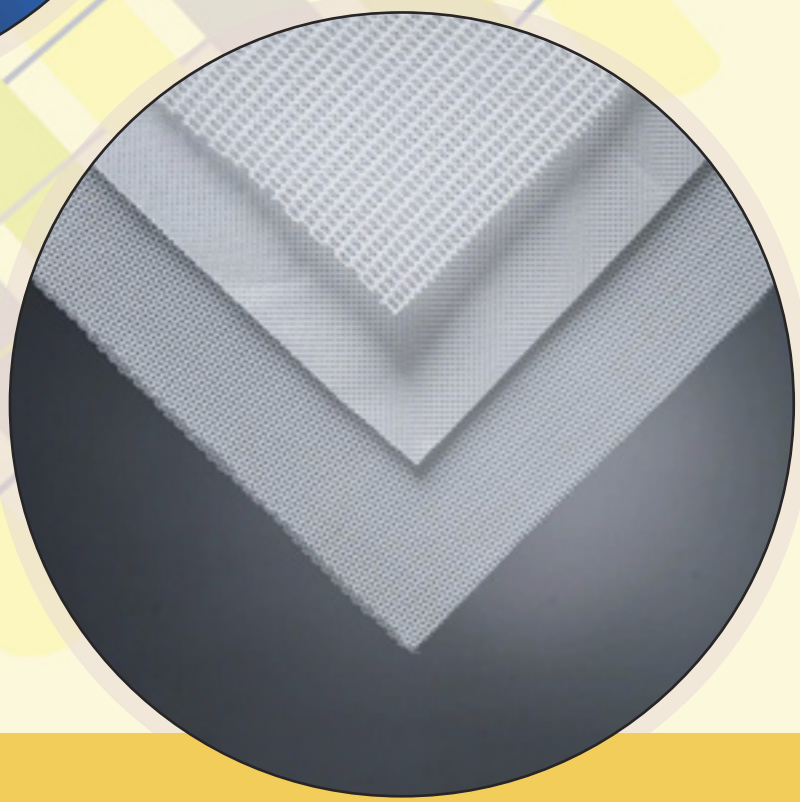
Technical TEXTILES international

Summer 2026
Volume 35, Number 2

Informing the industry worldwide

The latest developments in machinery on show at *Techtextil*



Innovations in fibres, fabrics, nonwovens and testing equipment to be displayed in Frankfurt

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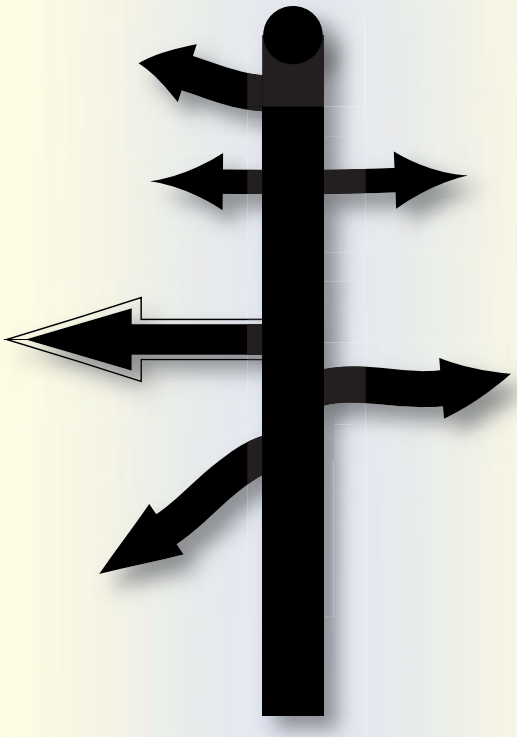

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Summer 2026
(Volume 35, Number 2)

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Subscription enquiries, orders and payments:
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PO Box 54,
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Tel: +44 (3301) 335079
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Annual subscription (four issues): includes free access to publications and back issues online: £300/$459/€390.

(Payments in other currencies are subject to our prevailing exchange rate). Prices are valid to the end of 2026, and include airmail delivery in Europe and air-speeded delivery elsewhere.

In the Editor's opinion

On 21–24 April 2026, more than 1700 exhibitors from 49 countries will open their stands to visitors at *Techtextil* and *Texprocess* in Frankfurt, Germany. There will be 16 national pavilions, with The Netherlands and Tunisia presenting themselves for the first time, and there are new exhibitors from Australia, Colombia, Nigeria, Hungary and Uruguay.

This international gathering of the technical textiles industry could not be better timed. Looking back at the editorial I wrote ahead of the 2024 editions of the co-located shows, many of the problems faced by the technical textiles industry (and the industry in Europe in particular) mentioned there have not been solved—indeed, in many cases, they have been exacerbated.

In 2024, the geopolitical situation was less than favourable. The war in the Ukraine was causing energy prices to spike in Europe; now, we also have an escalating conflict in the oil-producing Middle East to contend with. European companies still face increasing competition from the technical textiles industries in China and India. Ahead of the 2024 editions of *Techtextil* and *Texprocess*, trade tensions between the USA and China were impacting global trade. Now, the Trump Administration's recourse to tariffs is likely having an even more significant impact. Further, to these issues, increasingly stringent environmental regulations in Europe are creating a further financial burden for companies operating there.

In the face of these pressing issues, it is vital for the technical textiles industry to meet en masse, so that important and wide-ranging discussions can be had with regard to potential sloutions. The responses of the European industry to these challenges are evident in our extensive preview of *Techtextil*. Machinery builders are striving to make their equipment more efficient, cutting costs for manufacturers and reducing the impact the operations have on their environment (see also, page 4). Manufacturers of fibres (see also, page 21) and fabrics (see also, page 27) are working to incorporate more recycled and bio-based materials into their products. Chemical suppliers (see also, page 34), meanwhile, continue to develop additives that not only add value to textiles, but also reduce the harm to human health of the final products and of manufacturing processes to the environment.

Further, digital technologies for the automation of, exchange of data between, and analysis of data from, production machinery (so called Industry 4.0 and 5.0) will be a major focus of the *Techtextil* exhibition. At the same time, digital technologies will help those that adopt them to meet the sustainability requirements of customers and partners by, for example, improving the transparency of their supply chains and their ability to calculate the resources used in the manufacture of their products.

Finally, at the time of writing, *Techtextil* and *Texprocess* are less than a month away. We will continue to investigate and report on the plans of exhibitors as they are announced via our website (https://www.technical-textiles.net), so that you will have the most complete information in advance of the shows. I look forward to seeing you in Frankfurt!

Technical TEXTILES international

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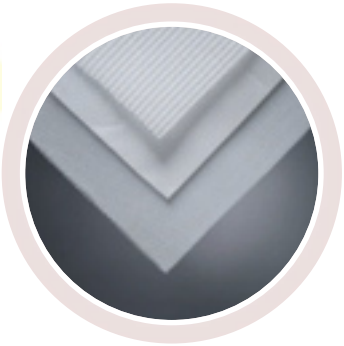
At Techtextil, Andritz will introduce its X-Pro crosslapper. Our preview of the other innovations in machinery on show in Frankfurt starts on page 4



Techtextil debutant, Asahi Kasei Advance, will showcase its three-dimensionally knitted Cubit fabrics. Details of other technical fabrics to be shown in Frankfurt can be found starting on page 27

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Further information at https://www.technical-textiles.net

Efficient, sustainable and automated machinery on show in Frankfurt

While many machinery builders will wait to present their most important developments at *ITMA* (which will take place in Hannover, Germany, on 16–22 September 2027), *Techtextil,* and its sister show, *Texprocess,* will provide them with a vital opportunity to showcase their technologies to manufacturers of technical textiles. Editor James Bakewell picks-out some highlights.

