

## New nonwoven for cleanroom apparel protection

Ahlstrom-Munksjö, a leader in fibre-based materials, has announced the launch of Ahlstrom-Munksjö PureArmor, a breathable impervious fabric for blood borne pathogen and cleanroom apparel protection.

"PureArmor eliminates the need to choose between comfort and protection. It offers the highest possible level of protection for sensitive environments without sacrificing the wearer's comfort, which is unique when compared to fabrics frequently used in cleanroom apparel," said Lionel Bonte, Vice President, Medical, Ahlstrom-Munksjö.

### Tri-laminate nonwoven

The new PureArmor fabric is a next generation tri-laminate nonwoven that has extremely low lint, making it suitable for applications that are sensitive to particle contamination. "By leveraging patent pending Ahlstrom-Munksjö technology, our product development engineers achieved PureArmor's extremely low levels of lint. The patent pending manufacturing process welds bicomponent spunbond fibres together which makes the fabric less prone to shedding without sacrificing softness," the company explains.

The barrier film layer at the centre of the tri-laminate fabric is a membrane, which has a nonporous monolithic structure that provides an impervious barrier, thus blocking the passage of viruses, bacteria, fluids and particles. The structure of the film is said to allow moisture vapor to pass through, allowing the wearer to remain comfortable while providing the highest level of protection.

### Monolithic film design

Most nonwoven fabrics available for cleanroom applications have particle filtration efficiency between 94 – 98% meaning that the fabric allows hundreds of thousands of particles to be released into the cleanroom environment in addition to potential blood borne pathogens. PureArmor's monolithic film design is said to stop 100% of the particles and potential blood borne pathogens, according to the manufacturer.

"PureArmor is an example of how Ahlstrom-Munksjö is leveraging our experience in manufacturing high protection surgical fabrics into products for other sensitive environments that require high levels of protection," commented Jason Beard, platform leader, High Performance Medical, Ahlstrom-Munksjö.

Ahlstrom-Munksjö's product portfolio of fabrics within the medical segment also includes fabrics for use in many types of protective apparel, surgical drapes, gowns and sterile barrier systems meeting demanding performance needs.

## Around 100 Uzbek companies showcase textile products at int'l fair

Around 100 Uzbek companies, producing textile and sewing products, are taking part in the 13th International Uzbek Cotton and Textile Fair this year, O'zbekYengilSanoat JSC (Uzbek Light Industry Company) said.

So, a wide range of products, such as cotton yarn and fabrics, dyed and mixed yarn, knitted fabric, ready-made knitted products, hosiery, special fabrics, home textiles, overalls, uniforms and other products of light industry were showcased at the exhibition.

During the fair, a fashion show was organized by the design center under O'zbekYengilSanoat company, where seven new collections were showcased.

Today, O'zbekYengilSanoat company includes more than 450 textile enterprises. There are more than 3,000 textile enterprises in the country.

During the years of independence, investments worth over \$2.5 billion were drawn into the country's light industry. Over this period, more than 300 big modern textile enterprises were put into operation.

Today, Uzbek enterprises supply domestic textile products to more than 50 countries. The annual volume of exports is more than \$1 billion. More than 100,000 people work at the textile enterprises operating throughout the country.

Among the priorities of the country's light industry is the accelerated creation of production capacities for the processing of cotton fiber into cotton yarn at a level of at least 80 percent of the country's fiber production.

More than 150 projects with a total cost of over \$1 billion are planned to be implemented in the light industry until 2019.

The production capacity of semi-finished and finished textile products will increase by 2 times and the export potential of the country's textile and knitwear industries will increase by more than 2 times as a result of the implementation of those projects.

will then be on the agenda, including the installation of a combined heat and power unit and many other lines.

In 2013, the ministry for the environment, climate protection and the energy sector, launched jointly with various industry associations in Baden-Württemberg, the Alliance for Greater Resource Efficiency. The Alliance has sought to identify 100 examples of excellence in Baden-Württemberg to demonstrate by means of specific projects the potential for savings in energy and material resources. The organisers are interested in both the approach and the implementation of measures. The Alliance for Greater Resource Efficiency feels that imitators stand to benefit most from projects at the operational level.

