

Friday 13 November 2015



Charles Beauduin.

Monforts acquires Timatec



Scan-type printers launched



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ITMA 2015 breaks exhibitor record

TMA 2015 has "broken all records" by attracting the largest number of exhibitors since the show's launch back in 1951, according to owner the European Committee of Textile Machinery Manufacturers (CEMATEX). Opened at the Fiera Milano Rho yesterday, the 17th edition of ITMA has drawn 1,691 exhibitors from 46 countries and

1,451 exhibitors from 38 countries took part in the exhibition. "More customers are looking for more efficient solutions to the challenges they face, including better technology. They are driven by the demands of the textile industry, which is why we continue to see growing attendance figures at ITMA," said President of CEMATEX,

economies. It follows a previous record set by ITMA 2007 when

As well as an increase in exhibitors, ITMA 2015 also brings a larger exhibition ground, with a net space of over 108,000sq m, occupying 11 halls of the Fiera Milano Rho fairgrounds. It is about 20% larger than the 2011 exhibition.

The largest participating country in terms of space booked is Italy. Italian exhibitors booked a total of 32,540sq m. This is followed by Germany at 21,380sq m, Switzerland at 5,530sq m, and Spain with 4,540sq m.

From non-CEMATEX countries, the four largest groups of participants are from Turkey at 7,590sq m, China at 5,880sq m, India at 4,870sq m, and Japan at 3960sq m.

In terms of sectors, dyeing and finishing occupies the most space (23%) with 303 exhibitors, followed by spinning (14%) with 290 exhibitors.

The theme of ITMA 2015 is 'Master the Art of Sustainable Innovation'. This will be demonstrated by a number of efforts, including the launch of the ITMA Sustainable Innovation Award, the rebranding of the Research and Education Pavilion to Research and Innovation Pavilion, and knowledge-sharing platforms to drive home the sustainability message.

"Visitors will be able to explore solutions that address sustainability at each stage of the textile chain - from raw materials to processes and packaging. Many companies are launching a range of technologies that answer this urgent need," said Mr Beauduin.



CEMATEX President Charles Beauduin



The press gather to learn about this year's exhibitor record

Santex to acquire **SMIT Textile**

antex Rimar Group is to acquire SMIT Textile, manufacturer of looms and weaving machines. Ferdinando Businaro, Santex president, said: "SMIT Textile has deep roots in our territory and a strong heritage. Such technological know-how and committed human capital deserves to keep growing. I firmly believe restarting companies is necessary to unlock new opportunities."

Stefano Gallucci, Santex Rimar Group CEO, said: "In 2015 we achieved our ambitious objectives and today we are well prepared to further grow our business. This operation fits our five year strategic plan enabling Santex Rimar Group to be a partner for our customers throughout their production processes, from loom to finished natural and technical textiles."

With this synergy between SMIT Textile and Santex, customers can rely on one integrated technology provider for all production processes, a global service network, high quality products, a partner with a profile financially sound and deep technological heritage and know-how, according to the company.

Investments in the near future aim to evolve SMIT Textile products, leveraging on the Santex Rimar Group R&D department, partnering with key customers and research institutes to meet their innovation needs, it added.

SMIT Textile is exhibiting in Hall 3 at Stand D115 and Santex Rimar Group is exhibiting in Hall 10 at Stand D101.

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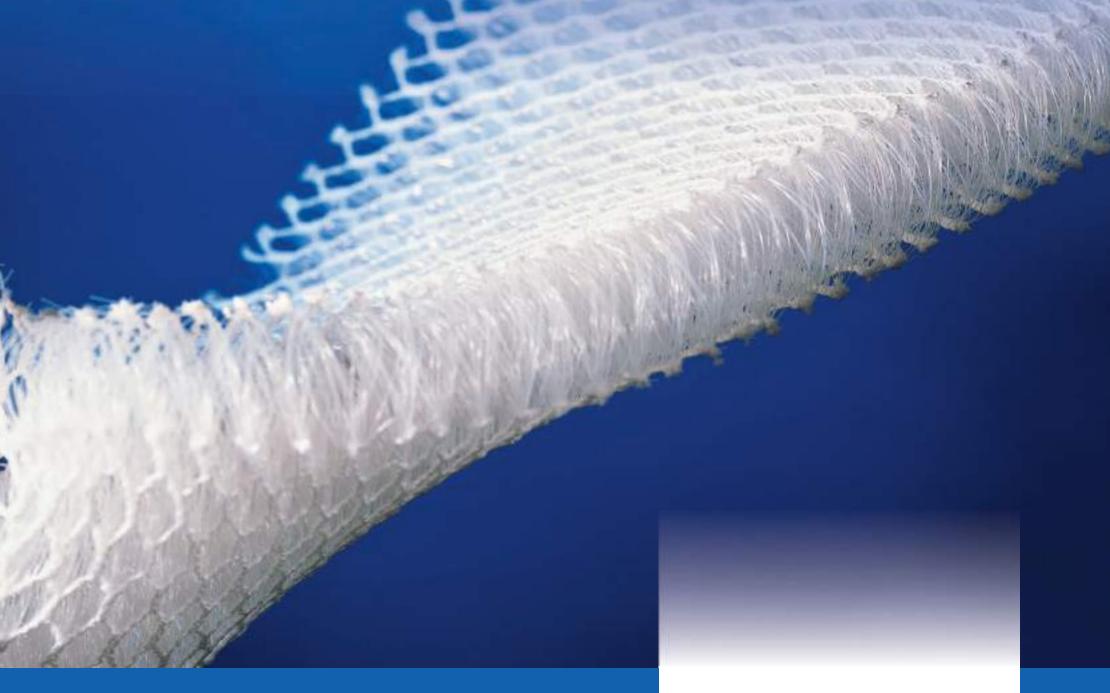
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THINKING AHEAD

Welcome to ITMA Welcome to Monforts



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www.monforts.com

Hall 10 | Booth E 101





Zimmer and DyStar to launch vat dyes for digital printing

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n a world first, Zimmer Austria has revealed a joint project with DyStar to develop a commercial platform for digital printing with vat dyes. It said the ultra-high-lightfast application, scheduled for launch in mid-2016, is aimed at exacting markets such as high-end upholstery, terry towels, workwear and military fabrics.

CEO Tony Naschberger said these were niche but high-value applications that fitted with Zimmer's market profile. In fact, vat dye printing represents around 3% of the broad textile-printing market, which is almost as much in volume terms as the total of all today's digitally printed fabrics.

To date, Zimmer and DyStar have run tests with four colours – yellow, blue, black and a dark red – but they expect to have eight colours by the time of the commercial launch. The inks are optimised for the Fujifilm Starfire print heads, with internal ink recirculation, used on the latest generation of Colaris printers. They

are expected to be marketed for used on other brands of printer with the same print heads.

The process requires pretreatment with alkali, followed by printing, steaming (to convert the dye to its soluble form) and washing to remove the pretreatment and any unfixed dye. In the laboratory the fabric is being dried before being steamed off-line but Zimmer foresees a one-stage process of inline pretreatment by Chromojet, followed by printing and steaming.

At ITMA Zimmer is also launching two digital textile printers in the Colaris family. Colaris3 is the third generation of the high-performance digital-textile printer and uses up to 64 Fujifilm Dimatix Starfire heads. Available in widths up to 5m, it has a maximum speed of 1,670sq m/hour. The new 1.8m Colaris Infiniti is a modestly priced 'out-of-the-box' solution; and also on show is a ChromoJET TableTop Printer for application development.



Zimmer managing director Tony Naschberger shows labratory samples printed with the new

High expectations from Hall 5 knit specialists

xpectations for this year's ITMA are high in Hall 5 as knitting technology specialists look forward to a boom in Connecting with more global audiences is one of the main goals for businesses

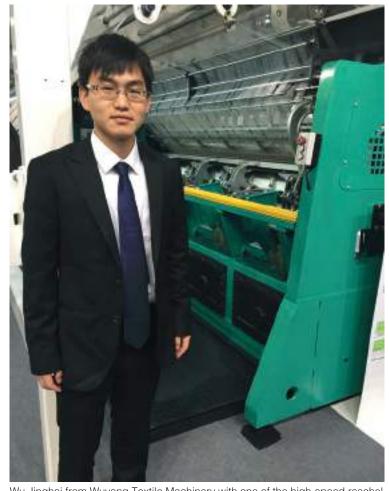
exhibit-ing in this hall. Longstanding ITMA exhibitor, Shima Seiki's Wholegarment technology celebrates its 20th anniversary, and its impressive stand at the entrance to Hall 5 has big-screen video simulations and many examples of its revolutionary seamless technology.

Media relations manager Masaki Karasuno said: "The last time Shima Seiki appeared at a Milan ITMA was 20 years ago when we launched Wholegarment technology. So it seems right we are here again for our anniversary, getting the message across to as many countries as possible."

Wuyang Textile Machinery, manufacturer of highspeed raschel warp knitting machines, is exhibiting at ITMA for the first time, at Stand G111.

Sales executive Wu Jinghai said: "This is our first time at ITMA so we are very excited to be here.

"India is currently our best market, and we have customers all over the world including two in Spain. But we want to grow and would like to reach more European markets, and ITMA is the best place to do this."



Wu Jinghai from Wuyang Textile Machinery with one of the high-speed raschel warp knitting machines on display at ITMA



Monforts acquires Timatec coating specialist

erman textile finishing machinery company, A
Monforts Textilmaschinen has announced at ITMA that it has recently acquired the 'know-how' Timatec, an Austrian coating specialist and begun manufacturing coating machines at its high-tech Austrian factory.

Timatec has been manufacturing coating machines for many years, however, Klaus Heinrichs, vice president of Monforts, said Timatec has mainly only been supplying to central Europe because of a restricted sales market. Mr Heinrichs said Monforts plans to supply the machines worldwide.

Timatec has a portfolio of coating units for virtually all applications – including solvent treatments and for wider width fabrics.

Its product range includes 'knife over air', 'knife over roller', 'magnetic rollers', and 'printing-head coating' options.

The former director of Timatec, Willi Tischler, is acting as a consultant for Monforts.

With the 'know-how' acquisition, Monforts continues to expand its competence for coating textiles and technical textiles for the benefit of its customers by offering a complete coating line from a single source.

Mr Heinrichs said: "The acquisition will benefit Monforts hugely. It means that we are now in a position to be able to offer complete coating lines for the coating of textiles.

"Nowadays, people want added value with their clothes and textiles."

Mr Heinrichs added that consumers now



From L to R - Roland Hampel, managing director, Monforts and Willi Tischler, former director of Timatec and now coating consultant for Monforts

want clothes with functionality, such as breathable garments, oil and stain repellent clothing and 'smart technology' apparel.

He continued: "People also want special functions on their textiles, for example for tents and other outdoor merchandise. Industrial textiles are now replacing other components, such as in the car industry. Increasingly, textiles are being used for the hoods of cars. For all these functionalities you need coating.

"We can now offer complete lines from

a single source, making the manufacturing process much quicker and smoother."

The first fully integrated coating machine, featuring both Timatec and Monforts components, has already been running for eight months and the customer is said to be fully satisfied with the machinery.

Monforts is keen to stress than no one at Timatec lost their jobs, as all Timatec staff were successfully integrated into Monforts. Monforts is in Hall 10, Stand E101.



SAURER.SETTING NEW STANDARDS. ITMA 2015.

The textile industry today is facing several major challenges: cost and availability of labor, utilization of resources and the increasing pace of fashion. Saurer approaches these challenges by creating ground breaking innovations in productivity, product lifetime and service to foster customers' profitability. The passion for customers, innovation and quality has given birth to E³, the triple added value label (energy, economics, ergonomics) which has ever since also been the guideline for innovation. At the ITMA in Milano Saurer Group will reveal all new E³ labeled machinery with the triple added value for the customers.

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Evgeny Ryzhkov, Director, Department of Light Industry of Russian Federation, arrives at ITMA

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Hall 8 B133h





Toyota puts focus on new markets and technologies

he strengthening market of Turkey is one of the key focuses for Japanese weaving and spinning specialists
Toyota at ITMA 2015.

On the opening day of the show, group manager Noriharu Teraoka spoke to ITMA Daily News and described the ITMA event as the biggest of its kind, and the most important for his company to attend - not least because it gives the company access to a broad European customer base, including Turkey.

"It's mainly European customers here, of course, Italy, Spain, France. But Turkey is a lot bigger market for us now, and it's important for us to be closer to them," Mr Teraoka said. "We have shifted a lot over the past 20 years,

we used to just visit European customers from Japan, but now we have a dedicated European team, based in Switzerland, so we can communicate directly with our customers here. It's very important."

