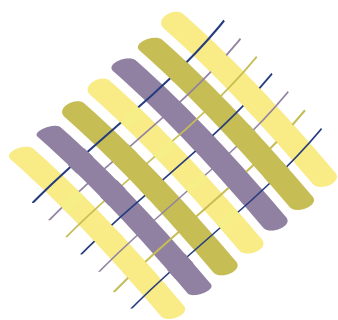




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Autumn 2026
Volume 35, Number 3

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Autumn 2026 **(Volume 35, Number 3)**

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Published by:

Boughton Technical Media Ltd,

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**Subscription enquiries, orders
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Annual subscription (four issues):

includes free access to publications

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In the Editor's opinion

As was evident at *Techtextil* and *Texprocess* (held in Frankfurt, Germany, on 21–24 April 2026, the technical textiles industry in Europe is undergoing something of a structural shift. The industry is currently weathering a geopolitical and economic storm of war, high energy prices, shifts in trade policy, increasingly stringent regulation and global price pressures. Speaking with those exhibiting on the showfloor at Frankfurt, and the big machinery manufacturers in particular, the tenor of the events mirrored the current state of global uncertainty. Potential customers are being cautious with their investments and are eager to cut their costs.

There are challenges, then, but there are also opportunities for those with the foresight to exploit them. At the show, the German Mechanical Engineering Industry Association (VDMA) Textile Care, Fabric and Leather Technologies presented an interesting study from Gherzi Germany. The study argues that for manufacturers of textiles, and those that supply them with machinery, to remain competitive, they should focus less on the performance of individual machines and process steps – cutting, sewing and finishing, for instance – and more on integrated, digitally networked production systems, and how they perform as a whole. The key question is no longer how efficient a single process is, but how efficiently the entire production chain operates.

Traditional growth models built on economies of scale are reaching their limits, as overcapacity and pricing pressure reduce the benefits of high-volume manufacture alone. This shift is reinforced by changes in demand. There is growth in the technical textiles industry, where precision, traceability and reliability are essential. The manufacture of textiles will therefore need to evolve from a fragmented process chain to an integrated system. Those that can design and operate intelligent, integrated production systems will not only adapt, but they will also thrive.

There are significant changes taking place in the nonwovens industry, also. In our opening feature (starting on page 11), our Nonwovens Editor, Adrian Wilson, reports from the *Index 26* trade fair, held in Geneva, Switzerland, on 19–22 May.

Taken together, Wilson writes, the developments highlighted at *Index 2026* suggest an industry in which the traditional relationship between scale, productivity and competitiveness is being steadily redefined. Competitive advantages will increasingly come not from how much manufacturers can produce, but from how intelligently they produce it.

In our second feature (starting on page 16), we report on long-time converter of textiles, supplying webbing and tapes to the US military, MMI Textiles, which moved into the manufacture of technical fabrics in 2021. The company's founder and Chief Executive Officer, Amy Bircher Bruyn, spoke to John McCurry about the reasons behind the company's change of strategy, the challenges and opportunities it presented, and the importance of partnerships.

In our final feature (starting on page 21), you can find out about how increasingly complex working environments are exposing the limitations of traditional methods for improving the visibility of workers in dark, dusty and smoky environments, such as the use of fluorescent and retro-reflective materials. Researchers at Coats, a leading supplier of critical components to the global apparel and footwear industries based in London, UK, are working to solve this problem using phosphorescent technologies and the company's Senior Vice President (SVP) of Innovation, Pradip Bahukudumbi, tells us more.

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On the cover:



Held every three years, Index offers an opportunity to gauge the progress of the global nonwovens market. Starting on page 11, Adrian Wilson reports.



Beginning on page 16, the founder and Chief Executive Officer of MMI Textiles, Amy Bircher Bruyn, speaks to John McCurry about the company's new manufacturing facility, shown here, and the importance of partnerships.



Karl Mayer's Warp Preparation business benefits from boom in data centres



Woven glass-fibre fabrics such as this are used to manufacture composite copper-clad laminates.

Karl Mayer says that its Warp Preparation business unit is enjoying a significant growth in orders as the increased construction of data centres is driving demand for high-performance printed circuit boards (PCBs) and consequently, for copper-clad laminates (CCLs).

Comprising composites reinforced with woven glass-fibre fabrics, CCLs are the are used for manufacture of PCBs and, consequently, are fundamental for the growth in the use of artificial intelligence

however, are changing rapidly as the growing computing power of modern AI systems demands servers with highly complex PCBs."