## Shima Seiki to partake in Premiere Vision expo, Istanbul

Leading computerized flat knitting machine manufacturer, Shima Seiki Mfg., Ltd. of Japan, was set to participate in the Première Vision exhibition in Istanbul, Turkey, the premium hub for Middle East and Eastern Europe fashion, held from October 18 to 20, 2017, in booth A12 B11.

Taking center stage at the expo was the company's SDS-ONE APEX3 3D design system. At the core of Shima Seiki's "Total Fashion System" concept, APEX3 integrates all stages of apparel production into one smooth and efficient workflow from planning and design to production and sales promotion.

Representing the production aspect of the total fashion system at Première Vision Istanbul was the MACH2XS flagship Wholegarment knitting machine. Featuring Shima Seiki's original SlideNeedle on four needle beds as well as the patented spring-type sinker system, MACH2XS offers great flexibility for knitting beautiful and sophisticated, high-quality Wholegarment products with a seemingly endless variety of knit patterns at very high speed and efficiency, all while minimizing dependence upon labour-intensive sewing and linking.

Shima Seiki also exhibited knitwear produced on its latest line of computerized knitting machines. Besides seam-free Wholegarment knitwear that features superior fit, comfort and draping characteristics, samples knitted on the SRY series and SVR series machines feature hybrid knit-weave structures.

## Global Yarn and Fabric Output Increased in Second Quarter, Led by Brazil and Asia

Global yarn production and fabric output increased in the second quarter and is expected to stay stable in the third, increasing in the last three months of the year, according to the International Textile Manufacturers Federation quarterly report.

Global yarn production rose 11 percent in the second quarter compared to the previous three months, led by a 12 percent gain in Asia and an 11 percent increase in Brazil. Yarn production decreased 10 percent in the U.S. and 18 percent in Africa in the same period. Overall, global yarn production was slightly higher than year-ago levels, ITMF said.

Global fabric production improved nearly 9 percent in the quarter, with a 10.4% increase in Brazil, a 9.8% gain in Asia and a 9.2% hike in Africa. Overall, global fabric output rose 4 percent compared to the second quarter of 2016.

Global yarn stocks fell 1 percent in the quarter, as Asia, Europe and Brazil saw their yarn inventories increase 0.7%, 2.3%, and 11.5%, respectively, but the world average was driven down by a 12 percent decrease of yarn stocks in Egypt. The stocks' improvement of 13 percent in comparison to the year-ago period included declines of 40 percent in Brazil and 3 percent in Europe, balanced by increases of 10 percent in Asia and 112 percent in Egypt.

Worldwide fabric stocks rose 3.3% in the period, driven by a 23 percent increase in Brazil. Global fabric inventories in the quarter decreased 8 percent compared to a year earlier, with Brazil falling 30 percent, Europe rising 7 percent and Asia and the U.S. fairly stable.

European yarn orders fell 7 in the period from the first quarter, with reductions of 6 percent and 4 percent recorded in Brazil and Asia, respectively.

A 9 percent increase in global fabric orders quarter to quarter was driven by a 13 percent gain in Brazil and 16 percent rise in Egypt. During the quarter, fabric orders were stable in Asia and down slightly in Europe.

ITMF said estimates for the third quarter "indicate a stable trend in both global yarn and fabric production," while for the fourth quarter "the global outlook for both yarn production and fabric output signal further rise."



# World Textile News

## EU4Business to study Armenian textile, apparel industry

The EU4Business Support to Small and Medium Enterprises (SMEs) Development in Armenia (SMEDA) project has invited applications from companies, experts or consortia for a sectoral study of the textile, apparel, leather, shoes, and fashion design businesses in Armenia. The study will comprise mapping, analyses and roundtables and workshops with stakeholders.