Asked what other markets are current priorities for Toyota, Mr Teraoka said Central America was showing much promise, but that the Asian markets of China and India were still very much key. "The slow-down in the Chinese economy has had a big impact on our business, but our relationship with China is still strong – and constant. China remains a really big priority for us."

Discussing his key aims for the seven-day ITMA event, Mr Teraoka said the company was most excited to show and talk about the company's newest technology and innovations.

"We know that European companies in particular do sales and marketing very well; very fancy. But for us we sincerely believe that the most important thing for our customers is that we focus on the latest technology for our machinery. And that is what we are here demonstrate."

Toyota is exhibiting in Hall 3, Stand D109.



Toyota's group manager Noriharu Teraoka on the opening day of the show





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REGGIANI



Resource productivity calculator launched

luesign technologies is exhibiting the resource productivity calculator at ITMA 2015. Visitors can find out how their processes can be optimised in terms of resource savings and environmental impact using intelligent process technology and smart chemistry from verified chemical suppliers.

In collaboration with the textile chemistry industry, this revolutionary resource productivity calculator was launched during the fourth bluesign conference in July this year. As the new milestone in the history of resource efficient textile production, the webbased application is said to enable textile manufacturers to save resources, time

and costs and reduce the impact on the environment and people at the same time.

Conditions existing in the textile factory as well as specific chemicals and materials used will be considered and compared to 'Best Available Technique' processes. The benchmarks show savings and environmental impact immediately and provide a well-grounded basis for decisionmaking, according to the company.

The use of intelligent processes and smart chemistry can reduce the consumption of water by 50%, of energy by 30% and of chemicals by 15%. The bluesign blueXpert is the supporting application to achieve these goals, according to the firm, exhibiting in Hall 8 at Stand F107.



bluesign technologies is helping customers to save resources



THINK TAIWAN

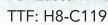
FOR FIBER & YARN

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Acelon: H8-C118 Hung Wang: H8-C119 Chain Yarn: H8-C115 Shinkong: H8-C117

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FRENCH TEXTILE MACHINERY

Your Technology partners @ ITMA 2015





(H10-A114)

ROUSSELET ROBATEL (H10-A113)



CEMATEX VILLAGE

(H8-B132e)

HALL 8

SCHAEFFER

PRODUCTIQUE (H8-B102)

STÄUBLI (H1-B111)

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- Energy, water and raw materials savings
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Solving data pooling problem

daptive Control Solutions believes the time is right to take lessons from the public internet and apply them inside business. Keeping data completely general will allow a new class of reporting systems to be built. And such systems also enable new working practices that may lead to novel ways of running business, it said.

Almost all organisations have IT systems and many employees spend most of their time at work interacting with them. Whether logging a customer call against a product return or scanning a barcode to track a logistics movement, their interactions create a steady flow of data mirroring business activity.

In a perfect world, Adaptive said either all data would be part of a single system, or all distinct systems would pool their data. If a company has an inhouse IT development then achieving data integration is often a major goal for that department. But with bestof-breed systems purchased from distinct suppliers this goal can often be impractical within the available IT resources, it explained.

The reason for pooling data is to allow overall reporting and statistical analysis and to run the business in a joined-up way. Several different systems may each know something interesting about the same business objects, but without pooled data those links may not be obvious.

But a data pooling system and format that everyone can agree upon is missing, believes Adaptive.

In an ideal world each supplier would still have within its own system all

the internal complexity needed, but would also send interesting data off to a central pool to reflect the business flow, said Adaptive.

This would be summary information and would be fire-and-forget from each system's point of view. Put like that, any system in the world could offer such function with appropriate security constraints. And if every system offered it, then the data pooling problem would be solved, it said.

Adaptive has created a new standard based on hash-tags and emails and an implementation of it called Flow Book. More details are available at Stand H102 in Hall 14.



Adaptive Control Solutions Flow Book

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Oerlikon welcomes you to ITMA 2015, Milan, Italy, 12-19 November 2015. We are located in Hall 4, Booth A 105.



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Rieter offers total spinning process control

ieter is demonstrating how it can offer control of the spinning process with its Spiderweb Mill Control System in Hall 2, Stand A106. The system is said to be the only one on the market that covers the entire spinning mill from fibre to yarn.

It is internet-based, can be used with all four spinning technologies, and added as an upgrade to older models.

The system can be configured for individual requirements; it stores and monitors the quality and production of all Rieter spinning systems.

Excellent yarn quality at high production rates are said to be achievable with the C70 high-performance card, and this can also

be seen at the stand.

Innovations in pre- and post-carding allow specific waste selection and an excellent raw material yield and sliver quality. A new, easily removable web bridge allows trouble-free cleaning and an immediate restart of the card, said the company.

The new RSB-D 24 double-head autoleveller draw frame from Rieter gives high sliver uniformity, even at high delivery speeds of 1100m/min. And its ECOrized suction system lowers the energy consumption. Older draw frame generations can also be fitted with the suction system.

At this year's ITMA, Rieter is presenting its new R66 automated rotor spinning

machine, which is said to make yarn production more economical.

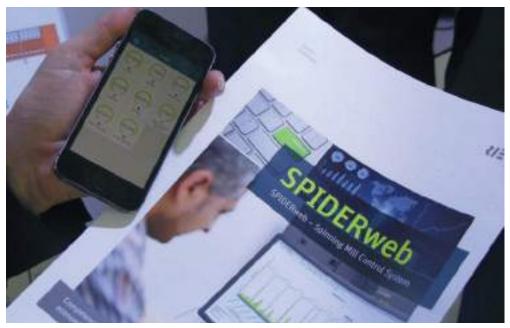
New lengths of up to 700 positions per machine, and longer machines mean a higher production per square metre.

The new S66 spin box is the heart of the new R66, and achieves higher speeds for improved economy at the same yarn tenacity and yarn uniformity.

The new electro-mechanical yarn traverse simplifies the setting of the winding angle for a wide range of applications, for reliable package flanks and good unwinding behaviour.

The J26 air-jet spinning machine has been additionally optimised, along with the P26 for processing polyester. This significantly extends the time between the necessary cleaning operations.

All three Rieter business groups are showing their product and service innovations at ITMA under their trademarks Rieter, Bräcker, Graf, Novibra and Süssen.



The Spiderweb mill control system is designed to operate on a mobile phone

Rieter's J26 air-jet spinning machine



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ITMA Europe Milan / Italy

Hall 08, Booth B132c



















































































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- + Strength + Partnership
- + Creativity + Success
- + High Tech + Reliability
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Turkish textile machinery manufacturers look for collaboration

urkish textile machinery
manufacturers number 133,
occupying 139 stands at ITMA.
The Turkish Machinery Group
(MTG) is representing Turkish
machinery producers and exporters at the fair
with a strong advertising campaign featuring
advertisements on trams, buses, metro stations
and at the exhibition.

At ITMA, Turkish machinery manufacturers are looking to strengthen relations with existing customers, broaden their portfolio of new customers and return to their country with new ideas and solutions.

This year, TEMSAD (Textile Machinery and Accessories Industrialists' Association), which

represents the Turkish textile machinery sector, is attending the fair. It has a vision to upgrade the production technologies of its members and improve their quality standards within reliable and sustainable structures. TEMSAD is hosting its visitors at Stand B133h in Hall 8.

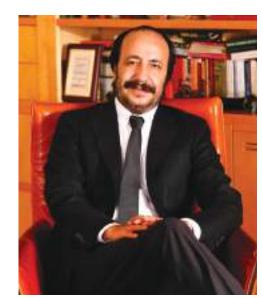
TEMSAD believes ITMA will strengthen the long-established commercial relations between Turkey and Italy. From 2014, Italy ranked fourth after Germany, Iraq and England among the largest importers from Turkey, while having a 5% share in Turkish imports.

Exports of textile and clothing machinery from Turkey rose by 67.3% in the first nine months of 2015. TEMSAD is looking to raise this percentage even higher through new

relationships established at the exhibition.

Textile machines, which are costly to produce, according to TEMSAD, are open for improvement in terms of mechanical infrastructure, electronics and software, representing an area where competition is intense.

The Turkish Machinery Group (MTG), said it is attending ITMA with a view to making a contribution towards development of the textile machinery sector. It views the sector not as a local, but as a global manufacturer, and would like to carry out new activities in cooperation with global partners, particularly in Europe, rather than acting alone.



Adnan Dalgakiran, chairman, Turkish Machinery Group

Textechno adds new instruments for cotton testing

extechno is presenting its latest range of testing instruments for fibres, yarns and fabrics in Hall 2, at Stand E104.

Several instruments have been added to the Cotton Control line, including the MDTA 4 microdust, neps, trash, and fibre-length tester as well as Covaslive, the automatic capacitive evenness and count tester for slivers and rovings.

These offer a combination of the most essential test methods for slivers, rovings, and yarns - tensile properties, evenness and count – with a high degree of efficiency and flexibility.

In automatic single-fibre testing, Favimat+ now has more test methods incorporated in the equipment. A new sample feed unit eliminates the need for extra labour for preparation of the test specimen and introduction into the test field.

Textechno's new automatic capacitive evenness tester for filament yarn Covamat has a novel sensor design, automatic package changer and a high-speed yarn twister.

The option to operate the universal filament yarn tester Dynafil Me+ as a stand-alone unit or in combination with the capacitive evenness tester Covafil+ and the count tester Comcount provides - apart from tensile strength and elongation - all the relevant yarn parameters in one test system.

Textechno has developed a new interlace stability tester ITEMAT+ TSI as the successor of the well-known ITEMAT by Enka Tecnica. The basic principle is the same - drives and electronics have been replaced by state-of-theart technology and the mechanical inter-lace sensor has been redesigned to serve a larger

linear-density range at better reproducibility.

Another highlight is the automatic drapability tester for technical and non-crimp fabrics. This instrument can detect defects

during draping and forming using optical analysis and image analysis. A further optional sensor can determine large-scale defects such as wrinkles.



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Stork technology



Scan-type inkjet printer models launched

onica Minolta is unveiling two new scan-type high- and medium-speed inkjet textile printers,

Nassenger 10 and Nassenger 8, at ITMA.

The addition of these two new models

will allow customers to choose from a wider range of options the model best suited to the scale of their business, production volume and budget, said the company, exhibiting in Hall 18 at Stand C108.

With high productivity, Nassenger 10 is aimed at customers who require high-volume printing as well as higher quality reproduction of images. With a print speed of 580sq m/hour, this model can replace a conventional flat screen printing machine, according to Konica Minolta.

Various printing modes include high productivity mode (580-310sq m/hour), high image quality mode and high density/high colour penetration mode.

Capable of meeting a variety of printing

needs ranging from sample printing to low-volume printing, Nassenger 8 is suitable for customers who require medium-volume printing. With a print speed of 240sq m/hour, this model ensures high productivity and is an ideal successor to a conventional inkjet textile printer, according to the company.

Various printing modes include high productivity mode (240sq m/hour), high image quality mode, and high density/high colour penetration mode.

Both models are equipped with newly-developed inkjet printheads, which are also used in the highest-end model,
Nassenger SP-1. With the adjustable ink droplet size (large, medium and small), coupled with the combination of Konica Minolta's proprietary dark- and light-coloured inks, these models are capable of higher quality reproduction of colour gradients and thin lines as well as fine, repetitive geometric patterns that are difficult to reproduce on conventional textile printers, said the company.

While printing of some designs is likely to cause problems such as streaking and uneven image density, Konica Minolta's state-of-the-art image processing technology in these models is said to minimise such problems and reduce defective prints.

The models are also said to be easy to maintain due to advanced functions for reducing troubles likely to cause downtime, such as: network-based remote access; notification of the printer status by email; automatic detection of fabric wrinkles; prevention of fabric from colliding with the printhead carriage; and automatic printhead maintenance.

The models ship with eight colours (CMYK + special colours + two light colours), with another colour offered as an option, and use Konica Minolta's own colourful disperse dye ink and reactive ink. The reactive ink meets the criteria of the Global Organic Textile Standard (GOTS).

The models employ an easy-to-use touch panel and user interface.



 $\label{thm:conica} \mbox{Minolta has launched two new injet printers, the Nassenger 10 (pictured) and Nassenger 8}$



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SSM boosts dye package density by 10-20%

SM is launching the new XENO-platform featuring winding machines, allowing an increase in dye package density. It is launching six new products in the winding and doubling segments and two in false twist and air texturing.

The new SSM modular winding machine platform, XENO combines dye package winding, rewinding and doubling applications with three different winding technologies.

The XENO is available with counter rotating blades (XENO-BW), friction drive system (XENO-FW) and high quality SSM yarn guide system (XENO-YW), said the company, exhibiting at Stand A101 in Hall 2.