The PCBs used in standard electronics feature six layers of CCLs, while those used in electric vehicles and mobile telephones have twelve layers of CCLs. The PCBs used in AI data centres, by contrast, can be made from over 24 layers of CCLs. The increased number of layers is driving demand for glass-fibre fabrics, but

(AI). The President of Karl Mayer's Warp Preparation business unit, Enzo Paoli, says: "Currently, around four billion metres of glass fabric are produced worldwide each year and by 2028, another two billion metres will be added. The requirements for glass fabrics,

it also creates challenges for their manufacture. The tension of the yarns used must be controlled precisely during warp-preparation; even slight deviations can cause local differences in density within the fabric, leading to time differences in high-frequency signals (known as 'the fibre-weave effect' or intra-pair skew).

Karl Mayer says that its Filsize-G sizing and AM-G assembling warp-preparation systems enable the reliable and efficient production of high-quality glass-fibre fabrics, and have been used by glass-fabric manufacturers worldwide for nearly 20 years.

Karl Mayer started selling its machines for manufacturing glass-fibre fabrics in 2007, to customers in China and Taiwan. The company sold its 100th such machine in 2020.

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Coats and Tajima enter partnership for embroidery innovation

Embroidery technologies are to be developed by London, UK-based thread manufacturer Coats and embroidery machinery specialist, Tajima Industries Ltd, of Kasugai City, Japan.

The two companies have signed a memorandum of strategic cooperation, through which Coats' global network of Embroidery Service Centres (ESCs) will be equipped with Tajima's machines, so that they can be used for customer co-creation, technical testing and training.

Coats and Tajima will also promote the use of the former's high-performance embroidery threads and technical advisory services with the latter's machinery (including its Intelligent Thread Management (i TM) and Digitally Controlled Presser Foot (DCP)) and digital technologies (including its PulseID, Pulse IQ and DG software platforms).

Group Commercial Officer at Coats, Adrian Elliott, says: "Embroidery is a specialised, premium segment where quality and

consistency are critical to protecting brand value. By partnering with Tajima, we can deliver unique, value-adding solutions that support customers from design through to production."

The Chief Executive Officer (CEO) of Tajima Industries Ltd, Hidetoshi Kojima, adds: "We are delighted to contribute to the further development of the embroidery industry through this partnership with Coats, combining the technologies and expertise of both companies."

The memorandum was signed by Kojima and Coats' Managing Director, Strategic



Representatives of Coats and Tajima Industries Ltd celebrate the signing of a memorandum of strategic cooperation between the two companies at Tajima Industries' headquarters in Kasugai City, Japan.

Projects, Kunal Kapur, at Tajima Industries' headquarters on 9 July 2026.

Marissa Munnings, Director Brand & Communications, Coats.
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Sector plan for ITMA 2027 in Hannover, Germany, is unveiled

The organisers of *ITMA 2027* have revealed the sector plan for the show, which will take place in Hannover, Germany, on 16–22 September, and will cover 180 000 m².

Owned by the European Committee of Textile Machinery Manufacturers (CEMATEx), of Zurich, Switzerland, and organised by ITMA Services, of Singapore, *ITMA 2027* will occupy twelve halls at the Messegelände Hannover. These halls will be divided into 20 sectors, including spinning, finishing, software and automation, recycling, and fibres, yarns and fabrics.

More than 1500 companies from 43 countries have secured their stands at the show. CEMATEx members account for 43% of all applicants and over 60% of exhibition space booked to date. There will also be a significant number of companies from (in order of numbers) China, India, Türkiye and Japan.

The President of CEMATEx, Alex Zucchi, says: "The diverse participation from around

the world reinforces *ITMA 2027*'s position as a neutral global platform, providing manufacturers with an equal opportunity to compete and showcase their latest innovations."

The Chairman of ITMA Services, Charles Beauduin, adds: "Despite ongoing geopolitical uncertainties and a challenging global economic environment, the strong response to *ITMA 2027* reflects the industry's resilience and continued confidence in investing in innovation and future growth."

Federico Pellegata, General Secretary, European Committee of Textile Machinery Manufacturers.



The sector plan for *ITMA 2027*, which will take place in Hannover, Germany, on 16–22 September.

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Monforts systems deliver continuous production for Kipaş Textile

The Thermex continuous dyeing line installed at Kipaş Textile's Kahramanmaraş plant.

Kipaş Textile has installed a continuous dyeing line and a sanforiser from A. Monforts Textilmaschinen at its new dyeing and finishing plant at its headquarters in Kahramanmaraş, Turkey.