The deadline for applications is November 8, according to a press release from EU4Business.

The European Union's EU4Business initiative helps SMEs with finance, support and training with assistance from organisations, such as the European Bank for Reconstruction and Development and the European Investment Bank.

The textile and apparel industry is one of the 11 strategic export-oriented sectors in Armenia. However, SMEs in that sector operate far below capacities and their products lack competitiveness in regional and international markets. The Armenian Government considers the revival of the sector as a priority. The study will improve the strategy of the sector and strengthen cooperation among companies by establishing a cluster.

Germany, has announced that the company has got an award from Bade-Wurttemberg for the energy-related renovation of its building services. Franz Untersteller, minister for the environment, climate protection and the energy sector, named Mayer & Cie. one of the state's 100 resource efficient companies.

Since Mayer & Cie. moved to its corporate headquarters on the outskirts of Albstadt-Tailfingen in the 1950s, the buildings on the site have repeatedly been extended, including many local and separate energy centres. This led to a disproportionately high use of energy. That was why, in 2014, Mayer & Cie. began to renovate its cold-water network. As a result, a third of the existing cooling plant became superfluous to requirements. Today's cooling management now harnesses the Swabian Alb region's bracing climate and switches off more cooling machinery during the five cold winter months.

In 2015 Mayer & Cie. went on, to upgrade its water pipes and renovate two heating plants. Last year, new compressors helped generate compressed air. This year the company was able to connect all consumers and install load profile management. Plans for the combined heat, power and cooling concept were also completed and a cooperation agreement was concluded with the Neckar-Alb Virtual Power Station, a pilot project undertaken in collaboration with the University of Reutlingen.

Heiko Hämmerle, Mayer & Cie.'s head of plant technology, who has been in charge of the project for over four years, will take the project further forward in 2018. Implementation of the heat, power and cooling concept

## Mayer & Cie bags award as resource efficient firm

Mayer & Cie, circular knitting machine manufacturer from

jacquard machines for both mattress covers and other home textiles as well as finely knitted jacquard fabrics for fashion are very popular with the company's customers. "Furthermore, our relative technology is popular in Iran", Timo Schramm reports. Only recently Mayer & Cie. shipped several Relanit 3.2 HS machines to customers in Iran.

The machine on show at Irantex was chosen in line with customer preferences. It was an OVJA 1.6 EE with a 38-inch diameter on an industrial frame. This extremely productive machine features electronic single needle selection in the cylinder and on the rib dial and thus offers a wide range of patterns.

It is suitable for use in both the mattress and the fashion sector and Irantex trade visitors showed keen interest in this Mayer & Cie. Machine, the company reports. "We received very good feedback on both our decision to exhibit in Teheran once more and our entire portfolio of machines," said Timo Schramm, summarising the company's Irantex experience.

"So, we are planning to exhibit in Teheran regularly again," Mr Schramm concluded.

## Santex Rimar Group retraces Silk Road in Iran

According to the manufacturer, the aim of Future Textile Road is to build an innovative platform for the future development of the global textiles industry and the long-term construction of the cooperation between countries.

### Agreement with Yazd University

During the event, Santex Rimar Group signed an agreement with Yazd University for supplying a SMIT rapier weaving machine with the purpose to train students on the latest textile technologies and do research jointly.

Presenting at the event were Aliasghar Alamdar-Yazdi and Dr Seyed Abbas Mir Jalili, from the Textile Engineering Department of Yazd University, Mr Kamalian, from the Sanat va Maadan Bank - Mine & Industries Bank, Federico Businaro, General Manager of Santex Rimar Italy, and Enrico Valsecchi, Sales Head of SMIT, as well as Giancarlo Grandesso, from Gi.Vi. Co, SMIT agent in Iran, who has been a strategic partner for the organisation of the event.

Contents shifted from the relationship between University and local textiles companies to the financial tools for Iranian entrepreneurs who want to buy equipment – from the latest developments of SMIT to the trends of fabrics design of Spring/Summer 2018.

