., a company with plants in Germany and the US, has expanded its global manufacturing capabilities to include high-speed automated production for Personal Protective Equipment. The company's new fleet of proprietary manufacturing technology is able to produce a total global output of 1.2 million face masks a day.

The automated manufacturing system was developed in collaboration with the Fraunhofer Institute for Product Technology (IPT) and a local machine builder in Germany. Moss will scale capacity in Europe and North America to produce a global output of 3 million masks a week by June and reach 6 million masks a week by August. In the US the company's previously planned relocation into a new state of the art facility in Illinois is proceeding on schedule and set to open mid-year.

Medical use

The masks have been developed to comply with the EN14683 surgical MNS mask standard in Germany and ASTM F2100 Level 2 Procedure Mask rating in North America intended for medical purposes. "The health and personal safety of medical service providers, first responders and many others is our global community's number one priority," Peter Bottenberg, Managing Director of Moss Europe in Germany, explained. "Moss has invested in high speed manufacturing systems for 3-ply procedure masks. We developed the system in partnership with the Fraunhofer Institute for Product Technology."

Setting up a special plant

In planning the plant the partners considered the entire supply chain, from the production of required materials to certification and supply chain management. As soon as the first prototypes are ready, the system will be optimized by the Fraunhofer IPT in order to scale and automate the production of the face masks.

Textiles and stitching have been an integral part of the Moss legacy since the 1950s. The Moss group has multiple Durst Rhotex 325 printing systems operating with water based inks, but they will not be involved in this project.

Although in principle these types of printers could be used for face masks, they are not suitable for medical use (not in accordance with the above mentioned standards). Moreover, a certain type of cutting and stitching system is needed to quickly and safely cut and assemble the models of the masks.

Peter Bottenberg continued: "In Germany we will be operating 8 completely new proprietary machines designed in collaboration with the Fraunhofer IPT. Fully automated machines process the raw materials all the way through to the finished product – it is a complete ecosystem focused on the high-speed production of tested, medical supply masks that are not printed."

Large volumes required

Moss is used to thinking big when it comes to quantities, particularly when a problem in the market due to a lack of useful, tested and qualified masks needs to be solved. "Because of our skills in high volume textile processing we received many inquiries relating to face masks, including some running into the hundreds of thousands," Peter Bottenberg related.

"Production levels dropped at our three facilities across the globe and the situation is generally quite different from the pre-pandemic environment. Whilst corporate work has remained strong, we have seen a slow increase in numbers in retail and restaurant chain and airport/transportation hub orders over the past two weeks. We are optimistic about both the production of face masks and traditional graphic solutions for the latter part of the year. Thinking in solutions instead of problems has always been our greatest strength and we are grateful to the dynamic partners who joined forces with us to develop a swift solution."

PIXLIP-emergency-response, example of other products made by Moss.

Outdoor-emergency-blog, produced by Moss.

Strategic long term activity

He continued: "This is a strategic long term activity. Our facility in the US will also produce these masks using the same technology and our global footprint allows for even more machines and production based on future demand. Globally the pandemic has put acute supply chain issues in the spotlight. We need a more secure solution for something so vital for emergency service workers, medical professionals and public health workers. Moss has made significant investments and applied extensive due diligence in this undertaking, as there are many regulations in both Germany and the US governing surgical mask production. Here in Germany, for example, we have in-house CE compliance experts for medical goods and we are registered as a medical supply company. Aiming to provide full transparency we will submit relevant specifications for the performance of the masks. These medical grade face masks will be certified in accordance with DIN EN 14683."

Do you also supply shields, window graphics, etc.?

"Moss also supplies separation and social distancing products, i.e. wall and window graphics, floor decals and illuminated graphics for retail or commercial environments, where they are used to post guidelines and information. They are available in package or bespoke formats. Face shields are available in the US and our facility there is also prototyping other forms of PPE."

Did you receive requests from particular governments to initiate this activity?