Founded in 1984, Kipaş claims to be the largest vertically integrated textile manufacturer in Greater Europe, and employs some 5500 people. It produces approximately 400 t of yarn each day, and 48 million metres of denim and 36 million metres of non-denim fabrics each year. The company's Chief Executive Officer (CEO), Halit Gümüşer, says: "[Turkey] offers fast logistics to European markets thanks to its strategic location, while its strong textile heritage and qualified workforce enable us to produce high-quality products. Our [research and development] R&D capacity – especially in sustainable and technical textiles – makes [Turkey] an indispensable solution partner in the global supply chain."

Kipaş already operates a number of Monforts lines, and the two latest systems have been operating continuously since the first day they were commissioned.

Monforts, of Mönchengladbach, Germany, says that its Thermex continuous dyeing lines are highly productive and energy-efficient, and yield high-quality products. The lines ensure that the penetration of dye in fabrics is uniform and colours can be reproduced over long production runs. Monfortex sanforisers ensure that the residual shrinkage of the fabrics is kept to a minimum and that they have good hand.

Gümüşer adds: "We are extremely satisfied with the installation process of the two Monforts machines installed in our new fabric dyeing and finishing plant, and with the professional support provided by the technicians. In particular, the uninterrupted remote support they provided to ensure operational continuity played a major role in quickly resolving any potential problems."

Gümüşer says that a key strength of Kipaş is the versatility its technologies makes possible. He continues: "We offer a very



wide and high-quality product range under our sub-brands, ranging from technical textiles to fashion-oriented products and from alternative sustainable solutions to high-performance fabrics. This gives us unique flexibility against fluctuations in global markets and thanks to our agile structure, we continue to strengthen our strategic position and expand our sphere of influence with new collaborations, maintaining our balance even in times of crisis."

At the end of 2025, Kipaş announced the launch of its fibR-e recycling platform. In a partnership with fellow Turkish company, Adana-based Meltem Kimya, waste garments containing 70% or more polyester (PES) are being processed and converted into certified, high-quality filament yarns and staple fibres.

"Recycling has barely scratched the surface of the PES problem," says Gümüşer. "With fibR-e, we can take real post-consumer waste in all its complexity and return it to the market as certified, high-quality filament yarns and staple fibres. This is how the industry moves from linear to circular, not through pilots but through commercial scale."

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<http://www.monforts.com>

Menang restarts quickly with Andritz airlay line

A Malaysian manufacturer of nonwoven automotive components, Menang, has resumed production with the assistance of Austrian machinery manufacturer Andritz after a major fire severely damaged its airlay line in mid-March 2026.

Andritz, of Graz, supplied a new airlay line and enabled production to restart at Menang, of Balakong, within only four months. Following the fire, Menang immediately launched a recovery programme and ordered a replacement airlay line from Andritz at the end of March. Working closely with the company, Andritz completed the installation and commissioning of the line by mid-July. By carrying out site reconstruction and equipment installation in parallel, Menang accelerated the return to production and minimized the impact on its operations.

The Group Director of Menang, William Wong, says: "Following the fire, our focus was on rebuilding quickly and ensuring continuity for our customers and partners. The strong collaboration between the Menang and Andritz teams played a key role in making this possible."

Susan Trast, Vice President Group Communications and Marketing, Andritz.
Email: susan.trast@andritz.com;
<https://www.andritz.com>



Imogo opens facility to showcase benefits of spray-dyeing line

The Swedish developer of a spray-dyeing line that slashes the consumption of fresh water, energy and chemicals, as well as reducing wastewater, when compared with conventional jet-dyeing lines, has opened a new showroom and production hub.

Imogo, of Limhamn, says that it will use the facility – located at the 7H Dyehouse in Kinnahult, also in Sweden – to show its potential customers its spray-dyeing technology in action and conduct trials on their fabrics. The showroom and production hub houses the company's Dye-max and Mini-max spray-dyeing systems and can be used for laboratory trials and full-scale production, and can process fabrics of up to 2.4 m in width.

The Dye-Max application unit is a closed chamber containing a series of spray cassettes with precision nozzles for accurate and consistent coverage, each nozzle working in combination with a patented valve that controls the volume of chemical applied. The chamber also has an

exhaust system and droplet separator to ensure that the environment around the unit is kept clean. There is one set of spray cassettes for each of the three separate dye-dispersion feed lines and they can be easily exchanged, without the need for tools, in less than one minute. This allows for extremely fast changeovers between colours, because the operator simply needs to insert a new cassette. Unlike existing processes, there is no need for a lengthy, thorough cleaning of the chamber each time and, because the spray cassettes are interchangeable, all maintenance on them can be performed off-line.

Imogo says that its technologies are tailored for the colouring of natural fibres in both knitted and woven constructions using reactive dyes. The Dye-max line can process up to 1.5 t of fabric a day.