At Techtextil, Andritz will introduce its X-Pro crosslapper for use with needlepunch and hydroentanglement lines.

Fibres and nonwovens

Andritz (Hall 12.0, Stand B95)

A machine builder for the textiles and nonwovens industries, Andritz of Graz, Austria, will present its technologies for the production of durable and technical nonwovens, and natural fibres, and systems for the recycling of textiles. The company will also introduce a new crosslapper (X-Pro).

Andritz will intorduce visitors to its stand to its plants for the production of man-made cellulosic fibres, including those made from lycocell. The company can supply specialised equipment such as flash dryers and pulp-preparation systems, and with decades of expertise in the pulp and paper industries, the company also provides audits and upgrades for existing plants.

Andritz will highlight the growing potential for the use of bast fibres such as hemp, flax, jute and kenaf for the manufacture of nonwovens. The company sells systems for dry cleaning, decortication and refining of such fibres so that they can be processed using its airlaying systems (neXline).

Cours, France-based subsidiary Andritz Laroche will showcase its technologies for the recycling of textiles,

including those for automated textile sorting and fibre preparation, and for chemical recycling, as well as integrated process combinations.

Andritz will show a unit (teXscan) that exploits artificial intelligence (AI) to sort textiles before they are recycled. The unit can evaluate the quality of textiles prior to their recycling, so that they can be sent for the production of nonwovens, spinning into fibres or chemical recycling, depending on what they are most suitable for. The sorting unit can also classify end-of-life textiles by composition and colour, and remove hard components, such as buttons and zippers.

Further, Andritz will introduce the X-Pro crosslapper for needlepunch and hydroentanglement lines. The company claims that the machine features a unique "X-path" design that enables the precise control of fibres, eliminating distortion and enabling flawless overlaps, regardless of the characteristics of the web. It is fully compatible with the company's ProWin profile-correction system.

Finally, Andritz will present its needlepunch and wetlaid technologies for processing technical fibres, such as those made from carbon, aramid, glass and ceramic fibres, and will highlight its Synergy service agreements for its machinery.

Airbond (Hall 12.0, Stand E31)

Airbond, of Pontypool, UK, will highlight the latest advances in its pneumatic splicing technology. Invented by the company in the 1960s, pneumatic splicing has become indispensable not only in the manufacture conventional textiles, but also in the production of carbon and aramid fibres and yarns for aerospace, automotive and wind-power applications. The technology intermingles individual filaments to create joints that are flatter and stronger than knots. Airbond's latest splicers are three-dimensionally (3D) printed, making them light and strong, while enabling the processing of yarns up to 16 000 tex; far beyond the 1200-tex capacity typical of most splicing systems.

Ascotex (Hall 12.0, Stand C75)

Ascotex, of Nelson, UK, will present its portfolio of ceramic and hard-chromed yarn guides, tensioning devices, yarn-break detectors, sensors, cutters and

On average, modern passenger vehicles each contain 30–35 kg of yarn, according to Barmag, with the polyamide and polyester yarns employed for the manufacture of airbags such as this accounting for a large proportion of this weight.

threading tools. The company says that in modern spinning and winding environments, where yarn velocities continue to rise and tolerances tighten, the surface over which a yarn travels becomes critical. Ascotex ceramic yarn guides, manufactured from high-grade technical ceramics, are hard and wear-resistant, and their ultra-smooth surface finish minimises friction, heat build-up and abrasion, protecting the integrity of filaments, and ensuring uniform winding density and package formation.

Autefa Solutions (Hall 12.0, Stand C79)

Autefa Solutions supplies customised equipment and related services for complete needlepunch lines: combing; opening and blending; chute-feeding; carding; crosslapping; needlepunching; drafting; winding. In addition, the company, from Friedberg, Germany, has sold lines for recycling carbon fibre and hydroentanglement machines.

The company will show its StylusONE needleloom, which it says is a reliable, cost-effective machine for the production of nonwovens with areal weights up to 1800 g.m^{-2}. Able to run at speeds of up to 1500 strokes per minute, the machine features a maintenance-free gearbox that helps to minimise downtime. StylusONE is available in four working widths – up to 6.7 m – and is offered in configurations for pre-needling and finishing.

The company will also tell visitors to its stand about its airlay systems that can process natural and recycled fibres. It will say that its Airlay V12/R and V21/-K 12 web-forming machines enable the production of high-quality products from natural and recycled fibres, and require only a moderate investment.

Barmag (Hall 12.0, Stand C56A)

Barmag – which was OC Oerlikon's Polymer Processing Solutions division (Oerlikon Barmag, Oerlikon Neumag and Oerlikon Nonwoven) and is based in Pfäffikon, Switzerland – will for the first time exhibit as a subsidiary of Rieter, of Winterthur, Switzerland.The company was acquired by Rieter in February 2026.

Barmag supplies spinning systems, texturing machines, systems for the production of bulk continuous filament (BCF) yarns and staple fibres, and systems for the production of nonwovens. At *Techtextil*, it will show technologies for the production of yarns for airbags, seatbelts and geotextiles.

The company, of Remscheid, Germany, says that, on average, modern passenger vehicles each contain 30–35 kg of yarn, with the polyamide (PA) and polyester (PES) yarns employed for the manufacture of airbags accounting for a large proportion of this weight. Barmag will tell visitors to its stand that its technologies for the production of these yarns are efficient and stable.

Technology Manager Industrial Yarn at Barmag, Jen Supra, says: "Our solutions meet all the demanding standards for airbag yarns worldwide, throughout the entire service life of a vehicle, regardless of climate or operating conditions."

Seatbelts must withstand tensile forces in excess of 3 t and simultaneously stretch in a controlled manner in the event of impact, in order to reduce the load experienced by the passenger. A seatbelt comprises approximately 300 filament yarns, each of which are spun from around 100 individual filaments. Barmag claims that its Single Filament Layer Technology is a sophisticated and simultaneously gentle high-tenacity (HT) yarn process for manufacturing these yarns.

Yarns that demonstrate low elongation, high tenacity and high rigidity are also used in geotextiles, such as

the geogrids employed in the base course system under asphalt. Geotextiles usually have high yarn counts of up to 24 000 denier. Systems from Barmag are able simultaneously to produce three filament yarns with counts of 6000 denier each. Thanks to the high spinning titer, fewer yarns can be plied together to achieve the required titer for the geotextile in a cost- and energy-efficient way. Complementing this, Barmag subsidiary Neumag supplies spunbond systems for the production of geotextiles made from PES or polypropylene (PP).

Dent Instrumentation (Hall 12.0, Stand E61A)

Dent Instrumentation, of Colne, UK, will tell visitors to its stand that its contactless yarn sensors have become a *de facto* industry standard, recognised for their accuracy and durability, and widely adopted. Operating effectively at speeds from as low as 3 $m.min^{-1}$ to 8000 $m.min^{-1}$, the sensors are encapsulated in epoxy resin for protection against spin finish, oil, wax and water, and incorporate a unique optical compensation system to minimise the need for cleaning.

Dienes Apparatebau (Hall 12.0, Stand C55B)

Pilot spinning systems for the development of new products, such as renewable precursors for carbon fibres and biobased alternatives to synthetic fibres, are to be shown by Dienes Apparatebau GmbH of Mühlheim am Main, Germany, on its stand.

The company says that in order to develop new fibres, filaments and yarns, companies need efficient, modular, flexible and, in part, self-optimising experimental working systems that can gather data on the process being carried-out. Dienes claims that its MultiMode plant meets these demands.