With the new platform, SSM is able to offer the three winding technologies for

assembly winding as well - XENO-BD, XENO-FD and XENO-YD. Complying with growing automation demand due to increasing labour costs, all XENO machines can be equipped with an automatic doffer system, said SSM.

Another benefit of the XENO platforms is the enhanced DIGICONE 2 winding algorithm, enabling a 10-20% increase in dye package density with the same dyeing recipe. The SSM XENO platform will be manufactured in Switzerland, said SSM.

The characteristics of tailor-made high performance yarns is helping them to substitute other classical materials in a large range of applications, boosting the use of technical textiles, according to SSM.

The SSM DURO-TW precision winder for

all technical yarns up to 50,000 dtex offers a new level of flexibility and winding quality in one machine, said SSM.

The assembly winder DURO-TD allows the plying of multiple ends/yarns, independently of them being of the same

type or different. Optional intermingling ensures loop-free twists as well as optimal unwinding during twisting. The ability to run closed precision winding enables higher package densities, increasing the knot-free length, added the company.



SSM CEO Ernesto Maurer (left) and marketing manager Thomas Elsener are pictured with the XENO Platform

Stay safe with Oeko-Tex certification

eko-Tex's safety certification system and its range of eco-friendly, skin-friendly textiles are on display in Hall 8 at Stand C110.

The Swiss company offers textile companies a way to test their products for potentially harmful substances and have them certified by an independent body.

More than 150,000 Oeko-Tex Standard 100 certificates have been awarded to 10,000 companies in 98 countries. The mark guarantees safety for the consumer and care for the environment.

Textiles from the Made in Green label have been tested for harmful substances and manufactured by environmentally friendly production technologies under socially responsible working conditions. Product codes on the labels can be used to trace textiles through their manufacturing process.

Step is Oeko-Tex's independent certification system for sustainable production facilities, from spinning through to weaving, knitting, finishing and manufacturing ready-made clothing. Production facilities must meet the environmental and social responsibility criteria established by Oeko-Tex.

MyStep database helps companies manage and control their existing supply chains using key sustainability factors. The IT tool helps companies improve specific areas of supplier operations.





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Use technically advanced Stäubli solutions to co-ordinate your entire weaving process with everything from a single source. From weaving preparation to shed formation – whether for dobby or Jacquard weaving – to modular weaving system solutions for carpeting and technical textiles, Stäubli offers innovative machines and systems for the production of top-quality woven products. Take advantage of Stäubli know-how: demand perfect co-ordination of all your instruments, and direct the production of your range of high-grade textiles with passion.









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The UK's vast textile heritage puts many of our members at the forefront of their fields, retaining the UK as their base for virtually all creativity and production. Impressive quality control and dedicated advances in technology has brought our members sterling international reputations.

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BRITISH TEXTILE MACHINERY ASSOCIATION
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High-speed low-energy warp machine

new high-speed, low-energy machine for warp knitted fabrics is setting trends at Karl Mayer's ITMA stand.

The innovative and ergonomic HKS 2-SE with its unique performance profile can be seen in Hall 5 at Stand C101, along with the company's fresh, new corporate design.

The highly-efficient HKS 4-M-EL high-speed tricot machine is on show and there are new possibilities for lace manufacturers, due to a multibar raschel machine with fall plate, in a working width of 242in. Another machine has been developed to produce lace bands and outerwear.

In the field of technical textiles, there is a new generation of the tried and tested HKS MSUS machine, based on the Wefttronic concept.

And there are two new innovations with the focus on flexibility for the warp preparation sector - a sectional warping machine which can be extended into a weaving preparation machine for special applications, and a warp sampling machine with a new working width, allowing new applications.

Other highlights are the size box, a sustainable technology for the denim dyeing sector, and three new online shopping facilities.

The apps Karl Mayer Check Parts and Karl Mayer Connect, plus the online store, Spare Parts Webshop, mean customers can keep track of what is on offer.



Karl Mayer connects with customers at ITMA

Tailor-made automation solutions

Stuttgart, Germany, offers tailor-made solutions and provides customer support from basic concept preparation to assembly and start-up of the machine.

Additionally, software is developed and optimised at RSG according to customer requests and ideas. The company said it also offers worldwide service and lasting customer support. RSG added that it does not deliver standard facilities, but rather adaptations of all machines to customer processes and products, which can be both fully

SG Automation Technics, located in

Concepts extend from solutions for narrow fabrics e.g.

and semi-automated.

belts and straps, to technical textiles, such as filter, felts and fleeces, as well as home textiles, said RSG.

The company also offers patented monitoring techniques for different sewing processes.

All upstream and downstream processes - sewing, welding, ultrasound, laser applications, printing, winding, packaging, etc. - that are available on the market can be integrated into the overall process, it said.

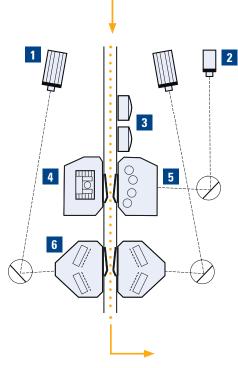
With RSG, textile enterprises can safeguard their production location even in intensive labour cost countries in the long run and can still position themselves successfully in the market, it believes.

RSG is exhibiting in Hall 7 at Stand B118.



RSG works with customers to deliver bespoke automation solutions





- 1 Cameras with very high resolution and scanning frequency
- 2 Camera with polarisation filter
- 3 Speed sensors
- 4 Lighting unit with polarisation filter
- 5 UV lighting unit
- 6 LED lighting module with 536 LEDs and special lenses

How can the benchmark for foreign part separation be improved even more?

With our new T-SCAN TS-T5. While our Foreign Part Separator SP-FPU works already with three modules - for coloured/dark, transparent and fluorescent foreign parts - the T-SCAN uses an additional module for shiny foreign parts.

Innovation number two is the unique T-SCAN camera and lighting technology with 1072 LEDs. The new lightsystem is significantly brighter, more energy saving and durable, while the cameras feature a higher resolution and scanning frequency.

Getting fibers into shape - since 1888.





Kothari launches fashion disperse inks

othari Info-Tech (KITL)
has launched its Charu
fashion series range of
high energy disperse
inks for direct printing
of polyester fabrics. The highlight of
these inks is said to be the same deep and
saturated colour palette used by traditional
printers.

In addition, it also includes fluorescent colorants. The colours available to choose from are Bright Cyan, Deep Magenta, Lemon Yellow, Deep Black, Scarlet Red, Royal Blue, Orange, Violet, Light Magenta, Light Cyan, Grey, Fluorescent Cyan,

Fluorescent Yellow, Fluorescent Magenta and Fluorescent Red.

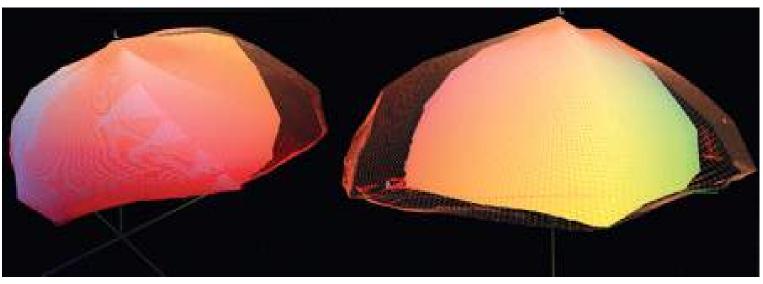
According to Dr Kamat, vice-president of the company, KITL, exhibiting at Stand D108 in Hall 18, has responded to fashion designers calling for brighter colours.

Conventional printers have a wide choice of bright colours to choose from, whereas in digital printing, the same has been true for cellulosic, but when printing polyester fabrics the choice has been fairly limited, said the company.

Polyester fabrics can currently be digitally printed either by the sublimation route or by the direct route. Both have their own advantages and disadvantages. Currently the shade gamut available by the sublimation route is much larger and brighter than for the direct route, said the company.

Although direct style digital printing with disperse dyes on polyester has been done for many years, the shade gamut has been of dull and muted colours, currently a big handicap for designers working at the frontiers of fashion, said Kothari.

As a result of the launch, designers now have at their disposal a wider and brighter gamut of shades, taking disperse printing to a new level, according to Kothari.



Views of Kothari non-fluorescent and fluorescent Charu Fashion series inks

Rumi presents sock knitting machinery

t ITMA 2015, Rumi is presenting its SEVEN TS sock knitting machine, a system that is capable of producing flat knit, terry, pattern and transfer stitch all in the same sock.

Producing a sock with selected terry and transfer stitch reportedly gives the end product advanced ventilation and breathability to the foot, making it particularly suitable for the sportswear sector.

According to Rumi, which is exhibiting in Hall 5 at Stand C111, the terry sliders used

to stitch the fabric are obtained by directly selecting the machinery sinkers through two actuators. It is this technique that makes it possible to combine multitude stitch-types all in one garment.

The machine also makes it possible to produce patterns with up to four colours per course without transfer stitch, depending on the needle diameter and quantity.

Needle diameters available are 3.3/4in, which operate with 72 to 144 needles; and 4.1/2in, which operate with a quantity of 84 to 160, said Rumi.



The SevenTS sock knitting machine



ITMA 2015 Milano Hall 3 Booth D110





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Improving performance in spinning mills

ovibra, located in
Boskovice, Czech
Republic, specialises in
spindle technology and
is launching the new
LENA (low energy consumption and noise
absorption) high-speed spindles for spinning
mills at ITMA in Hall 2 at Stand A105.

The noise absorbing system assembly (NASA) is said to ensure minimum neck bearing load, vibration and noise level at high speed, and in combination with wharve diameter 17.5mm and footstep bearing 3mm diameter, leads in lower energy consumption, according to Novibra. LENA is designed for tube lengths of

200mm to 210mm.

Another new product presented at ITMA is the clamping and cutting crown CROCOdoff, which is also available as the version CROCOdoff-Forte for coarse yarns.

The crown is operated by the spindle speed and allows automatic doffing.

Improved design of the teeth is said to offer reliable clamping and cutting of the yarn. In addition the CROCOdoff is said to reduce risk of yarn breakage during start-up, reduce energy consumption, minimises material loss and reduce maintenance.

CROCOdoff is suitable for use with new machines as well as an upgrade for some old machines.

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Power-saving air cleansing systems

witzerland-based Luwa Air
Engineering is exhibiting the
MultiCell Filter MCV based on
its filtration technology in Hall 2
at Stand A103. It has a modular
and space saving design said to be suitable for
machine exhaust air cleaning of blowroom and
carding machines as well as air conditioning
plants for dust and fly filtration of the room
return air.

The MultiCell Filter MCV is said to occupy one-third of the floor space compared with a conventional rotary air filter and offer an increased filter area for power saving with a simple robust 2-axis suction nozzle robot.

Luwa's Axial Flow Fan series B6XX has been developed with a focus on power saving. Axial flow fans are the main power consumer in an air conditioning or filter plant in a textile mill. In spinning they account for around 55% and in weaving it goes up to 75% of total consumed electrical power. Luwa said it has taken action to reduce this power consumption.

The B600 Axial Flow Fan with its sickle shaped blades has been developed in connection with the University of Siegen, Germany, following the requirements in textile air conditioning plants.

Comparable with best available efficient fans in the market, the Luwa Axial Flow Fan B600 can save up to 6% of consumed electrical power, according to Luwa.

The power saving features of the Luwa B600 Axial Flow Fan are as follows:

- Sickle shaped impeller for highest efficiency;
- Wide selection of fan configurations with different diameters and numbers of blades;
- Software to determine the most efficient fan configuration;
- Nano-coating of the blades to prevent dust deposits to keep efficiency constant and maximised;
- CFD simulation optimised inlet and outlet configuration of fan.

Luwa has recently launched the TexGuard System. Secure and reliable operation of blowroom and carding machines requires detection and elimination of metal contamination in cotton, avoiding possible sparks in different stages of operation including securing the filtration system. The system combines spark and metal detection with a high speed flap to form an integral part in textile material conveyance streams or waste collection systems, according to Luwa.

The spark detector is designed for catching up with high conveying air speeds with high material content. Equipped with an ultra-sensitive wide angle lens, the detector senses fully enclosed sparks and delivers the signal to the high speed diverter flap, according to the company.

All events are recorded in the monitoring system and can be accessed through the Luwa Digi Control System.



Luwa CEO Gottfried Abrell



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High efficiency machine for cotton pads

MI has launched a new machine for production and packaging of cotton pads. The ACE 500 is designed to offer improved standards for productivity and consistent quality, and is a step-up from the ACE 300, VMI's current market leader.

ACE 500, on display at Stand F103 in Hall 10, is designed for high efficiency production of a single product size, while also allowing for complete size changes to be managed quickly and easily. VMI said the new machine increased productivity by up to 40%, handling 54 bags per minute with up to 100 pads in each bag.

