



KNITTING TRADE JOURNAL

January / February 2021

History in the making

Inspiration for modern
knitwear design

Closing the loop

Intarsia production with
toe-closing technology

Next generation

Digitalization developments
in warp knitting

AI detection

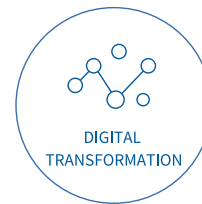
Intelligent inspection
for circular knitters

The technical magazine for the global knitting industry

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NEWS & MEDIA

Our Mission is to REPAIR the Industry's REPUTATION While Saving the PLANET.

The fashion industry is currently struggling to save its reputation—especially in terms of social responsibility. Over-production based on dubious projections due to lengthy lead times results in dead stock and disposal problems. In fact, our industry produces over 16 million tons of waste (as of 2015/EPA). With recently increasing public awareness, it certainly wouldn't hurt to adopt sustainable solutions to deal with this problem proactively. At SHIMA SEIKI, we offer DX solutions that cover the entire knit value chain. Our yarnbank™ digital yarn sourcing web service in particular provides a centralized platform for searching and comparing different yarns from around the world without having to deal with physical swatch books. What's more, digital yarn data can be downloaded and used in producing virtual samples* for making design decisions without the lengthy lead-time and waste associated with physical sampling. So sign up now—after all, it's free—and do your part to help save the reputation of the industry... and the planet while you're at it.



×



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*†Chrome and Edge recommended.
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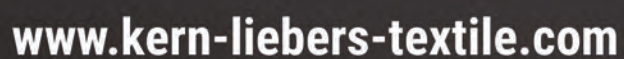
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Variable and volatile

As we enter 2021, the production and trade of knitwear and knitted fabrics in some of the key manufacturing bases across South Asia remains both variable and volatile.

In Pakistan, for example, exports of knitwear and other knitted garments and hosiery grew by nearly 13 per cent in the first four months of the current financial year as the industry continues to show its resilience to the ongoing pandemic.

The latest figures from the Pakistan Bureau of Statistics show that exports totaled 24,425 thousand dozens of knitwear items worth \$1.18 billion between July and October 2020, compared to \$1.05 billion in the same period in the previous year. The figures also show that in total, textile exports were up 3.78 per cent to \$4.79 billion compared to 2019, despite a drop in exports of raw cotton and cotton yarn.

The boosted knitwear figures come as the sector reported recently that it was back up and running to almost full capacity following the almost total shutdown last year, brought about by the coronavirus pandemic.

Industry organisations in Pakistan suggest that the country is faring better than many of its regional competitors

with buyers diverting a number of their orders to Pakistan from China, India and Bangladesh - a knock on effect of the US-China trade war as well as lower production in India which was experiencing a worsening of the Covid-19 crisis.

Bangladesh, on the other hand, is facing a huge drop in the shipment of readymade garments. Declining orders in the face of the pandemic was the biggest factor behind a 14.57 per cent fall in exports from Bangladesh last year with the latest figures revealing that the country's export earnings in 2020 fell to US\$33.60 billion from US\$39.33 billion in the previous year.

The first lockdown caused unprecedented disruption between March and May, when billions of US dollars worth of exports were cancelled or postponed, threatening the country's garment industry which is responsible for more than 80 per cent of exports.

Export earnings began to increase again from June but the second wave of COVID-19 started taking its toll on earnings from October, although exports from July to December were down by only 0.36 per cent on the same period in 2019.

However, the situation appears to be worsening again with RMG exports in December down by nearly ten per cent on the same month in the previous year.

For many in the industry, this has led to fears that, given the uncertainties and stresses caused by the second wave still persist, coupled with the relatively poor administration and unavailability of vaccine, that the downward trend could continue until April.

With so many different factors at play, timescales for a return to normality are, unfortunately, impossible to predict. For 2021, we may have to accept that the watchwords for the sector will be variable and volatile.



Haydn Davis

Editor

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What's hot on knittingtradejournal.com – our most popular online stories

Vietnam knitters facing raw material shortages

Ho Chi Minh - Knitwear manufacturers in Vietnam are reporting increasingly full order books for next year but are struggling to source sufficient raw materials at the right price to meet demand.

Hosiery show adds new AI feature

Brescia - This year's FIMAST exhibition which, as it stands, is scheduled to take place in April in Brescia, Italy, will introduce a new virtual concept aimed at connecting visitors and exhibitors.

Orders dwindle for Bangladesh knitters

Dhaka - Knitted garment manufacturers in Bangladesh are once again facing uncertainty following a raft of postponed orders from European retailers.

ITMA Asia + CITME on track for June 2021 showing

Shanghai – Despite the ongoing global coronavirus pandemic, ITMA Asia + CITME 2020 is continuing to receive the support of exhibitors from 25 countries, including the world's most established knitting machinery brand names.

Preparations for the seventh edition of the joint show are underway as scheduled. Following the completion of the stand allocation exercise, some 1,650 exhibitors have started to receive their certificate of admission and stand details from 14 December 2020.

Mr Ernesto Maurer, President of CEMATEX, explained: "The pandemic might have disrupted the world but

exhibitors are eager to resume their marketing efforts. Therefore, the show has not suffered a significant change in support. While there have been some concerns about international business travel from some quarters, the combined show is still gearing up for a mega showcase."

Mr Wang Shutian, Honorary President of China Textile Machinery Association (CTMA) agreed: "Due to the global epidemic, some overseas participants have adjusted their exhibition plans. Still, we will have the presence of internationally renowned textile machinery manufacturers. Once conditions permit,

we will be embarking on roadshows to promote the exhibition."

ITMA Asia + CITME will take place from 12 to 16 June 2021 at the National Exhibition and Convention Centre (NECC) in Shanghai. It will be held over 6 halls with a gross exhibition space of 170,000 square metres. It is organised by Beijing Textile Machinery International Exhibition Co Ltd and co-organised by ITMA Services. Japan Textile Machinery Association is a special partner of the show.

The last ITMA ASIA + CITME combined show in 2018 welcomed the participation of 1,733 exhibitors from 28 countries and economies and registered a visitorship of over 100,000 from 116 countries and regions.

For more updates, please visit www.itmaasia.com or www.citme.com.cn.

Myant opens new division to support growth in US market

Toronto - Textile computing specialist Myant Inc., which offers a high-tech partnership with German flat knitting machine builder Stoll, has announced the opening of a new business division in the United States to support the growth of its American partnerships.

This new division, Myant USA, will make use of both local expertise in textile design, engineering and manufacturing as well as Myant's interdisciplinary team of experts at its Toronto-based headquarters to better serve its US-based partners.

Myant says that its work in textile computing is enabling a reality where textiles across daily life become bidirectional interfaces to the human body. This enables a new type of connectedness between people and their bodies, their communities, and their environments.

By knitting sensors and actuators into ordinary objects (e.g. your clothes, the seats in your car or home, and other textile surfaces in life), Myant is helping companies across a range of industries radically redefine the value that their products can deliver. For example, an automotive company can now make a car seat with integrated pressure-sensing to measure fatigue, provide feedback to the driver to improve alertness at the wheel, and use actual behavioral data to justify better rates with their insurance company.

An apparel manufacturer, for example, that makes base layers can now use biometric data like ECG to create a new way to optimize performance and monitor the well-being of first responders. This ability to connect to the human body creates a way for more traditional industries to create value and become key players in the digital ecosystem, the company says.

By choosing New York as home for Myant USA, the company says it is now strategically situated in a region that allows more seamless collaboration with partners in the Health, Fitness, Automotive, Defence, Home & Commercial Furnishings industries.

The US facility will be staffed by experts complementing Myant's textile research & development team and allowing the company to expand its scope to include smart textiles for industrial, agricultural, and construction usages. The opening of this new facility also supports the company's efforts to bring more partners on to DTX (www.digitaltextileexchange.com), a cloud-based manufacturing platform that aims to democratize access to textile manufacturing capacity by dynamically connecting manufacturers with idle knitting machines to apparel brands.

Partners leveraging DTX will be better able to access the advanced manufacturing necessary to innovate in textile computing and be better positioned to satisfy local production needs.



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Pakistan exports climb

Islamabad - Pakistan's exports of knitwear and other knitted garments and hosiery grew by nearly 13 per cent in the first four months of the current financial year as the industry continued to show its resilience to the ongoing coronavirus pandemic.

The latest figures from the Pakistan Bureau of Statistics show that exports totaled 24,425 thousand dozens of knitwear items worth US\$1.18 billion between July and October 2020, compared to \$1.05 billion in the same period last year.

Exports of ready made garments from Pakistan were up 4.6 per cent compared

to last year accounting for around 11,378 thousand dozens of ready made garments with a value of \$947.419.

The figures also show that in total, textile exports were up 3.78 per cent to \$4.79 billion compared to 2019, despite a drop in exports of raw cotton and cotton yarn.

The boosted knitwear figures come as the sector reported recently that it was back up and running to almost full capacity following the almost total shutdown earlier this year, brought about by the coronavirus pandemic.

The much-needed growth in textile production has also prompted a

significant leap in cotton and synthetic yarn imports. "The textile industry has revived to pre-Covid-19 level, as precautionary measures to safeguard people from the virus and industry-specific economic measures by the government have helped at length to resume production to full capacity," All Pakistan Textile Mills Association (Apmta) former vice-chairman Asif Inam told *The Express Tribune*, adding some of the textile units which closed down permanently during the crisis had not reopened.

Inam also suggested that Pakistan was faring better than many of its regional competitors with buyers diverting a number of their orders to Pakistan from China, India and Bangladesh. This, he said was a knock on effect of the US-China trade war as well as lower production in India which was experiencing a worsening of the Covid-19 crisis.

"The number of export orders may increase in the time to come with recovery from the pandemic in export countries and regions, including the US and Europe," Inam said. "The industry has also recovered at a fast pace with the government's support in the shape of rationalizing energy prices to a regional competitive level, the continued supply of raw material and subsidized financing for the expansion of production and setting up new units."

"All these were the long pending demands of the industry to become competitive at the regional and international level. We had put such demands in front of several previous governments time and again, but this government has kept its words and delivered to the industry."

Knitting Trade Journal on your mobile device

Wakefield – MCL News & Media has launched its new updated smartphone news app for both Apple and Android devices, to bring the latest industry news on sustainability and innovation to you 24/7 and wherever you are in the world.

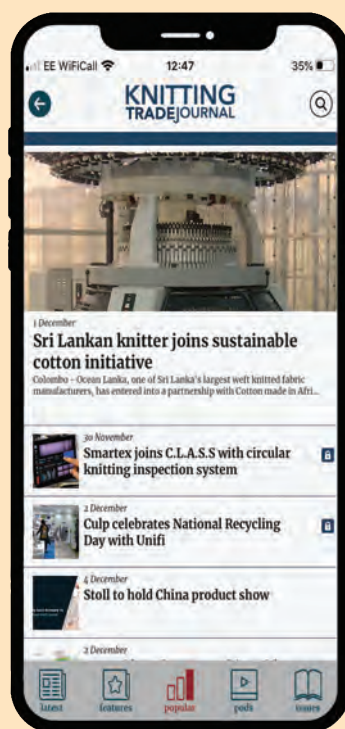
After months of development, the new, free to download, intuitive, and easy-to-use news app not only includes the latest news from Knitting Trade Journal, but also its sister publications Ecotextile News, Textile Evolution and Sustainable Nonwovens. With a clean look and design, users can choose from tens of thousands of breaking and archived news stories from our four websites, search for specific news via keywords and share content via messaging services or social media.

There's lots of free content, although our premium content – including the digital back issue archive – is reserved for subscribers. An added bonus is that if you subscribe to just one of our publications, you get access to all four on the new app to give you a broad, holistic view of what's happening in the global textile industry today.

If you're already signed up to this website, simply go to the relevant iOS or Android app store on your mobile device, search in the store for 'MCL News & Media' (not Ecotextile News), download the new app, and then log in with your unique username and password for this website. You will be able to read and search for news and features based on your subscription or membership package.

Other interactive features of the new app to look out for include an option to see what stories are trending online, bookmarks to save news for offline reading, long-format features, and a separate channel for all our podcasts.

With the importance of breaking news placed sharply in focus this year in particular, the new MCL News app will keep you up to date with our industry wherever you are in the world.



MBO for UK knitwear manufacturer

Fleckney - UK-based knitwear manufacturer, BHM Knitwear, a major supplier to several of the UK's leading retailers and brands, has undergone a management buyout.

Group managing director Ben Littlejohn and sales director Nick Barana led the

buyout supported by industry investors.

Announcing the deal Littlejohn said: "This deal provides a fantastic opportunity for myself, Nick, the investors and the rest of the team at BHM. With a perfect mix of enthusiasm, passion and a wealth of experience, the future of BHM looks incredibly exciting and I'd like to thank all of those involved in helping complete this deal."

BHM Knitwear began life in 1974 as a domestic manufacturer but over recent years has evolved to become a specialist supplier that blends off-shore production with UK-based design and quality control.

Nilit offers pre-dyed nylon fibres

Migdal Haemek - Nylon 6.6 specialist Nilit has introduced Sensil WaterCare as part of its comprehensive Planet Promise textile sustainability commitment.

Sensil WaterCare is pre-dyed so fabric and apparel makers can save 100 per cent of the water, energy, and chemicals involved in the traditional coloration process.

Sensil WaterCare is also said to significantly reduce processing time, water treatment costs, and the risk of pollution to rivers, lakes, and oceans. "Water is the foundation of life and protecting it is a corporate mandate we take very seriously at Nilit," said Ilan Melamed, Nilit General Manager. "Our R&D efforts are focused on developing new Sensil products like WaterCare that support the industry's sustainability goals and respond to growing consumer demands for textiles and apparel that are more responsibly made."

Sensil WaterCare is spun-dyed using environmentally responsible pigments such as charcoal and coffee bean shells, among others, which offer sustainable coloration. Colour is embedded in the yarn as it is produced resulting, says Nilit, in uniform color depth and luster that won't wash out, even at high temperatures. Garments resist fading so they last longer and dyes do not wash out in the laundry.



Crystal knitting facility honoured with EDGE certification

Hong Kong – Crystal International, one of Asia's largest knitwear manufacturers, has received the EDGE international green building certification system award for one of its key knitting facilities in Vietnam.

The award has been made to the Regent Garment Factory Limited, which achieved an EDGE (Excellence in Design for Greater Efficiencies) Building Environmental Certificate, for its newly designed factory building, in recognition of the reduction in energy use, water use and embodied energy in materials to the required standards.

Over the years, Crystal International says it has been putting efforts to promote environmental conservation and taking proactive actions to implement environmentally friendly practices in the factories and headquarters.

"This award represents the first building environmental certificate in Crystal International that recognises its persistent efforts," the company said. "It shows further determination to embrace sustainability in an earlier stage of green building design, which goes beyond the production processes, offices, products or water treatment. By attaining EDGE standard, the new factory building will be able to achieve resource efficiency and improve operational performance. This is a role model case to signify both good practices in sustainability as well as Crystal culture of 'right first time'.

Developed by International Finance Corporation, a member of the World Bank Group, EDGE focuses on the next generation of green building certification in more than 170 countries and includes a cloud-based platform to calculate the cost of going green and utility savings. For obtaining the Level 1 EDGE certification, a green building should earn a minimum of 20 per cent savings in energy, water, and embodied energy in built materials to meet the green building standard.

The new factory building reached 28 per cent in energy savings, 37 per cent in water savings and 44 per cent less embodied energy in materials. The building is still under construction and will be completed next year.

Crystal International received a preliminary certificate at the design stage and will earn the final certification at the post-construction stage. The company said it will also integrate this sustainable design concept to its future building projects, which as well as achieving energy and water savings, also supports the long-term Group sustainability goal for tackling climate change.

Crystal International Group offers a range of product categories across five segments; Lifestyle wear, Denim, Intimate, Sweater, and Sportswear and outdoor apparel. It operates a multi-country manufacturing platform, with around 20 production facilities across Vietnam, China, Cambodia, Bangladesh and Sri Lanka.

Narrow fabric manufacturer to expand

Lenoir - US-based MMI Textiles Inc., a manufacturer of knitted and woven industrial and custom fabrics, has announced a major expansion of its operations.

MMI, which supplies a range of industries including the military, tactical, medical, commercial and apparel sectors will open a 30,000-square-foot production facility in North Carolina to begin producing select narrow fabrics during the first quarter of 2021.

The new facility in Lenoir, NC will be focused on manufacturing and printing narrow fabrics, including a full line of mil-spec webbing and binding tape products.

The main driver behind the new operation is MMI's CTEdge Printed Narrow Fabrics that use patented technology to give the border of webbing and binding tape a more

concealed edge with different colour threads that allow it to blend into the materials behind it. This product line has seen momentous growth over the last few years with sales on a global scale and multiple international distributors, the company said.

"Our new facility reflects MMI's commitment to deliver the best quality products within the best possible lead times," said MMI president and founder Amy Bircher. "In addition to the investment in a new manufacturing facility, new equipment and new personnel, we have aligned with Mikan Printing, our existing print partner, to ensure quality control and timely delivery."

MMI will hire new staff and acquire new equipment in Lenoir to ensure better control of the manufacturing process for this line. The new facility will

house both MMI Textiles' new manufacturing facility and Mikan's print facility under one roof. Mikan is one of the country's most respected and innovative leaders in the textile printing industry.

"We believe this significant investment – especially at a time when businesses around the globe are being challenged as never before – demonstrates our agility as an always-on, end-to-end provider and producer of innovative customer solutions," added Bircher.

The new MMI Textiles manufacturing and print facility will be integrated under one roof to ensure efficiencies and consistencies that are better aligned with the MMI Textile brand promise of unmatched service and innovation. All sales and customer service transactions will continue to be handled through existing channels.

Italian textile technology centre opens in Pakistan

Faisalabad - The Italian textile machinery sector's new technology training centre in Pakistan has officially opened.

Financed by the Italian Government, the project intends to support the development of the local textile industry, by equipping the technology center with Italian machinery that will allow the local textile manufacturers to improve the quality of its products, through ongoing research and innovation. The first machines installed were supplied by companies such as Brongo, Tonello and Triveneta Grandi Impianti.

The inauguration ceremony for the Italy-Pakistan Textile Technology Center (IPTTC) was held in Faisalabad, Pakistan at the National Textile University (NTU). The training center, which is the first of its kind for Italian textile machinery technology in Pakistan, was inaugurated by the Italian Ambassador to Pakistan, Andreas Ferrarese, and by Rizwan Shafi, CEO of Crescent Bahuman Limited. Appearing at the ceremony in a video conference call from Italy was Alessandro Zucchi, the President of ACIMIT, the Association of Italian Textile Machinery Manufacturers, which is a partner in the project along with the PISIE (International Polytechnic for Industrial and Economic Development).

"With the creation of the Italy-Pakistan Textile Technology Center, ACIMIT wishes to strengthen previously existing fruitful relations with the Pakistani textile industry," Zucchi said.

In 2019, the Pakistani market was the sixth largest destination for Italian exports, totaling €80 million, and in the first half of 2020, was the third largest foreign market for Italian machinery manufacturers, just behind Turkey and China.

"I'm certain this initiative will reap benefits in terms of image, not just for the Italian manufacturers that have supplied the machinery, but for the entire Italian sector as well," Zucchi added.

As well as the availability of technology at the facility, ACIMIT and the Italian Trade Agency will also offer seminars for students, professors and representatives of local manufacturers, as well as the training of local personnel by the Italian companies that supplied the center with its machinery, helping them become better acquainted with their technology.