In a MultiMode plant, each step of the process is conducted by a module that can be adapted to the specific requirements of the customer and can be controlled separately from other modules. Dienes' production lines therefore comprise several modular units that can be exchanged and rearranged easily at any time. Further, data regarding the parameters of the process being developed can be viewed and recorded.

A wet-spinning line from Dienes Apparatebau GmbH. The company will tell visitors to its stand that in order to develop new fibres, filaments and yarns, companies need efficient, modular, flexible and, in part, self-optimising experimental working systems such as this that can gather data on the process being carried-out.

MultiMode Explorer is Dienes' tool for controlling and visualising MultiMode lines. A new user interface will be presented by the company at *Techtextil*. MultiMode Explorer allows for the gathering of data from sensors in real time, recipe management, the long-term-monitoring of production parameters and remote access to the plant for service and operation.

Dilo (Hall 12.0, Stand B81)

German nonwovens machinery manufacturer Dilo Group, of Eberbach (see also, page 5), will likely showcase its MicroPunch needling technology, which it has been developing for the last 20 years, and could be used in place of hydroentanglement for the production of disposable nonwovens from biodegradable fibres, as it is significantly more energy-efficient.

Needlepunching technologies have traditionally been used to bond nonwovens with medium-to-high areal densities, in part because the needles leave marks that are more apparent in fabrics with lower densities. As such, hydroentanglement is typically used to bond fabrics with areal densities of less than 100 g.m^{-2}, but although the process is widely used for the manufacture of fabrics for wipes, it is water- and energy-intensive. Dilo says that MicroPunch could be a viable alternative for the bonding of nonwovens with areal densities of 30-100 g.m^{-2}. The machine features needle boards with 45 000 needles per metre, enabled by innovative designs by Groz-Beckert (see also, page 19). The needles move in and out of the fibre web in a manner that minimises the appearance of any needle marks in the finished nonwoven. The machine runs at 160 to 170 metres per minute and the company reports energy savings of up to 50% per kilogramme of fabric produced, depending on the product, compared with hydroentanglement. Further, fabrics made using MicroPunch are strong and have more volume than a lightweight hydroentangled fabric.

Fibre Extrusion Technology (Hall 12.0, Stand A78)

Fibre Extrusion Technology (FET) of Leeds, UK, will highlight technology it has developed and patented that enables it to use supercritical carbon dioxide (CO_2) as a washing solvent for the production of ultra-high molecular-weight polyethylene (UHMWPE) fibres. Conventional processes for the manufacture of UHMWPE fibres involve the use of large volumes of hazardous solvents, such as dichloromethane (DCM) or, more recently, hexane. First, UHMWPE powder is dissolved in mineral oil to form a gel that is subsequently extruded, cooled and solidified. The oil is extracted from the fibres using DCM or hexane and the solid fibres are then drawn at high temperature to align the polymer chains further in the UHMWPE, resulting in strong and tough fibres. Typically, it takes 10 kg of hexane to extract 1 kg of oil.

Fibre Extrusion Technology (FET) has developed technology that enables it to use supercritical carbon dioxide as a solvent for the production of ultra-high molecular-weight polyethylene fibres. Here, FET's Senior Material and Process Scientist, Kris Kortsen, inspects a batch of fibres.

FET's Senior Material and Process Scientist, Kris Kortsen, says: "[Mineral oil] reclamation using extraction baths and hot-air drying chambers is not practical for the scale of our system. The current baths employed can be up to 200 m long and the waste volumes are considerable. Expertise is needed in dealing with such dangerous chemicals and overall, the process has an immense environmental impact. CO_2, by contrast, is a cheap and abundant sustainable solvent that is non-toxic, non-flammable and leaves no residue."

A Research and Development Manager at FET, Jonny Hunter, adds: "The current systems for manufacturing UHMWPE filament yarns are on a huge scale, with very complex processing routes. This means the supply chain is currently very inflexible with minimal opportunity for new product development. These disadvantages have been fully addressed in the development of our new FET-500 series laboratory- and small-scale gel-spinning system."

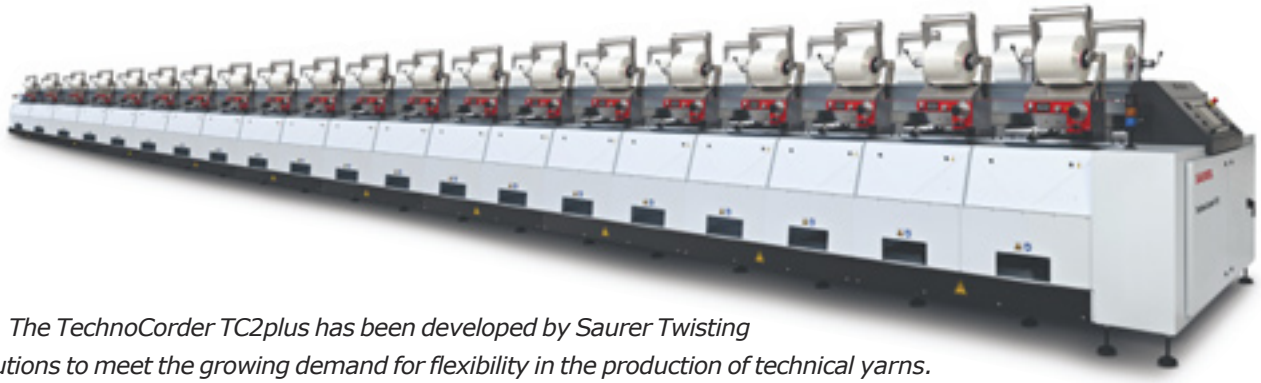
FET's closed-loop system can recover more than 95% of the mineral oil used in the production of UHMWPE fibres. Further, the FET-500 features a highly modular drawing system based on heated godet rollers, enabling the temperature and drawing tension to be customised and controlled precisely.

Retech AG (Hall 12.0, Stand B01)

From Meisterschwanden, Switzerland, Retech AG will exhibit its range of heating, drawing and monitoring components for processing man-made fibres.

Retech's heated godet rolls are designed to apply heat-treatments to filaments. They must generate the correct temperature for the material used and must maintain that temperature continuously throughout the process. To achieve these aims, Retech's godets feature single or multi-zone heating systems using induction-, infrared radiation- or resistance-based technologies. The company says that the godets employ energy-efficient motors and heaters, and have long service lives.

The failure of a godet can cause significant disruption to production. Retech has therefore equipped its godets with additional temperature sensors so that



The TechnoCorder TC2plus has been developed by Saurer Twisting Solutions to meet the growing demand for flexibility in the production of technical yarns.

preventive maintenance can be undertaken. The UTR-6A system measures the temperatures in the rotating godet and transmits the data to the UCR-6 temperature controller for processing.

Using thermocouples that are installed in the induction heater in each heating zone, the temperature of the induction coil can be measured and monitored. If the temperature exceeds a certain value, the coil can be damaged, and the system reacts with a warning and simultaneously switches-on a cooling function. The operator can then determine the cause of the increase in temperature and fix the problem. If the bearing temperature exceeds a certain value, the grease lubricating it decomposes and can cause damage and, ultimately, godet failure. Retech has also developed technology for monitoring the temperature of these parts. Vibrations can also damage bearings and lead to failures, and are also measured and evaluated via the UCR-6.

The company will tell visitors to its stand that modern godets need to be not only faster and bigger than their predecessors, but also able to run slowly if needed for the production of such as carbon fibres. To ensure that such slow speeds, of 0.1–10 $m.min^{-1}$, can be achieved in a stable manner, Retech has developed a drive system that, crucially, does not feature a coupling (common in the industry up to now) that connects the bearing, gear and motor. Instead, the bearing, the gearbox and the motor comprise one unit. Depending on the requirements for speed, torque and gearbox angle, a modular system is also available, which can be assembled according to a customer's needs.