"We are proud to venture into this new production direction to help fight the COVID-19 pandemic and to secure ample, competitively priced supplies to satisfy global public health needs," said Dan Patterson, President & CEO of Moss. "Our actions are based on what we were seeing and the inquiries we were receiving – goods in extremely short supply, ever increasing demand and limited access to critical supplies even for the largest organizations. Although we immediately came to market with hand-sewn masks, we felt that we wanted to make more of a difference and that handmade masks could not in any way make up for the shortfall. We were aware of the slowdown in our traditional markets and realized that PPE products were going to be needed when retail stores and events reopened. We knew we had access to the right skills, range of materials and networks with a robust procurement team, which meant that we had all the necessary ingredients to solve the problem at hand. We felt that it was the right thing to do in the face of this crisis and for the future of public health, and mobilized our global offices to work together in order to help solve this problem. We realized that sourcing materials and products in Asia was not the right approach in this instance. The supply chain and fabrication location for these products was the real issue, which is why we pivoted PPE into a long term strategy and a core market development for our business. We focused on developing a professional, medical grade solution that sets us up as the gold standard for the product and then developed the equipment and supply chain needed to execute our plan."

Peter Bottenberg added: "Although Moss already shipped several large mask orders in May, it will soon have the capacity to fulfil high volume orders from governments and public health organizations, including national contracts and re-stockpiling." •

For further information visit solutions.mossinc.com/ppe.

Emergency solution for a Retail_Entryway, plus explanation.

Peter Bottenberg from Moss Germany, being part of Moss Inc., a company with plants in Germany and the US.

Socer and Azuliber: the first ceramic tile factories to use:

EFI Cretaprint Hybrid Technology

By **Ton Rombout**

Tunisia based Socer (Société de Ceramique de Chebedda) is expanding its operations with the EFI Cretaprint Ceramic Ecosystem and has added an EFI Cretaprint 5th generation ceramic printer from Electronics For Imaging, Inc. to scale up its production capacity. This will be the fourth EFI ceramic printing machine that Socer has purchased.

L'Alcora, the Spanish tile manufacturer, installed the first EFI Cretaprint printer operating with water-based inks as a beta unit more than a year ago. Today this printer is successfully operating as part of Azuliber's regular manufacturing line. Fernando Javier Tomas Badenes, EFI Deputy General Manager for building materials, commented on this landmark installation as follows: "It is key for EFI to propose technologies that work with total reliability in the highly demanding ceramic manufacturing environment. In fact the Cretaprint Hybrid approach aims to help our customers adopt future technology in tile inkjet printing."

Factory plant of Azuliber.

About Socer

"We have been a loyal EFI Cretaprint customer for 14 years, our first purchase being Cretaprint rotary printers. A few years ago we introduced our first EFI Cretaprint digital ceramic printer and now we have decided to invest in EFI's most advanced printer for ceramic and tile decoration," Fares Ben Ayed, CEO of Socer, explained. "Going digital enables us to meet customer demand, as we can produce more work and do it faster. We value our relationship with EFI and always go back to them for future proof innovative solutions."

"The training team was particularly helpful, displaying good technical teaching abilities to ensure we understand our new printer. The EFI Cretaprint's service team has also been continually available to quickly respond to our any of our queries." "

Complete EFI ecosystem

Socer works with the complete EFI ecosystem of ceramic products: EFI Cretaprint machines, EFI Cretacolor ceramic inks and the EFI Fiery proServer, enabling users to achieve accurate colour matching whilst saving on ink costs. The flexibility and technological robustness of the EFI Ceramic ecosystem gives tile producers such as Socer the opportunity to look forward to a future of fully digital ceramic decoration. Working with an end to end solution, Socer is able to undertake more projects whilst improving its products and processes.

Based in Tunisia

Founded in 1974, Socer operates in the building materials, ceramics and glass sector with a plant in Tunisia's Chebedda Naassen industrial zone.

"North Africa is becoming a significant and growing market for ceramic products. The successful 5th generation technology installation at Socer reflects the increased sales and demand we are witnessing in that region," stated Fernando Javier Tomas Badenes, EFI Industrial Print Deputy General Manager for building materials. "Using EFI technology gives our customers the confidence to grab new opportunities, allowing their business to grow and advance."

EFI shield educational copy.

EFI Cretaprint hybrid.

About Azuliber

Azuliber Sales Manager, Fernando Palomo, commented: "When we heard about EFI's new technology for ceramic decoration, we knew we wanted to try it." Asked about the experience and results, he added: "I can safely say that it works. We manufactured our existing products with new water-based inks without any issue and produced a perfect finished product."