The compact unit of the ACE 500 has a 10sq m footprint, needs no special foundations and is easy to transport, install and commission. It is also designed to operate on low power and with compressed air.

In addition to providing automated machines across several industries globally, VMI is also involved in tyre building, technical rubber, can washing and medicine management.



ACE 500 is designed to offer improved standards for productivity and consistent quality

Latest yarn-feeding technology showcased

emminger, manufacturer of processing technology for yarn feeding, control systems and lubrication for knitting machines, is exhibiting its MSF 3 ATC storage feeder, PROMOFEED and KNIT SCAN systems in Hall 5 at Stand B121.

The company's MSF 3 ATC storage feeder, based on the MSF 3 CAN with 57V DC, is fitted with the Active Tension Control (ATC) sensor for controlling yarn tension. Used together with the GTN controller unit, it enables central setting of the yarn tension on single, groups or all the units together.

The control system ensures that the yarn tension at the outlet of the MSF 3 ATC is not influenced by external factors such as bobbin size or yarn quality and maintains the pre-set values at all times.

An additional feature is the yarn length measuring function already present in the GTN unit for the MSF 3 CAN and for the

positive feeders mounted on the knitting machine.

The company is also presenting its PROMOFEED, the next generation of yarn-tension-controlled feeders for elastic and non-elastic yarns, for knitting machines. The feeding technology offers a yarn tension range from 0.5cN to 100cN, and is simple to install and operate.

Another of the company's latest innovations is the KNIT SCAN fabric scanner, a contactless system designed to reduce second-grade fabric caused by broken needles on large diameter circular knitting machines.

The unit is self-adjusting to the fabric, making it easy to handle and operate, the company said. Due to the fact that the scanner head does not touch the fabric, sensitive fabric qualities can be detected, it added.

Memminger has had over 50 years of experience in this sector, and with a global workforce of 400 employees, it supplies over 100 countries.



Memminger's Promofeed



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Yarn dyeing machine uses less power

yeing technology manufacturer Thies is show-casing its yarn dyeing machine, iCone, said to be ideal for bleaching and dyeing fibres in different forms such as packages, warp beams, combed tops or flock.

The latest forms of flow analysis allow the piping system, pump and pump impellers to be optimised, reducing pressure losses and therefore lowering power consumption, according to Thies.

iCone offers the ability to dye in a traditional manner using reciprocating liquor circulation or to opt for ultra-short liquor circulation from one side only and a liquor ratio of 1:3.6. The machine can be matched

to the requirements of each application.

The delivery spectrum of the iCone is complemented by the latest, user-friendly control systems. These integrate in-house developed 'green functions' which provide users with standardised programmes for exploiting the optimisation potential in different process steps.

iCone can be integrated into existing dyeing houses. Existing dryers and material carriers can be adapted after consultation, said Thies, which is exhibiting at ITMA in Hall 14 at Stand C106.

Thies's iMaster H2O machine has been further optimised. The 2015 version incorporates improvements, many developed in response to suggestions from customers and users.

Thies is also showcasing the iMaster mini for the first time. This is a fully-equipped variation of the iMaster H2O able to be used with a load capacity of 20-80kg for small production runs and laboratory work. One aim is to operate the iMaster mini using the same parameter settings as the iMaster H2O production version. Undertaking the testing and optimisation phase on the iMaster mini offers the possibility to incorporate new kinds of fabrics, recipes and processes in the production sequence more effectively and cost-efficiently.

Another version for the treatment and finishing of light to medium-weight terry fabrics is the iMaster F. Its chambers have capacities of up to 400kg.

Thies's soft-TRD SIII combines the running conditions of the soft TRD SII with the latest short liquor ratio technology. Liquor ratios starting at 1:5 mean a variety of sensitive fabrics can be treated gently. The soft TRD III is suitable for finishing

polyester fabrics because the machine is fitted with a high-performance temperature control system.

MPS-G is a new, multi-functional supply system for chemicals, solids and dyes. It operates using a gravity-feed system said to be ideal for treating products of different consistencies, whether liquid, viscous or solid. Liquid chemicals are processed fully automatically, while dyes can be added manually at any time. With its compact design, MPS-G is said to be suitable for small dye houses, groups of machines or continuous systems.

This tool allows transparent analysis of treatment processes: rinse, wash and dye baths are monitored online and displayed as graphics. The visual representation of the process curves facilitates control of turbidity and determination of the dyeing extract from the liquor. The user can see how and when dyes transfer from the liquid phase onto the fibres or, for example, detect bath saturation during rinsing, said Thies.





Thies's i-master mini laboratory dyeing machine is on display for the first time

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Binsfeld launches product trio

S-based Binsfeld Engineering, manufacturer of rotary temperature transmitters for godets and heated rolls, is displaying its expanding line of products in Hall 2 at Stand F128.

New this year is the Binsfeld TempTrak RT380 Rotary Temperature Transmitter, a robust drop-in replacement and upgrade for Fuji FTM transmitters on heated godets. The RT380 incorporates Binsfeld's reliability, intelligence and generous spacing between rotating and stationary components, meaning less machine downtime, backed by a five-year warranty, according to the company.

Binsfeld is also presenting the DS220 Digital Stator and the HD480-I Heater Driver, both designed to provide digital upgrade options for the original temperature control equipment on Rieter J7/32 filament spinning machines. The DS220, which replaces the original stator circuit, offers both a frequency output and a 4-20mA current output for use with off-the-shelf process controllers.

The HD480-I converts a 4-20mA temperature control signal to a PWM (pulse width modulated) output for driving 50/60Hz induction-heated godets. It features a solid-state relay and soft-start function that extends the life of the godet heater, said Binsfeld.

Binsfeld is demonstrating its very flexible RT300 and RT350 Series godet transmitters with multi-channel configurations to fit most machinery manufacturers including Neumag, SwissTex, Rieter, Erdmann, Toray and more. It is also showing its line of calender (heated roll) transmitters, the RT310 Series.

Binsfeld Engineering has a strong reputation for reliable, precision

instrumentation
designed to operate in
the harsh environment
of man-made fibre
plants. The company
said it is dedicated to
producing trouble-free
systems that reduce
maintenance downtime
and increase yields for
fibre manufacturers
and textile producers
around the world.



temperature transmitter

Colour breakthrough for Everlight's research team

ature's rich palette of colours are the inspiration for Everlight Chemical's latest range of textile dyes. All the shades of the spec-

All the shades of the spectrum are celebrated in Everlight's ITMA exhibit in Hall 8 at Stand E117.

The company develops and manufactures low-fading, zero-toxicity eco-friendly fabric dyes for sportswear textiles.

From warm greys and greens to fiery reds and azure blue, Everlight's dyes are said to be the result of breakthrough technology by the company's research and development team.

Everlight described the lush, even colours

as "new industry benchmarks", combining fashion, safety and comfort.

Its polyurethane reactive adhesives give sportswear fabrics multi-functional weather-protection appeal, and are environmentally friendly. They are highly adhesive, yet resistant to intensive washing and drying, according to the company.

Traditional textile printing can be timeconsuming, labour-intensive, energy-intensive, and harsh on the environment, said Everlight.

Its integrated digital technology and textile printing is said to result in high-quality dyes and adhesives, faster production times, and ultimately new fashion trends.

Everlight Chemical



Everlight brings a splash of colour to the slopes

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Green mission for EFI Reggiani

FI Reggiani arrives at ITMA with the ambition of being the first traditional textile provider of global solutions for the 'green' textile factory of the future.

The company was acquired this year by the US-based global wide-format-printing giant EFI, which wanted to share in the success of the digital textile printing solutions sold under the Reggiani Macchine brand. But the Reggiani group also includes Mezzera and Jaeggli, which significantly extends its offer to the wide textile finishing community.

In fact, EFI Reggiani, exhibiting in Hall 18 at Stand A109, can now claim to deliver an overall solution for the whole textile process, from yarn treatment to fabric printing and finishing. It designs, manufactures, sells and services highquality machines across the globe for a wide variety of substrates and applications, including fashion, home textiles, sportswear, signage, flooring, automotive, and outdoor. EFI Reggiani said its innovations are the result of extensive research targeted to improve productivity and quality, optimise the textile manufacturing process, and reduce energy and water consumption, as well as environmental impact.

Able to supply integrated solutions,



Reggiani's flagship ReNOIR printer

EFI Reggiani emphasises the importance not only of machines and industrial plants but also of technological know-how, chemical knowledge, finishing processes and inks. These related aspects contribute to the development of new products and allow the company to achieve 'green' processes that reduce consumption and minimise environmental impact. EFI Reggiani said that, without compromising machine performance, its solutions save on human resources,

water, inks, colour waste, energy and stock holdings, while also exploiting recyclable materials.

During ITMA EFI Reggiani is showing new technological solutions and processes, based on new ecochemistry for water-based inks, as well as new automation technology. A complete EFI-Reggiani line showcases the latest developments, symbolising the important link between the processes of preparation, printing and finishing.

Expanding product range

urchased by Advanced
Dyeing Solutions Ltd seven
and a half years ago, Roaches
International continues to go
from strength to strength. The
company is re-established as a major supplier
of textile laboratory dyeing and quality
control testing equipment and sales are
continuing to improve year on year, it said.

It moved into new premises two years ago to facilitate expansion plans and can foresee having to move to an even larger site in the near future.

It has an on-going development programme to modernise and expand its product range. Over the last couple of years it has brought out the following new machines.

On the dyeing side, the Pyrotec³ Infrared dyeing machine; Colortec² Package dyeing machine for R&D and re-introduced sample Winch dyeing machine. On the QC side it has a new 9-head Martindale, Durawash and Durawash Plus, Washtecs, Rotary Crock-meter and two new Random Tumble Pilling Testers.

Most of these new machines are on show at Stand H101 in Hall 7. Its Laboratory Padders, Minithermos, Continuous Pad Steamer (CPS), Calenders, Thermosol Fixing Oven/Steamer (TFO) are said to be continuing to sell well.

As well as expanding premises and product range, the company is investing heavily in additional staff, having taken on a new international sales manager to develop new markets and two new apprentice engineers to cope with increased production.



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Automatic winding, TFO twisting & Rotor spinning machines HALL 4 STAND B101



Quality control devices
HALL 4 STAND B101A



Yarn splicers and textile laboratory

HALL 4 STAND B101B - Yarn splicers and laboratory equipment for spinning HALL 7 STAND H109 - Laboratory equipment - from fibre testing to dyeing&finishing



Manufacturing Execution Systems
HALL 1 STAND E101



Integrated system for dyeing industry
HALL 14 STAND G111



Electronic Manufacturing Services





Latest weaving mill technology from Neuenhauser

eaving and winding technology from the Neuenhauser group of companies is on display in Hall 3 at Stand F101.

Sohler-Neuenhauser shows a travelling cleaner specifically designed for weaving mills. SP100 features high performance combined with reliability. Due to strong growth in the technical textiles field, stationary suction systems for weaving machines have been developed in recent years and the latest models of the FX System are on show.

Group company, Scholze Germany's madeto-measure warp beams, back beams and cloth beams are also on show.

Genkinger-Hubtex, also a member of the Neuenhauser Group, has developed a program to manage the logistics of running a weaving mill. It is showing three electro-hydraulic vehicles - a warp beam lift truck, a fabric beam transport truck and a multi-directional side-loader for warehouse applications. All vehicles have the latest control technology and long-life batteries.

Neuenhauser Winding Technology's batch winder from the multiwinder series, has a press roller system and auxiliary centre drive. The latest developments in centre winding for technical textiles and carbon fabrics are also on show.



Neuenhauser travelling cleaner SP100 for weaving machines



Genkinger-Hubtex electric multidirectional sideloader E-MSR



50th anniversary celebration for MTI

anifatture Tecniche Industriali srl. manufacturer of components for spinning machines, celebrated its 50th anniversary on September 6th.

This major milestone has been reached due to the 'spirit of challenge' that began with founding president, Giovanni Diana in 1965, and has been handed down through the generations of MTI employees, according to the company.

It also praises its agents and distributors around the world and acknowledges the support received from its customers.

MTI, exhibiting in Hall 2 at Stand F105, said it offers a complete range of products for spinning machines, from preparation to winding: combing brushes, HDPE cans, card components, gill and finisher parts, fallers, drawing

rollers, condensers, auto-doffing parts and more.

Due to an ongoing process of innovation and its expertise in reverse engineering, MTI said it is able to offer strategic components for the spinning

The company is family owned, still managed by the founder and his two sons and daughter. It is situated in Biella, Italy, the heart of the land of wool where its technical and craftbased knowledge assets started and grew. Three production units cover an area of 5,000sq m comprising 3,700sq m of production space, 1,050sq m of warehouse space and 250sq m of recently renovated offices.