Saurer Twisting Solutions (Hall 12.0, Stand B56)

Saurer Twisting Solutions, of Kempten, Germany, will present a twisting machine it has developed to meet the growing demand for flexibility in the production of technical yarns, the TechnoCorder TC2plus.

It will tell visitors to its stand that the TechnoCorder TC2plus can process both fine and coarse yarns in low and high twist counts reliably and consistently. A key feature of the machine is FlexiPly, which enables the dynamic combination of different yarn types and counts. This allows for the production of hybrid yarns that are precisely engineered for their specific end-uses, which can be an advantage for applications such as mechanical rubber goods, tyre reinforcements and smart textiles.

A fine-count spindle, meanwhile, ensures that technical yarns with titers of around 110 dtex are protected and processed stably. It can be used to produce yarns for medical textiles, protective clothing and lightweight technical fabrics.

The TC2plus can also be used to produced yarns for artificial turf. Its integrated cabling function can blend various polyethylene (PE) monofilaments into sophisticated yarn constructions that can authentically reproduce natural light and shadow effects, resulting in a highly convincing natural appearance.

Finally, an integrated set-up assistant helps operators to define the optimal package configuration within minutes, minimising changeover times, maximising machine up-time and sustainably enhancing the overall effectiveness of the equipment.

SML Maschinengesellschaft mbH (Hall 12.0, Stand B76)

SML Maschinengesellschaft mbH of Redlham, Austria, will show a range of multifilament spinning lines for the production of fully drawn yarns (FDYs) from polypropylene (PP) and polyethylene terephthalate (PET). The machines in the Vertex range can run at higher line speeds, have a higher output capacity and are more efficient at low titres than the company's Austrofil MT/HT spinning lines.

In comparison with SML's Austrofil MT/HT 4x4 spinning lines with 16 yarn-ends, the basic 3x3 configuration of the Vertex line has 24 ends, increasing its efficiency at low titres. With the same extruder output capacity, the production output for a 250-denier yarn is doubled. Further, the Vertex line is equipped with godets and winders for increased speeds.

The stretching and winding units on the Vertex machines are placed directly beneath the spinning head and the quenching unit, meaning that the footprint of a 3x8 line is reduced by 30% compared with an Austrofil MT/HT 4x4. Further, this concept enables the production capacity of the lines to be tailored simply by adding further spinning units.

Trützschler Group (Hall 12.0, Stand C61)

Trützschler Group, of Mönchengladbach, Germany, will present the latest machines and technologies from its Spinning, Card Clothing and Nonwovens business units.

A focus of the stand will be Trützschler Nonwovens' production lines for needlepunched nonwovens (T-Suprema, see also, page 12), which it has developed in partnership with Texnology Srl of Fontaniva, Italy.

Trützschler Nonwovens will showcase upgrades to its single machine portfolio, including the X-Series nonwovens cards (the high-speed card NCT-X, the versatile NC-X and the compact NC-Xe), a high-performance dryer (MPD) and a compact hydroentanglement unit (AquaJet-X). Trützschler Nonwovens will also highlight its air-through bonding (ATB) technology for producing nonwovens for the hygiene industry. The technology enables the reliable processing of ultra-fine fibres (down to 0.4 dtex), producing soft nonwovens.

A T-Suprema production line for needlepunched nonwovens, developed by Trützschler Nonwovens in partnership with Texnology Srl (see also, page 11).

Trützschler Nonwovens' digital working environment, T-One, now features an energy-management function for real-time monitoring of a line's electricity and gas consumption, and carbon-dioxide footprint, and a camera-based anomaly-detection system that identifies fibre migration and accumulations at an early stage.

Trützschler Card Clothing (TCC) will present a new wire with a special surface designed for hygiene, hydroentanglement and air-through bonding applications.

Trützschler Spinning will say that that its Truecycled technology encompasses every step required for the manufacture of recycled yarns, from cutting and tearing textile waste, to carding and drawing secondary fibres. It adds that the yarns resulting from the technology serve as a premium alternative to conventional materials.

Truecycled technology has been used by Brain of Materials, also of Mönchengladbach, to produce an open-end yarn (Wyron truecycled) from 50% post-consumer textile waste and 50% recycled polyester (PES). These yarns are being used to create fabrics for the seats of two electric vehicles (EVs) made by Lotus. Wyron truecycled yarn is used for the back sections of car seats for Lotus' Emeya and Eletre EVs. According to Lotus, of Norwich, UK, it selected the yarn for its premium haptics, light weight and reduced impact on the environment.

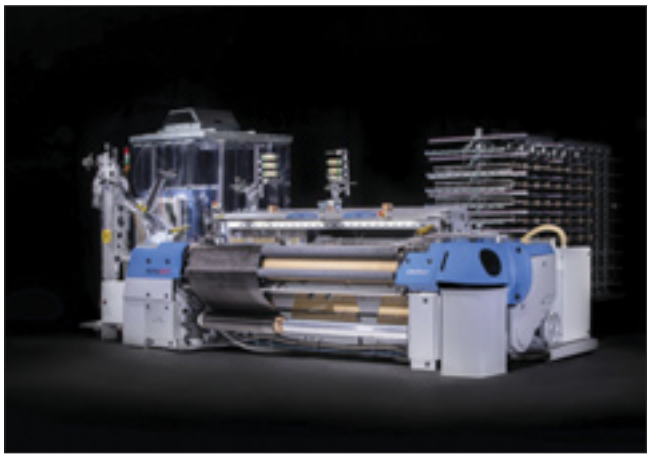
Weaving

Itema Group (Hall 12.0, StandD05)

Itema Group of Colzate, Italy, will present the Itematech UniRap, which features a positive single-rapier weft-transfer that enables it to process a wide range of high-tenacity yarns, including carbon tapes and fibres, glass fibres, aramids, steel and lead-coated yarns. It is available with two separate weft-insertion systems, which can be exchanged easily and quickly for different jobs.

The Hercules loom, meanwhile, can operate as both a negative and positive rapier weaving machine, enabling it to process weft yarns with counts from 20 up to 48 000 dtex, in single- or multiple-weft-insertion configurations. Hercules is available in weaving widths of up to 6.2 m and has a modular construction that enables it to be customised according to its intended use. It can generate beating forces of up to 5.5 t depending on the reed width and is suitable for producing heavy fabrics, such as geotextiles and agrotextiles, coated fabrics, conveyor belts, canvas and plain carpet.

Itema will also show the P7300HP V8 projectile weaving machine and the R9500EVO rapier weaving machine, the latter of which can be equipped with the iSAVER device to eliminate waste selvedge on the fabric's left side. The company will also report that its recently launched A9500 iLENO airjet weaving machine for the production of secondary carpet backings has rapidly gained popularity among technical weavers.



The Itematech UniRap, shown here, features a positive single-rapier weft-transfer that enables it to process a wide range of high-tenacity yarns.

Picanol (Hall 12.0, Stand C01)

Picanol of Ieper, Belgium, will be able to discuss its latest generation of airjet and rapier weaving machines, which feature numerous technologies for their automation, and the gathering and exchange of data related to their operation.

Picanol's weaving machines now have the "Connect" suffix. Its airjet weaving machines are now known as OmniPlus-i Connect and TerryPlus-i Connect, while its rapier weaving machines are now called the OptiMax-i Connect and the TerryMax-i Connect.

On the OptiMax-i Connect, Picanol has introduced a lubrication-monitoring sensor and a temperature sensor. The data they gather in combination will help the user to ensure that the gripper tapes are in optimal condition.