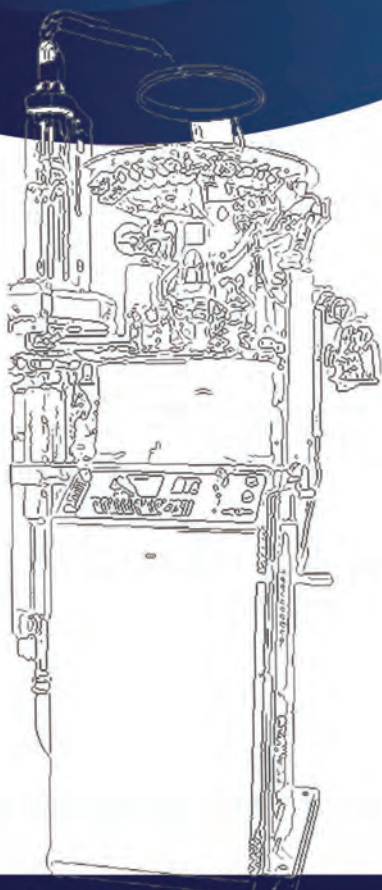




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IFKT proposes new president For North America

North America – The IFKT - International Federation of Knitting Technologists is to expand its activities in Mexico and has proposed long-standing member Hitesh Kumar Sharma as its new president for North America.

Following on from the online General Assembly which took place on 29 October, 2020 Hitesh will be responsible for IFKT national section in Mexico in addition to his handling of the USA and Canadian national sections.

Highlighting HKS's recent innovations, which include the a knitted fabric called H97 Loop Cluster for Covid-19, the IFKT said: "He (Hitesh) has also also taken an active role in cultivating and representing the IFKT while providing timely fashion information to its national members. His long-term vision, technical expertise and industry are relations fueling the federation for further expansion in other countries around the globe."

Embrace new technologies to advance apparel industry

St. Louis - The US fashion and textile industries needs to embrace new technologies that create efficiencies, quality and speed at a viable cost, according to Evolution St. Louis co-founder John Elmuccio.

Speaking at the Product Innovation Apparel NYC (PI Apparel) – an event bringing together industry professionals to discuss the challenges and technologies disrupting the fashion, apparel and footwear industries, Elmuccio shared how he and his business partner, Jon Lewis, have created an industry sector for advanced knitting and manufacturing with the launch of Evolution St. Louis, their high-tech knitting facility in St. Louis, Missouri.

At the event, Elmuccio presented "Made in USA: Building The Supply Chain of the Future to Meet the Needs of the Changing Fashion Industry" to fashion industry professionals interested in learning more about the changing supply chain, sustainability and innovation, disruptive technology and more.

"Even before Covid-19, many brands and retailers were beginning to reimagine their supply chains to respond

to the dynamic shift in consumer buying behaviour and the traction of direct-to-consumer models," Elmuccio said. "The global pandemic has exposed the weaknesses in the global supply chain and accelerated that conversation. By embracing technology in manufacturing, we can build industry sectors that support 'Made in America' as a meaningful business."

Elmuccio told delegates that he recommends shortening the supply chain by locating production in the United States to enable brands and retailers to be more responsive to consumer demand. "We need to reimagine the supply chain and take advantage of new technologies that create efficiencies, quality and speed at a viable cost. Domestic production allows for greater control of intellectual property and the ability to better manage inventory while requiring less travel."

He also shared how he and his business partner, Jon Lewis, have created an industry sector for advanced knitting and manufacturing with the launch of Evolution St. Louis, their high-tech knitting facility in St. Louis, Missouri.

"To allow American brands and retailers to keep pace with emerging trends, we need to embrace the latest technology," Elmuccio said. "Traditional cut-and-sew production is costly because it's one person to each sewing machine. Utilizing flatbed knitting technology, we can have a single technician control 10 machines at Evolution St. Louis."

Other speakers at PI Apparel included leaders from Carhartt, Fashion Institute of Design & Merchandising, L.L.Bean, London College of Fashion, Stanford University, Target, ThirdLove, Under Armour and Walmart.

Evolution St. Louis is a premier high-tech knitting facility using cutting-edge 3D and complete garment seamless knitting technology to create what the company calls, 'the manufacturing facility and supply chain of the future'.



John Elmuccio,
co-founder of
Evolution St. Louis.

Orders dwindle for Bangladesh knitters

Dhaka - Knitted garment manufacturers in Bangladesh are once again facing uncertainty following a raft of postponed orders from European retailers.

As Europe reels from a second wave of coronavirus and the implementation of further lockdowns, retailers have started to ask their knitwear and other garment suppliers to put orders on hold until January or even later in 2021.

However, mindful of the bad press following widespread cancellations when the pandemic first began, retailers are requesting postponements rather than outright cancellations.

During first phase of Covid-19, buyers cancelled orders worth about US\$3.2 billion, according to the

Bangladesh Garment Manufacturers and Exporters Association (BGMEA).

Fazlee Shamim Ehsan, a director of the Bangladesh Knitwear Manufacturers and Exporters Association and owner of Fatullah Apparels, said his buyers had asked him to put 35 per cent of his ongoing work orders on hold in both December and January.

"This is very close to cancellation as the payment will not be made. And it is not clear whether they will reinstate the orders," he told the *Dhaka Tribune*, adding that employers would still have to cover salary and raw material costs for the items that were already in production.

A BGMEA survey of its members showed that a significant number of

knitting mills were reporting a 30 per cent drop in orders.

Back in August, global brands and retailers began reinstating orders for garments as COVID-19 lockdown restrictions were eased, triggering a bounce back by Bangladesh's exports to record levels.

Shipments of readymade garments were responsible for the country's export earnings for July reaching a record US\$3.91 billion, the highest ever figure for a single month.

The rebound in export sales followed six months of negative growth as cancelled and delayed orders triggered by the coronavirus pandemic cost Bangladesh's garment industry, which is responsible for 85 per cent of the country's exports, more than US\$3 billion.



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Kingwhale joins RE100 climate change initiative

Taipei - Vertically integrated circular knitter Kingwhale has become the first mill in the Asia-Pacific region to join the RE100 global initiative, pledging to use 100 per cent renewable electricity by 2040.

The Taiwanese company, which controls its entire production process from fibre spinning to knitting and garment production, says the move is its latest bid for sustainability.

RE100, led by international non-profit

the Climate Group, is a global initiative to mitigate climate change by bringing together hundreds of large and ambitious businesses to switch to renewable electricity.

"The RE100 initiative was the next logical step for us," said James Huang, president of Kingwhale. "We understand quite well that textile production can be very demanding on our natural resources, and that's why we take sustainability very seriously.

"For years Kingwhale has set an example for our industry, showing others it's possible to create great products while minimising waste and energy consumption, and now I hope others will join us in our commitment to 100 per cent renewable electricity."

Kingwhale, a Bluesign system partner and OEKO-TEX Standard 100 certified company, previously developed a new yarn technology - LIT (Low Impact Technology) - to minimise the use of resources and reduce waste.

LIT modifies the molecular structure of polyester which means it needs 60 per cent less water for dye preservation, 15 per cent less dyestuffs to achieve colour, and 22 per cent less electricity for heating and cooling.

Mills encouraged to join new Sri Lanka industrial zone

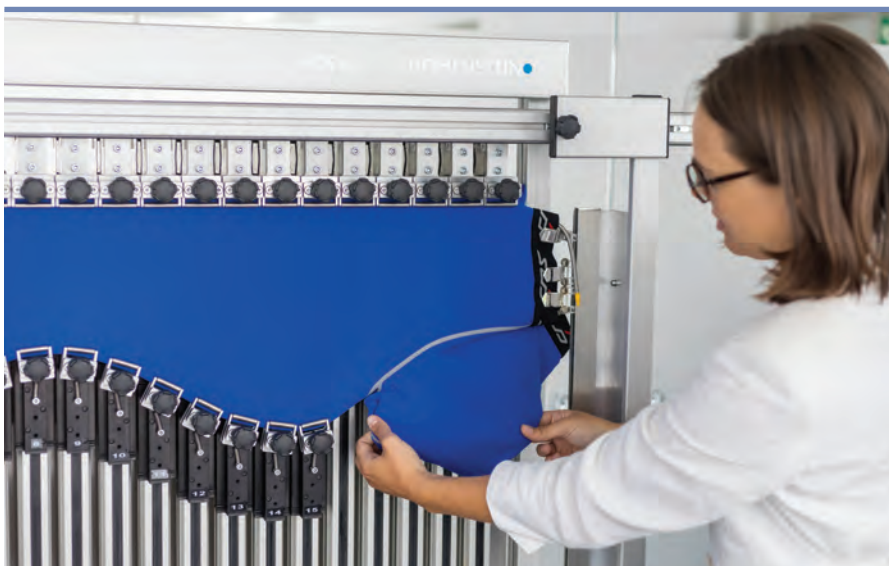
Colombo - Officials in Sri Lanka have approved the creation of a new 275-acre industrial zone focussed on knitted fabric manufacturing and finishing.

The move, which includes investment incentives for knitting mills looking to relocate to the zone, comes as the country's textile industry looks to bounce back from the impact of the Covid-19 enforced industry slowdown.

The new zone will be located in the Eravurpattu, Batticaloa region of Sri Lanka.

Sri Lanka's *Daily FT* reports that the establishment of the processing zone has been a key goal of the country's apparel industry for several years, pointing out that as well as helping in the recovery from the Covid-19-hit industry, it will also help the industry tap into global value supply chain changes and help it weather external uncertainties within the market.

Sri Lanka also hopes to tap increased value-added potential, encouraged by GSP+, and promote backward integration, resulting in the setting up of new industries and creating new employment opportunities.



New compression standard for sports and leisure garments

Bönnigheim - Testing service provider Hohenstein has been working with a number of its brand partners to create a new compression standard for sports and leisure garments. DIN SPEC 4868 is said to be the first uniform standard for compression in the booming sports and leisure segment.

Using the new test, Hohenstein said that claims of textile compression properties can be transparently checked and clearly understood. The DIN SPEC 4868 test method combined with the HOSYcan compression tester will enable the objective comparison of products and materials with analytical performance data on the desired properties.

Florian Girmond, the Hohenstein expert in charge of developing the new standard, is convinced of the opportunities it offers to the entire industry noting: "The objective and precise data obtained with HOSYcan will serve as the basis for innovative product development as well as for quality assurance and competitive comparisons."

In addition to the test scenarios defined in DIN SPEC 4868, HOSYcan can be customized for special requirements for any products, from compression cuffs and socks to shapewear, shirts, underwear and leggings.



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Benetton offers customization with new ecommerce platform

Ponzano - Italian fashion brand Benetton has unveiled a new generation e-commerce platform, which it says, offers a personalized, unique and innovative digital experience for its customers.

Renowned for its knitwear, Benetton's new ecommerce platform encompasses Blend Different, the new concept underpinning the revamped website, which made its debut on 17th December.

Drawing inspiration from the founding values of the brand, Blend Different aims to portray United Colors of Benetton's products in a way that is highly customizable and adaptable to everyone's individual style.

Through innovative tools, such as Shop by Color, Find your Blend and Blend Different – featured respectively on the Home Page, in the product pages and in the women's, men's and children's sections – customers are encouraged to experiment with new garment and colour combinations, playing with the collection to find their own unique, personal match. It all translates into a very contemporary online shopping experience, open to any personality, style and identity.

"The digital ecosystem consists of several touch points, each with its own identity, role and language, intended for a specific target audience; Boomers (Gen X born before 1981), Gen Y (born between 1981 and 1996), Gen Z (born after 1996)," Benetton said. "Thanks to its modular structure, the new Benetton.com site offers the right editorial and commercial content for each user, guaranteeing an increasingly unique and optimised experience based on the behaviour of each target group. Starting with the SS21 Collection, there will no longer be just one Benetton.com but many different versions: the site's appearance will change automatically as a result of new tools that track the user's journey and interests." There will also be articles exploring the history of the brand, pages revealing the inspirations and insights of the latest collections, and product factsheets that will include sections highlighting aspects of sustainability.



Sri Lankan knitter joins sustainable cotton initiative

Colombo - Ocean Lanka, one of Sri Lanka's largest weft knitted fabric manufacturers, has entered into a partnership with Cotton made in Africa (CmiA), one of the world's leading standards for sustainably produced cotton. The recent partnership will see Ocean Lanka further increasing its use of sustainable cotton.

Cotton made in Africa is an initiative of the Aid by Trade Foundation, which operates on the principle that partnering retailers and brands pay a license fee for every product bearing the CmiA label. CmiA then reinvests the licensing revenue towards training smallholder cotton farmers in sub-Saharan Africa, thereby improving their living conditions.

"As of today, over 40 per cent of fabric and yarn we use is already sustainable. The partnership with CmiA will allow us to further increase that proportion, putting us well on our way to reaching at least 75 per cent by 2025," Dr. Austin Au, Managing Director of Ocean Lanka said.

Hanes wins China infringement case

Winston-Salem - Activewear and sock giant HanesBrands has received a favorable judgment from the Nanjing Intermediate People's Court in a trademark infringement case involving its Champion brand in China.

The case involved the production and distribution of counterfeit Champion products and the operation of unauthorized Champion retail outlets by six defendants. The defendants - Hurricane, Chengda, Rainbow Wing, Fuxun, Yunma and Wu Zhanghao - were ordered to immediately cease all infringement of the Champion brand. The defendants were also ordered to pay fines totaling more than \$600,000. "The case marks a significant victory," said Jon Ram, president, global activewear.

Knitting technologists honoured in VDMA student awards

Frankfurt - Innovations in knitting technology were among the recipients of year's awards from the VDMA through its Walter Reiners-Stiftung Foundation.

The foundation, through the VDMA Textile Machinery Association, is actively involved in promoting young engineers and each year offers prizes for the best dissertation, diploma or master's thesis and creativity prizes for bachelor's and semester theses.

Among this year's winners was Harry Lucas of TU Chemnitz, who was awarded a promotion prize in the category master thesis of €3,500 for his work in the development of a new knitting head for jacquard knitted fabrics, enabling a large variety of colours for example, in the production of fan scarfs.

Other prizes were awarded to Philippa Böhnke, ITM Dresden, and Juan Carlos Arañó Romero, ITA Aachen, who were honoured with creativity awards for the cleverest bachelor or project work.

Ms. Böhnke's project dealt with composite implants for the repair and regeneration of bone defects while in his bachelor thesis, Mr. Arañó Romero developed a spinning machine able to produce yarn with material from the moon. By this, the transport effort in space travel can be minimized, because insulating material for example necessary for a moon base can be produced on the moon directly.

The prizes were awarded by the chairman of the Walter Reiners Foundation of the VDMA Textile Machinery Association, Peter D. Dornier.

The next award ceremony will take place in May 2021 at the fair Techtextil in Frankfurt.

Cifra unveils sustainable beachwear concept

Italian Warp knit specialist Cifra has adapted its patented Warp Knit Seamless technology for applications in the beachwear sector which, as well as including a number of new fabric innovations, also offers sustainably produced garments.

According to Cifra, snag-resistant swimwear in 3D Warp Knit Seamless is a game-changer compared to traditional weft knit seamless garments on the market. Moreover, the

technology allows knitters to use sophisticated body mapping technology to play on positive and negative spaces and patterns to enhance the figure with a variety of designs.

WKS warp knit beachwear is described as seamless, snug and quick-drying for total comfort, and has the unique characteristic of being run-proof, a value added supplement to its fashion credentials. "Cifra's new offering re-thinks beachwear and meets current common needs of time and practicality: comfortable and versatile garments, designed to be worn throughout the day also as elegant lingerie bodysuits," the company says.

WKS beachwear concept is also said to adhere to sustainability concepts, a key issue at the heart of Cifra's research and development. The offer includes products knitted both in premium polyamide 6.6 and in pre and post-consumer recycled yarns such as Radici Group's Renycle, a polyamide 6 obtained from production waste, as well as Aquafil's Econyl, made from plastics recovered from the oceans that have then been recycled.

Both are combined with an elastomer which is also recycled. "In the aim of a full sustainability, from the sea and in support of the sea, with a strong emphasis on design and responsible innovation," Cifra said.





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ACIMIT figures show a gloomy quarter for Italy

Milan - Sales of Italian textile machinery dropped again in the third quarter of 2020 although there was a glimmer of optimism for the sector with domestic orders showing an increase of 20 per cent compared to 2019. The latest statistics from ACIMIT, the Association of Italian Textile Machinery Manufacturers, show that overall, the index of orders intake for textile machinery decreased by 26 per cent compared to the same period in 2019. The index value was confirmed at 72.4 points (2015 basis = 100). Orders from foreign markets declined by 31 per cent, with an absolute index value of 68.2 points. However, an increase of 20 per cent was recorded domestically compared to 2019, with an absolute index value of 112.6 points. Announcing the results, Alessandro Zucchi, president of ACIMIT, said the ongoing pandemic had hit the sector hard, since it is traditionally driven by exports - in fact, over 80 per cent of Italian machinery is exported.

Fulgar and Rodia-Solvay partner on anti-viral yarn

Castel Goffredo - Brazilian group Rodia-Solvay has developed a new polyamide yarn with antiviral and antibacterial properties in partnership with Fulgar.

Q-Skin powered by Amni Virus-Bac Off will be produced and distributed in Europe by the Italian man-made fibre specialist

This new development follows Emana, a PA-based yarn with FIR technology that uses human body heat to increase the general well-being of the skin; and the biodegradable PA 6.6, Amni Soul Eco.

Developed in record time in the Rodia-Solvay research laboratories in Paulinia and Santo André in Brazil, the new product was created specifically to provide additional protection amid the lingering threat posed by Covid, and in particular, the return to offices and schools which has created an exponentially rising demand for garments given anti-bacterial and antiviral protection treatments.

Amni Virus-Bac Off inhibits enveloped viruses (influenza, herpes and novel

Coronavirus) and non-enveloped viruses, thereby helping to avoid retransmission from textile surfaces as well as blocking cross-contamination of viruses and bacteria thanks to the antiviral and antibacterial agent incorporated permanently in the polymer matrix.

The electron affinity with the proteins in the external structure of the virus causes this agent to prevent the tissues from becoming a host surface for the spread of harmful viruses and bacteria that are on the tissue itself, thus helping to reduce the risk and speed of contamination.

Q-Skin powered by Amni Virus-Bac Off also offers the same advantages of a standard polyamide in terms of softness, thermal comfort, breathability, ease of maintenance and quick drying. Applications include casual, sports and workwear, socks, shoes and accessories, masks for the community, as well as hospital clothing, children's wear and even seat covers and gloves.

Adidas ramps up sustainable material pledge

Herzogenaurach - From football jerseys to footwear, 2021 will see more than 60 per cent of all Adidas products made with environmentally friendly materials such as recycled polyester and sustainable cotton. The pledge is part of a wider shift by the sportswear giant which includes a

commitment to using only recycled polyester from 2024 onwards and an objective to end plastic waste.

"Sustainability is an integral part of the adidas business philosophy," said adidas CEO Kasper Rorsted. "We have continued to invest in sustainability initiatives during the coronavirus pandemic and we will significantly expand our range of sustainable products in 2021.

"To this end, for example, we have worked with our suppliers to create the structures that make it possible to process recycled materials on a large scale. Not only does our commitment make adidas more sustainable, but it also drives the development of the whole industry."

In addition to the Parley products, Adidas is increasing the amount of recycled materials used in its overall product range with the use of recycled polyester promoted under its 'Primeblue' and 'Primegreen' labels.

Further targets, with a view to achieving global climate neutrality by 2050, include the development of a plant-based leather, a particularly climate-friendly running shoe and the use of recycled cotton.

For the latter, Adidas is working with Finnish start-up Infinite Fiber to develop a process to transform used clothes into a cotton-like material.



Hosiery International

World's first carbon nanotube heated socks

Las Vegas - Clothing tech firm Ororo Heated Apparel has announced a new technology for heated socks in a new Kickstarter campaign.

The new "Redwood" Carbon Nanotube Heated Socks is the first in the world to use ultra-thin u-shaped carbon nanotube heating elements.

The technology in use here allows for instant heating and even heat distribution. The u-shape expands the heated area to be closer to the toes while being barely noticeable when worn. Like Ororo's other heating clothing, the Redwood socks contain UL-certified batteries with up to 10 hours of continuous heat.