### Unique opportunity

The event represented a unique opportunity to the attendees to visit the factory of SMIT customer Reza Soltani: with more than 36 years of experience, he begun weaving traditional fabrics before focusing mainly on upholstery fabrics, which are among the best products of SMIT rapier weaving machines.

"Long before Islam, Yazd has had a very effective role in production of gold cloth and at the time of the Mughal and the Safavid Yazd people had been one of the main weavers and producers of fabric in our country and these products can be seen in the great museums of the world. SMIT has been present in the country for 40 years and today counts more than 3,000 installed machines – 1,000 in Yazd area only," he said. Once again Future Textile Road investigated the theme of osmosis between East and West, between the Persian textiles trends and Italian technology.

## Iranian artisans to promote skills, arts at Milan festival

A cluster of Iranian craftspeople will demonstrate their skills at the Artigiano in Fiera International Crafts Selling Exhibition, which will be held in Milan, Italy, from December 2 to 10.

Iran will be a guest of honor for the prestigious event. The country's pavilion, measuring 980 square meters, will be set up jointly by the Cultural Heritage, Tourism and Handicrafts Organization and the national touring and automobile club in collaboration with several domestic handicraft businesses. Iran's offerings will touch upon woodwork, illuminated manuscript, miniature, textile printing, enamel, leatherwork, handwoven products, calligraphy, traditional musical instruments, embroidery, metalwork, and marquetry, amongst a lavish patchwork of other skills.

It will also show off various souvenirs, handwoven rugs and carpets, indigenous dishes along with live performances and workshops which hint as its rich historical heritage and tourism attractions.

Exhibitors, craftsmen, buyers, retailers as well as import and export companies from 115 countries will attend the event at the Fiera Milano Group and Milan Convention Centre.

Over the past couple of years, dozens of Iranian handicrafts have been honored with the UNESCO Seal of Excellence. A total of 65 crafts on various themes including enamel, tile, metalwork, leatherwork, wood carving received the privilege in 2010.

# Iran Textile News

## Turkish Clothing Brand Uses Iran as Production Hub

Turkish company LC Waikiki, otherwise known as LCW, has become the first major foreign apparel manufacturer to officially start cooperation with domestic garment players.

Turkish company has been in negotiation with Iran's Ministry of Cooperatives, Labor and Social Welfare and the Ministry of Industries, Mining and Trade for the past eight months and the Turkish side has so far surveyed over 70 apparel factories and manufacturing units in Iran.

Iranian clothing company Ronak Jean has been shortlisted. LCW has already placed order and the Iranian company's production line has been making clothes for the Turkish brand labeled "Made in Iran" tags for the past few months.

Most of the apparel ordered by LC Waikiki are produced [in Iran] for export purposes and only a small share has been considered for distribution in domestic stores.

The first phase of the collaboration will see LCW place orders with selected Iranian apparel makers worth around €20 million in the next year and a half.

All the exports will be done under the parent company's supervision and management. The apparel, labeled "Made in Iran" under LC Waikiki brand, will be exported to LCW branches in other countries. This project is expected to create about 5,000 jobs in Iran.

The ministry has decided that foreign brands willing to sell their products in the Iranian market are required to directly apply for permits to acquire representative sales outlet in Iran without taking recourse to middlemen.

In addition, the representatives are required that 20% of the

value of their imports (in rial terms) be produced inside Iran during the first two years of their business activities. After two years, the authorized representatives are obliged to export 50% of the apparel produced domestically.

## Mayer & Cie targets Iranian market

For the first time in many years Mayer & Cie. (MCT), has exhibited at the Irantex trade fair, which ran from 4 to 7 September 2017 in Teheran, together with its Iranian trading partner Iranstrick.

As an all-round trade fair for textile machines and textile products Irantex mainly attracts Iranian textile industry customers.

"After the easing of economic sanctions in January last year we experienced a significant surge in demand from Iran, so that is why we want to be back in the local market for our customers," commented Timo Schramm, regional sales manager at Mayer & Cie. On the decision to take part.