Today the company sells its products in more than 60 countries worldwide and is proud to serve leading yarn spinners and famous spinning machine manufacturers.



MTI recently renovated its offices





Retech rolls with the latest technology

etech is letting the good times roll with its latest range of highend solutions for synthetic yarn production.

Visitors to Hall 4, Stand A114 at ITMA can see Retech products in action for the first time, as bright blue thread moves along on heated godet rollers, yarn tension sensors and air-bearing separator rolls.

Godet rolls have been the Swiss company's leading range for many years, and the latest advances show its dedication to energy-saving cost cutting and customer satisfaction.

The right godet is crucial and there is no such thing as an off-the-shelf model, so a close relationship between the customer and the equipment designer is very important,

NAVIS TubeTex

www.navistubetex.com

according to Retech.

Based on the permanent synchronous magnet motor concept, there are three main motor sizes available in different performance categories. Different roll diameters and lengths are available for each motor, and having decided on the customer's requirements, a special godet based on a modular standard concept is precisely manufactured.

Retech tailor-made godets are capable of up to 6000m/min with temperatures up to 400°C.

The latest air-bearing separator rolls are also on show at the Retech ITMA stand. These rolls are used in polymer plants all around the world, and Retech's new technology has reduced their air consumption by one third.

WinOlt, Retech's online tension control

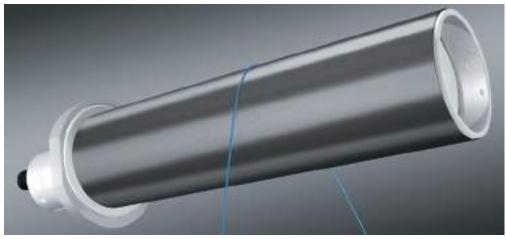
system that continuously monitors yarn tension, records yarn breaks, and calculates downtimes and machine efficiency data, has been further enhanced and optimised.

WinEval offers a large information base for plant managers to optimise machine efficiency. Figures can be evaluated per shift, per day or over a particular time period.

A roll temperature surface measurement device, initially developed for the company's own engineers, is now available to customers directly and is on show for the first time at ITMA.

Up to four measuring points can register the exact roll surface temperature within one to two seconds, and the information can be sent to the customer via a USB connection.

Another Retech highlight is the newly developed temperature transmitter UTR-4A for 1-6 individual heating zones. It has been miniaturised as much as possible and can be combined with UCR controller or USC signal converters. It replaces the UTR-4 and is also available as a modification for existing heated godets.



Retech's energy-saving air-bearing separator roll





Circular saws for knitting machines

Dora Enrico, exhibiting in Hall 7 at Stand G111, specialises in circular cutter saws for hosiery and knitting machines. In the textile sector since 1953, with 62 years of experience and advanced machinery, it said it produces high quality parts for many Italian and foreign brands.

STILL A LOT TO DISCOVER, TOGETHER. THE FUTURE OF TEXTILE DIGITAL PRINTING

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leader in digital printing technology.

In 2003 we launched Monna Lisa, the first industrial digital textile printing solution:
a real breakthrough that led the way in the digital printing on textiles.

At ITMA we are showing our most innovative solutions resulting from our partnership

in this sector, with increasingly reliable, fast and efficient products.

And as research never ends, further innovations are to be expected in the near future.

Find out more on our participation at ITMA on: www.textilesolutioncenter.com

VISIT US: Hall 18 - Booth D101-102-103



12 - 19 NOVEMBER FIERA MILANO RHO MILAN, ITALY



EPSON EXCEED YOUR VISION





Taiwan showcases yarn and fibre developments

even large players in the fibre and yarn textile technology sector of Taiwan are showcasing their products supported by the Taiwan Textile Federation (TTF) at ITMA in Hall 8 at Stand C119.

The exhibitors are Acelon, Chainlon, Everest, Far Eastern New Century, Hung Wang, Shinkong and Yi Jinn.

Acelon is showcasing AceStatic, a polyester fibre with electrically conductive features achieved through a fibre spinning technique. AceStatic can reduce dust accumulation and avoid an electrostatic field effect. It is suitable for anti-explosion wear, clean-room garments, workwear, underwear and medical textiles, according to Acelon.

Chainlon, manufacturer of nylon 6, nylon 6 fibre, nylon 66 and nylon fibre air textured

yarn, has been working on green technologies in recent years. Greenlon features recycled yarn, dope dyed yarn and deep dyed yarn. The manufacturing process can reduce energy consumption, CO2 emissions and eliminate wastewater, said the company. Greenlon is said to be appropriate for sports, fashion, industrial and other end uses.

Everest ever seamless body-mapping garments are made using seamless or jacquard machines. The high compressibility of the garments can enhance blood circulation, reduce muscle injury and improve athletic performance, according to Everest. Combination with a mesh layer helps to achieve a good wicking effect, said Everest. The 4-way stretch feature is body-mapped to ensure optimum comfort during use, said the company.

Far Eastern New Century Toplumins is a luminescent yarn for e.g. running in the dark. It can be self-luminous in a dark environment after a short period of light-storage, enhancing safety.

It is said to be suitable for gloves, caps and shoes. Far Eastern is also offering PET two tone filament which provides multiple combinations of colours. It also provides thick and thin effects for those seeking a fashionable look.

Hung Wang specialises in horsehair braid (crinoline) and different types of braids including PP braids, paper braids and hemp braids. The crinoline, made of 100% polyester, is suitable for wedding dress and millinery use, said the company. Another specialty is a kind of straw braid consisting of 4% polyester and 96% paper yarn offering light weight and coolness.

ShinCool Fiber, from Shinkong is a hydrophilic polyester fibre designed to enable active temperature and humidity management. Its high hygroscopic characteristic with inherent anti-static function, is said to have a better moisture regain rate of 2.2% than any regular fibre. Another version of ShinCool+ is hollow fibre which offers higher water absorption and liberation yet light weight.

Capitalising on the soaring athleisure trend, Yi Jinn has forged ahead in the development of functional textiles. Products like SG Stay Warm (moisture management and insulation), SG Color (environmentally-friendly and energy saving PET colour yarn), SG Elastic (high shrinkage fibre) and

SG TOP/NOP (spandex covering yarn), are materials suitable for athletic apparel said to be functional and fashionable.

Due to a surge in global demand for fashionforward athletic apparel, Taiwan's textile manufacturers are focussing on the 'wellness generation', chasing more cost-effective and environmentally-friendly production.

At ITMA, in addition to displays from the above exhibitors, TTF's stand showcases the 'Textile Export Promotion Project' commissioned by the Bureau of Foreign Trade. It will also deliver sourcing support and information on the Taiwan textiles supply chain to buyers and manufacturers looking for new business contacts.



Mr C T Chan, Chairman, Yi Jinn Industrial Co Ltd, Taiwan Textile Federation addresses ITMA visitors

VISIT ZIMMER AUSTRIA HALL 18 Booth B112 Beyond simple applications, we also like to do things nobody else does!

ZIMMER AUSTRIA launches the new Colaris³, the Colaris Infiniti and the Rotascreen TG/TU

Colaris Infiniti is the "off-the-shelf" or "out-off-the-box" solution with a **very attractive price**. The 1.8 m printer can hold up to 8 colors and 32 SPT 1024GS printheads in total with dropsizes from 7 to 21 picoliter. The speed ranges from 520 sqm/h at 360x360 dpi at 1 pass to 170 sqm at 360x1080 dpi at 3 pass using 4 heads per color.



Zimmer Maschinenbau GmbH | DIGITAL PRINTING SYSTEMS Eibergstrasse 2-8 | 6330 Kufstein | AUSTRIA

Phone: +43 (5372) 64893-0 | info@zimmer-austria.com

Energy savings from Bellini

oris Bellini's new yarn dyeing machine boasts electrical energy savings of more than 70%.

The Pulsar machine is said to combine top-quality dyeing with a dramatic cut in running costs, and can be seen in Hall 14, at Stand G104.

The groundbreaking system is a result of in-

tensive laboratory and industrial-scale testing.

In comparison with standard technology, the Pulsar machine demonstrates particularly low consumption figures. It offers more than 70% savings in electrical energy, a very low 1:4 liquor ratio for most fibres, and a 20-30% saving in water, chemicals and steam, said the company.



J-Teck3 launches high concentration dye-sub inks

-Teck3 is focusing on the dye-sub ink J-Cube, a versatile range of inks dedicated to industrial print heads in Hall 18 at Stand D112.

It was initially developed for Ricoh and Kyocera print heads used in industrial applications requiring high speed and quick drying on coated and uncoated transfer papers.

The increasing success of the product together with the introduction of new print heads led J-Teck3 to develop new versions, both for transfer and direct-to-fabric applications, dedicated for use in different heads, making J-Cube, a diversified premium ink range.

Manufactured with J-Teck's "Cluster Technology", these inks have been extensively tested and represent J-Teck's answer to market requests for high quality inks specifically developed for industrial applications such as fashion and home decoration.

With the strap line "A Cube for Every Print Head", J-Teck3's offer at ITMA includes: Sublimation printing: J-Cube KF – Kyocera; J-Cube RF – Ricoh; J-Cube NSK - Konica Minolta; J-Cube PNF – Panasonic. Direct to fabric printing: J-Cube KP – Kyocera; J-Cube RP – Ricoh. J-Teck3 is launching J-Cube KF Extra and J-Cube RF Extra, new high



J-Teck3 is launching new colour inks at ITMA

concentration dye-sub inks for Ricoh and Kyocera print heads at ITMA.

The two lines will be manufactured in colours Extra Cyan, Extra Magenta, Extra Yellow and Extra Black, featuring high concentration, fast drying and optimal colour release with the use of coated and uncoated paper.

On display will also be J-Teck's complete range of digital inks: J-Next Subly, suitable for Epson DX6 and DX7 print heads and the J-Eco Nano Line disperse dyes with Nanodot technology for direct and transfer printing on polyester. Its EPS System for double-sided printing in the digital direct-to-fabric printing process is also on display.







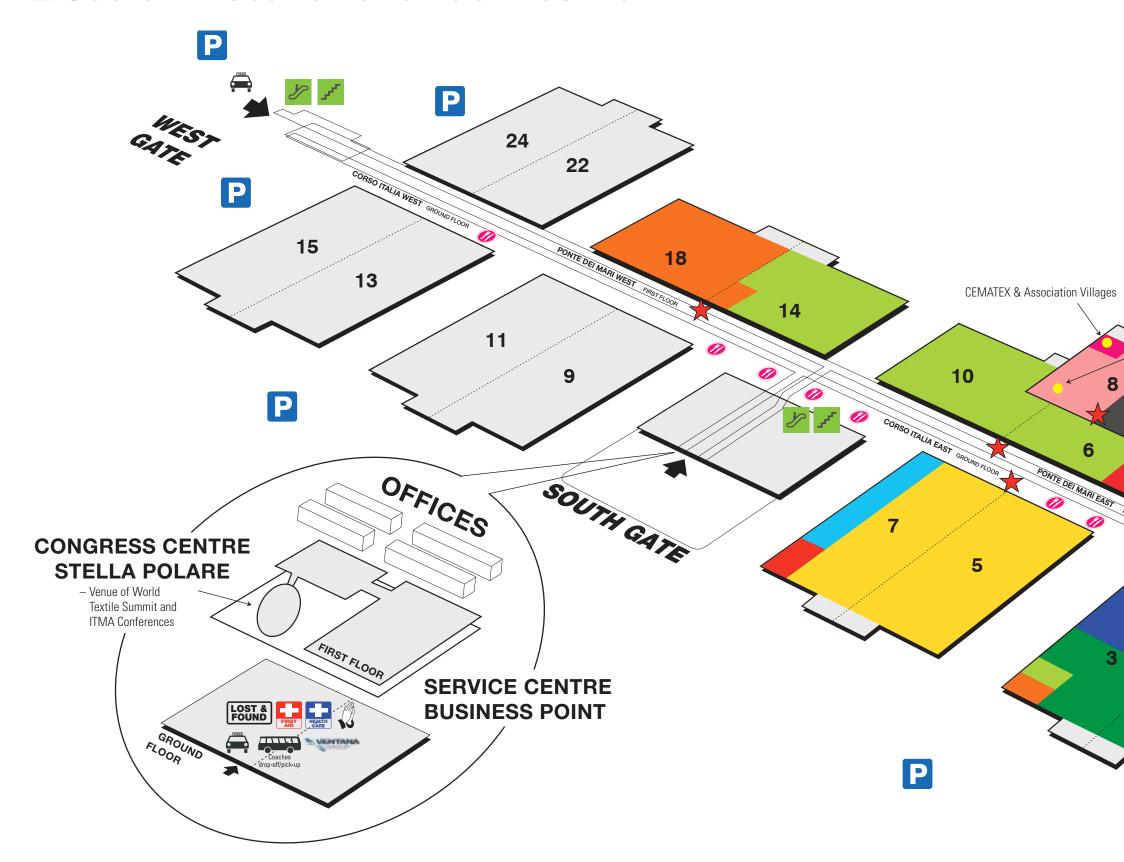
WHOLEGARMENT

Innovation Coming of Age



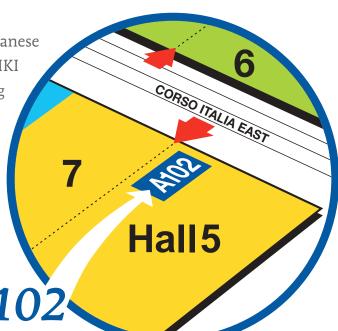
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Sector Allocation and Facilities Plan





WENTY YEARS AGO at ITMA '95 in Milan, Japanese flat knitting machine manufacturer SHIMA SEIKI unveiled the world's first WHOLEGARMENT® knitting machine. Capable of producing a knitted garment in its entirety with no seams, it was revolutionary technology that was proclaimed as "The Magic of the Orient." Now we return to Milan to commemorate the 20th Anniversary of WHOLEGARMENT® knitting, with new technology worthy of celebration. Come and see for yourself, at the SHIMA SEIKI booth.