Further, as an option, a gripper-stroke measurement sensor can be fitted, which Picanol says not only dramatically simplifies the setting of the gripper stroke, but also enables the user to realise higher machine speeds when weaving narrow widths.

Picanol's Sumo Drive machine drive has been updated with a sheet-metal package that reduces its energy consumption, an optimised oil-cooling circuit to improve its performance and a built-in sensor for monitoring its temperature.

Further, the Connect machines can be equipped with a power-monitoring module, which allows the user to keep track of the power consumption of each machine over time.

Every Connect machine also has a built-in ambient-temperature and -humidity sensor, which will help the user to optimise the climate control in the weaving shed. Each machine can also be equipped with a sensor for monitoring the amount of raw material it uses.

To enable a fast reaction to the data gathered by the many sensors on the new machines, Picanol has also updated its BlueBox control unit. A sensor dashboard screen has been developed for the BlueTouch display; with a simple touch of the screen, the current and historical power consumption, temperature, humidity, material consumption, and – on the OmniPlus-i Connect – also the air consumption of the machines can be monitored. The BlueTouch display is now also equipped with an action centre, which is an electronic logbook where all actions such as maintenance interventions can be logged or scheduled.

The machine manual is also now available on the BlueTouch display and with a context-based help function, the help pages related to the operation the user wants to perform appear with one touch. The built-in Internet browser even allows the user to consult, for example, on-line tutorial videos to guide them through a setting procedure.

Picanol has also introduced a variety of new tools that enable the weaving of high-quality fabrics. The harness frame stroke measurement system was, until recently, only available on the SmartShed machine, but it is now also available on the cambox and dobby machines. Combined with technologies for visualising

Monforts' coaTTex is dedicated to air knife and knife-over-roller coating (see also, page 16).

and simulating the shed, it enables the user to optimise their shed settings without losing any time or taking any risks. Finally, a fully fledged access-control system not only limits the access to certain pages and settings depending on the user, but also allows a tailored dashboard to be established for each user profile.

Quality Machines Textiles BV (Hall 12.0, Stand D26)

In 2015, QMatex BV was established in Waragem, Belgium, to exploit the double-shed formation found in wire looms in the development of looms for the production of technical textiles. The company is able to custom-build individual looms to the requirements of its customers.

In its relatively short history, QMatex has already developed looms for the production of:

- lightweight, flexible fabrics woven from fine yarns and with defined water-permeability, for the production of medical implants that are compact and resilient enough to be inserted into the human body using stents;
- heavy fabrics of 7.5 cm in thickness and 2 m in width for thermal insulation. This 36-t loom can generate a beat-up force of 180 000 N, so that wefts can be inserted above one another, and features a horizontal take-up to support the weight of the woven fabrics;
- spacer fabrics for the filtration of fine oil. The tolerance for the holes in the fabric is 0.02 mm.

Stäubli (Hall 12.0, Stand B01.6)

Founded in 1892 , Stäubli (see also, page 15) of Pfäffikon, Switzerland, manufactures high-speed shedding and weaving-preparation machinery. The company's machines are used for the production of such as one-piece woven (OPW) airbags, custom fabrics for use in lightweight construction and artificial grass.

At *Techtextil*, Stäubli will present its Magma Tying Machine, a robust system that can handle diverse and demanding yarns, such as polypropylene (PP) tapes. Stäubli says that Magma delivers consistent quality while minimising the downtime traditionally associated with warp changes.

Stäubli will also present its TF series of weaving machines, engineered for the production of advanced three-dimensional (3D), multilayer and high-performance fabrics using technical yarns made from such as carbon, glass and aramid. The TF20 can run at high speeds and has a double-rapier option, increasing the output of lightweight composite reinforcements. The weft-insertion function on the TF30, meanwhile, is designed to ensure the gentle treatment of yarns, and it can therefore handle carbon and aramid yarns, as well as ultra-sensitive ceramic yarns.

The company will show the Unival 100 electronic Jacquard machine, which provides flexibility for weaving technical fabrics, and is particularly suitable for the 3D weaving of fabrics from glass and carbon fibres.

Finally, the company will show its robust LX 2494 Jacquard machine, which is suitable for weaving heavy technical fabrics.

Vandewiele Sweden AB (Hall 12.0, Stand C21)

Vandewiele Sweden AB, of Ulricehamn, is a maker of weft-yarn feeds and tension controllers, and a member of the Vandewiele Group of Marke, Belgium. On its stand, the company's team will explain how, by ensuring repeatable, predictable yarn delivery at high loom speeds, its technologies enable weaving mills to operate closer to their technical limits while maintaining the quality of the fabrics they produce.

Knitting

Karl Mayer (Hall 12.0, Stand B79)

Concurrently with *Techtextil*, Karl Mayer (see also, page 21) will open its Textile Innovation Center (TIC) at its nearby headquarters in Obertshausen, Germany, and invite attendees of the exhibition to visit. The company will tell visitors to its stand that it is focusing on its core competencies: warp knitting; warp preparation; technical textiles. On its stand at *Techtextil* and at the TIC, the company will show hollow-fibre mats that it produces on its warp knitting machines with weft insertion. With their permeable surfaces, the mats could be used to enrich blood outside the body with oxygen, clean the ink from printer cartridges and even carbonate drinks.

Further, Karl Mayer will show a diverse range of multiaxial reinforcements for composites that can be produced on its machines.

The company will also show warp-knitted fabrics that protect their wearers from the harmful effects of solar radiation. The fine-gauge (E 44) fabrics are knitted on Karl Mayer's two-bar tricot machine (HKS 2-S). The company says that the fabrics possess two advantages over their circular-knit counterparts of almost identical areal weights. First, they are around 30% more permeable to water vapour, making them significantly more comfortable to wear. Second, they are better at blocking ultraviolet (UV) radiation emitted by the sun; owing to their dense structures, the fabrics' UV protection factor (UPF) is more than twice as high. The lightweight textiles are also soft, smooth, cool and silky against the skin, do not crease when worn and are highly resistant to pilling.

Karl Mayer adds that temperatures continue to rise worldwide. In the summer of 2024, the Copernicus Climate Change Service registered the hottest June, August and day since records began. Consumers are therefore demanding garments that provide protection from the sun. When hiking, climbing or cycling, the intensity of UV radiation from the sun increases by 2–3% with every metre of altitude gained.

Coating, laminating and finishing

A. Monforts (Hall 12.0, Stand C60)

Monforts will showcase a trio of machines it has launched in recent years for the coating and drying of technical textiles.

The company, of Mönchengladbach, Germany, says that its machines can be used to improve the performance of, and impart a wide range of functionalities to, technical textiles. The company's systems are used, for instance, to manufacture outdoor and architectural textiles, such as tents, awnings, sailcloth and blackout blinds, where coatings provide the desired combinations of water- and weather-resistance, dimensional stability and opacity.

In transport interiors, particularly automotive upholstery and interior fabrics, coatings influence parameters including abrasion-resistance, tactile feel, stain-resistance and durability. Automotive suppliers also demand consistency across batches, which Monforts addresses through digitally stored coating recipes, which can be reloaded to produce identical results from each coating run.

Further, Monforts coating systems process materials such as high-temperature filter media, flame-retardant barrier fabrics and heavy membranes for biogas

A MontexCoat unit installed in front of a Montex stenter.

storage systems. The systems are also used to manufacture carbon-fibre prepregs and reinforcement fabrics for composites.