The socks also feature an elastic connecting cord with high-level stretchability to keep the cable from deforming while providing extra comfort when walking. With the low resistance value, it reduces heat loss over the cord and extends the run-time for longer-lasting warmth. To prevent overheating and burning, the socks also contain a microchip on the heating elements to precisely control the temperature.

Ororo's co-founder Mark H. explained: "Redwood socks include a precise temperature controller to prevent overheating and also have the market's first ever elastic connecting cable, which offers more comfort and range of motion."

Knitted using Coolmax yarn's moisture-wicking technology, this breathable fabric also pulls sweat away from the skin to keep feet dry and prevent chafing or chilling.

Intarsia technology for technical knitted uppers

Brescia - Italian hosiery machine builder Cesare Colosio has widened the scope of its latest 4-feed knitting machine which, based on intarsia technology, is said to be ideal for the production of technical, sports and fashion shoes.

Colosio describes the S-1M as the 'first circular true argyle machine for the production of seamless uppers'.

"The S-1 represents the evolution of the traditional circular machine; the true argyle gives the possibility to create a seamless upper, with possible different areas according to the type of yarn or colour, ready for the application of the sole," the company says.

The S1M is also said to help eliminate waste and offers high speed manufacturing with a single piece taking between five and seven minutes depending on the pattern. The machine can also create an upper with independent zones, each one composed of one or more yarn types, which can help provide an upper with different characteristics, say in terms of flexibility and resistance, according to the desired final effect.

It also has the ability to offer unlimited patterning possibilities

and colour combinations. During the production process the machine can create three-dimensional areas, eyelets for the laces forming a unique shape with the upper.

The S1 is now equipped with 20 electropneumatic yarn fingers and an extra rubber yarn finger with positive feeder electronically controlled by digital motor. It also has eight groups of actuators for needle by needle selection and has electronic size control for eight different sizes as well as automatic machine resetting in just three seconds.

"The S1M guarantees quality, reliability and is absolutely easy to use, it can minimize the costs and the production times meeting the demands of the international footwear market," Colosio says.

The latest specification machines available from Colosio for the 4 ins model include a range of gauges, 9 - 10 - 11 - 12, and a needle count of 108, 120, 132, 144 and 156 with a maximum knitting speed of 160rpm.

The 4.5 ins model has the same gauge possibilities but with a needle count of 120, 132 or 144.

Busi enhances partnership with DèPio

Botticino - Hosiery machine builder Busi Giovanni is continuing to build its relationship with Italian sock manufacturer DèPio.

"Our businesses proudly located in the same geographical area called Botticino continue their story of friendship and mutual cooperation in order to improve and to grow despite any crisis and any troubles," Paola Baldracchi, Busi's commercial & marketing director explained. "Over such a difficult period we haven't stopped implementing new ideas and realizing novel projects. On the contrary we have deepened our business cooperation and strengthened our relationship."

She continued: "Amazing socks designed and produced by DèPio thanks to their long-lasting expertise as well as endless creativity with a Busi sock-knitting machine which made all that possible. Inspiration has come over when DèPio's designers imagined and then realized a new collection of socks as a tribute to the statue Vittoria Alata, symbol of victory in our territory. Love for our territory, originality, love for beauty, imagination and technical know-how have been blended."

Lycra unveils legwear trend and fashion forecast

London - The Lycra Company has launched its global trends forecast for Autumn/Winter 2021-2022 for the legwear segment.

Each year through an alliance with the trend forecasting experts from Stijlinstituut Amsterdam, Lycra offers its forward-thinking prediction of the cutting-edge trends through a capsule collection that showcases the latest legwear innovations.

"For over 20 years we have been inspiring our customers with our ▶

legwear trends forecast; it's a value-added benefit of working with The Lycra Company that our customers appreciate," said Jane Gwyther, senior strategic account manager – legwear, The Lycra Company. "This year's trends forecast tells a story of creativity, inclusion and possibility. It embraces size diversity and addresses the new generation of shopper's sense of urgency to bring about change in their world.

"Each look features technologies we have developed to satisfy unmet consumer needs in legwear comfort and performance. Innovative trends are now accelerating, convincing us to focus on fibre and technology solutions that are embedded in progressive design. We have identified four key themes that address the hopes and dreams of the modern consume."

Trend 1: Vanity

We can be anyone we want to be, its magic

Focusing on the young, digital natives who are humble, modest and self-effacing, this trend focuses on self-love, how women can be comfortable in their bodies and how legwear can facilitate new ways of self-expression.

A Little Bit of Shine

For the perfect balance between style and functionality, Lycra Fusion True To You technology offers ladder resistant hosiery and a super comfortable, three-dimensional fit that keeps its shape while enhancing the natural shine of the legs.

For the do-all-be-all generation, new Lycra Dry Technology brings all-day comfort to even the most glamorous of legs. Lycra Dry Technology transports moisture away from the skin bringing quick-dry comfort and long-lasting fit so that the wearer can get on with their daily activities.

Diagonal Styling

Bold and eye-catching, diagonal lines create an optical illusion, enhancing our look in real life, just like the filters we use to project an optimised image to the world via digital tools. This look brings a touch of self-expression and fun to an otherwise formal attire. Offering sustainability credentials through the use of Lycra T400 EcoMade technology, and a highly comfortable cuff that stays up with less red marks or digging in, thanks to Lycra Soft Comfort technology.

Trend 2: Homework

Paring classics with retro contemporary style

A trend that aligns a trusted and comfortable classic with something that allows us to show off our style as we open our homes and lives to the world via video calls and the lines between home and work life blur.

Creative Entrepreneur

The creative entrepreneur pushes the boundaries and blends exciting innovations with traditional and classic styles. The WFH generation expects it all.

Comfort, functionality, style and responsibility. Coolmax EcoMade fibre, made from 100% recycled resources combined with Lycra T400 EcoMade fibre, helps people move and perform at their best while feeling reassured that their apparel is not causing harm to the environment.

College Influence

The boundaries between work and leisure are blurring as we juggle a range of activities throughout the day. Fashion merges comfort and respected traditional style as we find solace in classic college and club style dressing. Lycra Shaping technology with Lycra fibre type 962L allows for more flexible sizing and easier donning. It refines the silhouette and sculpts simultaneously, combining shaping performance with exquisite comfort. Perfect for a smart, yet comfortable look.

Trend 3: Softspot

Slow down and return to more holistic forms of well-being

Wellness is the focus where we are encouraged to slow down and return to holistic well-being. Natural tones worn and paired down.

Inside Outside

Multi-taskers need clothing that will adapt to the multitude of activities that they take on each day, whilst being durable, looking good and feeling comfortable. Thermolite FIR technology with spun-in minerals to reflect the body temperature/heat back to the skin helps to keep your legs warmer for longer. Lycra 16AL fibre, helps to achieve deeper saturated colours for an always new look.

Minimal Design

Less is more in design and in nature. Neutral colours and time-defying minimalist design offers flexibility and style durably. Made in part from recycled materials and part from renewable plant-based resources, Lycra T400 EcoMade technology gives new life to plastics once destined for landfills, whilst offering comfort stretch and excellent shape retention.

Calzedonia unveils new sustainable hosiery collection

Verona - Italian hosiery specialist Calzedonia has selected the Iluna Group's Green Label smart laces and nets containing recycled yarns for its new Eco Collection of tights.

The GRS (Global Recycled Standard) and OEKO-TEX Standard 100 certified recycled yarns contain Q-Nova by Fulgar, the environmentally friendly nylon 6.6 fibre produced with regenerated raw materials that meets precise traceability needs and is Global Recycled Standard (GRS) certified; and Roica EF by Asahi Kasei, the premium stretch yarn which, also certified to GRS, is made with 58 per cent of pre-consumer material, and gives superior comfort and a performing fit.

The Eco Collection includes different styles of tights, such as the pictured zebra patterned seamless net made with 85 per cent Q-Nova and 15% Roica EF.

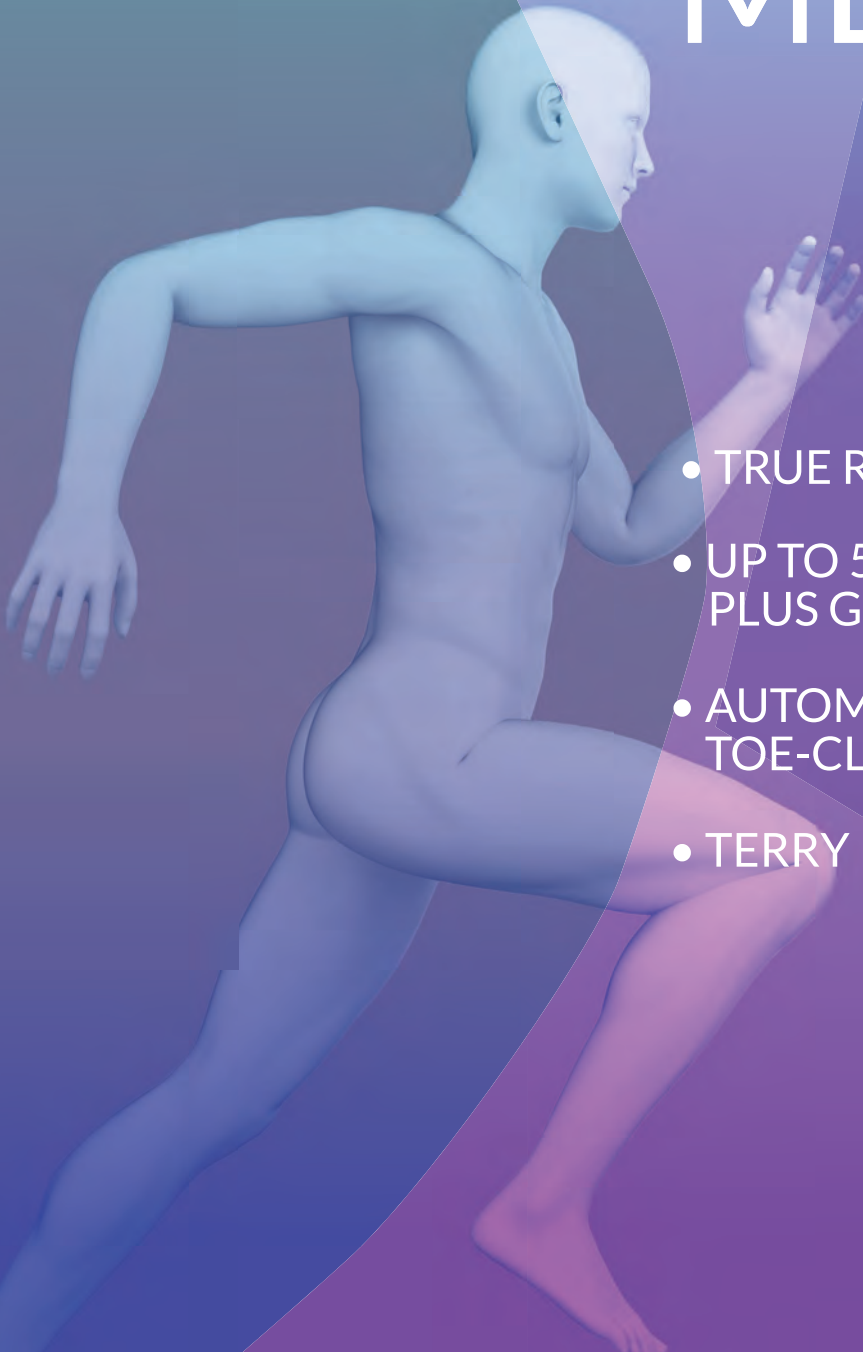
Elsewhere, Calzedonia has also been expanding its presence in the growing US market. Although it operates more than 4,800 stores worldwide, the company has been looking to increase its activity in the US market. Increasing its number of stores across the U.S. from 43 to 49 this year, despite the ongoing coronavirus pandemic, Calzedonia has opened four stores in California and two in Florida. All of the new stores are for the Calzedonia brand, which sells women's legwear and swimwear, and Intimissimi, which sells lingerie.



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Opportunity and challenges for Asia Pacific

The knitting industry across the Asia Pacific region is facing both new opportunities and fresh challenges following the completion of the world's largest free trade agreement.

The signing of the Regional Comprehensive Economic Partnership (RCEP), the world's largest free trade agreement, has brought a mixed response from the textile and apparel industries across the region.

The RCEP is a free trade agreement between the Asia-Pacific nations of Australia, Brunei, Cambodia, China, Indonesia, Japan, Laos, Malaysia, Myanmar, New Zealand, Philippines, Singapore, South Korea, Thailand, and Vietnam.

The agreement is intended to reduce tariffs and red tape and includes unified rules of origin throughout the bloc, which may facilitate international supply chains and trade within the region. It also prohibits certain tariffs, but does not focus on labour unions, environmental protection, or government subsidies. The 15-member countries account for about 30 per cent of the world's population (2.2 billion people) and 30 per cent of global GDP (\$25.8 trillion) as of 2020, making it the biggest trade bloc in history.

It was signed at the virtual ASEAN Summit on 15 November 2020, and will take effect within two years, after it has been ratified by the member countries.

On initial inspection, the region's enormous textile and apparel industry is expected to get a strong boost and form a more closely integrated supply chain across the Asia-Pacific region. In 2016, the RCEP member countries exported \$4.5 billion of textile and apparel products, accounting for more than half of the world's total.

More than 80 per cent of textiles imported by members of the Association of Southeast Asian Nations (ASEAN) came from RCEP members in 2016 in terms of value, and around 81 per cent of apparel imports by ASEAN were also from RCEP members, according to WTO figures.

China's textile industry, for example, is expected to experience a huge boost from the treaty. Chen Jing, vice president of the country's Technology and Strategy Research Institute, told *The Global Times* that cooperation in textiles between China and the emerging economies in Southeast Asia had been huge with China exporting textile products and textile intermediate products to neighbouring countries for years. "The reduced tariffs on these products will benefit Chinese spinners," Chen said. "The elimination of higher trade barriers enabled by the RCEP agreement will strengthen Southeast Asia's textile industry, with more of China's investment flowing there."

Caution

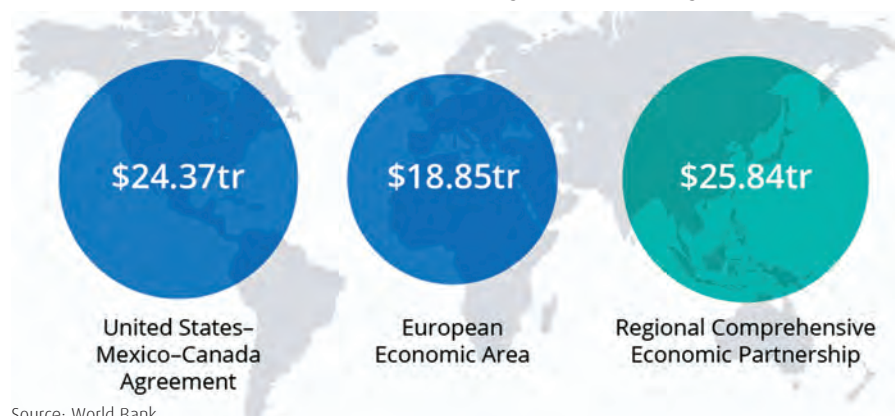
Whilst China's welcoming of the deal is unsurprising, given the scale of its export industry, other countries, including some

RCEP signatories



RCEP: Asia-Pacific forms world's largest trade bloc

Total 2019 GDP of member countries of selected regional free trade agreements



Source: World Bank

not included in the agreement, have sounded a note of caution.

Indonesia, for example, has warned that its textile industry may experience increased competition as a consequence of wider market access and investment opportunities. Concerns have led to calls for the country's government to boost the competitiveness of its investment climate.

In Malaysia, domestic textile producers are also approaching the RCEP with a degree of hesitation.

Almost 60 per cent of Malaysia's trade involves RCEP members and around 56 per cent of Malaysia's exports go towards the countries covered by the RCEP, given that ASEAN's 10 members are Malaysia's top trading partners. Broadly speaking, Malaysia's open trade position will be greatly enhanced by increased market integration, reduced trade barriers and enhanced trade facilitation.

However, while industries such as telecommunications, banking and finance, are expected to widely benefit from enhanced cooperation, the textiles and clothing sector is likely to be impacted by nearby low-cost competitors such as Vietnam.

Taiwan, not a signatory, has also warned of the impact of the trade deal. Officials in Taipei have warned that the country's textile industry, along with the petrochemical and machine tool sectors should brace themselves to bear the brunt of the impact of the RCEP.

Taiwan's Minister of Economic Affairs Wang Mei-hua noted that the industries in question could face fierce competition from neighbouring countries in light of

RCEP facts & figures



the reduced tariffs with China.

According to Lee Chun, deputy director of Taiwan WTO & RTA Center of Chung Hua Institution for Economic Research, the RCEP is an upgraded version of existing free trade agreements among the signatories, and 70 per cent of Taiwan's exports to those nations are already free from tariffs.

Nevertheless, as China, Japan, and South Korea form closer economic ties, he warned that Taiwan may find itself in a weaker position when it looks to maintain a presence in those markets.

Withdrawal

India, meanwhile, a major player in the region's textile sector reaffirmed its commitment to not take part in the agreement.

India dropped out of the RCEP's negotiations in November 2019 after participating in 28 of 31 rounds of talks over a six-year period. Its withdrawal, announced last year, followed concerns that the deal would expose Indian manufacturers to a flood of cheap and mainly Chinese-made imports, an unequal trade flow which Indian officials say would have jeopardized millions of local businesses, industries and jobs.

Although RCEP proponents say it will

RCEP

The RCEP will establish a single goods and services trading market for the Asia-Pacific, representing a significant step forward for free trade in the region. The agreement aims to enhance economic partnerships throughout the region, facilitate regional investment and trade, and subsequently close the development gap among the economies of its member states.

Investors in the region can expect greater trade opportunities due to an increase in goods eligible for tariff reductions, the liberalization of investment and services in member states, enhanced regulatory transparency and coordination, and reduced compliance costs due to improvements in customs procedures. For instance, as the RCEP looks to incentivise companies to build supply chains within the region, one important development will be the creation of common rules of origin for the entire trading bloc. Under the RCEP, a single certificate of origin may be used for every country, rather than companies having to navigate separate criteria for each country or step in the production process.

help signatory nations to emerge faster from the the current economic problems brought about by the coronavirus pandemic, including through greater participation in and access to regional supply chains, Indian political leaders counter that they are protecting domestic interests from cheap and, in China's case, often state-subsidized imports.

They say that no protections against such an unequal trade surge were promised at the RCEP's negotiations; India is believed to have sought an automatic trigger of increasing tariffs at a particular level of imports but other signatories declined to agree.

Analysts say New Delhi will instead look towards a new version of the competing Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) free trade pact, particularly if the US decides to join the agreement outgoing US President Donald Trump scrapped and incoming leader Joe Biden has hinted he would rejoin. **KTJ**

Closing the intarsia loop

Santoni has launched a new version of its XT Machine with toe-closing technology.

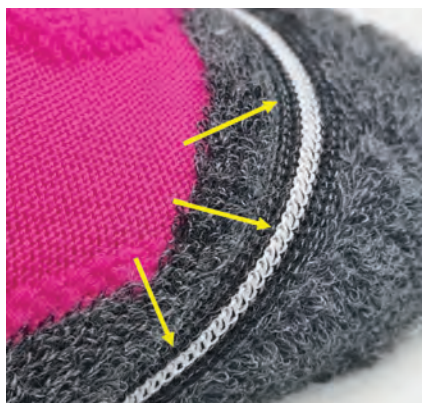
Seamless knitting machine specialist Santoni is continuing with the development of its XT technology with the launch of a new version that is equipped with toe-closing capabilities.

The Brescia, Italy-based firm has unveiled the new XT Machine TC, which is described as a world first; an intarsia machine uniquely equipped with an integral toe-closing device.