Hall 5 Stand H5-A102

Chapter 12

Chapter 16

operations

Chapter 17

and accessories

Transport, handling, logistics, storing and packing equipment

Equipment and products to

ensure machinery and plant

Services for the textile industry

CEMATEX and Association Villages (Hall 8)

CEMATEX Associations

ACIMIT AMEC

ATMA

BTMA

GTM SWISSMEM SYMATEX

JTMA KOTMA

TAMI

TMAS **UCMTF VDMA**

 R&I Speakers Platform - 2BFUNTEX Final Conference **AMTEX CTMA EEPC** ITAMMA

Rest of World Associations

Chapter 8

and folding machinery, auxiliary

Chapter 13

reduction and pollution prevention and accessories

Chapter 14

Chapter 18

Chapter 19

Natural fibres, man-made fibres,

Chapter 4

Weaving preparatory machinery, weaving, tufting machinery, auxiliary machinery and accessories

Chapter 9

Printing machinery, digital printing machinery, auxiliary machinery and accessories

Chapter 1

Machinery for spinning preparation, man-made fibre production, spinning, auxiliary machinery and accessories

Chapter 2

Machinery for winding, texturing, twisting, auxiliary machinery and accessories

Chapter 11

Laboratory testing and measuring equipment and accessories

Chapter 3

Machinery for web formation, bonding and finishing of nonwovens and felting, auxiliary machinery and accessories

Group Hospitality Lounge EAST GATE **Registration Foyers** Refer to page 14 for details.

Chapter 15

Colourants and chemical auxiliaries for the textile industry



Q&A

A customer-oriented approach

ITMA Daily News interviews **Dr Dirk Burger**, CEO, Trützschler



What machines are you exhibiting at ITMA Milan 2015?



All four business divisions of the Trützschler Group are introducing their new products. Some of the machines can be seen in operation.



What can you tell us about any new technologies you are launching?



To us, the ITMA in Europe is always a welcome occasion to present new technologies. In our Spinning division, this concerns new technologies for the detection and separation of foreign parts. Card Clothing is showing a newly developed flat top machine for high-quality fine combed yarns. The benefits to the customer are in the area of nep extraction.

The Nonwovens division is presenting, in cooperation with Voith Paper, among others, technology for the manufacture of flushable wipes by applying the wetlaying process and hydroentanglement. In addition to installation concepts, our Man-Made Fibers division is also showing modules for installation modernisation using the plug-and-play method, as well as interesting solutions in the area of BCF spinning.

Q Why is

Why is ITMA important to Trützschler?

A

The ITMA show in Europe is the undisputed

leading trade fair of our industry. A majority of new developments can be traced back to Europe. For this reason, ITMA attracts customers from all over the world.



How are you finding the European textile machinery market at the moment?



The European providers of textile machinery are leaders in technology and have economic strength. They have been able to increase their competitive position in recent years.



How is the growing Asian textile machinery market affecting your company?

A

Asia is our largest market. For this reason, we have had our own production sites in the two large textile countries of China and India for a long time, which has enabled us to strengthen and expand our market position. In other Asian countries we are leading and competitive with our innovative machines from Germany.



What are the trends in customer demands



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- Environmentally friendly coatings and pretreatments
- Low energy consumption
- No heat, water, or emissions
- Treat fabrics made of heat sensitive fibers
- Durable water and stain repellency
- Little or no effect on hand or color

Visit us at

Hall 14, Stand H14-F 105

ITMA Daily News

for your technologies at the moment?

A

It is a general trend that customers request not only machines; they also ask for technological support and know-how for the operation and installation of the machines. That is why we rely on intelligent technology and innovative control concepts. A large number of self-adjusting functions are already integrated into our machines. During new investments, our customers also tend to focus on 'Total Cost of Ownership'. The sole attention to investment amount is increasingly being replaced by low operating costs, particularly low energy consumption, low labour input and maximum raw material utilisation.

In a growing technical textiles market, are machinery manufacturers having to make big changes to their products?

A

Customers in Europe expect from us specific machines for their specific products. While in Asia, it is often a matter of standard installations for volume production. We serve both markets with our products.

Q

How is Trützschler keeping up with technological innovations needed to capitalise on the technical textiles market?

A

Strong research and development, as well as globally operating technological support ensure our leading edge. Two well-equipped technical centres in Germany allow us to develop tailor-made products together with our customers.

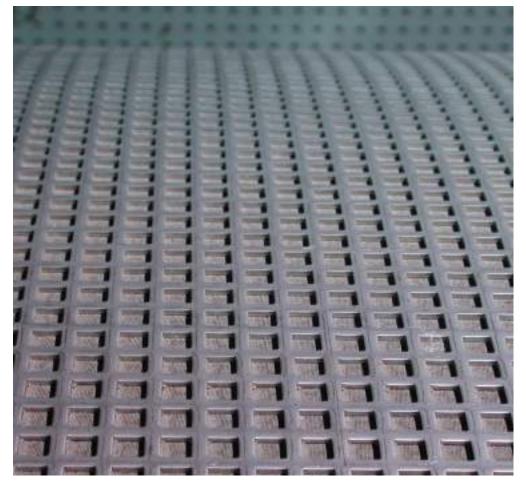
Q

How has 2015 been for Trützschler so far and what are your plans for the future?

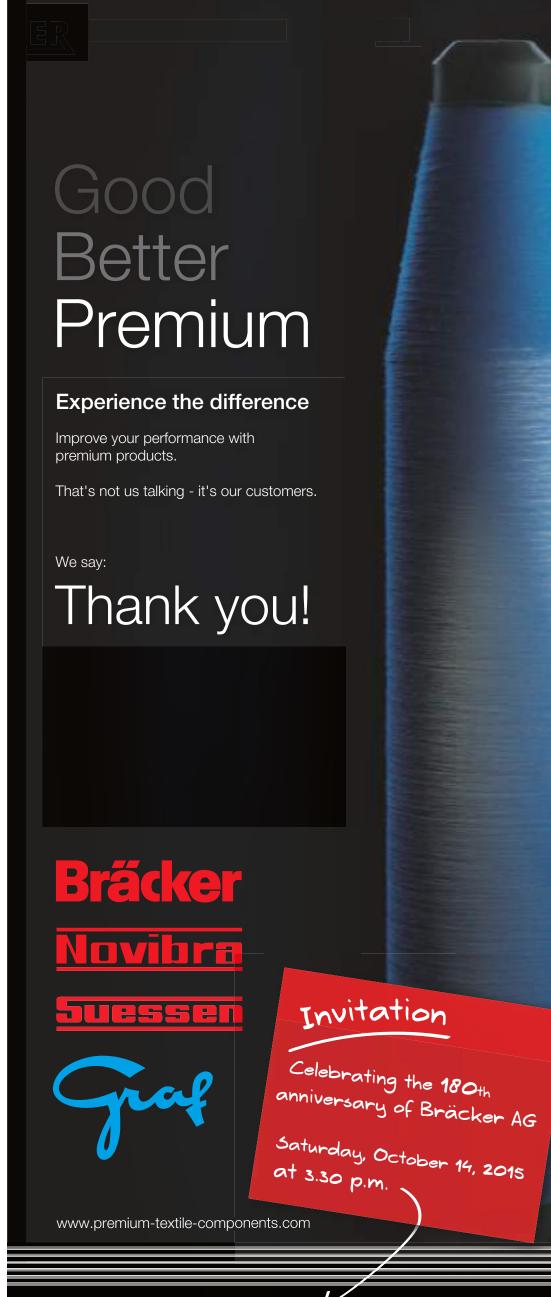
A

Currently our business is consistently good. Even in the run-up to ITMA, our customers are not reluctant to place orders. In 2016 we will introduce the new ITMA products into the markets. Therefore, we expect business to remain solid for the next few years, provided there are no political events.

All four Trützschler groups are exhibiting in Hall 2, Stand C113.



TNMF thermobond shell for 3D effects



Visit us at ITMA Milano Hall 2 / Booth A105





Q&A

Supplying technology and know-how

ITMA Daily News interviews **Regina Brückner**, CEO, Brückner

What have been your key textile-related activities over the past year?

A

We have developed a lot of new machines for special purposes, we are going to present systems for more efficient production, and new solutions for heat recovery and air purification.

Q

How are you finding the European textile machinery market at the moment?

A

There has been a big consolidation in our industry over the past few years, but luckily companies with excellent technologies are still very successful –





no matter if the companies' names have changed - and European producers of textile machinery have always focused on R&D, good management and reliability.

Where are your main customers located?



We are happy that our customers are located all over the world as we offer solutions for classical textiles, as well as technical textiles and nonwovens. This means that we have many customers in Asia, including China, India, Bangladesh, etc, in Europe, and in North, Middle and South America, but also Africa gets more and more important.

How is the growing Asian textile machinery industry affecting your company?

Of course we are facing competition from Asian as well as other countries, but competition just inspires us to be more efficient, to invest more in R&D and provide better solutions for our customers. Our aim is to solve the problems of our customers by selling custom-made machines.

What are the trends in customer demands for your technologies at the moment?



We feel that all over the world, our customers care more about efficient production, reduction of energy demand, reduction of resources and of course reliable machines. Resource savings, ecological aspects and profits need to be stipulated when discussing new machines at the moment.

What are the main challenges facing your company?

At the moment one of the biggest challenges for everybody in business is the uncertainty of everything. Planning is getting really difficult as currencies, markets and demands of the end-users are changing so quickly. As an entrepreneur you need to make sure that the company is organised well in order to adapt very fast to any changes and to be flexible.

Is your company involved in serving the needs of the technical textiles market and if so, what changes are you making to address this rapidly growing market?

Yes, we offer many different machines for technical textiles, and are therefore constantly developing new ideas for new applications – for example, the coating of technical textiles, or the finishing and bonding of nonwovens, etc. But we see ourselves not only as a machine supplier, but also as a supplier of technology and know-how. And this is one of the big needs of our customers.

How has 2015 been for your company business wise and what are your plans for next year?

We have had a good year in 2015 and are very positive about the future. We are therefore about to construct a complete new production facility in Germany where we will be able to build more and bigger machines.

What are you hoping to get from ITMA?

We're looking forward to meeting all our customers to discuss the new machines we are presenting, and of course to get new contacts.

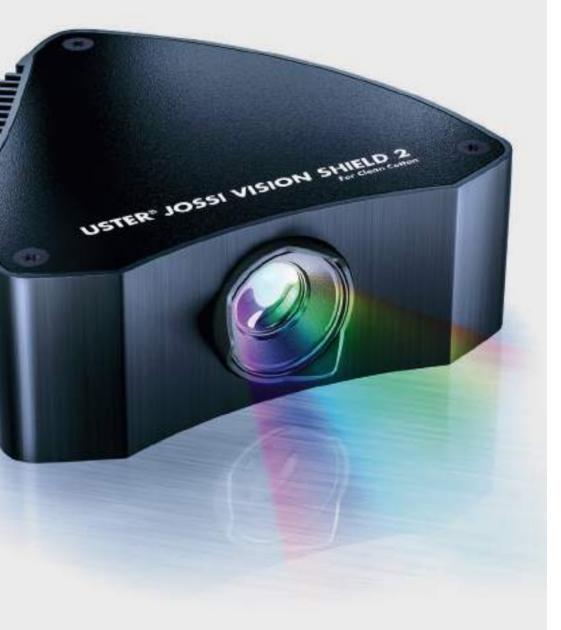
Brückner is exhibiting in Hall 10, Stand A101.