Monforts' flagship MontexCoat coater is now being used in a diverse range of markets and enables the single-sided application of finishing agents for outdoor clothing, the addition of functionality to home textiles and the creation of textiles for lightweight parts for construction, automotive and aerospace applications. The line can also be used for the overdyeing of denim, the creation of double-face coated materials, fabric awnings, tents and medical drapes, and the pre-treatment of substrates for digital printing. A range of different doctor blades, and their combinations, can be supplied, including air-knife, roller-knife, foam, screen and magnetic-roller coating. The last option is recommended for lines with working widths of over 2.4 m.

Monforts' coaTTex line (see also, page 14) is dedicated to the air-knife coating and knife-over-roller coating of textiles. The company says that the unit can be used for the single-sided application of pastes or foams to impart functionality, such as waterproofing, liquid- and gas-protection, and breathability, to textiles. It can also be used for foam-lamination and -coating, including the application of black-out coatings. The unit can be incorporated into existing finishing lines or can be installed as part of new Monforts lines, such as Montex stenter systems.

Finally, Monfort's VertiDry convection dryer can be installed before or after a stenter for the pre-drying of sensitive fabrics, or after the coating of airbags, denim fabrics and glass-fibre substrates. Other applications for the machine include the finishing of sportswear, outerwear, carpets, geotextiles and tarpaulins.

The VertiDry can be integrated into both new and existing finishing lines. A single unit can accommodate approximately eight metres of fabric at any given time and Monforts can build multi-storey versions.

The VertiDry can be powered using a variety of sources, or combinations of sources, is equipped with an integrated exhaust-air duct, and can be connected to a heat-recovery system such as the Monforts Energy Tower.

Baldwin Technology (Hall 12.0, Stand C56B)

Baldwin Technology, of St Louis, Missouri, USA, will once again show its non-contact precision-spray finishing system (TexCoat G4) for the finishing of textiles, which it says can reduce water consumption by as much as 50% compared with traditional padding processes.

Baldwin says that the TexCoat G4 has numerous advantages over conventional methods for applying finishes to textiles. The finish is distributed uniformly across the textile surface and is applied only where it is required—on one or both sides of the fabric. This is highly beneficial when, for example, applying water-repellents to laminated fabrics, as it eliminates the problem of the finish affecting the quality of the adhesion layer. Further, the non-contact technology prevents the dilution of the finish in wet-on-wet processes, allowing full control of coverage rates. In addition, with no bath-contamination during the finishing process, there is no downtime during colour or fabric changeovers.

The company claims that when using TexCoat G4, all of the oversprayed finish is recycled and none is wasted during changeovers of chemicals, colour or fabric. As only the necessary amount of finish is applied to the fabric, a reduced wet pick-up level of 50% can be achieved, leading to a 50% reduction in water- and energy-consumption. The low wet pick-up levels together with a single-side spray application enable combined processes and can completely eliminate

drying steps, such as for laminated fabrics and in the finishing of upholstery textiles.

The company will also be able to discuss an efficient digital spray-dyeing system called TexChroma. It claims that the use of TexChroma can reduce the consumption of energy, dyes and chemicals by more than 30% compared with conventional continuous pad batch dyeing using steam, and up to 50% compared with exhaust reactive dyeing. Further, the system enables reactive dyestuffs and alkali fixation chemicals to be mixed just seconds before their spray-application, which eliminates any 'tailing and listing'—the uneven application of dye and variations in colour along the length of the fabric.

Brückner Textile Technologies (Hall 12.0, Stand B58)

In business for over 75 years, Brückner Textile Technologies (see also, page 7)of Leonberg, Germany, is a specialist in coating and finishing lines for textiles and nonwovens. The company will introduce visitors to its stand to its newly formed Environmental and Energy Technology department. This department will provide comprehensive advice regarding Brückner's heat-recovery and exhaust air-purification systems to its customers. The department can also tell visitors about Brückner's ExperTex simulation tool, which is available for all of the company's new machines and enables customers to increase their production output and reduce energy consumption. Depending on the year of manufacture, this tool can also be retrofitted to older lines.

The company will be able discuss its Power-Frame SFP-4 stenter, which is energy-efficient and easy to maintain, for the finishing of technical textiles. The company has recently introduced new features to the stenter, such as electricity- and hydrogen-powered heating systems and intelligent software for optimising coating recipes. Further, the stenter can be equipped with heat-recovery and exhaust air-purification systems that help to save energy and ensure compliance with environmental regulations. A fully automatic cleaning system significantly reduces maintenance and personnel costs. The cleaning programs are flexible and freely configurable, and production does not have to be interrupted for cleaning purposes.

Brückner will also be able to talk about a new relax-and-shrink dryer for finishing knitted fabrics (Power-Dry PD-1), and a two-in-one coating unit (Opti-Coat) that features a high-precision coating cylinder and a perfect ground coating knife, enabling it to apply paste and foam coatings.

Fibroline (Hall 12.0, Stand D31)

Fibroline of Limonest, France, has developed and patented an impregnation method for dry powders. Using alternating electric fields, the company's D-Preg, S-Preg, T-Preg and Y-Preg technologies can permanently embed various additives into porous structures, including nonwovens up to 10 cm in width, on lines running continuously at 10–300 m.min^{-1}.

Santex Rimar Group (Hall 12.0, Stand E60)

Santex Rimar Group of Vicenza, Italy, consists of:

- Cavitec, a specialist in prepregs for composites;
- Isotex, which makes coating, printing and embossing machinery;

Zimmer Austria's Colaris-TeX digital printer can be equipped with a water-treatment module to minimise the amount of wastewater it creates.

- Santex Nonwovens, a maker of ovens for thermobonding nonwovens;
- SMIT, a manufacturer of rapier looms used to make technical textiles such as airbags, glass-fibre fabrics and conveyor belts;
- Sperotto Rimar, which makes machinery for finishing textiles;
- Solwa, a specialist in environmental technologies, including water treatments.

In Frankfurt, the Group stand will feature Cavitec, Isotex and SMIT.

Cavitec will be able to discuss an updated hotmelt coating and laminating unit for the production of breathable sportswear, rainwear and protective clothing. The company has redesigned its Caviscreen unit so that it can apply adhesive more evenly and precisely to fabrics than its previous iteration.

Using the Caviscreen unit, a reactive polyurethane (PUR) adhesive is fed through a drum melter via a heated hose to a traversing adhesive distribution system inside a rotary screen, just behind the doctor blade. The adhesive is pressed by the doctor blade through holes in the screen where it is transferred to the substrate. The use of different dot patterns and screen thicknesses allow for adhesives to be applied in different weights and coverages.

Cavitec says that its screen-coating system is highly precise and efficient, ensuring the air-permeability and a soft feel of fabrics coated by it. The rotary screen allows users to regulate and adapt the coating weight, and it can be changed easily by hand.

Zimmer Austria (Hall 12.0, Stand B78)

With sites in Klagenfurt and Kufstein, Zimmer Austria (see also, page 1) produces machines for the digital printing and functionalisation, flat-screen and rotary screen-printing, coating, steaming, washing and drying of textiles and carpets.

On its stand, the company will show a print carriage (Colaris) with up to 96 printing heads, which is used for the high-capacity digital printing of carpets and towels.

Zimmer Austria will also introduce its latest digital printer (Colaris-TeX), which it says is environmentally friendly, easy to use and renders high-quality prints. The company's engineering team has made the machine as intuitive and ergonomic to use as possible, resulting in a system where:

- daily tasks require minimal manual intervention;
- maintenance procedures can be carried-out quickly and require only a small number of tools;
- critical components are easily accessible;
- intelligent system functions actively support the operator.

This operator-centric design minimises the risk of errors, shortens training periods, enhances safety and ensures consistently high print quality, even in demanding multi-shift environments.