After years of trade restrictions that made it almost impossible to import machinery or even spare parts from the EU, machinery manufacturers are aware that there is a great deal of pent-up demand in Iran.

As Timo Schramm knows from experience, it mainly benefits German manufacturers because 'Made in Germany' enjoys a very high overall reputation. Germany is Iran's largest trading partner in the EU and German-Iranian foreign trade increased by 22% on the previous year in 2016 (auswaertiges-amt.de).

For Mayer & Cie., the popularity of German machines mainly comes into its own in the high-quality segment. Fully electronic

# CONTINUED GROWTH FOR TURKISH TEXTILE PRINTING

In its report titled, The Future of Digital Textile Printing to 2021, Smithers Pira valued the digital textile printing market at €1.17 billion in 2016 and has forecast growth at an annual average of 12.3% between 2016 and 2021. It's no wonder that this is an exciting and rapidly developing market. The FESPA Print Census 2015 identified textile printing as a dominant growth application among respondents, 27% of whom were already involved in garment printing, with 81% seeing growth in this segment, the highest of any growth application.

Textile printing equipment also featured prominently among print service providers' investment plans, with 21% of respondents specifically focussing spend in this area, supported by 12% planning to acquire thermal transfer equipment.

The Turkish market has a significant head start here as garment and textile are already among the largest and best-performing sectors of the Turkish economy, accounting for around 7% of GDP (2013) and comprising 56,000 textile and clothing companies operating in the country.

The Turkish textile and clothing industry is one of the major players in the world market. In 2015 Turkey exported US\$ 27.6 billion of textile and clothing products, which equated to almost one fifth of Turkey's total exports.

As one of the leading producers of textile, inevitably Turkey has an active textile printing market. However, where traditionally screen and rotary printing were the dominant processes, digital textile printing is rapidly expanding due to the change from mass production to personalisation. Quick turnaround times are also a benefit of digital printing and are an increasing priority for the fashion industry due to changing seasons and limited edition garments.

For printers with textile expertise, there are also interesting opportunities beyond garment, for applications such as flags and banners, interior décor items, and for consumer products such as mobile and tablet covers.

Decorative and industrial textile applications featured heavily in the FESPA Print Census findings, with 78% surveyed reporting growth in textile for décor applications. This includes products such as towels, bedding, curtains, upholstery, cushions, table linens etc. This is a blossoming textile market globally and, as one of the world leaders due to its wide range of products and superior quality in home textile production. Turkey plays a significant role in this market.

Turkey not only serves the domestic home textile sector but also exports 60% of its production, with the biggest export products in 2015 being towels, bathrobes, dressing gowns, curtain fabrics and bedding. Turkey's main export country for home textiles is Germany, with USA, UK, France, Russia and the Netherlands also major export markets for Turkish producers. Soft signage also presents major opportunities in digital textile printing. According to the FESPA Print Census, textile substrates are making significant inroads in the signage and graphics space, with 67% of PSPs observing sustained growth in soft signage. In the visual communications sector, the increased interest in printing on textile seems to stem from two key considerations - aesthetics and economics.

As an alternative to PVC vinyl and rigid materials, printed textile is versatile and appeals strongly to commercial customers, who typically find the softer, sleeker look and feel more natural, and the fluid movement of textile is more aesthetically appealing. Economic drivers are of course also influential. Textile substrates can be less costly to store and transport, and can lend themselves more readily to re-use than rigid materials.

The growth in textile printing is a trend we're witnessing globally at our shows. At our global print expo in Hamburg in May 2017 we saw an increase of 23% in textile printing exhibitors. Looking ahead, textile printing will have a substantial presence at FESPA Eurasia 2017 as 40% of exhibitors taking part in Istanbul for FESPA Eurasia are showcasing textile printing solutions for fashion, home textiles and soft signage. Visitors looking to see the latest textile printing solutions, both screen and digital, can attend FESPA Eurasia 2017 in Istanbul free-of-charge if they register using code: EURM705.