Brückner is focused on saving energy with its finishing technology







USTER® JOSSI VISION SHIELD 2

Remove contamination – but why waste good cotton?

Raw material is a major expense for spinning mills. So they need to avoid waste – but still meet the ever-increasing quality demands of their customers.

The new USTER® JOSSI VISION SHIELD 2 is the solution, taking care of everything, efficiently and economically. Top technology and intelligent tools make short work of eradicating foreign matter, also with white PP in raw cotton, long before it gets into the yarn.

Powerful new spectroscopes can identify even the smallest impurities and finest differences in cotton tufts. The Efficiency Booster is an ingenious new feature offering even greater savings in raw material – by distinguishing between real contaminants and dense tufts of good fiber. It ensures that only foreign matter is ejected, with exactly the best timing, to minimize wasted cotton.

USTER® JOSSI VISION SHIELD 2 – the best choice for fiber cleaning



Lights, textiles, action!

A traditional Swiss embroidery company has been making a big splash recently, with electronic textile circuits for a host of new applications. Adrian Wilson reports

orster Rohner, headquartered in St Gallen, Switzerland, was founded in 1904 and today, with its focus on traditional embroidery, supplies to leading haute couture brands such as Chanel, Luis

Vuitton, Prada and Yves St Laurent.

Five years ago, the family-owned company, which retains its R&D and production base in St Gallen but also now has manufacturing operations in China and Romania, decided to explore the technical



Akris evening dress incorporating LED lights and black rhinestones



opportunities for its advanced embroidery technology developed over many decades.

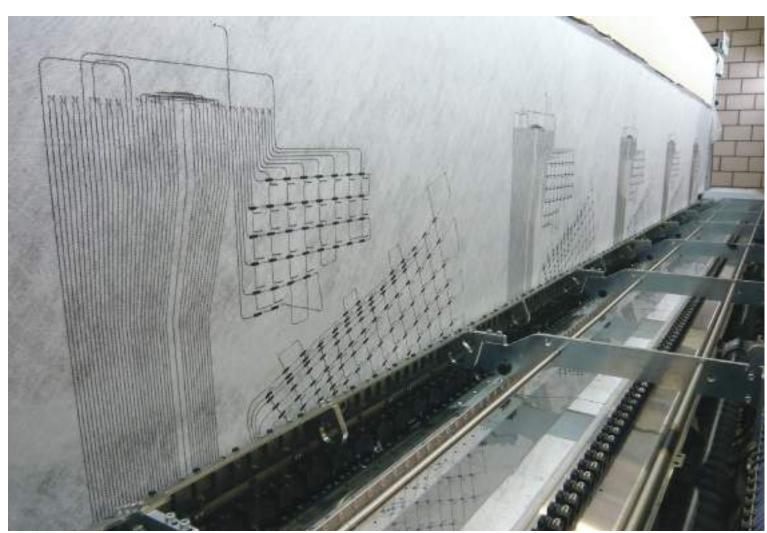
Success led to the formation of a subsidiary, Forster Rohner Textile Innovations (FRTI) which has subsequently been supplying the market with embroidered electronic textiles since 2013 – including textile-based conductors, heaters, sensors and illuminated fabrics based on LEDs.

E-broidery

These products – branded 'e-broidery' – are now finding success in diverse markets, including safety mats for industrial applications, electro-stimulation suits for more efficient workouts and lighting solutions for professionals which are designed to be flexible and lightweight.

"Embroidery is very good for repetitive patterns which makes it highly suitable for circuitry design," explains head of FRTI Dr Jan Zimmerman. "It's very flexible in production and allows design and production to be combined. As such a broad range of potential products are possible."

The company's product range is based



Properties like washability, drape and feel are unaffected by the integrated circuits



Creativity, Sustainable Technology, Reliability, Quality from Italy. The top of the Italian textile machinery will be on stage at ITMA MILANO 2015.









48

on more than 140 different conductive yarn materials and includes custom developments and heating and sensor structures that can be up to 14 metres long.

Balance

"Ten years ago, the integration of electronics into fabrics generated a lot of enthusiasm, but in the past few years it's proved generally easier to make the hardwear wearable – in

phones, watches etc – than to put electronic functionality into clothing," Dr Zimmerman observed. "It's also proved difficult to balance standards between two huge industries which traditionally have had little to do with each other."

Nevertheless, FRTI is now growing fast, and building on the success of its parent company, its e-broidery has already premiered on the Paris catwalk in a ready-

onic to-wear collection by the Swiss design
rman house Akris.

Akris creative director Albert Kriemler
used the e-broidery technology to

used the e-broidery technology to transform a line of sophisticated evening wear and accessories into images of starry night skies. Through textile interconnections and delicately-designed circuit lines, the pieces exploited LED lights, powered by a hidden, small rechargeable battery, in combination with black rhinestones.

"There have been thousands of concepts for integrating lighting into textiles over the years, but the challenges are considerable and most have not succeeded," Dr Zimmerman said. "It initially took us two years to develop our other products – from prototypes in 2011 to products in 2013 – but we had to develop the materials for the catwalk show in just four weeks, and ten alternative samples were required. Lightemitting textiles is now a field in which we're extremely active."

Textile properties

It's significant that FRTI's technology is

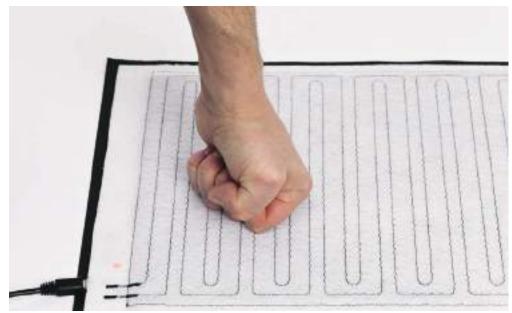
the first industrial production process that enables the integration of active lighting into fabrics without compromising core textile properties like washability, drape and feel. A striking example of this was the Corsage Lumineux bodice created for Triumph's upmarket lingerie brand Valisere in 2013.

The eLumino collection of LED curtains by Création Baumann were the first serial products based on e-broidery technology and received a reddot design award in 2014.

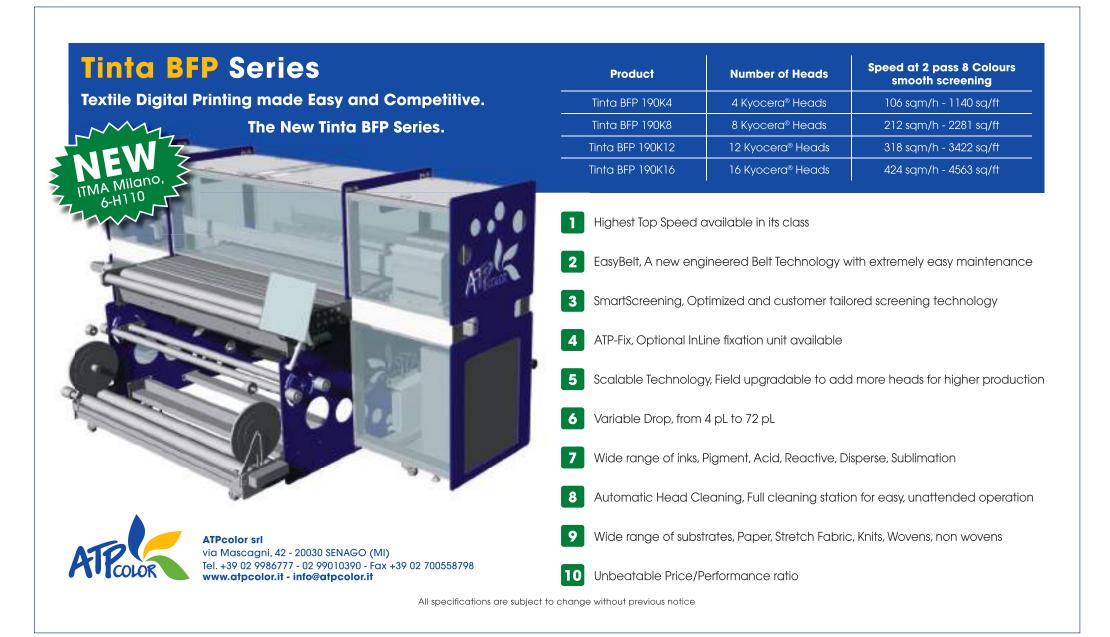
The conductors and LED elements integrated in the embroidery generate a decorative pattern of light that can be dimmed to three levels of intensity in order to control a room's ambience.

The San Francisco-based digital clothing start up company Switch Embassy has also worked with FRTI on the development of a washable LED screen that can be used in many areas of textile application – from clothing to interior furnishings.

It was successfully employed in the T-shirtOS, described as "the first world's first scrunchable, washable connected garment"



Embroidery is very good for repetitive patterns which makes it highly suitable for circuitry design





and capable of generating customised messages and patterns created via a mobile phone app.

Some 25 million of these T-shirts were produced and distributed as part of a promotional campaign for Ballentine's Whisky.

Carpetlight

Carpetlight, based in Hamburg, Germany, is another company exploiting smart textiles and LEDs based on FRTI's technology. Its portable lighting systems are light enough to fold, roll, and adapt to any form or function 100 times a day.

Carpetlight fabrics are also powerful enough to light complete objects, rooms and scenery and as such, meet the high standards required for film-making and photo shoots.

They have been developed by Götz Schmidt zur Nedden and Till Sadlowski, who have worked as lighting technicians for well-known film directors including Wes Anderson, Roman Polanski and Quentin Tarantino.

After working for more than 20 years on film sets with bulky equipment they decided to design a versatile tool to make professional lighting more easy, enlisting Forster Rohner to develop their ideas. The result is Carpetlight.

With its high uniformity of luminous output by balanced transmission, along with its diffusion ratio, the non flickering, dimmable and tuneable colour temperature matches all daylight, evening and night situations. High colour rendering allows the smart fabric lamp to be used for any purpose where true colours are essential.

Antelope

The EMS Antelope Suit from Munich-based active sportswear company Wearable Life Sciences (WLS) was also developed with Forster Rohner.

It is designed to optimise training workouts for both professional and amateur athletes and is based on electrical muscle stimulation (EMS) equipment.

EMS enables muscle contraction via electrical pulses which are sent directly to the muscular system, but current solutions employing this technology and available on the market are costly, mostly stationary

and cumbersome in application.

The Antelope is supplied with integrated electrodes, wires and control unit to provide the maximum possible mobility and flexibility during training. The suit enables full-body workouts as well as the training of individual muscles for medical rehabilitation.

Through interconnection with a specifically-designed app for precise data acquisition, the wearer is guided through various programmes to optimise training success.

It is claimed that 20 minutes of Antelope EMS training equals up to three hours of conventional exercise and a combination of voluntary and EMS training can increase the proportion of activated muscles to over 90% compared to the conventional maximum of 30%.

"Recently there has a clear trend of EMS entering the gym terrain through specialised EMS Studios," said Philipp G. Schwarz, WLS CEO. "Our suit provides an optimised full body workout for everyone and opens up new areas in therapy. It is cost-efficient and simple

and has the potential to revolutionise the whole industry."

ECGs

Finally, the Swiss research institute Empa has this year gained much attention for its development of an FTIR-embroidered and self-moistening electrode that can be used for the long-term monitoring of electrocardiograms ECGs.

The demand for ECG monitoring systems is increasing, and not just because hospitals and rehabilitation clinics are interested in such instruments for the long-term monitoring of patients' hearts and circulatory systems - the trend towards recording and collecting personal health data is also booming.

The device has already been tested in the course of over 100 experiments with volunteer subjects and the next step in its development is the start of clinical tests in co-operation with the University Hospital in Basel, along with various industrial partners.

Embroidery technology is on show in Hall 5 at ITMA.





www.thiestextilmaschinen.de





On home turf

ITMA Daily News interviews Raffaella Carabelli, President of Italian textile machinery association ACIMIT



How many Italian textile machinery companies are exhibiting at ITMA?



More than 450 Italian companies are exhibiting at ITMA, with an increased exhibition space of 56% compared to the 2011 edition.



How has business been for Italian textile machinery companies in the last year and what are your expectations for 2016?



Based on orders that have come in for the first half of the year, we believe that Italian machinery manufacturers will close on a positive note in 2015. Taking into account that ITMA falls in November, any positive results will then become concrete only next year.



What are the most important markets for Italian textile machinery products in Europe and the wider world?



In Europe, our main markets are Germany,

Portugal and France. China, Turkey and India, on the other hand, are our primary export destinations.