Colaris-TeX can be connected directly to Zimmer Austria's service infrastructure, enabling remote diagnostics and predictive maintenance to be carried-out, and real-time support to be provided by the company's specialists. These capabilities dramatically reduce the likelihood of unexpected machine stoppages.

The machine also features a stable and easy-to-access print carriage that supports up to twelve colour channels and six printheads per channel. A universal ink system can handle a variety of dies and functional fluids. It integrates an automated system (Colaris TuneUp) that simplifies the set-up of the machine and ensures consistent print quality. Finally, a water-efficient blanket-washing system helps to minimise the

impact of the machine on the environment, and a newly developed fabric-feed system eliminates distortion from the first metre.

Other machinery, equipment and accessories

Erhardt+Leimer (Hall 12.0, Stand C51)

Erhardt+Leimer of Stadtbergen, Germany, will exhibit products that it designs, makes and supplies for automated measurement and control technologies for nonwovens and textiles, as well as plastics, paper and tyres. These products include cutters, spreaders, guides, devices to measure tension and control webs, and monitors to check printed images.

The company recently introduced its latest metal detector, the Elmeta MDA1005/1006, which it claims can detect small metal particles across the width of a web running at between 2 and 500 $m.min^{-1}$.

Groz-Beckert (Hall 12.0, Stand B90)

A specialist in industrial machine needles and accessories for processing fabrics based in Albstadt, Germany, Groz-Beckert (see also, page 8) will exhibit its portfolio covering knitting, weaving, felting, carding and sewing products.

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A showcase for innovation in fibres, yarns, filaments and threads

The development of high-performance and environmentally friendly fibres, yarns, filaments and threads continues to create significant opportunities for manufacturers of technical textiles. James Bakewell picks-out some highlights to look-out for during *Techtextil*.

Aquafil (Hall 9.1, Stand B51)

In March 2025, after more than ten years of research and development (R&D), Aquafil, of Trento, Italy, opened a demonstration plant that uses a chemical process for separating elastane fibres from polyamide (PA). It will be able to show the resulting PA fibres on its stand at *Techtextil*.

The company says that the plant allows for the elastane and PA fibres used in blended fabrics, for such as sportswear and swimwear, to be separated effectively and recycled.

The technology enabling the plant has been developed in partnership with researchers at the Georgia Institute of Technology in Atlanta, USA. In 2013, Aquafil filed a patent describing the technology, but this did not lead to the development of an industrial-scale process. The company worked to refine the technology and published a new patent in 2022.

Using its pilot plant, Aquafil now plans to refine and develop the technology further so that it can be used in the large-scale recycling of blended fabrics. To support this, Aquafil has built a network of strategic partners to secure a steady supply of post-consumer materials and to support the development of a robust, efficient recycling supply chain.

The PA recovered through the process will be regenerated at Aqualfil's Econyl plant in Ljubljana, Slovenia. Started-up in May 2011, this now lays claim to being the world's most efficient industrial plant for the production of PA 6 from solely regenerated materials using a closed-loop process. The company has also established an international network for the collection of materials and a logistics chain to transport them to the production plant.

All of the waste collected is taken to a warehouse in Ajdovscina in Slovenia, about 80 km from Ljubljana. Aquafil has calculated that the environmental impact of this logistical operation represents just 3% of the total environmental impact (the so-called "carbon footprint") associated with the Econyl system.

At Ajdovscina, the company cleans and separates the PA 6 waste, and then shreds and compacts it to optimise its transportation to Ljubljana. The waste is pre-consumer (such as oligomers, scraps and other materials generated from the production of PA 6) and post-consumer (end-of-life carpet and rug tuft, as well as rigid textiles). Another source of waste is fishing nets, which contain large amounts of residues collected during their use, including such as metallic materials, and polypropylene (PP) straps and bands.

The polymers produced from Econyl caprolactam are distributed to Aquafil's production plants, where they are transformed into yarn for rugs, carpets and flooring, and clothing.

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21–24 April 2026
Frankfurt, Germany
Ivonne Seifert, Director Marketing Communications, Messe Frankfurt Exhibition GmbH;
Tel: +49 (69) 7575-6157;
Fax: +49 (69) 7575-6781;
ivonne.seifert@messefrankfurt.com;
https://texprocess.messefrankfurt.com

Textiles Recycling Expo USA
29–30 April 2026
Charlotte, North Carolina, USA
Isobel Ree, AMI;
Tel: +44 (117) 314-8198
isobel.ree@amiplastics.com;
https://events.amiplastics.com/textiles-recycling-expo-usa

May 2026

Railway Interior Innovation Summit USA
12–14 May 2026
Washington, DC, USA
Andreas Wibowo, Business Development Manager, Red Cabin;
Tel: +49 (162) 256-7382
andreas.wibowo@redcabin.de;
http://redcabin.de

Textile Rental Services Association (TRSA) 113th Annual Conference
12–14 May 2026
Napa, California, USA
Susie Jackson, Textile Rental Services Association;
Tel: +1 (540) 632-1933
sjackson@trsa.org;
https://web.cvent.com/event/c071cff4-6692-45ed-ab36-198fe47e456a/summary

FESPA Global Print Expo
19–22 May 2026
Barcelona, Spain
Leighona Aris, FESPA;
Tel: +44 (1737) 228160
Leighona.Aris@Fespa.com;
www.fespa.com

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19–22 May 2026
Geneva, Switzerland
Magali Fakhry Dufresne, Palexpo SA;
Tel: +41 (22) 761-1061
index@palexpo.ch;
https://www.indexnonwovens.com

June 2026

International Textile Machinery Exhibition (ITM)
9–13 June 2026
Istanbul, Turkey
Teknik Fairs Ltd Co;
Tel: +90 (212) 876-7506;
Fax: +90 (212) 876-0681;
info@teknikfuarcilik.com;
https://www.itmexhibition.com/itm2024

Textiles Recycling Expo
24–25 June 2026
Brussels, Belgium
Isobel Ree, AMI;
Tel: +44 (117) 314-8198
isobel.ree@amiplastics.com;
https://events.amiplastics.com/textiles-recycling-expo

World of Wipes
29 June–2 July 2026
Nashville, Tennessee, USA
MIsty Ayers, Marketing Coordinator, INDA (Association of the Nonwoven Fabrics Industry);
Tel: +1 (919) 459-3712
mayers@inda.org;
https://www.worldofwipes.org/

Filtech
30 June–2 July 2026
Cologne, Germany
Suzanne Abetz, Filtech Exhibitions Germany;
Tel: +49 (2132) 935760
info@filtech.de;
http://www.filtech.de

July 2026

Nanotexnology
4–11 July 2026
Thessaloniki, Greece
Stergios Logothetidis, Chair, Nanotexnology;
Tel: +30 (231) 099-8174
info@nanotexnology.com;
https://www.nanotexnology.com

August 2026

Techtextil North America
4–6 August 2026
Raleigh, North Carolina, USA
Kristy Meade, Show Director, Messe Frankfurt Inc;
Tel: +1 (770) 984-8016, x 2428;
Fax: +1 (770) 984-8023;
kristy.meade@usa.messefrankfurt.com;
https://techtextil-north-america.us.messefrankfurt.com

Intertextile Shanghai Home Textiles
18–20 August 2026
Shanghai, China
Rita Li, Messe Frankfurt (HK) Ltd;
Tel: +852 223-9966;
Fax: +852 2598-8771;
rita.li@hongkong.messefrankfurt.com;
https://intertextilehome.hk.messefrankfurt.com/china/en.html