**ML:** *How can multinational companies like yours innovate and optimize the know-how that is available at different sites? Related to this, how can large companies share know-how between sites?*

**OH:** In the historical material industry, sites were very much a standalone capability with their own eco-system and boundaries. In today's world these doors have been opened and synergies happen between competencies centres as matter of survival. Multiple sites belong to a single business and cross virtual teams are established to deliver the desired outcome. Where people sit has become secondary.

In short: business targets become the true north, not necessarily the location and boss you report to. This requires strong strategic leadership and communication to make people believe and follow.

**ML:** *Would you qualify innovation as a pull or a push process?*

**OH:** That fully depends on nature of the organization. Stable, controlled and predictable innovation is most of the time a push process (sell what we can and control), whereas a pull process deals with all the uncertainties from failing and financial disaster to great success and victory - so a much broader spectrum.

A hybrid model where you fully anticipate consumer needs and have an organization dedicated to that (pull), but combined with the muscle of "all means" technology (push) spread through right channels and markets ....

You need to be so to say right and left handed... and that feels naturally uncomfortable.

**ML:** *More often than not, companies try to answer the question 'how can we create value for the consumer' while finishing the sentence with the words 'using our current assets'. This is very understandable, or are they missing great opportunities this way?*

**OH:** Using current assets is the natural gravitation to the belief that it fits your existing competencies and using those won't get anyone fired - isn't it? Reality however is that many assets and technologies can be accessed through alliance, partnerships or acquisition.

What is much more important these days is that you have channel access, understand the language, identify the opportunity and develop solutions that ultimately need to be produced, ideally on the internal assets. But, if it is financially viable, why not look outside or invest in a new area?

Building a new innovation business should be led by the most senior and respectful leader in a company to disrupt and overcome challenges. Many companies make the mistake of giving a small project or a new innovation in the market to a young graduate student (seen as low risk) - imagine the natural struggle and failure ahead...

#### **About EDANA**

EDANA serves more than 250 companies across 36 countries in the nonwovens and related industries, helping its members to design their future. The Association's mission is to create the foundation for sustainable growth of the nonwovens and related industries through active promotion, education and dialogue. Information about upcoming events can be found at [www.edana.org](http://www.edana.org)

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## INNOVATION'S TOUGHEST QUESTION: WHAT ARE WE REALLY TRYING TO SOLVE?

### Omar Hoek, Executive Vice President at Ahlstrom-Munksjö discusses innovation in today's connected world

19<sup>th</sup> October, 2017 – Brussels, Belgium – With the Nonwovens Innovation Academy approaching, EDANA's Scientific & Technical Affairs Director, Marines Lagemaat, caught up with keynote speaker Omar Hoek, Executive Vice President at Ahlstrom-Munksjö to discuss innovation in today's connected world.

**Marines Lagemaat (ML):** *You're going to talk about innovation's toughest question: what are we really trying to solve? Could you already reveal (part of) your viewpoint in a few lines?*

**Omar Hoek (OH):** People try to find solutions based on their rationale and knowledge. Especially in the scientific world: you learn critical thinking methods and apply that in research and development.

In today's connected world the opportunities and trends are driven by impulses, trends and technology that can change at the speed of light and overnight...

Are we prepared, structured and do we have the right DNA ready for that unstable mass and, do we want to lead or follow this trend?

**ML:** *Innovation, in particular the process of innovating is difficult to manage, some companies use some form of stage gate process. What is your experience with such tools? Do they meet their purpose? Are there alternatives?*

**OH:** Innovation processes "a la" stage gate, come from eras where we wanted control and research and actual innovation had a clear predictable target and we got "organized" around it for structural, budgeting and accountability purposes.

In today's world we see a different type of innovation, fast pace vs slow, predictable vs random behaviour, existing versus new technology, with or without external partners etc...