The EFI Cretaprint Hybrid solution includes digital glazing and aqueous inkjet printing. One of the drivers behind this new technology is its positive environmental impact on the ceramic tile manufacturing process, reducing both consumed resources (glazes, water and energy) as well as emissions and other waste.

Sustainability

Sustainability is high on the agenda at Azuliber, a company that has implemented different environmental initiatives, including the ceramic industry's first closed water circuit, cogeneration of electric power and solid waste recycling. Azuliber produces 25,600 kWh by cogeneration, using hot air from the turbine in the atomizers. It also runs a comprehensive recycling programme, including a sludge and ceramic suspension collection and reuse service, involving more than 30 companies in the industry and handling 187 million kg annually.

Innovation as a strategy

Azuliber's production operation showcases the potential market viability and value when migrating from solvent to aqueous ceramic inks. According to EFI's Fernando Javier Tomas Badenes, sustainability and technical improvements, resulting from the enhanced integration of tile manufacturing processes, are key drivers in the development of Cretaprint Hybrid technology. “We do understand, however, that a technology will only be fully implemented in the industry when it proves to be cost-effective."

Routine manufacturing with EFI Cretaprint Hybrid printers at Azuliber is providing real-world evidence that this is a robust and efficient solution capable of decorating standard ceramic pieces out of large format slabs.

Based in Spain

Founded in 1972, Azuliber has an established legacy in tile manufacturing, which it combines with maintaining a track record in innovation. The company won its third Alfa de Oro award this year for the development of a ceramic-polymer composite with advanced noise absorption properties - an innovative new solution developed by Azuliber in partnership with Neos Additives and BestTile.

With a history of almost 50 years in the ceramics sector, Azuliber combines tradition and experience with an innovative and pioneering spirit to develop products specifically adapted to market needs. Based in L'Alcora, in the Spanish province of Castellón, Azuliber's product offerings include porcelain, red paste stoneware, white paste, large formats, rectified and semi-polished, irregular forms, indoor and outdoor ceramics and ceramics for home and commercial spaces. For further information visit www.azuliber.com. •

If you would like more information on EFI's advanced digital technologies for ceramic tile manufacturing visit www.efi.com/cretaprint.

Socer and Efi.

Azuliber water-friendly ceramic example.

Azuliber team that won the prize.

The Alfa machine during an exhibition.

Several new products at competitive prices

Mimaki expands its range

By **Herman Hartman**

Following the postponement of Fespa, Mimaki Europe staged a virtual press conference at the end of March, introducing several new products ranging from a new 1.6m UV roll2roll printer, a new textile printer and a 3.2m wide printer equipped with solvent inks - all systems Mimaki markets at competitive prices. And there was more, including a 3D printer and a textile printer that can print directly onto both fabric and paper. The relationship with OKI was also put in the spotlight.

The OKI M-64-S

Mimaki en OKI

Not all the products under discussion were actually new. Mimaki and OKI previously announced that Mimaki is now responsible for the sales and support of OKI large format products, including support from the installed base and products previously marketed by OKI's large format division. The latter had only been in existence for a relatively short time and resulted from OKI's earlier takeover of Seiko's large format activities.

OKI's ambition at the time to independently gain a place in the large format printer market no longer applies. The extent to which new products will appear under the OKI label was not clarified. In terms of large format printers, OKI is one of the few in this sector to use Seiko print heads, which makes the current 2 models among the faster in their segment. OKI remains responsible for building the 2 models that are currently being supplied - the OKI M-64-S, a 64 inch wide printer equipped with OKI's eco solvent SX ink, and the OKI H3-104S. With a print width of 104 inches (approx. 250 cm), the H3-104-S is a bit of an odd one out. Most manufacturers, including Mimaki, now supply printers at 3.2 m wide. However, the H3-104S has many users. The OKI SX solvent inks, print speeds and mesh kit option are valued across the market. Both printers hardly overlap with the existing Mimaki range.

New arrangements with OKI

Since April 1 Mimaki has been supplying both large format OKI dealers and its own Mimaki dealers with OKI printers, replacement parts and inks, also for older models. OKI dealers in turn get access to other products in the Mimaki range. OKI printers are also sold under their own label since April 1.