Offering an excellent level of quality and pattern definition, the range of the four-feed XT Machine is specifically aimed at the production of Burlington/Intarsia pattern socks that meet the increasingly high demands of the fashion market.



According to Santoni, both sport and technical socks can now benefit from the XT Machine TC which combines Intarsia concepts with the possibility of creating special, technically dedicated areas, and the guarantee of superior performance with ultra high comfort linked toes.



The toe-closing system in use is the Lonati Group's renowned SbyS toe-linking technology, which uses the true linking technique (see above).



The result is an innovative knitted sock in which it is possible to use different yarns in order to meet the desired customization requirements. The different technical features can include:

- compression areas with precisely positioned elastic yarns
- sandwich terry for cushioning and protection effects
- mesh areas for higher ventilation and moisture control

"The XT Machine TC is such a versatile and complete machine that produces exclusive socks whilst meeting Generation 4.0 requirements for higher comfort combined with superior technical performance," said Santoni.

A closer look at the intarsia technique demonstrates how the machine avoids

the formation of continuous tails while knitting two different yarns on the same course.

Image B, within the yellow area shows the passage from a yarn to another.



In image C, the tails appear only at the starting and ending of a new yarn (colour).



The Intarsia technology also allows the use to knit areas of different stitch structures, yarns and stitch density:

- The Pink Area is knitted with 3 x Pink Nylon 78/2 (plain and terry)
- The Dark Grey Area is knitted with 1 Black Lycra + 1 Dark grey Cotton (terry)
- The Light Grey Area is knitted with 1 White Nylon 70/3 + 1 Light Grey Cotton (plain)

- Elastic Band in foot is knitted with 1 White Elastic 130Dtex (laid-in) + 3 x Pink Nylon 78/2 (plain and terry) +
- Terry can be knitted in any area using the appropriate yarn fingers.

Selection is through actuators; each sinker is selected individually and allows the design of any pattern (yellow line). **KTJ**



The Inside Guide to **COTTON & SUSTAINABILITY**

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Flat knitting for life & style

Apparel brand Uniqlo opts for Shima Seiki's WHOLEGARMENT technology as its exhibition showpiece.

Uniqlo made its debut at the annual China International Import Expo (CIIE) with Shima Seiki's WHOLEGARMENT knitting technology acting as a key centerpiece for the Japanese apparel retailer's exhibit.

Held from November 5 to 10 in Shanghai, the event also marked the first time Uniqlo has hosted The Art and Science of LifeWear brand exhibition in China, following similar events in New York, Paris and London in previous years.

Shima Seiki and Fast Retailing have a long-standing partnership with the apparel giant a major exponent of Shima's WHOLEGARMENT technology. The resultant products are characterized by excellent comfort, wear, and drape properties arising from seam-free construction, high added value and a wide variety of designs not offered by conventional products.

The innovative knitwear manufacturing solution from Shima Seiki can also reduce manufacturing lead times and

realize appropriate volume production while also significantly reducing yarn and fabric wastage.

Beneficial

The two companies have mutually a beneficial relationship stretching back a number of years.

In 2017, Uniqlo launched a collection which featured items created with 3D U-Knit, a three-dimensional knitting technique that employs WHOLEGARMENT technology to enhance fit and comfort.

3D U-Knit was developed at the Innovation Factory, which was set up in 2016 as a means of establishing a new production system for the fashion retailer to utilize Shima's latest knit production technologies.

When it was first launched, 3D U-Knit was described as the first stage in the Uniqlo quest to redefine quality knitwear. This was followed with a program that enabled customers to purchase on-demand knitwear such as sweaters and dresses.

WHOLEGARMENT uses the latest knitting machine technology to produce knitwear three-dimensionally in one entire piece, eliminating seams. Since its inception in 1995, the development of WHOLEGARMENT technology, such as the Slide Needle (whereby a slider mechanism replaces the conventional latch, expanding possibilities in knit and transfer, with increased number of knitting techniques, wider gauge range, higher quality fabrics, better efficiency and the ability to support a variety of production methods including shaping, integral knitting and WholeGarment production) means that the overall costs of producing knitwear has come down.

A key advantage of this technology has therefore become its flexibility and speed, empowering designers to perfectly materialize their visions. However, while WHOLEGARMENT has primarily been the domain of knitwear from fashion houses, employing this technology through its close partnership with Shima Seiki has helped Uniqlo increase access to knitwear with unprecedented refinement at affordable prices.

Revolutionary

This recent event marked the first time that Uniqlo has showcased a WHOLEGARMENT machine at an event in China with the booth space demonstrating the art of the revolutionary 3D seamless knitting process.

At 1,500 square metres The Art and Science of LifeWear was the largest exhibition space in the customer goods category of the CIIE.

The space, known as "Museum of Tomorrow," showcased the innovation and technologies behind iconic Uniqlo products, the craftsmanship that goes into creating high-quality clothing, sustainability initiatives, as well as the first public exhibition of the upcoming +J collection in collaboration with designer Jil Sander.



The Uniqlo exhibit at the CIIE Lifewear show.



UNIQLO

Uniqlo is a global brand with more than 2,200 stores in 25 markets.

On show was the world's largest Ultra Light Down which was hanging in mid-air.

"LifeWear is characterized by apparel that comes from the Japanese values of simplicity, quality and longevity," the company said. "Designed to be of the time and for the time, LifeWear is made with a modern elegance that it becomes the building blocks of each individual's style. A perfect shirt that is always being made more perfect. The simplest design hiding the most thoughtful and modern details. The best in fit and fabric made to be affordable and accessible to all. LifeWear is clothing that is constantly being innovated, bringing more warmth, more lightness, better design, and better comfort to people's lives."

The actual Ultra Light Down jackets sold at Uniqlo feature a fabric made of a durable and light ultrafine fibre that is treated to eliminate down packs, combining warmth and lightness while being compact enough to easily fold into an accompanying pouch.

Showcasing Uniqlo's innerwear offerings, the Museum of Tomorrow also featured three experiments to demonstrate how the various functions of AIRism regulate the air under clothing, releasing heat and humidity to provide a comfy dryness. Another station highlighted the bio-warming technology found in Heattech innerwear.

Additionally, for the Double 11, or Singles' Day Sales, the world's largest online shopping festival, Uniqlo demonstrated its seamless online-offline integration by inviting customers to visit the Museum of Tomorrow through a simultaneous online exhibition on the Uniqlo Digital Flagship Store.

"Uniqlo is pleased to have introduced The Art and Science of LifeWear and its product and services innovations to consumers in China, and around the world, through the CIIE platform," explained Jalin Wu, group executive officer of Fast Retailing and chief marketing officer of Uniqlo Greater

China. "We hope that with our participation we could inspire a better future life, and new lifestyles, for people everywhere. Uniqlo is full of confidence about the Chinese market and consumers going forward, and the company plans to continue to deepen its roots into low tiered cities in China."

The exhibit also featured a Blocktech lab, where experiments clearly demonstrated the high-tech utility outer's windproof, waterproof and breathable functions, which provide comfortable protection against the cold.

In addition, Uniqlo's global sustainable development and innovation efforts, which use the power of clothing to help protect the earth and care for people and communities, were also on display.

CIIE also marked the world debut of BlueCycle, a rebranding of innovative Uniqlo water-saving technology that allows for significantly less water use in the jeans production process. **KTJ**

The Uniqlo brand is operated by Fast Retailing Co., Ltd., a major Japanese retail holding company with global headquarters in Tokyo, Japan. Uniqlo is the largest of eight brands in the Fast Retailing Group, the others being GU, Theory, Helmut Lang, PLST (Plus T), Comptoir des Cotonniers, Princesse tam.tam and J Brand. With global sales of approximately 2.0088 trillion yen for the 2020 fiscal year ending August 2020 (US \$19.06 billion, calculated in yen using the end of August 2020 rate), Fast Retailing is one of the world's largest apparel retail companies, and Uniqlo is Japan's leading speciality retailer. Uniqlo also continues to open large-scale stores in some of the world's most important cities and locations, as part of its ongoing efforts to solidify its status as a global brand. Today the company has more than 2,200 stores in 25 markets.



WHOLEGARMENT uses the latest knitting machine technology to produce knitwear three-dimensionally in one entire piece.

Staying one foot ahead

Carol Bielak, head of design at luxury UK sock manufacturer Pantherella, tells the UKFT's Manufacturing Heroes campaign how an understanding of knitting machinery, yarns and the full production process, as well as a good understanding of the worldwide customer base, is crucial in today's increasingly competitive sock sector.

As head of design at Pantherella, Carol Bielak combines her extensive knowledge of yarns and knitting machinery and a flair for colour to develop a premium 'made in England' sock collection that is sold all around the world.

Carol started her career working for hosiery manufacturers including Byford Hosiery Corah and Crowther Hosiery, before joining premium sock brand Pantherella in 1988.

Pantherella has been making socks in Leicester since 1937 and the family-owned firm uses a combination of modern machinery and traditional techniques. Each pair of socks is hand-finished to ensure they meet the highest quality standards, with features such as fine-linked toe seams for extra comfort and reinforced heels and toes for added durability.

Carol's role requires knowledge of the machinery, yarns and the full production process, as well as a good understanding of the worldwide customer base.



Carol Bielak.

"Before you can design a pattern you need to know what type of stitch and fabric can be produced for example, ribs, textures, flat knits or jacquards," she says. "You need to know how many yarn feeds are available to use, which determines how many colours can be used to create your design.

"You also need knowledge of yarn types and counts that can be used on each machine gauge, as well as the properties and composition of yarn to determine its suitability for the finishing

process and wash care instructions for the end consumer.

"Finally, you need to know who your customer base is and who you are designing for, taking into consideration age, lifestyle and current trends to be able to design a well-balanced collection to suit all tastes for the worldwide markets that the brand is sold into."

One of the main things Carol thinks you need in her role is a good sense of colour – knowing what colour combinations work well together and what type and count of yarn is required for the product range you are designing.

"You need to be able to envisage a design and pattern that will be suitable for a sock, bearing in mind the size and scale required," she says.

"It's always great to receive praise for you work but you also have to be able to take criticism, as long as it's constructive and helpful."

The starting process for any collection will see Carol researching trends and producing mood boards, then she will begin sourcing yarns and meeting with yarn agents/suppliers either in house or attending international yarn fairs.

She will review and update core yarn colour palettes, then spend time designing on a CAD system or producing technical graphs for patterns. She will liaise with the design technicians on their daily work schedule and producing colourways for patterns, once the design has been knitted down and approved.

She'll also liaise with the production team, marketing, sales and sample department and produce documents that outline exactly how each sock is made, with details of the machine,



colour and yarn, pattern and style numbers, finishing routes, compositions and get-up information.

She will also attend meetings and give presentations to both internal departments or agents for sales meetings and line launches. "One of my favourite parts of the role is that I have had the opportunity to travel in the UK, Europe and the USA for retail investigation, visiting customers, attending trade exhibitions and yarn fairs.

"One of my favourite trips over the years has been attending Pitti Filati in Florence, meeting with yarn agents and spinners, as well as seeing all the beautiful yarn collections.

"I also enjoy seeing the first sock knitted down of a new design and then preparing the various colour options, especially if we are using a new yarn and colour palette. I also get huge satisfaction when I see my designs and colours in store, which gives me a real 'buzz'," she says.

In her years with the company, she has seen technology change dramatically, with new machinery and computer aided design (CAD) software.

"The process of creating a pattern and design prototype is probably the biggest change that I have experienced," she says. "This new technology has enabled me to design and offer diversity in our collections but still retain the quality we are known for by using premium yarns."

One of the biggest challenges Carol has faced over the years is finding beautiful and interesting yarns in a suitable count that can be used on sock machinery.

It is also challenging to design a collection for worldwide markets to suit everyone's taste.

However, she is motivated by trying to improve the collection each season, offering different types of patterns and stitches while working within the limitations of the machinery.

For someone looking to follow in her footsteps, Carol says: "Always listen and try to take on board what people want or require, whether it be sales, agents or the customer but always have the conviction and belief in your own ideas and creativity to offer a balanced collection for everyone.

"You also have to remember that what



you design or may want to design in a sample prototype can be replicated in production on plant machinery."

Justin Hall, the managing director of Pantherella and fifth generation sock maker in his family, says these skills take years to acquire.

"There's a lot of know-how with regards to using natural materials and natural fibres. We use the best quality materials in the world, which we have done for generations and we continue to do so. It takes many years to build up the experience to be able to work our premium like cashmere and Chinese silk yarns and know how to get the best out of them."

Carol also pays particular attention to international fashion trends and seasonal colours to help produce new collections every season.

"Each pair of socks has been passed through dozens of pairs of hands to ensure that every pair of Pantherella socks leaves with the Pantherella stamp of approval," she says. "This has been essential in growing the Pantherella name as the number one sock maker." **K TJ**

Stoll unveils latest flat knitting technology

Karl Mayer opened the doors of its Changzhou facility to showcase the latest developments from Stoll, the first time the flat knitting specialist has been showcased in the country as a part of the Karl Mayer Group.

The first presentation of the Stoll brand at an in-house Karl Mayer product show ended in great success on December 19 after a three-day run.

In China, the current infection development allows face-to-face events again and as such, around 380 visitors from 170 companies took advantage of the opportunity to meet on site.

Most of them travelled to Karl Mayer (China) in Changzhou from the Great Shanghai area, and a few others came from the north of China, despite the exceptionally cold winter weather.

Many of the guests arrived, intrigued with the question of how the Stoll flat knitting machine business will continue after the acquisition by Karl Mayer, and

left, says the company, with increased confidence. "The first impression was great. Our high-tech production in Changzhou with the group-wide high quality standards, the excellent operational management, the just established Stoll development, our expertise, all this left a very good impression on our customers," said Liu Xuran, chief of Sales & Product of the Stoll Business Unit.

As previously reported, the Stoll brand will continue to operate independently as part of Karl Mayer with the same contacts but with the support of the strong group of companies which, says the warp knitting machine builder, will guarantee customers successful business more than ever before.

An exclusive selection of the innovations, which, the company says will continue to ensure full order books in the flat knitting sector, was on show in Changzhou. All the machines exhibited impressed with their excellent price/performance ratio and various automation solutions.

The machines on show were also the subject of numerous concrete investment inquiries and project discussions with Area Sales Manager Thomas Streicher and Simon Ma from regional partner Chemtax expressing their satisfaction with the feedback and the sales successes. "Some customers came twice to check the performance of the machines," said Streicher.

A highlight of the machine show in Changzhou was the topic of knit & wear. In the seamless knitting of sweaters, eliminating almost all downstream finishing processes, Stoll says it is setting standards in terms of patterning possibilities and price/performance, as demonstrated by the ADF 830-24 ki W knit & wear and CMS 830 ki knit & wear.

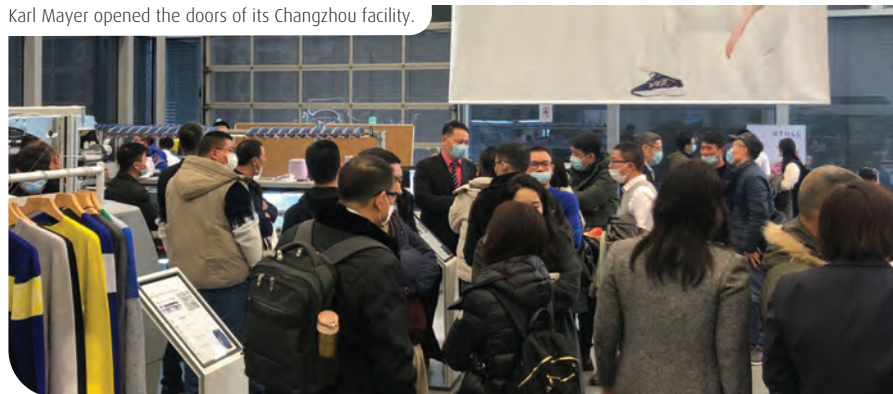
The ADF model is designed for the high-level market segment and implements innovative fashion patterns with inverse plating and Intarsia among other things, which cannot be easily copied. With its production versatility and flexibility, the machine particularly impressed the brand manufacturers from the high-end segment in Changzhou.

The CMS-version, meanwhile, is targeted at the basic-level volume market and scores with an extremely good price/performance ratio. This model was on show in a new gauge E 10.2 which, on the CMS 830 ki knit & wear model, will allow customers to

The Karl Mayer Changzhou facility.



Karl Mayer opened the doors of its Changzhou facility.



participate in the lucrative but highly competitive market of fine knit & and wear articles.

As a further contribution to automation, an ADF machine with a knitrobotic-kit was presented for the first time in Asia. The robotic functions make it possible to integrate materials and parts into the knitted product without manual intervention. As an example, an everyday mask was produced during the in-house show, with the nose bracket inserted fully automatically.

Patterning

Stoll has also launched its latest generation patterning software.

Connective Pattern Software, known as CPS, is described as easy to learn and contains a wide range of spectacular features with the aim of shortening and simplifying development times, sample creations and modifications which speeds up programming significantly.

Unveiling the new system, Stoll said: "You will enter a new world of patterning creation and programming where your pattern software not only follows your orders – it automatically supports you and avoids double work (your data input will be copied into relevant modules).

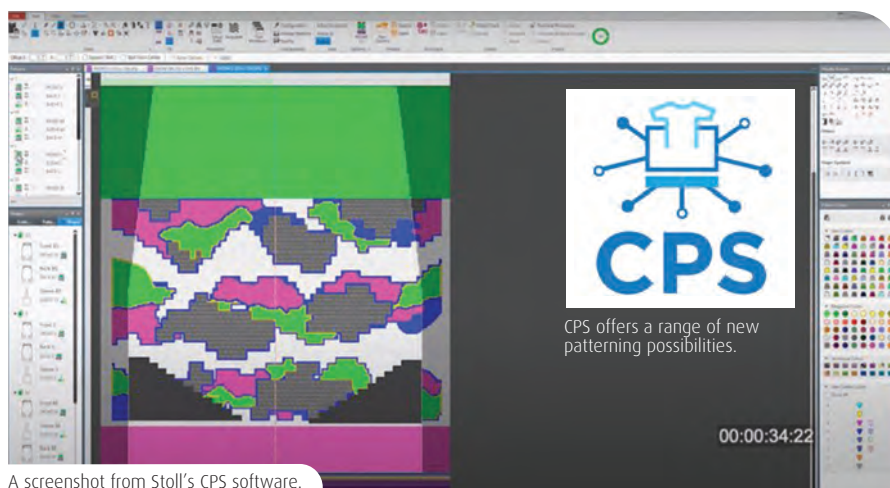
In terms of project management, the new CPS software ensures that all parameters, modules and settings are valid for all patterns of the project being worked on while knitting sequences are also created automatically. Other features include:

Simultaneously Fabric-View With Yarn Distortion

- Parallel fabric-view for permanent control
- The fabric-view will be changed simultaneously
- The fabric-view is automatically updated
- Fabric-view as preview
- Fabric-view after technical processing with stitch distortion

Grading System Included

- New Dimensioned Shape Project
- The upgraded GKS (Grading for Knitting System) is fully integrated in the CPS).
- No extra software needed



A screenshot from Stoll's CPS software.

- No additional licenses
- Time saving by creating shapes mainly at grading processes (creating sizes)

Modul-Explorer With Flat Modules

- All the modules are flat modules, technique modules as well
- All the modules are local modules. They belong to the pattern
- All the modules are containing the 1x1-technique
- Easy and fast editing
- Easy to handle Module Explorer with preview and search function

Different Views Simultaneously

- Different views in one surface
- Basic Symbol View
- Expanded Symbol View
- Expanded Fabric View
- Graphical Shape View
- Line Shape View

Project Management

- One Project – Many Patterns
- One Project – Many Shapes
- Technical processing, Sintral, MC-program for all patterns by one click
- Knitting sequences are created automatically **KTJ**

Karl Mayer integrates Stoll North America

Following this year's acquisition of Stoll by the Karl Mayer Group, the flat knitting and warp knitting manufacturers' North American activities are to be integrated, a move which will see a significant expansion of Karl Mayer's facility in North Carolina. The move will see Stoll America's operation in New York City closed and resources and activities integrated into Karl Mayer's Greensboro, North Carolina location. This process started in October 2020 and will be completed at the end of the year. The Stoll core team in its new location will include business and technical management, textile design and product development, Stoll machine programming, and customer service. Some team members will relocate from New York and others will be new.