It gets very complex to make a one size fits all model for this type of innovation... but a mechanism that has its ear to the ground when a new trend-train is coming is an absolute must





DILO Compact Line for Needling Carbon Fibres

A close cooperation with needle manufacturer Groz-Beckert has advanced the development of the needle module technique and the intense needling of light weight nonwovens. Ample information will be available at the booth.

Furthermore, DiloGroup will inform about universal needling technology and carding systems of wide working width and high web speed for water entanglement lines. For this important, special branch of nonwoven production normal lines have a working width of about 3.8 m and medium web speeds of around 200 m/min, DiloGroup's portfolio includes carding systems of wider working width and higher web speeds. DiloTemafa offers in close cooperation with DiloSpinnbau these special web formation systems with working widths exceeding 5 m and resultant web speeds of more than 400 m/min after water entanglement and drying.

Reduced draft between card doffing system and winding are essential to achieve a high web uniformity and an acceptable strength ratio in machine direction to cross direction (MD:CD). DiloSpinnbau sets the standard for high productivity with random roll technology and for best felt homogeneity by low draft. DiloGroup is very successful with these fibre preparation and carding systems in all nonwoven production lines with high productivity and quality requirements.

Further important features of these special installations are the fibre preparation from DiloTemafa, the air handling for card suction, filtration and moistening which result in high line efficiency.

At SINCE 2017 DiloGroup will explain the characteristics of DILO standard and special nonwoven production lines in discussions with international customers.

Visit us at SINCE 2017, Shanghai, Hall 1, booth R76 from November 8 - 10, 2017.



DILO's crosslapper Vector 200

DILO machines may be used for the production of nonwovens used in automotives, as floor coverings, synthetic leather, geotextiles and for filtration, just to name the most important fields of application.

A new special line configuration using an online scrim fabric machine for the reinforcement of multi-layered nonwovens has been developed for the production of filter media, geotextiles and roofing material. Information about this special configuration will be available.

Considerable progress has been achieved in the processability of special fibres like carbon using recycled fibres to make composite materials. Compact special lines for product research and development with recycled carbon fibres are available and can be discussed with interested visitors.

# DILOGROUP

## ENGINEERING FOR NONWOVENS

press  
release

### PRESS RELEASE

October 2017  
-aw/TP

#### **DiloGroup at SINCE 2017 Hall 1, booth R76**

Starting in 1986, the Shanghai International Nonwovens Conference & Exhibition (SINCE) has become the largest and most important nonwovens exhibition in Asia.

This year, more than 450 exhibitors will present on a floor space exceeding 34 000 m<sup>2</sup> the complete industry value chain from nonwovens raw materials, production machines and accessories to the endproduct. The related industries covered include hygiene, filtration, fabrics and apparel, medical, automotive, wipes, home furnishings and upholstery.

DiloGroup from Eberbach, Germany, with its units DiloSystems, DiloMachines, DiloTemafa and DiloSpinnbau has traditionally taken part in this important exhibition since 1986.

As the leading group in the field of staple fibre nonwoven production lines DiloGroup will inform about complete lines presenting the latest developments in all components. Staple fibre production lines start with fibre preparation – opening and blending – from DiloTemafa, card feeding and cards from DiloSpinnbau and end with crosslappers and needlelooms from DiloMachines.

The quality of DiloGroup's four equipment components, opening and blending, carding, crosslapping and needling, is important to customers. A DILO line stands for highest productivity with best web quality. This goes hand in hand with a high efficiency as the mentioned four machine groups are controlled by a single drive and control technique and fulfill all requirements for modern crosslinking and smart production.

Individual lines are engineered, manufactured, delivered and put into operation by DiloGroup for the customer's specific purpose and benefit.

Service and spare parts supply to support the high availability of DILO nonwoven production lines is available worldwide. In addition to information about standard universal lines, we will inform about the latest developments in DILO machines which aim to increase efficiency, productivity and improve end product quality by the degree of automation.

An example of such an innovation is the "Vector 200", a new crosslapper by DiloMachines which is unique with an infeed speed of more than 200 m/min.