Imogo's Chief Executive Officer (CEO), Joacim Wellander, says: "While previous discussions have focused on the potential of spray dyeing, we are now fully



The Dye-Max application unit can spray-dye up to 1.5 t of fabric a day.

equipped with the machinery, technical expertise, and operational experience to move projects from the laboratory to full-scale commercial production."

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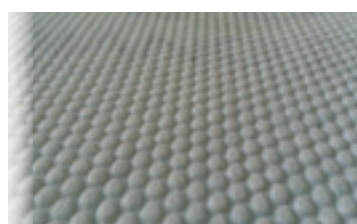
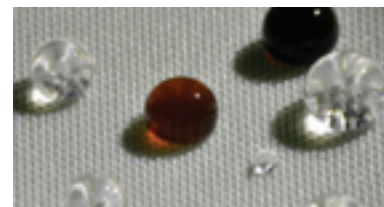
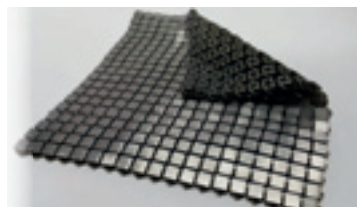
ISSN 0964-5993: Printed in the UK by Blackmore, Shaftesbury.

Technical Textiles International is published in four issues a year: Spring, Summer, Autumn and Winter, in one volume, by:

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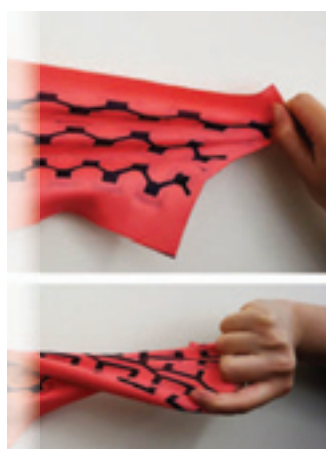
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ADVANCES IN *Textiles* technology

February 2022

An international newsletter on textiles technology edited by:
James Bicknell

Fibres, filaments and yarns

Artificial silk door-pulls feature on Mercedes-Benz concept car

Novel, sustainable door-pulls made from artificial silk fibres are being used by Mercedes-Benz of Stuttgart, Germany, in its latest concept car, the Vision EQXX.

The carmaker has designed Vision EQXX to highlight ways in which luxury vehicles can be produced using technologies that are more environmentally sustainable than conventional approaches.

The artificial silk fibre is called BioSteel and is produced by AMSilk of Pirmas, Germany. The company says that the fibres are biodegradable and recyclable, and no waste is generated during their manufacture. It adds that BioSteel demonstrates mechanical properties

The door pulls for the Vision EQXX concept car from Mercedes-Benz are made from BioSteel artificial silk fibres.

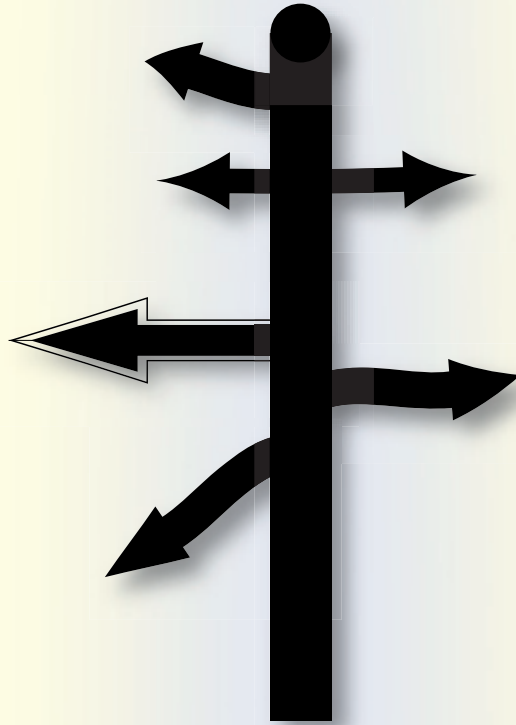
Highlights this month:

Methods for determining the effects of stains and stresses on carbon nanotube fibres are being developed by researchers at Rice University	2	A single vented tumble dryer can discharge up to 120 million microfibres into the air each year, according to a pilot study	5
A range of durable fabrics made from pre-consumer recycled polyamide (PA) 66 fibres has been launched by Invista through its Cordura brand	3	A fibre-laying process that enables the efficient production of composite footplates and toe caps for use in footwear has been launched by Gosts	7
A dust-action thermoregulating finish that reduces the temperature of surfaces to which it is applied by up to 3°C has been launched by HenQ	4	A long fibre-based lithium-ion battery that could be woven into fabrics is being developed by researchers at the Massachusetts Institute of Technology	10

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