The team's focus will be twofold. As well as continuing to serve the needs of the Stoll machine market with innovative machines, spare parts and technical service, they will also provide innovation support services to customers, brands, incubators, startups and educational institutions. These support services include textile product design and development, sample, prototype and small collection production and training. For these new activities, Karl Mayer is making a major investment in the Greensboro building, adding a state-of-the-art textile development and visitor centre.

The centre will have customer collaboration and training areas with end-product samples, Stoll machines for demonstration, training and production purposes, and a prototype finishing and assembly operation.

The new center will offer similar collaboration opportunities for industry partners working with other Karl Mayer technologies and is expected to be completed in March 2021.

FutureStitch sets new eco-standard for circular knitting

FutureStitch aims to create premium knitted products through a business model that promotes social and environmental consciousness.

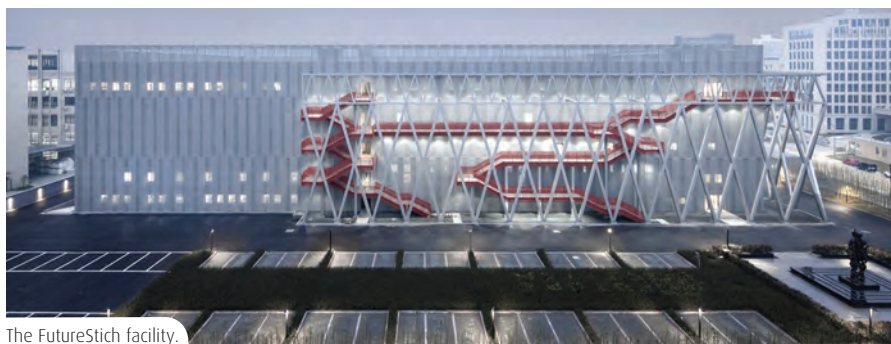
California-based FutureStitch has announced that its state-of-the-art circular knitting facility in China has received the U.S. Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) Platinum certification – the USGBC's highest LEED designation and the highest score amongst sock and knitwear manufacturers in the world.

Renowned for its use of the latest circular-knitting technology and its subsequent material innovation, FutureStitch, which was founded by Taylor Shupe and Peter Shi, says its main purpose is to create premium knitted products through a business model that promotes social and environmental consciousness. "Since our founding, FutureStitch has had an equal focus on producing high-quality products and raising global manufacturing standards," said co-founder and CEO, Taylor Shupe. "Addressing society's most pressing issues – such as combatting climate change and providing meaningful employment with living wages – should be a primary goal for all manufacturing companies.

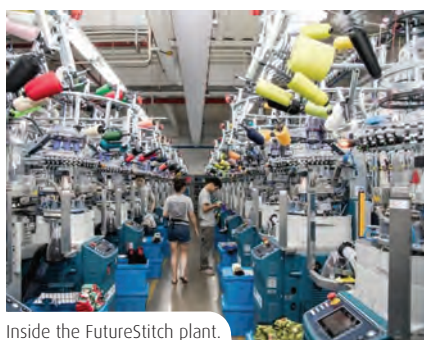
"Our Platinum LEED certification demonstrates that it is possible for any manufacturer to move beyond aspiration and take action to create a workplace that both engages employees and reduces its impact on the environment. We have set a new global standard for textile manufacturing, and we will continue to pioneer innovative, socially and environmentally responsible approaches as we look to build our first U.S.-based factory."

FutureStitch says it is the first US-based manufacturer in China to receive the certification, which recognizes a healthier, more energy and resource-efficient building.

The 300,000-square-foot facility near Shanghai, in China's Zhejiang Province,



The FutureStitch facility.



Inside the FutureStitch plant.

opened in October 2018. Through a combination of high-quality technicians, advanced software and industry-leading machinery, the operation delivers speed-to-market and competitive pricing for its customers. Designed by world-renowned architect Zhang Lei, FutureStitch's state-of-the-art facility is SA8000 compliant – the world's leading social performance certification program focused on worker well-being and includes a library, basketball court, gym and art gallery.

The facility's low environmental impact features include:

- **Low Impact Construction:** the factory was built using a fraction of the concrete typically used to build manufacturing facilities, and, instead, is constructed with recycled, ultra-durable metals like aluminum alloys and steel.
- **Low Power Usage:** 500,000 kilowatts (kWh) of power is saved annually through the use of efficient lighting, on-site solar heating, and maximized access

to natural lighting, reducing annual carbon dioxide emissions by 498.5 tons.

- **Geothermal HVAC:** a geothermal air conditioning system pumps cooled groundwater through the building, reducing energy costs and eliminating the need to use any ozone-depleting substances.
- **Air Quality:** fresh air is circulated throughout the factory, including the production workshops, to reduce carbon dioxide and volatile organic compound (VOC) emissions.
- **Low Water Usage:** state-of-the-art chemical injection systems alleviate need for waste water. Products are finished using a dry-cleaning method instead of wet processes.

"Greatness is in the details, and year over year, that's where we find opportunities to innovate," Shupe added. "We put a lot of care and attention into everything we do at FutureStitch; big and small. The LEED Platinum certification is a major milestone for our brand and it puts us on the path to becoming a top innovative manufacturer—not only in China but throughout the world."

With offices in San Clemente, California, and Haining, China, FutureStitch has a brand portfolio that includes Stance China, InStitches Inc., Boosocki, FreshMD, and Golden Willow. It is also the contract manufacturer of Stance socks. [KTJ](#)



Gildan: innovation's role in the Covid-19 fight

Gildan Activewear's Innovation Centre enables it to use its advanced tools and procedures to enhance its overall innovation process.

As the Covid-19 pandemic began to spread in 2020, Gildan Activewear joined international efforts to produce personal protective equipment (PPE). Key to this response was the company's Innovation Centre which, strategically located inside its manufacturing complex in Honduras, meant it was able to leverage its product-development process to help with this important initiative.

To learn more about this special facility and the role it played in the company's PPE production efforts, Gildan's Israel Salinas, VP of Global Product Management & Innovation, explains further:

Can you explain what Gildan's Innovation Centre is and why it's important for the company?

Israel Salinas: Product innovation has been in place for many years at Gildan, and we have a skilled technical team responsible for carrying it out. This team has experience in areas such as fabric, apparel, hosiery, colour, chemistry, and engineering, among others. Their main role is to design, develop, improve, and assess new product opportunities. By bringing together these capabilities, we can develop and test products, as well as their performance characteristics, under controlled conditions using advanced technologies and testing methods.

Just recently, we expanded our Innovation Centre to further support our chemical, textile, and colour development capabilities and help make our products more sustainable, fashionable, and cost-effective. With the support of this centre, we can perform an effective product launch from concept to scale, ensure quality consistency, and create a meaningful value proposition for our customers.



Israel Salinas, Gildan VP of Global Product Management & Innovation.

How did the Innovation Centre help Gildan prepare for manufacturing PPE?

IS: We wanted to support efforts to mitigate the worldwide shortage of PPE, so our team had to quickly start learning more about PPE production so that we could get a better grasp of what was needed to begin manufacturing. Fortunately, our Innovation Centre is well-equipped to facilitate the design and development of new products, and that helped us develop and test PPE in a short period of time.

Beyond this, the centre was also an essential component to creating PPE that could provide customers with protection while harnessing a design scheme that wouldn't disrupt our traditional textile manufacturing processes.

In what ways would the absence of the Innovation Centre have impacted the PPE production process?

IS: Without the Innovation Centre, it would have taken us much longer to design and start producing PPE. Our overall capabilities combined with the team's talent, their outstanding investigation efforts, the tools and processes

we had access to, and the proximity of the centre to our manufacturing facilities, allowed us to complete the design and implementation of our PPE under a very short timeframe.

What are some of the most important lessons you've learned about the Innovation Centre following COVID-19?

IS: First and foremost, the Innovation Centre team demonstrated exceptional commitment and resilience during this entire process.

More generally, this effort gave us the opportunity to use the advanced tools and procedures we've been implementing as part of our overall innovation process. We were also able to learn about the value that comes with investing in innovative tools, processes, and human resources, which proved to be exceptionally beneficial to our productivity by driving speed to market, delivering consistent quality, and providing flexibility to changing customer requests. It also shows that our business model and the investments we make in innovation allow us to be more resilient during challenging circumstances.

What do you hope or envision for the future of the Innovation Centre?

IS: Our vision for the future of this centre is a multifaceted one: We hope to establish and drive a culture of continuous improvement; strengthen our operational execution from concept to scale; allocate resources to build stronger innovation and technical teams, which may lead to further innovations; and drive sustainable initiatives that positively impact our environment, customers and communities. **KTJ**

Mayer & Cie benefits from European re-shoring

Mayer & Cie is experiencing a strong performance from its key Turkish market.

Mayer & Cie has welcomed a strong performance in its key Turkish market in recent months with Relanit single jersey and interlock knitting machines showing particularly high demand as manufacturers continue to transfer their production locations closer to Europe.

Despite 2020 being marked by the spread of the coronavirus pandemic, the country continues to be one of the Albstadt, Germany-based firm's strongest and most consistent sales markets. Even in difficult years, the manufacturer and its longstanding Turkish representative Mayer Mümessillik have achieved positive results.

As well as the transfer of production

to locations close to Europe, fabric manufacturers are also attracted by Turkey's state-of-the-art machine parks and the increase in demand for comfortable clothing that is suitable as home office wear.

"Compared to 2019, we anticipate a growth in the Turkish market even though the corona situation was a serious setback in the second quarter of 2020," explains Stefan Bühler, Mayer & Cie's regional sales manager for Turkey, adding that Mayer & Cie got off to a strong start on the Bosphorus in the first quarter of 2020 with additional positive effects until mid-March. This was due, says Bühler to a desire for production locations close to Europe.

In the second quarter, during the lockdown, demand largely ground to a halt although Government measures helped to cushion the downturn. "In the second quarter, GDP was down by about 10 per cent, so we got off lightly," noted Ahmet M. Öğretmen, general manager of MCT's Turkish sales partner Mayer Mümessillik.

Since July 2020, orders for Mayer & Cie circular knitting machines have now bounced back with Öğretmen seeing an interplay of reasons for this recovery. The main reason, he says, is the low exchange rate of the Turkish lira, which has boosted exports of ready-made textiles.

With reference to the Turkish state news agency, Turkish daily *Hürriyet*



The Relanit 3.2 HS.

recently reported, 11 per cent year-on-year growth in August 2020. The most important export markets, the newspaper says, are Germany, the UK and Spain who between them account for around half of exports totaling 1.27 billion. "This demand must be fulfilled," Öğretmen says. "That leads to investment in machinery by manufacturers."

Technology

The long-established German firm's share of the Turkish market is substantially higher than in other markets. The manufacturer's position is particularly strong in the market for plain single jersey fabrics, with the Relanit 3.2 HS being the machine of choice. It achieves an extraordinarily high level of productivity, especially in processing elastomer yarns. It also handles a wide range of yarns reliably.

"Mayer & Cie. is the clear leader in the second major circular knitting discipline, rib and interlock fabrics; Interlock is Mayer & Cie.," says Öğretmen, noting that the machines mostly used for double jersey fabrics are the OV 3.2 QCe, the D4 2.2 II and the D4 3.2 II.

The OV 3.2 QCe knits interlock, 8-lock structures, spacers and fine gauge with 3.2 systems. The D4 2.2 II is another stalwart for rib, 8-lock and interlock. The 8-lock D4 3.2 II is the machine of choice for firms that want to manufacture structures such as Piqué, Punto di Roma or Thermal in addition to interlock.

The MBF 3.2 is another leading seller in Turkey. A three-thread fleece machine, it knits fabrics for sports and leisurewear

Machine Head of the D4 2.2 II.



Detailed view of the MBF 3.2.

such as hoodies and is very much in keeping with the trend in home office year 2020.

"Comfortable clothing is circular knitted," Öğretmen adds, "and we benefit from that of course."

A further advantage, a key factor in attracting increased investment, is the modernity of the Turkish machine parks, which is doubly attractive in view of Turkey's weak currency. "In the past 10

to 20 years there has been very heavy investment in high-quality machines," Öğretmen says. "As a consequence we have the world's youngest and most up-to-date production facilities."

Combined with geographical proximity to the main export markets in Europe that should prove a growth driver in the years ahead – and keep demand for Mayer & Cie machines brisk and high, the company says. [KTJ](#)

Mayer & Cie is celebrating a circular knitting milestone with the production and delivery of its 77,777th machine.

The machine in question is a best selling Relanit 3.2 HS and is currently packed and for shipping to one of the German firm's Turkish customers, Torman Tekstil, which is based in Istanbul.

"The Mayer & Cie. top seller is loaded onto pallets, lashed and secured, and packed in gleaming silver-coloured foil," Mayer & Cie said.

"Nothing out of the ordinary – except for the sheet of white paper marked 77777 revealing what is special about this consignment. The Relanit 3.2 HS is the 77,777th circular knitting machine that Mayer & Cie. has manufactured in over 80 years of circular knitting machine production. Circular knitting machines with a serial number consisting of five identical digits are not something that the Albstadt-based manufacturer ships to customers regularly. After all, 11,111 single or double jersey machines, electronic or mechanical, are manufactured between each schnapps number. Based on an average annual output of 1,200 machines, that corresponds to a period of nine and a half years. So a Mayer & Cie. circular knitting machine with a schnapps number is far less frequent than a lunar eclipse. Statistically speaking, a lunar eclipse can be seen in Albstadt four times per decade."

The machine type with this special number is, in contrast, much more frequent. The Relanit 3.2 HS is one of Mayer & Cie.'s best-selling circular knitting machines, highly sought in the global market for its reliability and productivity, especially in processing cotton and elastomer yarns. This high-performance machine is described as one of the most productive in the market, the company says, and is suitable for a variety of uses, but especially for knitting any kind of single jersey outerwear.

Intelligent inspection for circular knitters

An automated fabric inspection system which makes use of artificial intelligence is said to significantly reduce defective fabric production on circular knitting machines.

A new advanced camera vision system for circular knitting machines is said to reduce defective fabric production to close to zero.

The Smartex-V1 system is said to detect a range of different issues including elastane faults, yarn thickness, holes and needle defects.

According to Smartex, the camera inspection system is able to reduce the production costs of textile manufacturers

by detecting and stopping the knitting machines. It uses computer vision and artificial intelligence and, says the company, can be easily incorporated in existing knitting machines. It also provides automated insightful productivity and quality reports, real-time production monitorization via the internet, and registers and stores 100 per cent of the production for full transparency and traceability, an opportunity, says Smartex, that has never existed before.

Margins

"The textile industry operates on thin margins and has a considerably high defect rate which has huge implications for the environment," Smartex says.

"The entire industry is dependent on human eyes to detect defects in textiles. Human conditions in the textile industry aren't great - dust and fibre fill the air, and workers are relied on to catch more than a dozen different types of defects as machines spin out fabric at over 60 revolutions per minute.

"Defects in the textile industry are also notorious for their ability to be compounded: if a roll of fabric is shipped with a defect that wasn't caught, that can often lead to entire pallets of clothing being discarded, or in some cases even burned - the environmental and financial impact here is enormous.

"Smartex is transforming industry through AI+computer vision. A system of cameras and deep learning algorithms installed on the machines themselves can catch defects at the source, and automatically shut down production before wasting expensive high quality materials."

One area that presents the most challenges, for example, are faults in fabric when using elastane fibre. Commonly, this defect goes unnoticed until the dyeing stage, resulting in waste of resources. Once a periodic defect is detected, the knitting machine stops the production so that the problem is promptly fixed without causing further damage. In case of singular defects (such as holes, oil spots, contamination points, etc), the system



provides a stoppage option, XY roll coordinates, automated online dashboard and quality reports of the rolls, machines, employees, and the entire factory plant.

Based in San Francisco, Shenzhen, and Porto, Smartex was able to develop the system after attracted capital funding from a number of investors including Momenta Ventures, DCVC, Spider Capital, SOSV, Cindy Bi (General Partner at CapitalX) and Fashion for Good, a global initiative supported by brands such as C&A, adidas, Kering Group, PVH, Stella McCartney, Target and Zalando.

The European Commission has also recognized Smartex technologies as fundamental for the industry 4.0 in knitting mills as a way to better manage quality and efficiency, reducing waste and time and avoiding too late inspection after the rolls had been produced, and has granted the company over €2.2 million for research and development.

Installations

The Smartex system has so far been installed by a number of leading circular knitters. One example is a recent partnership is with Intratess, a major textile supplier of the Kering Group which owns major fashion houses like Gucci and Balenciaga, and is adopting the Smartex solution to bring textile waste in their factories to near zero.

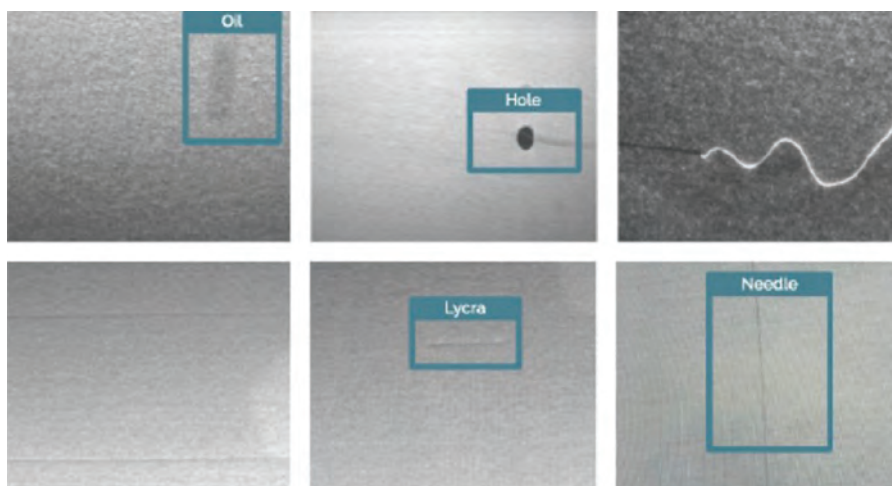
"Smartex is the only system I've seen able to detect the small defects that have been a huge problem for our company," said Danilo Verrini, owner of Intratess. "It is a great tool for high efficiency output and quality control of the materials. It is also a great tool to control yarn quality and monitor production efficiency."

"Increasing efficiency and reducing textile waste is our priority at Smartex," added CEO Gilberto Loureiro. "Combining it with a massive ROI for our clients and digitization of their textile factories makes our mission even more delightful."

According to Smartex, research shows that the system can save an average factory almost €1000 per month per machine.

Results from this case study after employing Smartex shows:

- raw materials savings – 930/month
- saved production time – 22 hours/month



- weight of avoided defective fabrics – 132 kg/month
- water savings – 21.613 litres/month
- machinery energy – 1.188 kWh/month
- reduction of CO₂ emissions – 228 kg/month

Elsewhere, Tintex Textiles, which is well known for its high-quality standards in the knitting and dyeing processes, has been reporting a direct benefit from Smartex technologies of a monthly average of seven textile rolls saved per machine and a monthly average of 28 defects avoided, many of them periodic and repeatable capable of damaging full rolls.

"Smartex innovative technology helps

our company every month by increasing production, improving quality and transparency in the supply chain," said Mario Jorge Silva, CEO at Tintex Textiles S.A.