Whereas the OKIs are sold under their own label, it is a different situation with the new 3D printer announced by Mimaki, the Mimaki 3DGD-1800 3D. Real connoisseurs will soon recognize the 3D printer developed by Massivit, which will be marketed with the same specifications. Mimaki aims to establish a leading position in the 3D printing market in the long term. This means that, where necessary, the company will collaborate with partners to supply the necessary systems, such as Massivit in this case. Mimaki can rely on its extensive distribution network and ensure that it fits in with the rest of the Mimaki range. Unlike the other 3D printers in the current Mimaki range, the 3DGD-1800 3D is also interesting for the sign and graphics market. The printer has two nozzles that can fill a building volume with a base area of 145 x 111 cm to a height of 180 cm. The 3DGD-1800 uses and sprays a liquid gel that contains a UV-curable resin, which is scratched with LED UV light. The construction height is 35 cm/hr. Several samples were shown during the presentation,

Mimaki 3DGD-1800 3D

Mimaki UJV 100-160, roll-to-roll UV-curable inkjet printer.

in which a colour was immediately added to the pale white end result with the aid of a pre-printed shrink or wrap film. Spraying or other forms of breeding are also possible.

One of the applications for 3D printing in our market is the creation of 3D advertising objects. You can also create facade texts and logos in 3D. One complicating factor is that in some cases you need space for both the 3D printer and to sand and polish the rough printed object and, were necessary, spray it in colour. The printer will also produce a base for illuminated letters and logos. The milky white resin is translucent. In this particular application both the outside and inside have to be perfectly polished.

New roll2roll printer

The Mimaki UJV 100-160 is a new roll2roll printer equipped with LED UV ink. It is not a derivative of Mimaki's existing print and cut models, but is based on a new print engine that uses different print heads. The LUS 210 UV ink is also new. The printer is based on a 4-colour ink set, but can also be supplied with white and/or transparent ink. Mimaki is using this new print engine to introduce the Dot Adjustment System (DAS), in which a control strip is measured by a sensor to accurately position ink droplets. DAS takes into account the thickness of the substrate without the user having to adjust the head height. The same sensor and strip also manage the fine-tuning of media transport. The printer prints at speeds of up to 23 m² in Draft and 13.6 m² in Production mode. According to Mimaki, the UJV 100-160 represents a price breakthrough in UV printing and is developed for non-EU countries and designed for high quality printing and maximum productivity.

Mimaki SWJ -320 EA with air purifier

Mimaki built a 3.2 m wide print engine that forms the basis for various printer models. An earlier version of its 3.2 m model equipped with solvent inks, could not be marketed in the EU because of the ink used at the time. The current model, the SWJ-320EA with improved ink, has been in use outside the EU since 2018, also in Russia. It was introduced here last year. Starting in May, the SWJ -320 EA will be supplied with an Air Purifier Unit manufactured by BOFA, which eliminates VOCs released during printing. Various relevant figures were submitted during the press conference. It should be noted though that the carbon filter occasionally needs to be replaced as it becomes less effective at binding with VOCs over its lifetime. A significant amount of VOCs are only released into the ambient air when the substrate evaporates in the 24 hours after printing. Additional ventilation will be required in some situations in order not to exceed HAS values.

Mimaki maintains that there is still a demand for this type of printer in our region and that the cost per print is lower than with printers of this width equipped with other ink systems. It can also compete with the range of solvent printers originating from countries such as Turkey and China.

The TX300P-1800 MKII is equipped with a replaceable plate in the print bed to print on both paper and textile.