Research, Innovation and Science for Engineered Fabrics (RISE) 2026
25–26 August 2026
Raleigh, North Calrolina, USA
MIsty Ayers, Marketing Coordinator, INDA (Association of the Nonwoven Fabrics Industry);
Tel: +1 (919) 459-3712
mayers@inda.org;
https://www.riseconf.net

September 2026

CINTE Techtextil China
1–3 September 2026
Shanghai, China
Jason Taylor, Messe Frankfurt (HK) Ltd;
Tel: +852 2230-9296;
Fax: +852 2598-7919;
jason.taylor@hongkong.messefrankfurt.com;
https://cinte-techtextil-china.hk.messefrankfurt.com/shanghai/en.html

FESPA Mexico
10–12 September 2026
Mexico City, Mexico
Leighona Aris, FESPA;
Tel: +44 (1737) 228160
Leighona.Aris@Fespa.com;
https://www.fespa.com

The Emergency Services Show
16–17 September 2026
Birmingham, UK
David Brown, Event Director, Nineteen Group;
Tel: +44 (20) 8947-9177
dbrown@nineteengroup.com;
https://www.emergencyuk.com

Dornbirn Global Fiber Congress
16–18 September 2026
Dornbirn, Austria
Dornbirn Global Fiber Congress Office;
Tel: +43 (1) 319-2909-41;
Fax: +43 (1) 319-2909-31;
office@dornbirn-gfc.com;
http://www.dornbirn-gfc.com

Introduction to Textiles
22–24 September 2026
Manchester, UK
Robyn Ingham, Events Coordinator, The Textiles Institute;
Tel: +44 (161) 237-1188
ringham@textileinst.org.uk;
https://www.textileinstitute.org

Outlook
22–24 September 2026
Cascais, Portugal
Delphine Rens, Marketing and Communications Coordinator, EDANA;
Tel: +32 (2) 740-1822;
Fax: +32 (2) 733-3518;
delphine.rens@edana.org;
https://www.edana.org/events/outlook/outlook-2022

October 2026

GO Wipes Europe
20–21 October 2026
Cologne, Germany
Ellie Baker, Events and Sponsorship Sales, Smithers;
Tel: +44 (1372) 802291
ebaker@smithers.com;
https://www.go-wipes.com

Milipol Qatar
20–22 October 2026
Doha, Qatar
Comexposium
sales@milipol.com;
https://en.milipol.com

FiltXPO
28–29 October 2026
Miami Beach, Florida, USA
Lori Reynolds, Director of Events, INDA (Association of the Nonwoven Fabrics Industry);
Tel: +1 (919) 459-3716;
Fax: +1 (919) 459-3701;
lori@filtxpo.com;
https://www.filtxpo.com

November 2026

Advanced Textiles Expo
3–5 November 2026
Orlando, Florida, USA
Amy Collins, Advanced Textiles Association;
Tel: +1 651 225 6970
amy.collins@textiles.org;
https://www.textiles.org/event/ifai-expo-2023

ISPO
3–5 November 2026
Amsterdam, The Netherlands
Sabine Wagner, ISPO;
Tel: +49 (89) 949-20802
sabine.wagner@messe-muenchen.de;
https://www.ispo.com/en/munich

Advanced Engineering
4–5 November 2026
Birmingham, UK
Alison Willis, Divisional Director, Easy Fairs;
Tel: +44 (20) 3196-4303
alison.willis@easyfairs.com;
https://www.advancedengineeringuk.com/

26th Annual Carbon Fiber Conference
10–12 November 2026
Huntsville, Alabama, USA
Beth Ascue, Conference Manager, Gardner Business Media, Inc.
BAscue@gardner.media;
https://www.carbonfiberevent.com/

Hygienix
16–19 November 2026
Houston, Texas, USA
Tracie Leatham, INDA (Association of the Nonwoven Fabrics Industry);
Tel: +1 (919) 459-3726
tleatham@inda.org;
https://www.hygienix.org

Space Tech Expo Europe
17–19 November 2026
Bremen, Germany
Gordon McHattie, Event Director, Smarter Shows;
Tel: +44 (1273) 916309
gordon.mchattie@smartershows.com;
http://www.spacetechexpo.eu

ITMA Asia + CITME
20–24 November 2026
Shanghai, China
Daphne Poon, ITMA Services;
Tel: +65 9478-9543
daphnepoon@itma.com;
https://www.itmaasia.com

Aachen-Dresden-Denkendorf International Textile Conference
26–27 November 2026
Aachen, Germany
Sabine Keller, Deutsche Institute für Textil- und Faserforschung Denkendorf (DITF);
Tel: +49 (711) 9340-505
add-itc-2020@ditf.de;
https://www.aachen-dresden-denkendorf.de/en/itc

January 2027

Heimtextil
12–15 January 2027
Frankfurt, Germany
Bettina Bär, Messe Frankfurt Exhibition GmbH;
Tel: +49 (69) 7575-6096
bettina.baer@messefrankfurt.com;
https://heimtextil.messefrankfurt.com

Wearable Expo
17–19 February 2027
Tokyo, Japan
Reed Exhibitions Japan Ltd;
Tel: +81 (3) 3349-8502;
Fax: +81 (3) 3349-4900;
wearable-eng@reedexpo.co.jp;
https://www.wearable-expo.jp

March 2027

IDEA
23–25 March 2027
Kansas City, Missouri, USA
Misty Ayers, INDA (Association of the Nonwoven Fabrics Industry);
Tel: +1 (919) 459-3712;
Fax: +1 (919) 459-3701;
mayers@inda.org;
https://www.ideashow.org

May 2027

NPE: The Plastics Show
3–7 May 2027
Orlando, Florida, USA
Ashley Stoney, Plastics Industry Association;
Tel: +1 (202) 974-5210;
Fax: +1 (202) 296-7005;
astoney@plasticsindustry.org;
http://www.npe.org

September 2027

ITMA
16–22 September 2027
Hannover, Germany
ITMA Services;
Tel: +65 6849-9368
info@itma.com;
https://itma.com

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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: Boughton Technical Media Ltd, PO Box 54, WR15 8XN, UK. The annual subscription in the USA is $459. Technical Textiles International is distributed by Blackmore Ltd, Longmead, Shaftesbury, Dorset, SP7 8PX, UK. Postmaster, please send address corrections to Boughton Technical Media Ltd, PO Box 54, WR15 8XN, UK.

Advances in Textiles technology

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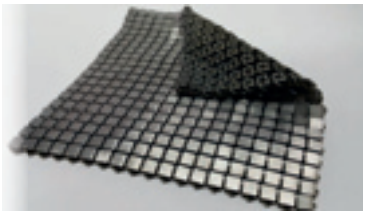
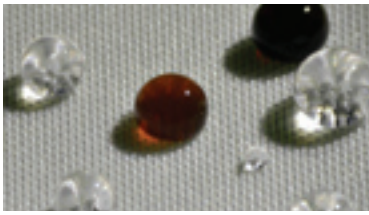

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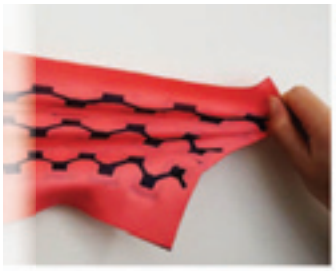


Advances in Textiles technology

February 2022

An international newsletter on textiles technology edited by: James Bakewell

Fibres, filaments and yarns

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

Novel, sustainable door-pulls made from artificial silk fibre 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 Planegg, 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: full contents listing on page 2...

Methods for determining the effects of strains 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 Coats 7

A dual-action thermoregulating finish that reduces the temperature of surfaces to which it is applied by up to 3°C has been launched by HeiQ 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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