Going forward Smartex is also looking for future market expansion into rolled materials. "Rolled materials are an incredibly challenging 'black box' for suppliers, as they provide extensive challenges in storage with regard to quality control," the company said. "After a material has been rolled and housed, the overall quality of the entire roll is unclear. Paper, fabric, and sheet metal are the next on the docket for the startup." **KTJ**

Past meets future with bio-based knits

World's first knit with fabric produced through microbial fermentation.

Technical apparel brand Goldwin and biomaterial specialist Spiber have developed the world's first knitted garment made with Brewed Protein, a biopolymer whose plant-based microbial fermentation process makes it well-positioned to deliver significant contributions to animal- and plastic-free initiatives in a range of fields and industries.

Called simply The Sweater, the development is described as a milestone in Goldwin and Spiber's shared mission to reduce the fashion industry's impact on the environment by replacing traditional, petrochemical-based materials and production methods with innovative, bio based solutions.

Designed to emulate a traditional ski sweater, this coarse gauge knit and twisted yarn delivers an ultra soft and comfortable feel in a blend of 70 per cent wool and 30 per cent Brewed Protein. The latter is produced through a microbial fermentation process, which utilizes plant-based feedstock such as sugars as its primary resource, resulting in materials that are said to be well-positioned to contribute significantly to animal-free and plastic-free initiatives in a range of fields, such as the apparel and automotive industries.

The Sweater is Goldwin and Spiber's first Brewed Protein garment brought to market in the US. In 2019, The North Face Japan, which is operated by Goldwin Inc., collaborated with Spiber to release the Moon Parka, the world's first outerwear jacket featuring microbially-produced fabric.

Designed primarily as a conceptual garment, the parka was available for sale only in Japan and was produced in highly limited quantities.

Partnership

Goldwin and Spiber's partnership began in 2015, but The Sweater marks the beginning of a new phase in the partnership, which the companies call "Vision Quest," a project that unites partners around the world in the quest for a better future.

"Mankind has continued to evolve the sweater via the use of technology and knowledge throughout history and it is now essential winter wear," said Takao Watanabe, Goldwin's Head of Development. "The sweater has remained loved by many and its design has also remained largely unchanged since the original sweater first came into existence. The reason why it has played such a big role in the cultures and histories of people all over the world is

due to the diverse and versatile animal fibers and the sweater knits that use these to their full potential."

Goldwin is an international technical apparel brand with products ranging from high performance skiwear, lifestyle apparel, activewear, and outdoor apparel.

Spiber Inc., established in September 2007, is a Japanese biotechnology venture engaged in the development of innovative biopolymer. It is currently engaged in numerous initiatives to scale up production of its polymers, with construction of its first overseas plant currently underway in Thailand. Scheduled to begin commercial operation in 2021, the plant is anticipated to be the largest structural protein mass-production facility in the world. In October 2020, Spiber also announced a partnership with Archer-Daniels-Midland Company, the world's premier agricultural origination and processing company, towards mass-production of Brewed Protein polymers in the US.

The Sweater is a highly exclusive item which, with an US\$800 price tag, will be produced in limited quantities.

"The Sweater was devised while probing the origins of the supposed original form of these sweaters and what of this will persist into the future," added Watanabe.

"Furthermore, black is a colour that is made by mixing all other colours and is also said to be the original colour. These sweaters that have been with us from the beginning will lead us to the future through modern-day technology. This single black piece of apparel that signifies both the past and the future." **KTJ**

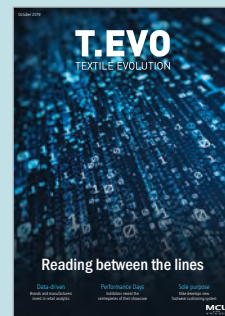
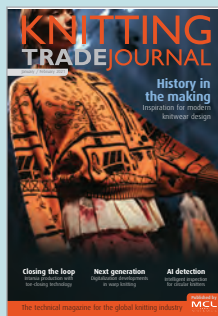


The Sweater made Brewed Protein.
Image: © Takashi Kawashima.



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Next generation digitalization from Karl Mayer

With its new, extra wide tricot technology, Karl Mayer is offering a completely new patterning concept and even greater output.

Karl Mayer has launched the latest generation of its extra-wide, high-performance tricot-knitting machine.

The HKS 3-M ON is based on the new ON pattern drive and networking the machines via k.ey, Karl Mayer's Cloud system. It is therefore said to offer the simple, fast pattern change of EL gears, while doing so at the speed of machines with N pattern drives.

This latest model is also designed to offer hybrid patterning possibilities. The first three-bar HKS model with electronic guide bar control allows for immediate pattern changes without any mechanical modification and therefore no delay in production.

"HKS 3-M ON offers the same performance in terms of speed and design variety as the current version of HKS 3-M, but with a more efficient production and improved reaction time," Karl Mayer says. "The newest working

width of 280 ins is even 15 per cent faster than HKS 3-M in the same working width.

"Furthermore, using the innovative ON gear, warp knitting mills can easily choose patterns by connecting the HKS 3-M ON through the k.ey, system. Instead of waiting for new pattern disks, it is only necessary to select and exchange data. Simply download the required information from a secured cloud to the machine, and you can immediately start to work new articles. In times of rapidly changing market requirements, it is an asset to be able to react quickly on such demands and be able to access to new patterns."

The HKS 3-M ON also offers the same performance in terms of speed and design variety as the current version of HKS 3-M. Further, by using a new main drive system, Karl Mayer says it is possible to minimize maintenance costs by reducing wear and tear parts by using

fewer belts for the electronic pattern drive and no more main drive belt (now direct main drive system).

HKS 3-M ON can produce fabrics for a wide range of applications due to its various working width in gauges E28 and E32 with further gauges available on request.

In addition to higher performance, the latest generation of HKS 3-M ON in 280 ins is said to be easier to operate compared with previous models. The newcomer stands out by offering improved handling, particularly when changing warp beams. A moveable ladder makes it easy to access the couplings and a side work platform provides additional support access. In addition, it is considerably easier to remove the guide bars. These changes will also be rolled out for the HKS 3-M ON across further working widths and other machine types.

The HKS 3-M ON also offers greater



The Karl Mayer HKS 3-M ON.

flexibility than ever before with a larger working width than its predecessor. An increase of up to 20 ins is possible. Now with a maximum of 300 ins, wider items can be produced or several narrow fabric lines can be produced beside one another with a higher variance in number and width. In addition, the expanded working width and a higher speed result in a significant increase in productivity.

Patterning possibilities

In future, Karl Mayer will have two business models for creating new articles on the HKS 3-M ON, offering three different interchangeable options and thus maximum flexibility

The first two variants – SwapKnit 36 and SwapKnit 36 Flat – are suitable for designs with repeats up to 36 stitch courses. Anyone who selects these machines can purchase lapping patterns from Karl Mayer's Spare Parts Webshop in just a few clicks, load them onto their machine and create new or old, tried-and-tested products.

For the SwapKnit 36, individual lappings are ordered for each ground guide bar – similar to the now-familiar principle of the pattern disk. The purchased lappings remain available to the customer in the cloud and can be used successively on several machines.

SwapKnit 36 Flat offers additional flexibility with a flat rate. For a fixed rate, a selection of lappings are provided, which can be used on a machine selected for this variant over a certain period of time. The possible period of use is 1 month, 3 months or 12 months.

Variant three has been developed for pattern repeats over 36 stitch courses. It uses web-based software k.innovation – CORE by KM.ON, which includes a lapping editor. The intelligent software solution derives the chain link notation for a new design and then creates the pattern files.

A technical prerequisite for using all three variants is that the machine must be connected to the KM.ON cloud via k.ey. To offer attractive economic opportunities, various business models are



A technical prerequisite for using all three variants is that the machine must be connected to the KM.ON cloud via k.ey.

available. While customers can buy single lappings or a whole catalogue of lapping patterns for SwapKnit, a licence can be obtained for k.innovation – CORE - which regulates the period of use. This means individual variants can be chosen completely flexibly while a change by article is possible, as is using one of the three options in the long term. "This makes the HKS 3-M ON a hybrid all-rounder that combines the patterning possibilities of typical N and EL pattern drives in a single model," Karl Mayer says.

The lappings ordered using both SwapKnit variants are available immediately, as are the pattern files created via k.innovation – CORE. They can be used for fast lapping changes, without posing any modification risks at the machine and with only minimal downtime. Customers can respond to market requirements within the shortest possible time and use their machines with maximum efficiency. Using the acquired virtual pattern rack or a specially created collection of pattern files, Karl Mayer notes that customers can also save money by not having to store pattern disks. **KTJ**

New KM.ON products for simple collaboration

KM.ON, Karl Mayer's digital development subsidiary, is launching two new products for its tricot and raschel warp knitting machines in the first half of 2021, both of which will be available through its k.innovation web-based design tool.

k.innovation – Core and Style provide design tools with which users can work together with partners in a single project, allowing both parties to seamlessly exchange ideas, concepts and products within one system. "Easy coordination, easy collaboration - a real game changer," says KM.ON, adding that the new systems enable the quick creation of innovative products by sending designs directly to a machine with a single mouse click. "k.innovation helps to shorten your time to market workflow which saves time and money," the company said.

Specifically, k.innovation – Core is a lapping editor for use on Karl Mayer's renowned HKS 3-M ON tricot machines. Knitting mills are able to create their own lappings without the limitation of 36 repeats for more flexibility.

k.innovation – Style is a tool to help develop textiles with complex designs, functional zones, and style-relevant contours for the RSJ 4/1 ON raschel machines.

Established in Frankfurt in 2017 as the Karl Mayer Digital Factory, the KM.ON brand offers a broad portfolio of digital solutions.

KM.ON's digital portfolio of services supports customers in selected areas and is made up of eight solution categories. k.ey – a conventional industry PC together with appropriate software – provides access to the solutions. The platform of hardware and software can be installed easily and links the machines securely to the protected cloud. This is based on the expertise gained by participating in ADAMOS with regard to the use of an IIoT environment which is specifically focused on the needs of machinery and plant construction. This enables the benefits of KM.ON to be used easily and securely.

History in the making

Angela Cavalca visits Modateca Deanna, the historical Italian knitwear archive which acts as a key source of education and inspiration for today's knitwear industry.

Archives and education, representing both the past and future of the knitwear industry, can be found at the Modateca Deanna, one of the most important and historical knitwear archives in the world where professionals, designers and students from the Accademia Costume & Moda Masters program can research, train and discover resources for the creation of new collections.

Modateca Deanna

To visit the extensive archive of the Modateca Deanna, located in the Italian town of San Martino in Rio, close to Reggio Emilia, is to be fully immersed in the knowledge and know-how developed from the early 1960s by the renowned Miss Deanna Knitwear Company.

During its fifty years of activity the

company has collaborated on collections for some of the most important designers from across the world, founded in the passion and experimental attitude of its founder, Deanna Ferretti Veroni.

The company was integrated in 2002 in the Armani Group, which maintained the production at the factory until 2014. Since then, the archives remained part of the family's property with Deanna's daughter Sonia Veroni, taking the company down a new path and creating the Modateca Deanna in 2005.

The incredible heritage and resource material that can be found at the archive is constantly evolving with Sonia Veroni, who acts as CEO of Modateca Deanna as well as a Director of the CKD Masters course, continuing in the organisation's rich tradition of acquisition and continuous research. "Our factory has



Sonia Veroni.

worked with the best international fashion designers and the Modateca project started by my daughter is a great initiative that I deeply appreciate, also because of her special involvement in the continuous development of the archives and of the CKD Master," explains Deanna Ferretti Veroni.

Modateca Deanna is an extraordinary historic archive in terms of dimension and quality. Covering an area of over 3,000 square metres, it houses a huge quantity of material such as garments and knitted samples as well as a sumptuous library, a quantity and quality of historical and current knitwear resource material that cannot easily be found elsewhere.

Starting the visit from the historic library on the ground floor, it contains books, collections and volumes of encyclopedias including both limited and rare editions; around 6,000 volumes in total that are always being updated. The volumes are divided in different main categories and subjects such as painters, fashion designers, textile and further sub-categories. It is a rich collection to support and inspire the creative process. Further rooms house collections of



Deanna Ferretti Veroni.



Modateca Deanna Vintage Research Archive.

magazines ranging from editions from the early 1900s to contemporary ones. In total there are more than 20,000 famous international newspapers and magazines covering fashion, costume, design, interior design, architecture and travel.

Modateca Deanna also collects complete photographic albums about the Prêt-à-Porter and Haute Couture fashion shows in New York, London, Milan and Paris from the end of the 1980s until 2011.

Collaborations

Deanna's first collaborations and her initial activities were clearly among the first experimentations that changed the approach of many designers to the knitwear sector. As Sonia Veroni explains: "Kenzo was the first designer Deanna started to work with when they were very young. Our district was very well known to buyers who came here to buy the finished products. A new phase saw Deanna working closely with Kenzo and together they developed a collaboration that was based on a more technical



Modateca Deanna Research Archive.

approach, carrying our research and experimenting to improve the limitations of the machines. Together they found new technical solutions to create colourful jacquards and patterns."

As well as Kenzo, the Miss Deanna

company created knitwear collections for some of the most important designers and brands in the world including Krizia, Maison Martin Margiela, Adrienne Vittadini, Angelo Figus, Claude Montana, Joseph, Lawrence Steele, Neil Barrett, ▶

Pour Toi, Prada, Valentino, Best Company, Dries Van Noten, Yohji Yamamoto, Yves Saint Laurent, Enrico Coveri, Gai Mattiolo, Julien Macdonald and Trussardi.

All of this experimentation and research was a key contribution to the current technical archive, which includes stitches and technical swatches, different types of necklines, embroideries and applications, knitwear accessories such as scarves, hats, gloves and socks or vintage bags, bijoux and sunglasses, as well as accessories like buttons and zips.

The other archive rooms on the first floor are dedicated to the knitwear samples made within the company as well as those acquired by Deanna Ferretti Veroni or coming from designers' donations. There is also a garment section divided according to different categories of fabrics such as jersey and laces or evening dresses as well as a rich vintage archive, with pieces coming from brands from all over the world.

Creative Knitwear Design

A further step forward was taken in 2016 when Modateca Deanna embarked on an innovative and unique educational project, the Masters degree in Creative Knitwear Design (CKD) which is run in collaboration with the Rome-based Accademia Costume & Moda.

The course's approach is highly creative and practical with the program conceived for young designers and professionals who wish to specialize in their career. The synergic work of the

two Italian organisations at the heart of the course aims to reduce the existing gap between the creativity and the technical aspects of the manufacturing process, thereby meeting the current needs of brands and retailers across the fashion industry.

Walking through the school's spaces, makes you realize the great opportunity that Modateca Deanna offers. Students develop their knowledge and creative skills about knitwear starting from the project concept and the raw materials, working with different yarn collections and colour cards as well as experiencing the machine possibilities and manufacturing process with the school's partners. The location tells of the valuable history of the factory and the current need to pass on such know-how to the next generation.

The course also makes it possible to collaborate with around 50 leading companies from the Italian manufacturing districts including spinning mills, printing and dyeing mills, embroidery factories and artisan laboratories. All the CKD Master's partners are incredibly open and make themselves available to work with the young creatives.

Tradition

The companies involved represent the highest level and quality of the knitwear sector, carrying out research and working together to promote this long-standing Italian tradition. Even if some of the companies involved are competitors, this project breaks down

the barriers and representatives from different brands and design houses come together as part of one system to work in a proactive way.

The advantage of this school, compared to others, is that it boosts research and experimentation for the industrialization of the works. A further significant added value is that each student will be able to develop a personal style with the tutoring deeply aligned in the development of the individual talent. "The students attending the Master are quite different and, together with the Academy, we make an accurate evaluation and selection," Sonia Veroni explains. "Then we do the last interview at our headquarters. It is particularly important for us to meet the students in person, to better understand their true ambitions and personal attitudes."

This year's Master course involved 13 students coming from schools and universities from all over the world. They worked online during the lockdown with the knitwear experts and tutors and in June the school opened again, offering the students the opportunity to attend the laboratory. During the last months of 2020 the students prepared their collections together with the manufacturers who produced the items. Several interesting projects were carried on with brands such as Marni, Max Mara and Stone Island as well as a jersey project with the Italian mill Jackytex together with Enka.

Modateca Deanna Archive.



Modateca Deanna Technical Archive.



Highlighting the increasingly general trend towards sustainable topics and goals, the young students attending the Master course displayed a natural inclination for environmentally friendly themes. They considered the importance of a responsible production process starting from the collection concept while also having the opportunity to work with some of the finest Italian suppliers that are engaged in this trend.

As well as the most innovative materials available on the market, the students were also given access to some of the most sustainable materials with the opportunity to experiment on new combinations with materials from the participating companies R&D departments.

The final works are also presented as a catwalk show during the January edition of Pitti Filati in Florence.

Presenting their collections in front of such an international audience represents a fundamental moment of dialogue between the finest knitting mills in the sector, the buyers and representatives from some of the most prestigious fashion houses, the press and of course young international creatives.

The current Master's final works will be presented at future Pitti Immagine' events while as before, all the students that attended the Masters course will have had the opportunity to take an internship and placements at some of the companies they have worked with during their time on the course. **KTJ**



CKD Master at Modateca Deanna.



Pitti Filati 86_CKD Fashion Show.
Image: © Astra Marina Cabras.

Hyosung aims to stretch its lead

Hyosung is investing across its worldwide production network as it looks to strengthen its global elastane leadership.

Hynosung is firming up its position as the world's leading elastane producer with new investments in two key markets.

The South Korean firm is to invest US\$54 million in a new 15,000-ton capacity site in Turkey and will also increase the capacity of its creora elastane facility in Brazil, in the city of Araquari, Santa Catarina.

In Turkey, the new plant will be up and running by July of this year, and will be a timely addition as the company targets a capacity increase within Turkey to about 40,000 tonnes of creora per annum.

In the long-term, Hyosung says textile demand could reach upwards of US\$675 billion globally, an appetizing figure that will only serve to reaffirm the company's ambition of being the market leader.

"We need to solidify our position as

the world's No.1 manufacturer, widening the gap with rivals, strengthening our dominance in the European premium market with the expansion of our production facilities in Turkey, which serves as a production base of Europe," said chairman Cho Hyun-joon.

Hyun-joon has been the catalyst behind this idea to invest in Turkey, which he believes will separate it from its rivals which might be stagnant amidst an uncertain climate.

In Cerkezkoy, Istanbul, work will be underway soon to establish its latest base there.

Market research suggests that global elastane demand is projected to grow at an increased 6-7 per cent per year, as opposed to the typical 2-3 per cent. This is largely down to the shift in lifestyles of

many, with athleisure and activewear sales having soared.

In Brazil, the fresh investment will allow Hyosung to increase the annual elastane production capacity from 12,000 to 22,000 tons by the end of 2021.

"We are investing in Brazil to meet the growing demand for elastane, as well as to guarantee the supply of the textile industry in Brazil and in the Latin American market," said President Do Jun Cho. "Our state-of-the-art facilities will allow creora elastane to offer the best quality, consistency and value, to meet customer needs. We are not only selling a product, but also providing a textile solution to our partners, listening carefully to the voice of our customers. In addition to our expertise in technological fibers, we also offer new solutions with the support of our global marketing team in the USA, the UK, HK and the Fashion Design Center in Seoul."

"We believe in Brazil and we were waiting for the right moment for this new investment," added Cristiano Hanna, Hyosung's National Sales Manager. "Finally, we decided to make this achievement a reality for our country - bringing greater volumes of raw material production to the textile industry, generating more jobs and stimulating the Brazilian economy."

Hyosung is targetting a capacity increase within Turkey to about 40,000 tonnes of creora per annum.



Hyosung's Vietnam facility.

Leadership

Since 2010, Hyosung has become a global leader in elastane production, with 10 factories located in South Korea, China, Turkey, Vietnam, Brazil and India. With a current production capacity of approximately 340 thousand tons per year, Hyosung is the largest producer of elastane in the world with the fastest expansion, product diversification and quality, being recognized by its

customers as a company of solutions and innovation in the market.