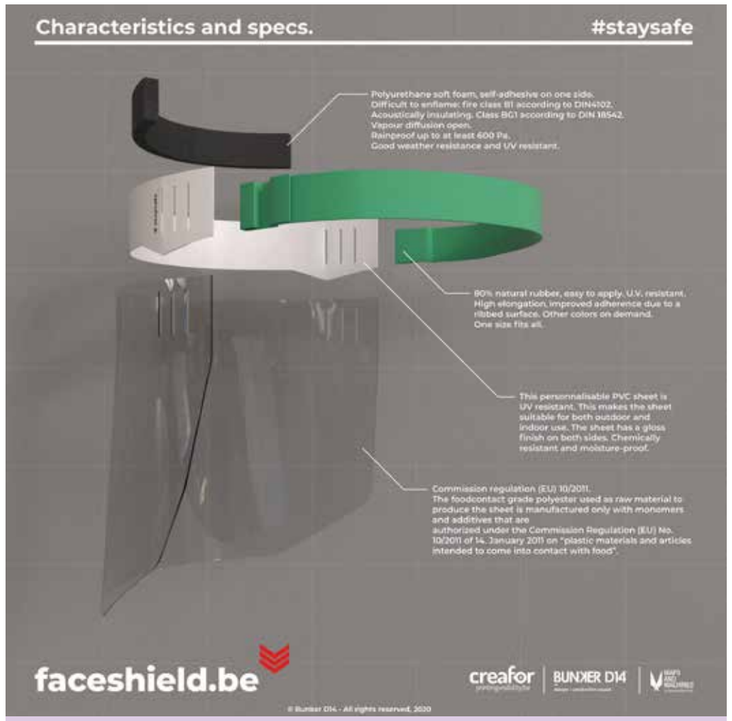
TX300P-1800 MKII

The TX300P-1800 MKII printer for textile printing, which was announced at ITMA last year, is now available. Compared to its predecessor, the specifications have been tightened and a number of improvements have been implemented. The TX300P-1800 MKII will print directly onto both textile and sublimation paper, thanks to the exchangeable printed circuit boards with vacuum for printing on paper and with an ink outlet for direct printing. The most striking feature is the way in which the printer can be configured for two different ink sets that can be used side by side. Both inks can be used for dye sublimation and direct sublimation, or one of them can be substituted for pigment ink. The printer can also be operated with just one ink type to accelerate the print speed. •

Having to shut down and start up again

How Covid-19 is affecting the industry

By **Julia and Ton Rombout**



Face shields designed to protect from Covid-19.

Creafor face shield.

Although many countries across the world imposed a lockdown, they did not always implement it in the same way. How are the Covid-19 measures affecting the sign and print industry? Is the future now looking a bit brighter? Even though many customer assignments continued, some were cancelled or postponed, but there is scope for new undertakings or innovations also. SignPro Europe took stock at a number of European sign and wide format print production companies.

We asked these companies whether any of the coronavirus measures had affected their business, whether they were handling work in progress or their work had come to a standstill, whether any new orders had been accepted or developed since April/May, and whether any specific ideas and ventures had been undertaken in order to keep production going?

Standard Creafor assortment.

Creafor in Lokeren, Belgium

When the lockdown was imposed in Belgium Creafor still had some work in progress, Andreas Foriers told us. The company was able to remain operational but noticed a sharp drop in orders week after week, from 60% during the first week to 50% the second week and 40% the following week.

Thereafter, however, Covid-19 prevention orders started to roll in for about two weeks, including a number of orders for Plexiglas and floor stickers. Eventually it turned into a stampede! Creafor actually generated a full month's profit in just 2 weeks, which obviously made up somewhat for lost ground. The Belgian shops reopened last Monday, hence the rush, but since then things have calmed down again.

Covid-19 prevention signs.

Andreas Foriers: "There's clearly a lack of consistency and it is difficult to anticipate how things will progress. The current orders have very short lead times. In fact, if nothing comes in today, we have to make people technically unemployed tomorrow, due to the very fast turnaround times from order and prepress. It applies to quite a number of incoming orders. Sometimes things change very quickly, as was the case last week when everyone suddenly had to come back to work and subsequently became technically unemployed again. It really is a volatile situation."

What will happen going forward?

Andreas Foriers continued: "We developed our own face shields in conjunction with a stand builder and are the exclusive producer/distributor of this product. It enables us to maintain a position in this market. We have also produced many floor stickers and acrylic screens, items that are in great demand. We have become more of a security company rather than a printing company."

Creafor also operates as a finishing company in the graphics sector. Obviously, they don't yet have an insight into the order situation, as there is still considerable caution in the traditional graphics market where things have slowed down. Andreas Foriers confirmed that the company is now attempting to offer added value to these companies, but at the same time trying not to depend solely on their business. "As a sector, we are tied to events where many people come together. But now that everything, i.e. fairs, markets and stand construction, is cancelled we definitely feel the impact."