The latest releases in the elastane line include the new GRS certified creora regen made with 100% recycled waste, creora Color +, elastane with tinting affinity for more vivid colors in blends with natural fibers and creora 3D Max, for denim.

"We continue to invest in all areas of our business to further expand the creora brand," added Do Jun Cho. "In addition to our investment in capacity, our global marketing team and research and development centre, which provides trend forecasts, customized product development workshops and more, add value and creative solutions to our extensive network of partners."

Collections

Despite a year cancellations and postponements of trade shows and exhibitions, Hyosung has taken the opportunity to showcase its latest developments online. In December, the company took part in the virtual Performance Days exhibition where it presented its latest offering of recycled multi-function fibres, in addition to its Home Everywhere collection of sustainable yarns developed recently in collaboration with Lenzing.

"As consumers increasingly seek out sustainability, we continue to expand our offering of eco-friendly solutions to help our customers reach their sustainability goals," said Mike Simko, global marketing director, Hyosung-Textiles. "These goals can range from a focus on waste reduction to the elimination of using non-renewable resources, along with many others in between."

Reuse. Recycle. Regen.

At Performance Days, Hyosung highlighted its sustainable stretch and multi-fibre solutions which included its GRS-certified creora regen elastane and Mipan regen nylon, both made with 100% reclaimed waste, along with its regen polyester made from 100% post-consumer waste. The company also unveiled its expanded range of multi-functional, 100% recycled fibres including:

- regen askin cool-touch with UV-protection polyester



Hyosung showcased its latest collections at the virtual edition of Performance Days.

Global spandex demand is projected to grow at an increased 6-7 per cent per year.

- regen cotna – cotton-like feel, quick-drying and pill-resistant polyester
- regen aerolight – moisture-wicking, soft-touch, light-weight comfort polyester
- regen aerocool – rapid moisture wicking, quick-drying polyester
- Mipan regen robic – high-tenacity nylon

Home Everywhere

Earlier this year, Hyosung also unveiled its latest collection made in partnership with cellulosic fibre specialist Lenzing. Noting that the Covid-19 pandemic has changed the clothing preference for many consumers as they now spend much of their time at home, the collection is geared to consumers looking for comfortable, versatile and sustainable apparel that can be worn for multiple occasions and lasts longer.

The result is that Hyosung and Lenzing have introduced a collaborative collection of Home Everywhere eco-friendly fabrics made from comfortable, functional and sustainable yarns. The collection is

comprised of three fabric concept groups, which includes a variety of unique blends featuring Lenzing's cellulose fibres and Hyosung's range of multi-function elastane, polyester and nylon fibres. The collection includes:

- Color your Confidence: Hyosung creora Color+ elastane or creora Black elastane blended with Tencel Modal fibres featuring Eco Color technology enable garments to reach colour vibrancy for longer, even after repeated wash. Using 50% less water and 60% less carbon footprint, these fibres result in a lower environmental impact than conventionally dyed fibres.
- Sumptuous Sensations: Hyosung 100% recycled regen aerolight polyester with Tencel Modal fibres featuring Micro Technology offer super-fine touch and exquisite softness, producing lightweight, long-lasting, naturally comfortable fibres.
- Versatile Function: A functional collection featuring Hyosung's Mipan aqua-X nylon or aeroheat EX polyester with Tencel Lyocell fibres for temperature regulating, moisture management and UV protection. **KTJ**

Spanish brand marks Tencel first for knitted footwear market

Mallorca - Spanish footwear brand Camper has launched a new collection of knitted uppers following a close collaboration with Lenzing.

Camper launched its AW2020 collection in September, featuring the Right and Upright styles. The boot and bootie from the AW2020 collection have been designed with an innovative knitted construction technique that contains Tencel Lyocell fibres from botanic origin, derived from sustainably grown wood sources.

Harvested from certified and controlled sources that are FSC or PEFC certified, Tencel Lyocell fibres are

developed using a closed loop production process, which is highly resource efficient and has a low ecological impact.

The process recycles water and uses 95 per cent less in comparison to conventional cotton.

For this collection, the fibre has been blended to create an innovative 3D webbed structure, which creates a sock-style boot with support, comfort and conscious attitude.

"We are thrilled to collaborate with Camper, the first footwear brand to feature a knitted upper women's boot using Tencel branded lyocell fibres,"

said Florian Heubrandner, vice president of Global Business Management Textiles at Lenzing.

"The sustainable fibres are not only a great choice for the environment; the soft and breathable material also offers great comfort and feels good. Our partnership with Camper is a perfect example of our commitment for driving sustainability in the footwear industry."

Camper's partnership with Lenzing is part of its long-term commitment to source materials with a lower ecological impact, whilst retaining the performance, durability and unique spirit that makes a Camper shoe, the company said. As



Polartec and Westex collaborate on new FR knitted fabrics

Hanover - Polartec has partnered with fellow Milliken textiles business Westex, a producer of protective fabrics, to bring to the fore a range of new flame-resistant, arc-rated knit fabrics.

The new Polartec FR collection comprises three fabric types, each optimised for use in different apparel layers.

"It's a collaboration that draws on the best of both brands, with Westex contributing its expertise in FR/AR fabric engineering and design and Polartec as an expert in performance fabric constructions," commented Michael Langley, vice president of marketing and sales for Westex.

"Incorporating our engineered FR technology — technology we have expanded and refined over the course of our 60-year history — into performance knits and fleeces that are market leaders in their own right is a win-win for our customers."

The FR collection of knits boast a patented tri-blend yarn that's both flame-resistant and temperature regulating. The first, Polartec Power Dry FR is said to offer "superior next-to-skin moisture management", using a bi-component knit that's both breathable and comfortable. This line, tipped for applications as a shirting fabric, comes in two weights: a 4.5oz jersey knit base layer certified to NFPA 2112 and offering NFPA 70E Category 1 protection, and a 6.4oz pique knit certified to NFPA 2112 and offering NFPA 70E Category 2 protection. The second, Polartec Power Grid FR, is said to provide warmth without needing an excess of material due to "the combined ability to both trap warm air and quickly dump excess heat during high exertion," the companies said.

Power Grid FR is a 9.6oz jersey knit compliant with NFPA 2112, and offers NFPA 70E Category 2 protection and meets CSA Z96 and ANSI 107. Polartec and Westex believe its primary applications will be in lightweight jackets and balaclavas.

The third and final fabric line is the Polartec Wind Pro FR and is said to "answer the call for weather-resistant FR fabrics". The fabric is reportedly four times more wind resistant than classic fleece and so can reduce wind chills.

Suitable for jackets, the 11.6oz jersey/velour Wind Pro FR is NFPA 2112-certified, provides NFPA 70E Category 2 protection and meets ANSI 107.

"With this Westex collaboration, we're bringing the pinnacle of outdoor and athletic performance fabrics into the PPE space," said Polartec president Steve Layton. "The products that millions of people wear hiking, mountain climbing, and athletic training now have the added benefit of uncompromising FR/AR protection thanks to Westex's technology. This is a game-changer for workers everywhere."



Cecilia Llorens, Product Design director for Camper explains: “Long-term partnerships such as those with Lenzing are vital to reducing the environmental impact of the footwear industry. Our designers are focused towards change and developing new innovations in design, but this must be complemented by materials such as Tencel. We plan to eliminate the use of virgin plastic in our uppers by 2022, and natural materials that achieve both performance sustainability are essential to being able to achieve this.”

An independent, family run business, Camper is a contemporary Spanish footwear brand operating from its headquarters in Mallorca where dozens of original designs are developed each season. The company has more than 400 stores in more than 40 countries.

Sensil BodyFresh proven to reduce viral activity

Migdal Haemek - Nilit, the manufacturer of premium Nylon 6.6 for apparel, has received confirmation that fabric made with Sensil BodyFresh demonstrated a 99.85 per cent reduction in Betacoronavirus viral activity.

The confirmation from Microbe Investigations AG (MIS), a microbiological testing services lab, noted that the additive embedded in the Sensil BodyFresh yarn provides long-lasting protection that does not deteriorate with laundering, indicating that the additive is not washed out of the fabric. The fabric was tested according to ISO 18184:2019 criteria against Betacoronavirus 1 (OC43), an enveloped, positive-sense, single-stranded RNA virus.

“We originally developed Sensil BodyFresh with antibacterial and anti-odor properties to provide consumers with outstanding freshness,” said Sagee Aran, head of Global Marketing at Nilit. “With these proven antiviral test results, our business partners can expand their Sensil BodyFresh product concepts beyond comfort and aesthetics to include enhanced protection and a positive sense of well-being.”

First warp knitted textiles in a seersucker effect

Obertshausen - Karl Mayer’s ongoing work on specialist fabric research and development is continuing with the launch of the first warp knitted textile in a seersucker effect.

“Seersucker clothing is a hit every summer season,” says Karl Mayer. “The fabrics look cool and can be worn without breaking into a sweat. This is thanks to slightly three-dimensional relief-like fabric sides.

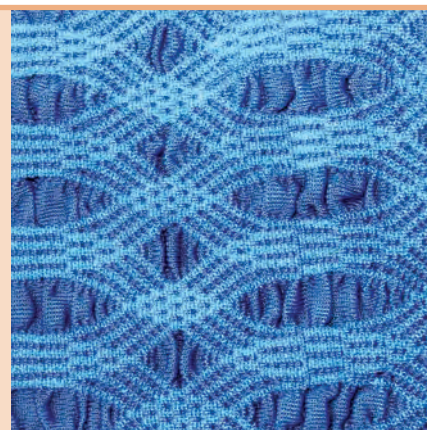
“The crepe-like surfaces ensure that the textiles do not lie directly on the skin, but are instead kept away from the body. This allows for ventilation and moisture balance. What’s more, the relief-like structures mean the pieces do not need to be ironed after washing – and also give the fabric its name. The word seersucker originates from Persian and means shir o shekar: milk and sugar.”

These fabrics, which the company says offer many advantages, are traditionally produced on rapier looms. Thanks to a recent breakthrough by Melanie Bergmann, Textile Technology Product Developer at Karl Mayer, it is now possible to produce seersucker-effect fabrics on warp knitting machines.

To complete her work, the creative artist used a high-performance tricot machine – type HKS 4-M EL in E 28 – and a polyamide winding yarn with an elastane core.

The gauge of the textured PU/PA yarn is dtex 110 f 24. “The material was tensioned in GB 1 and GB 2 and creates a great visual effect when relaxing,” explains Melanie Bergmann. “The surface structure and elastic properties can both be changed by lapping the wrapping yarn differently. The possibilities were explored when implementing various sample series at the end of last year.”

During further trials in March 2020, Bergmann also influenced the elasticity, as well as the flatness and the characteristics of the 3D effects using different indentations. These new fabrics with a versatile, moving surface design enable warp knitting companies to effectively expand their production repertoire, with Karl Mayer seeing particular potential for clothing and home textile manufacturers in Turkey. Warp knitting is generally highly efficient compared to many other surface forming processes and results in products that neither pull stitches nor fray at the edges, the company said.



Sensil BodyFresh is currently used by leading apparel brands across all segments such as intimates and underwear, base layer, activewear, and legwear. By inhibiting microbial growth, fabrics stay fresher longer and require fewer launderings. The benefits are built in to the yarn and do not wash out or wear off for the life of the fabric, providing sustainable protection that doesn’t pollute waterways. In addition to providing these proven antimicrobial benefits, Sensil BodyFresh is responsibly made at Nilit’s water- and energy-optimized facilities and meets the company’s Total Product Sustainability

guidelines for long-lasting, high quality products made with respect for the planet and people.

“Consumers today appreciate long lasting, environmentally responsible, multifunctional apparel,” continued Aran. “Sensil BodyFresh offers numerous performance factors that include sustainability and well-being attributes for today’s current climate”

Nilit has a broad portfolio of sustainable Sensil premium nylon products that address water preservation, energy use reduction, pollution elimination, biodegradability, and increased use of recycled inputs.

Knitted hemp fabric for functional fabrics

Prato - Italian knitter Pontetorto showcased its latest functional and sustainably produced fabrics at last month's virtual Performance Days exhibition.

Among the exhibits was a new hemp option which has been added to its family of environmentally friendly, high-performance Biopile fabrics.

The inner side of this new Biopile is made with hemp while the outside fabric is obtained from a continuous filament of 100% polyester recycled from PET.

Hemp, a natural textile fibre obtained from the long stem fibre of the herbaceous plant of the same name, is highly protective as it filters 95 per cent of ultraviolet rays and shields against electromagnetic fields. It also has considerable absorption power and easily disperses body moisture thanks to its high breathability.

Being a hollow fibre, it is characterized by a thermostatic effect that develops a



sort of "natural thermal insulation" thereby offering the wearer a freshness in summer and warmth in winter, creating an optimal body microclimate without causing bacterial proliferation.

Hemp is also naturally antimicrobial and is an ecological textile fibre as it does not require pesticides, herbicides and fertilizers during cultivation.

Pontetorto's Biopile fabrics also include a fleece pile that does not release microplastics. With a brushed inner side, the fabric is made from 100% Tencel from Lenzing and, unlike most other fleece products, is not made of polyester.

Biodegradable even in salt water, even if the tiniest of fleece particles separate when washed, they decompose in less than a year without any residue or risk to any living creatures, the company says.

The fabric, which is currently offered

in three grades, is from the Pontetorto Eco-System offering, which aims to demonstrate the company's commitment to environmentally friendly manufacturing techniques.

The process starts with the selection of raw materials with sustainable options such as recycled fibres or brand new degradable variants always considered first for processing. This sustainable thinking is then complemented on the production floor where the in-house solar plant generates up to 50 per cent of the required power.

"Environmentally conscious management is called for now more than ever," the company says. "The retail trade and consumers are increasingly conscious of goods obtained by environmentally friendly methods with little or no negative impact on our habitat. This trend has been evident for some time in the automobile branch, but now the textile industry is also demanding sustainability.

"While some companies draft long-range plans to initiate an 'eco-transition', we have implemented sustainable solutions quickly and easily wherever possible."

Eco Performance Award for US knitter

New Jersey - US knitter Optimer picked up its award for fabric innovation at last month's virtual Performance Days exhibition.

The company was honoured for its Optimer Adapt technology in the Eco-Performance Award category.

Consisting of 100 per cent organic cotton fibre, Adapt technology is said to demonstrate sustainable climate management at its best. "Optimer focuses on the wearing comfort of cotton combined with the function of synthetic fibres," the judges said, highlighting how, "adapt technology ensures enhanced, more balanced climate management due to the natural phase change material."

Key to the fabric's performance is its unique and bio-based microencapsulated material - verified by ECOCERT - which reacts to changes in body temperature to maintain balanced comfort. As the body heats up, the Adapt material liquifies and stores this energy assisting the body in its efforts to cool down. Reacting to a cold environment, the material solidifies and releases the stored energy back to the body for warmth. This ability to adapt to the environment and the body's response provides a thermal balance for enhanced comfort. The fabric dries faster, has a soft, natural feel, is pilling-resistant and colourfast. This makes the material suitable for a wide range of applications, such as sportswear, leisurewear or workwear. The technology is also suitable for use in bedding and medical applications. "A built-in thermostat set to automatically manage our personal climate may just be wishful thinking, but a fabric infused with Adapt technology is the closest thing to having this dynamic approach to human comfort in textiles," says Optimer. "Its unique and bio-based microencapsulated material reacts to changes in body temperature to maintain balanced comfort."

Optimer is perhaps best known for its Dri-release family of fabrics. FreshGuard, for example is a patented moisture-management and odor-eliminating technology made with 100 per cent recycled blend of man-made and natural fibers that transports moisture and wards off odour. Dri-release E.C.O. 2nd comprises post-consumer recycled polyester and post-industrial recycled cotton made from apparel manufacturing clip waste. According to Optimer, the E.C.O. technology reduces the amount of waste sent to landfills and uses less water, pesticides, dyes and electricity to produce and process the cotton. 2nd Nature is also Oeko-Tex-certified.



New features from virtual Texworld

Paris/Virtual - As it announces new features on its digital platform, Texworld has confirmed the addition of a new online pavilion featuring the latest offerings from the Sri Lankan fabric manufacturing sector

There is also a new addition to the virtual Texworld exhibition which allows buyers to request video meetings with the exhibitors they want to get in touch with, in order to benefit from a more immersive experience.

Launched towards the end of last year, the platform now brings together more than 3,200 professional buyers and some 220 exhibitors from all over the world. Visitors are able to source from more than 6,600 products already

available in the exhibitors' showrooms made possible with a state of the art selection criteria.

The new Sri Lanka pavilion, representing the fourth largest women's intimate wear exporter in the world and a regular partner of the Texworld physical shows, is now on board with six manufacturers.

Also new is a special pavilion meeting with exhibitors from the Zhejiang region of China.

More than 40 exhibitors from the Zhejiang province are now available via the new video function.

"Beyond the platform itself, we are continuously supporting companies in their digitalization by offering an "onboarding" service that helps them to integrate the digital tool into their activities - provision of virtual showrooms to present their products online, advices to improve the quality of their visuals," organisers said.

Hosiery show eyes connectivity with new AI feature

Brescia - This year's FIMAST exhibition which, as it stands, is scheduled to take place from 13 - 16 April in Brescia, Italy, will introduce a new virtual concept aimed at connecting visitors and exhibitors.

Targeted primarily at international visitors in light of continuing travel restrictions, FIMAST Connect is a digital platform that uses both data analysis and artificial intelligence to match buyers and exhibitors, both online and within the trade-show itself.

"FIMAST Connect is available to exhibitors and visitors, built to expand the physical experience towards a new hybrid dimension, allowing new contact opportunities and increasing the visibility of your services and products in an intuitive and simple way," organisers said. "The goal of FIMAST Connect is to offer an always up-to-date meeting space for the industry with an eye on the needs of our international visitors."

The FIMAST exhibition features manufacturers of machinery and other equipment for the sock, hosiery and finishing industries and is seen as an ideal meeting point for both Italian and overseas professional visitors to discover the latest developments in this fast moving sector. ▶

Chinese knitting show to join Yiwu exhibition



Yiwu - The Zhejiang International Trade Fair For Textile and Garment Industry, including the Yiwutex hosiery show, will now be held concurrently with the China Knitting Brands Innovation Design Week (CKIW Expo).

Taking place at the Yiwu International Expo Centre from 8-10 June 2021,

The show will encompass four thematic zones, including Knitting & Hosiery Machinery, Sewing & Automatic Garment Machinery, Digital Printing Technology & Application, and Knitting Products & Accessories, under the theme of "Technological Innovation Promotes Diversified Trans-Boundary, Intelligent Textiles Contributes A Healthy Future".

In the wake of the coronavirus pandemic, local authorities in Zhejiang are keen to promote technologies that can reengineer the manufacturing industry. With this in mind, Shengzheng Zhongsheng International Exhibition Co., Ltd., the organizer of CKIW, which acts as a professional international knitting industry platform, will now hold exhibitions in March, June and September 2021, in Shengzhen, Yiwu, and Hangzhou accordingly. CKIW Yiwu will include knitted underwear, home wear, warm clothing, t-shirts, socks, sportswear, swimwear, kids' clothing, yarn, knitted fabric, accessories.

"Organized under the same roof, the two exhibitions will provide an international business platform which covers the entire knitting industry chain, integrates research & development to design, equipment to technology, raw materials to underwear, and apparel for the industry development," organisers said. "The twin expos will stage a professional knitting industry event for the entire industry chain to display technology, promote brands, release market trends, and discuss hot topics at high-end forums."



The news dates follow the cancellation of the May 2020 edition, which was unable to take place following the spread of the coronavirus pandemic.

As before, the exhibition will cover a range of sectors including preparatory machines, yarns and hosiery accessories, circular hosiery knitting machines, linking, sewing and assembly machines, dyeing and finishing machines, packaging machines and accessories, computer equipment, control systems and other services.

ITM ideal springboard for Turkey growth

Istanbul - This year's ITM exhibition is expected to act as a major springboard for further investment in the Turkey's knitting sector.

Exhibition organisers have stressed that the Turkish knitting and wider textile industry, which has continued to increase its exports levels and its investments throughout the coronavirus pandemic, is once again showcasing its resilience - a factor that will continue in the build up and beyond ITM 2021.

"The exhibition will provide a great advantage to companies that desire to



expand their investments and introduce their brand new technologies," organisers said, highlighting how despite the slowdowns in the textile industry in 2020, Turkey succeeded a big breakthrough with the removal of restrictions in June, thanks to both its textile production infrastructure and international exports capacity.

"The exports of the textile and raw materials sector increased and the companies turned to new investments," organisers said. "While many local companies enlarged their facilities, some of them made new investment decisions. For example, while a giant hygienic and medical fabric production facility was invested in Corlu, another Turkish company, a global brand in textile machinery production, decided to invest 40 million Turkish Lira."

Turkey is increasingly regarded as one of the world's most strategic locations, a meeting point between East and West at the heart of global textile industry.

As a manufacturer of high quality textiles, it produces a wide range of yarns, fabrics, garments, home textiles as well as a large amount of technical textiles. With its advanced textile industry, the demand for textile machinery in Turkey is increasing every day, a fact that is illustrated by the growing importance of the ITM exhibition. The 2018 edition, which hosted 1,150 companies from 64 countries, welcomed a record 59,000 visitors, a 16 per cent increase compared to the 2016 edition and a clear indication that this year's show, scheduled for 2-6 June, can set new records once again.

Fabric Days delayed until March

Munich - The Munich Fabric start has confirmed that is Fabric Days event, initially scheduled for has been delayed by five weeks. Originally planned for January, the show will now take place from 2-4 March, 2021 at the MOC Munich Order Center.

The delay follows an extension of measures in German aimed at reducing the spread of Covid-19. Based on current infection rates and the situation in Europe, the German government confirmed recently that there was no sign yet of a steady decline in infection numbers, which decreases the chance that Fabric Days would be approved in the first weeks of the new year.

The time frame is too short to expect that conditions will improve as they did before the trade fair in September 2020 and the risk of cancellation at short notice is too high.

"If we look realistically at the next few weeks with the knowledge and experience gained over the past months, the date for Fabric Days from 26 - 28 January 2021 is no longer justifiable for our exhibitors, visitors and for all contributors. Based on these facts, we feel obliged to postpone Fabric Days by 5 weeks until 2 - 4 March 2021," explained Sebastian Klinder, managing director Munich Fabric Start. "The first feedback from the exhibitors regarding the new date is understanding and positive. This underlines the very good response to Fabric Days and the trust in the organisers. The need of the industry for a physical event in Munich is still high. Around 300 international suppliers are expected to present their novelties and material developments for Spring/Summer 22."



Turkey's textile and apparel industry is regarded as the driving force of the country's economy, accounting for 35 per cent of the country's total exports, 11 per cent of employment, 10 per cent of GDP and 25 per cent of the total amount of industrial investments in the country. The latest data shows that the Turkish textile industry is in sixth place in terms of exports with more than 50,000 workplaces and a total of 2.5 million employees. As the world's seventh largest textile manufacturer, Turkey is currently the second biggest supplier to European Union countries.

Turkey is also the fourth largest buyer of textile machinery with the country's textile manufacturers relying heavily on imported machinery and technologies for their investments when domestic production does not meet the demand.

In 2018, of the US\$27.5 billion spent on textile machinery globally, Turkey was the fourth largest investor, spending \$1.9 billion.

The latest figures from TURKSTAT (Turkish Statistical Institute) show that of the \$1.9 billion total investment, \$523.2 million was for the machinery used in preparation of yarns and fibres. Weaving machines ranked as the second highest with \$316.9 million dollars while flat and circular knitting machines ranked third with \$316.1 million.

The fourth most imported machinery group was machines used in textile finishing. Imports of machinery in this group reached \$273.6 million in 2018.

In terms of textile finishing industry, Turkey now has around 600 facilities which are renowned for their know-how, production capacity and quality of producing finished knitted fabrics, primarily made of cotton and viscose. Vehbi Canpolat, Chairman of Migiboy Tekstil and President of TTTSD (Turkish Textile Dyeing and Finishing Industrialists Association) says: "When we say 'the textile finishing sector in Turkey is playing to world leadership' we don't say it for nothing. In the global market, Turkey is the best place for finishing of the knitted fabrics made of cotton and viscose, which we call natural fibres. We have experience in this area. If you ask me about capacity, I can say that we are the 3rd country with 600 factories after China and India."



Revamped Texworld for February edition

Paris - Messe Frankfurt is to revamp the February 2021 editions of its Paris shows, including Apparel Sourcing, Avantex, Leatherworld, Shawls&Scarves, Texworld and Texworld Denim Paris, with a smaller, invitation-only event to view fabric collections. The shows will also take place as a virtual exhibition as they have in this years previous editions.

"The growing uncertainties linked to the COVID-19 crisis and the limitations imposed by the application of health regulations for major events with an international dimension - such as travel restrictions for foreign nationals - make it impossible to consider the holding of fashion industry trade fairs," Messe Frankfurt France said in a statement.

"The Messe Frankfurt France team would nevertheless like to enable international fashion players, buyers and exhibitors, to build their collections and exhibit their know-how. In order not to interrupt the business flow and to provide visibility for manufacturers, we will be proposing an event for fabrics and clothing buyers which will have a quite innovative format."

Organised over a week at the beginning of February, in the heart of Paris, the show will allow buyers to discover, with absolute safety, the offer from selected exhibitors whose products will be grouped together in specific areas.

"This event will be able to welcome visitors, by exclusive invitation and reservation, in order to show them the textiles and clothing collections selected from the exhibition offer," Messe Frankfurt added. "Organised around the traditional trend forum, several dedicated areas will group together by category the samples of fabrics and finished products from hundreds of textile companies and clothing manufacturers gathered by our selection committee."

"This is not a trade fair in the strict sense of the word, because this event will not bring together our exhibitors, but the products of a selection of our exhibitors," explained Frédéric Bougeard, President of Messe Frankfurt France. "It is a solution that will enable us to best meet the needs and expectations of the customers during this unique period. It complements the digital sourcing platform, which we have developed with our partner Foursource, as a means of exchange between two physical editions of our shows. It is crucial to offer our visitors access, even if restricted, to the global offer."

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Business News

Gildan ramps up production to meet increasing demand

Montreal - Gildan Activewear is ramping up its production lines to meet growing demand for its apparel and hosiery ranges with 75 per cent of pre-COVID manufacturing capacity now back on-line.

Reporting net earnings of US\$56.4 million for the three months ended September 27, 2020 down from \$104.9 million in the same quarter last year, Gildan said that it returned to a profit as increased capacity utilization and improved product-mix in the third quarter led to a significant improvement in gross margin, which totaled 22.5 per cent.

Gildan Activewear extended the shutdown of its manufacturing operations back in May following the impact of the global coronavirus pandemic. At the time, the company said it would continue to assess the need and timing to resume manufacturing operations, while following government mandated restrictions, in relation to evolving demand trends and inventory levels.

Overall, results for the third quarter reflected a strong improvement from the second quarter, despite ongoing COVID-19 impacts. Sales for the third quarter of 2020 of \$602 million declined 18.6 per cent compared to last year and were comprised of activewear sales of \$456 million, down 26.3 per cent from the prior year, and strong sales growth in the hosiery and underwear category, where Gildan generated \$146 million of sales, up 21.2 per cent compared to the third quarter of 2019.

The decline in activewear sales was primarily driven by lower unit sales volumes, unfavourable product-mix, and higher promotional discounting in the imprints channel. Imprints sales volumes were down 21 per cent in North America and 25 per cent in international markets, reflecting the ongoing impact from the COVID-19 pandemic. From a sales perspective, point of sale (POS) levels in the imprints channel, although down on a year-over-year basis, remained relatively stable through the third quarter, while sales to retailers were up year-over-year.

On the retail side, activewear sales were down slightly compared to last year. The 21.2 per cent increase in the hosiery and underwear sales category was driven by strong momentum from private and Gildan branded underwear products which continued to gain share and doubled in sales in the quarter. Although hosiery sales in the quarter improved sequentially, sales were slightly down compared to the prior year.

In terms of capital expenditure, Gildan spent \$14.1 million in the quarter, down from \$40.2 million last year, primarily for maintenance purposes.

Delta Galil buoyed by return to profitability

Tel Aviv - Delta Galil has swung to a profit in its third quarter, despite a drop in sales and the wider impact of the coronavirus pandemic.

The manufacturer and marketer of branded and private label apparel and innerwear net income was US\$19.5 million, a 39 per cent increase

compared to \$14.0 million last year, and a sharp turnaround from a loss of \$53.3 million in the 2020-second quarter. Sales were \$382.9 million, compared to \$446.1 million in the third quarter of 2019, a 14 per cent decrease associated with Covid-19 impact.

The company also announced the acquisition of leading US online retailer Bare Necessities, which enhanced Delta's digital presence, while offering more than 160 brands and 6,400 styles in intimates, women's swimwear, shapewear, sexy lingerie, sleepwear, and hosiery, among others.

Announcing the results Isaac Dabah, CEO of Delta Galil, said the return to profitability exceeded expectations. "Our results this quarter were driven by a strong performance in Delta European Brands and Delta Israel, coupled with initial benefits reaped from our strategic restructuring plan announced last quarter, as well as additional cost savings initiatives," he said. "Looking ahead, we continue our ongoing focus on driving innovation and excellence to deliver sustained profitable growth and long-term shareholder value. And, with a strong balance sheet, we have the necessary financial resources to continue to innovate and grow."

Delta Galil noted that the disruption caused by COVID-19 and related business closures and public quarantine measures resulted in decreased sales volume, primarily with several major DGUSA and DGPB customers, and lower retail sales due to store closures, which were partially offset by higher web and e-commerce customer sales.

The impact of COVID-19 reduced third quarter sales was approximately \$60 million, while the impact on EBIT was negligible.

As previously stated, Delta Galil is not providing financial guidance for fiscal 2020, as a result of the global impact of COVID-19.

Nevertheless, the company estimates that its operating results will maintain profitability in Q4 of this year.

Hanes posts positive performance despite Covid impact

Winston-Salem - Activewear and hosiery giant Hanesbrands has posted strong third quarter sales, despite continued market disruption from the Covid-19 pandemic.

Net sales for the third quarter ended September 26, 2020, were US\$1.81 billion compared with \$1.87 billion a year ago, including \$179 million of personal protective garments globally.

The year-ago quarter included net sales of \$119 million from the now exited C9 Champion mass program and the DKNY intimate apparel license. Excluding the exited programs and the effect of changes in foreign exchange rates, total constant-currency net sales for third-quarter 2020 increased 2.6 per cent.

Third-quarter operating profit decreased 35 per cent to \$175 million, and the quarter's adjusted operating profit excluding actions decreased 9% to \$227 million.

"I want to thank our incredible team of more than 63,000 around

the globe for their commitment and dedication during these challenging times," said Hanes chief executive officer Steve Bratspies. "I'm pleased with our results as we saw significant improvements across our business and exceeded our expectations for sales, profits and cash flow from operations."

Across the quarter apparel revenue trends improved sequentially in each business segment. Global sales of Champion grew nearly 130 per cent over the previous quarter, and consumer demand remained strong.

The latest figures also show that U.S. Innerwear sales increased 8.4 per cent, excluding protective garments, with growth in the basics and intimate apparel businesses. Overall, U.S. Innerwear sales increased 37 per cent over prior year driven by sales of protective garments, continued positive point-of-sale trends and inventory restocking.

As reported, the third quarter International segment net sales declined 5 per cent and operating profit declined 10 per cent. Excluding sales of protective garments, core International sales declined 7 per cent compared to the previous year, marking a significant improvement from the 44 per cent decline in the second quarter.

The company's outlook for the fourth quarter reflects continued uncertainty due to the COVID-19 pandemic and is based on the current business environment, including the recently implemented COVID-related restrictions in Europe, but does not reflect any potential impact to the consumer or operating environments should governments or businesses institute additional lockdowns and store closings.

For the fourth-quarter 2020, net sales are expected to be approximately \$1.60 billion to \$1.66 billion.

Maternity brand Seraphine acquired in £50m deal

London - UK maternity and nursing brand Seraphine has been acquired in a management buyout led by Mayfair Equity Partners in a deal valuing the company at around £50 million.

Mayfair acquired the company from Bridgepoint Growth and entrepreneur founder Cécile Reinaud who launched the brand back in 2002 as a boutique store in Kensington, London.

The company now sells across 127 countries around the world and has flagships in the UK, Europe and the US.

Reinaud said in a statement: "I'm delighted that Seraphine is backed by a new investor and will continue its exciting growth journey. Bridgepoint has been incredibly supportive for the last three and a half years and I am now handing over Seraphine to its amazingly talented management team."

Recover investment boost

Banyeres de Mariola - Recover, the producer of sustainable, premium recycled cotton fibre and cotton fibre blends, has received new funding as it looks to ramp up its operations and to grow its output over the next five years.

The family-owned company with a 70-year long history in textile recycling technology has announced it will achieve its goals on increasing its output to 200,000 metric tons of recycled fibre per year by 2025 through a strategic partnership with Story3 Capital.

Recover recycles industrial and pre- and post-consumer cotton waste, replacing the need to cultivate cotton, limiting the use of dyes through its ColorBlend system, and reducing textile landfill waste. Through its proprietary technology, Recover says it provides cost competitive, maximum performance fibers for both rotor and ring spinning applications. Per the Higg Material Sustainability Index, Recover's recycled cotton fiber has the lowest environmental impact score in the world.

As a result of the investment, Recover will increase its production to 200,000 metric tons of recycled cotton fibre per year by 2025. This will save nearly three trillion liters of water each year, equivalent to the drinking water consumed by 3 billion people on an annual basis, and allow 500,000 acres of land to be directed away from cotton cultivation for other uses.

VF Corp acquires Supreme

New York - VF Corporation has completed its purchase of streetwear brand Supreme for a purchase price of US\$2.1 billion.

The company expects its latest acquisition to modestly increase its revenue and adjusted earnings per share in fiscal 2021, and eventually contribute at least \$500 million of revenue in fiscal 2022.

Supreme sells apparel, accessories and footwear under its namesake brand globally through direct-to-consumer channels, primarily digital. The Supreme brand's founder, James Jebbia and the senior leadership team of the brand will remain with the company, headquartered in New York City, New York.

"We are thrilled to welcome Supreme to the VF family and to build on our decades-long relationship as we create value for all of our stakeholders. VF is the ideal steward to honor the authentic heritage of this cultural lifestyle brand while providing the opportunity to leverage our scale and expertise to enable sustainable long-term growth," said Steve Rendle, VF's Chairman, president, and chief executive officer.

Arcadia sells Evans brand

London - Administrators for the Arcadia Group have sold the Evans brand, e-commerce and wholesale business to rival City Chic Collective Limited for £23 million.

The deal will see City Chic acquire the Evans brand and intellectual property, customer base and inventory, but not its store network. Those stores will continue to trade for the time being, administrators said.

Established in the UK in 1930 Evans is a specialty retailer in plus-size apparel and footwear. In the year to August, its website had 19 million visits and generated approximately 23 million pounds, while the wholesale business delivered sales of approximately £3 million.

Listed on the Australian Stock Exchange, City Chic also specialises in plus-size women's apparel, footwear and accessories. It operates primarily through the online channel in Australia and New Zealand (ANZ) and the US, as well as through a store network in ANZ and wholesale and marketplace partnerships in the US, UK and Europe.

The deal comes after Arcadia, whose portfolio includes Topshop, Burton and Dorothy Perkins, called in administrators from Deloitte at the end of November after its trading was "severely impacted" by the pandemic. The move put some 13,000 jobs at risk.




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All dates listed below were correct at the time of writing. As a result of the coronavirus pandemic, all dates are subject to change at short notice. Please check with individual organisers for confirmation.

January 2021

23-25

Interfilere

Lingerie fabrics

Paris

France

Web: www.interfilere.com

27-29

Pitti Filati

Florence, Italy

Web: <https://www.pittimagine.com/en/corporate/fairs/filati.html>

26-28

Munich Fabric Start

Munich

Germany

<https://www.munichfabricstart.com/welcome.html>

February 2021

1-4

Texworld

Le Bourget

Paris

Web: <https://texworldparis.fr.messefrankfurt.com/paris/en.html>

1-5

ISPO

Virtual edition

<https://www.ispo.com/en/munich>

Dates TBC

Premiere Vision

Paris

<https://www.premierevision.com>

March 2021

18-19

Interfilere Shenzhen

Shenzhen World Exhibition

& Conference Centre

Web: <https://interfilere-shenzhen.com>

May 2021

4-7

Techtextil

Frankfurt

Germany

Web: <https://techtextil.messefrankfurt.com/frankfurt/en.html>

June 2021

12-16

ITMA Asia + CITME 2020

National Exhibition

and Convention Center

Shanghai

China

Web: <http://www.itmaasia.com>

22-26

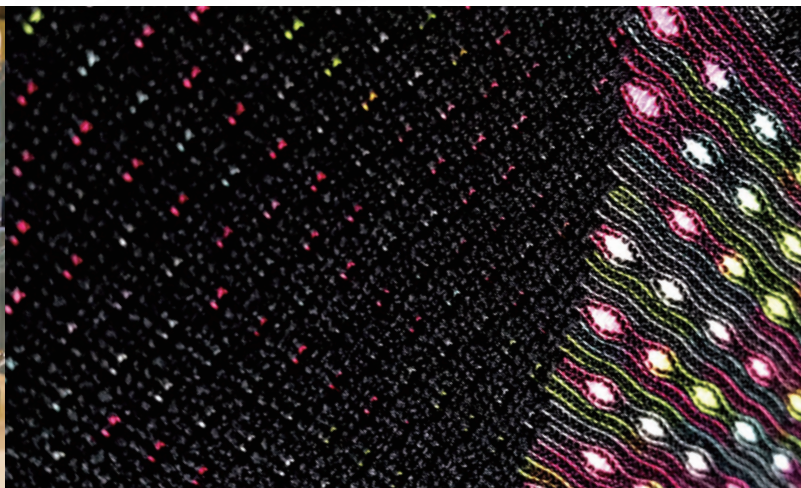
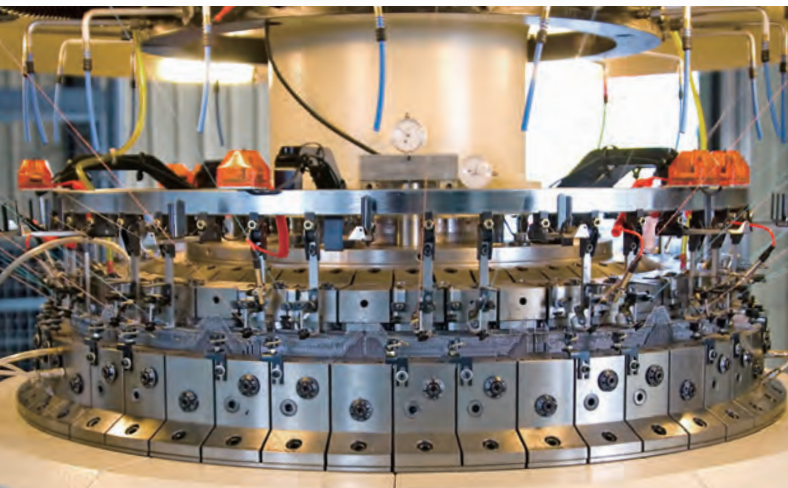
ITM & Hightex 2021

Istanbul

Turkey

Web: <https://www.itmexhibition.com/itm2021/>

Although every care is taken over the compilation of this diary to ensure accuracy of the dates, these can sometimes be changed due to local circumstances. It is therefore advisable to check with the appropriate organisers before travel arrangements are made.



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