Merking in Reykjavik, Iceland

We also made an overseas call to Iceland to talk to Jóhannes Frank Jóhannesson of Merking. Iceland is one of the few countries in Europe that seems to have Covid-19 pretty much under control. The country only had a few confirmed Covid-19 active cases in May. However, Merking noticed that many orders were cancelled. Most of its staff was furloughed (at a rate of 25%). Half the workforce was still working full-time following a number of requests to produce Covid-19 shields, for use in supermarkets to protect cashiers. Shops never closed in Iceland. Swimming pools reopened about a week ago, gyms are set to open on Monday and the football season will start again in June.

Jóhannes Frank Jóhannesson explained: "A large hotel is opening its doors here. We were commissioned to do all the signage, a major job. It hasn't been cancelled; it is merely on hold. Fortunately, the finance was already in place. We are still working on the project but at a slower pace and there is no reason to believe that it will not continue. It will be located at Vatnajokul National Park. Guðni Thorlacius Jóhannesson, Iceland's President, is set to open it later this year."

Items for the Vatnajokul National Park.

What will happen going forward?

Back in November just before the pandemic took hold, Merking purchased a new printer from America. It was loaded onto a truck to be transported to Canada and from there on to Iceland. The project was put on hold for other reasons and when the printer finally arrived, a technician was scheduled to come to Iceland to assemble and commission it. Travelling through Amsterdam airport some-time in March, he was stopped and not allowed to fly to Iceland. Now, as a result of Covid-19, Merking is unable to get technicians to visit the island at all.

Jóhannes Frank Jóhannesson added: "One of our colleagues has now installed it using remote live video support. We installed several video cameras around the room and were in direct contact with the technician in Israel, who instructed us how to proceed. The fact that it was not a brand-new printer made the procedure more complicated. It was supposed to be a quick transfer, but we didn't trust the print head as it had probably been damaged, so we had to change it. It is now up and running and we can finally print 5 m images again."

Jóhannes Frank Jóhannesson thinks that business will go on, albeit in a slightly different way from now on. A lot will depend on whether there will be a second wave of the virus. If there is, and if it's similar to the second wave of other viruses such as the 1918 flu pandemic, things will be very difficult again.

VISIX in Roesselare, Belgium

VISIX, a company run by Jean Van Houtryve and also based in Belgium, has been affected quite badly because approximately 20% of its turnover derives from stand construction, which is completely at a standstill at the moment as no exhibition cloths or textile frames are being produced. Another 20% is generated from the events sector, i.e. beach flags and tents, but that sector is also down. Fortunately, VISIX started printing face masks at the end of April, which has ensured that the

Read more -->>

company will have a record month in May. It is also starting to supply partitions to schools, in transparent PVC, an alternative to Plexiglas. Plexiglas is a popular product in the market, but transparent PVC can be installed in aluminium frames, which will allow the customer to insert an attractive print once the Covid-19 crisis is over. These types of Plexiglas panels are actually easier to dispose of.
Jean Van Houtryve explained: “We are now constantly working on corona products, including printed masks, partitions, transparent roll-ups, floor stickers, etc., and are also developing a number of other products for use during the summer, e.g. printed beach screens. The Belgian government intends to make it mandatory to make a reservation for the beach this summer in a number of seaside resorts. Our stand builder is developing a reservation system to book a section of the beach in advance, e.g. from 2 till 6 pm, and we will provide printed beach sails to enable people to safely stay within their own bubble.”

What will happen going forward?
Jean Van Houtryve continued: “Covid-19 remains high on the agenda for now. The big marketing budgets are either lost or not currently available. We do have another product though, a so-called star tent. Quite a few people are now teaching keep fit outdoors, something that normally happens indoors. We have developed an enclosed tent for this purpose to motivate people to go outdoors and exercise at a safe distance from one another. There is some activity in the industry, but it all seems very short term and uncertain. Only the face masks were really huge for us. We marketed almost 600,000 of them printed with specific brands within a 3-week period. Moreover, we are continuing to do so in huge numbers. Until a month ago we had very little to do with face masks, but these hug numbers have arrived in double quick time.”

Finally
Most businesses remain positive for now and are trying to make the best of a bad situation. The resilience and innovative spirit throughout the industry is remarkable. We will keep you posted as the situation develops. For more information also refer to other articles in this issue of SignPro Europe. •

Transparent PVC with aluminium frames.

The Visix campaign.

Face masks printed with specific brands.

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