How has the euro exchange rate affected Italian textile machinery manufacturers this year?



Currency issues have important repercussions for export orientated sectors such as ours. Just consider the currency storm of late August, which had significant effects on the domestic purchasing power of many emerging countries. The euro's

devaluation has facilitated exports of Italian machinery to areas where the US dollar is the reference currency. However, the recent economic slowdown in China shows how day-to-day the global market is constantly changing and influenced by the sum of several factors, not just currency issues.



How important is ITMA for Italian textile machinery manufacturers compared with other textile machinery exhibitions across the globe?

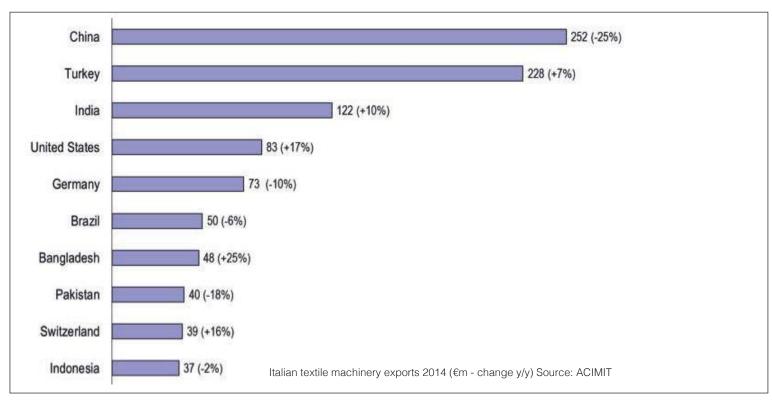


ITMA has always served as a benchmark

trade fair for Italian machinery manufacturers, and it is even more so this year since it returns to Italy after 20 years. This European exhibit acts as a reference point for innovation in the industry and new trends. No other trade fair in the world can compete with ITMA in terms of technology on show and new solutions proposed. The proof lies in the sheer number of visitors arriving from all geographical areas.



What key issues/challenges are Italian textile machinery manufacturers currently facing and how is ACIMIT helping them address these challenges?







A

As the ITMA Milan slogan says, "Master the art of sustainable innovation". Sustainability is the challenge textile machinery manufacturers must confront. For some years now, ACIMIT has been committed on this front, through the "Sustainable Technologies" project. And during ITMA, we will be presenting the results of our recent survey conducted to take stock of what has been achieved by ACIMIT members' companies participating in our project in terms of emissions of carbon dioxide (Carbon Footprint).

O

Is the much talked about reshoring phenomenon (manufacturing textiles in Italy) having any noticeable effect on Italian textile machinery manufacturers?

A

The reshoring of Italy's textile industry is still a very new and unnoticed factor, whereas in the US the constant devaluation of the dollar over the RMB (-30% since 2002) and simultaneous increase in wages in China have rendered reshoring more appealing. In Europe, on the other hand, over the same period the euro has appreciated by 5%, making relocation policies less convenient. Thus, for our industry as for other sectors, there are no real tangible effects at the moment.

Q

What are your best memories from all the ITMAs you have attended over the years?

A

My very first ITMA was in 1983 and my job was to bring coffee to customers. In 1987 I was distributing product catalogues... In Milan, in 1995, I had been appointed sales manager for Fadis, so I remember that edition with a lot of emotion, especially since it was extremely crowded and stimulating.

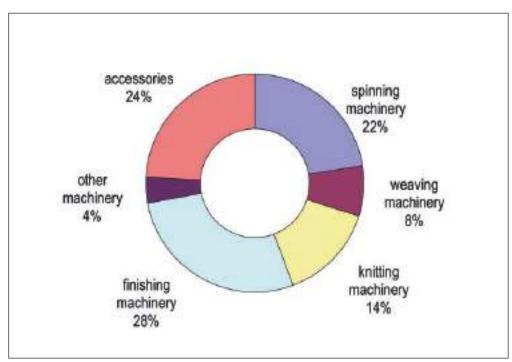
I believe the 2015 edition can replicate that success and leave lots of memories, particularly as Fadis is celebrating 55 years in business this year, making it the oldest manufacturer of precision winding machines under the same ownership since its establishment.

ITMA is obviously in your home country this time – what makes this edition special?

A

Italy - and Milan in particular - is synonymous with good taste and fashion. Still today, Italy's textile sector is an undisputed leader in Europe. This leadership has been built up over the years thanks to a deep rooted synergy with our textile machinery companies.

ITMA Milan will be an opportunity to show the world that the modus operandi of our textile production chain is indeed unique in the world, in terms of excellence for end products and process innovation.



Italian textile machinery exports by categories - 2014 Source: ACIMIT

Needling Lines for Filter Fabrics



Needled filter fabrics for cleaner air and water



Visit us at hall H3, booth C104

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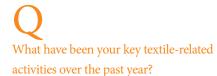
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Q&A

Dual market approach

ITMA Daily News interviews **Andreas Schellhammer**, CEO, Stoll



As a knitting machinery manufacturer our key textile-related activity over the past year

of course was to sell our machines and to provide first-class service to our customers.

However, we also put a lot of effort into the development of innovative knit applications for fashion as well as for technical textiles. Our high-quality machines and especially the new ADF technology provide a perfect basis for those developments.

Q

How are you finding the European textile machinery market at the moment?

A

In Europe we are targeting the high-end fashion segment as well as the technical

textile market. In these areas we are facing a growing business.

Besides that, especially in Turkey and some markets in Eastern Europe, traditional sweater production still plays an important role on a stable level. We see that proximity to end-consumers and responsiveness becomes more important.





Vision meets Technology!



Where are your main customers located?



Our main customers are located in Asia, mainly in China and Bangladesh. In Europe we find them in Turkey and Italy.

How is the growing Asian textile machinery industry affecting your company?



This mainly affects us in the entry-level segment mainly for first invest. We are clearly focusing on total cost of ownership and innovation to differentiate from this competition.



What are the trends in customer demands for your technologies at the moment?



In the fashion area we see a differentiation in the demand patterns. On the one hand there is an increasing demand for more sophisticated and unique designs which we are serving well with the ADF technology. On the other hand, of course, there is the demand for efficiency and productivity in the mass production segment. Here we are competitive in the lifecycle consideration with our proven CMS technology.

Another important trend is the interest from new industries in flat knitting. The unique possibilities of this technology regarding 3D-shapes can provide substantial cost and



Coarse guage knitwear pattern

performance advantages. Our clear intention and corporate priority is to create attractive answers and solutions for this growing demand.

Last but not least in fashion as well as in technical textiles we can observe an increasing need for value chain optimisation through intelligent software solutions around the theme of Industry 4.0. We see significant potential in this area which will help our customers to be much more competitive in the future.

What are the main challenges facing your company?

Persistent challenges in our industry of course are cost and responsiveness. In both areas we are consistently investing effort in order to maximise the value for our customers.

In addition market and product

development for technical textiles despite some success is still new to us. So there is more to learn and to explore for everybody in our company.

Is your company involved in serving the needs of the technical textiles market and if so, what changes are you making to address this rapidly growing market?

As stated before, the active development of this market is one of our key priorities. We are putting significant investments in R&D as well as in market development and sales in order to turn the significant potential into real growth.

How has 2015 been for your company business wise and what are your plans for next year?

In 2015 we will achieve a reasonable result with a further stabilisation of our market position. Based on our strong customer and technology basis we see the potential for slight improvement in the coming year.

What are you hoping to get from ITMA?

At ITMA you see Stoll as a strong and innovative partner with a clear focus on our customers and their needs. We are introducing a good range of new developments in machine technology and in knit applications. On that basis we hope to excite our current customers and to attract new customers for flat knitting in general and for Stoll in particular.



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- Booth H2-C101 (Spinning) Booth H3-F101 (Weaving)
- **Transport and Handling Equipment** for Weaving and Knitting Mills





Booth H2-G111 (Spinning)

Booth H3-F101 (Weaving)

Booth H3-F101 (Weaving)



Q&A

Positive shift in European market

ITMA Daily News interviews **Barry Goodwin**, MD, Amba Projex



What have been your key textile-related activities over the past year?

A

We have installed coating and lamination machines for technical textiles and composites production all over the world. We are based near Manchester, UK and have installed plants this year in the UK, Europe, America, Asia, East Asia, and Australia.

Q

How are you finding the European textile machinery market at the moment?

A

As a business we have detected a positive shift in activity by way of both enquiries and sales throughout Northern European countries. There are, however, still opportunities to be had in what are considered to be less active parts of the union.

Q

Where are your main customers located?

A

We have clients on five continents, a mix of UK/Europe and the rest of the world. This includes Asia and East Asia.

Q

How is the growing Asian textile machinery industry affecting your company?

A

We have been up against Asian and East Asian competition for decades and although we respect many credible suppliers of equipment in the region, we still win a significant chunk of the business when we go head-to-head due to our technical know-how, quality and the way we operate. There seems to be more players out there but not many providing the technology and wet chemistry too; this is a USP for us.

Q

What are the trends in customer demands for your technologies at the moment?

A

We see an equal spread at present in the areas we focus within, i.e. coating and lamination of technical textiles and composites. Also popular right now for us (and specifically in Asia) is three-pass blackout employing flocking technology and the production of blackout blinds.

Prepreg composites production of woven carbon and tapes is still an important focus for us, and we actively supply this industry. Our latest prepreg machine was installed literally just before ITMA.

Q

What are the main challenges facing your company?

A

It seems securing new business at present is not an issue for us. This has come after several years of strategic planning, forming our partnerships wisely and developing relationships with our clients. What is more important to us right now is ensuring we only take on projects we are able to deliver on time and to the satisfaction of our clients.

Q

Is your company involved in serving the needs of the technical textiles market and if so, what changes are you making to address this rapidly growing market?

A

My team has been serving this industry for decades already. We have been adding value to substrates for many years and presented on this topic at the International Coating and Laminating Conference in Cannes, describing our experiences to date in Asia in the early part of 2015. We have adapted and made the necessary changes already. We remain focused on what you rightly describe as a growing market.

Q

How has 2015 been for your company business wise and what are your plans for next year?

A

We have over delivered on our forecasts for

2015. Some existing projects will roll over into next year. We are predicting more of the same in the next 12-36 months with orders ripe for conversion now and into the first quarter of 2016 and beyond.

Q

What are you hoping to get from ITMA?

A

ITMA is a great international platform to meet with existing and new clients. We can also assemble our extensive network of agents too and establish how we can better support them until the next ITMA. We fully expect to secure business as a result of exhibiting in Milan based on our past experiences. Some of this will come immediately, some will come in subsequent weeks, months and some will come in a few years.

Q

Is there anything you'd like to add?

A

We have commissioned a fully operational production laminator to be our show exhibit focus this year, the AZ - 2000 - H. It is of modular design with high temperature capability. It can be configured for any sector end use and is causing significant interest in the lamination world.

Amba Projex is exhibiting in Hall 10 at Stand

New CEO for Uster

ster Technologies
is to have a new
chief executive, in a
carefully-planned and
phased handover by
April 2016. At his own request, current
CEO Dr Geoffrey Scott will take early
retirement and will be succeeded by
Thomas Nasiou, currently the company's
head of textile technology.

Dr Scott, who has been CEO for the past 16 years, said: "Since the formation of Uster Technologies in 2003 following the first management buy-out, we have been through some exciting and challenging times, including being publicly listed on the Swiss SIX Exchange, managing through the financial crisis, the investment and subsequent takeover by Toyota Industries and most recently the successful acquisition of Jossi Systems," he said.

"The work has been enjoyable but demanding. It is time to slow down a little and to spend more time with my family. It is the right time to step back from the CEO role and hand over the leadership role. We have the ideal successor here already, so we can work towards a seamless

transition for the future sustainability of the business."

The new CEO will take over on April 1, 2016. Dr Scott will continue to provide support to the company and to the Uster management in future as a member of the board of directors.

As head of textile technology and a member of the executive board, Mr Nasiou has extensive experience of the textile industry, with Uster's customers, markets and the company.
His experience has been gained working through the value chain from cotton farming, ginning and spinning and through various roles in Uster, it said.

"This background makes him uniquely qualified to take the next step as CEO," said Dr Scott. "Thomas Nasiou's deep textile expertise, knowledge and commitment to Uster and its long term strategy will ensure continuity and stability of the Uster business."

Mr Nasiou joined Uster in 2006 as a textile technologist. In 2011, he was promoted to head of textile technology and became a member of the Uster executive board. In 2014, he became member of the Spinners' Committee of the International Textile Machinery Federation.

Mr Nasiou, who holds an MBA from Hellenic Management Association in Larissa, Greece, said: "Learning is important for me. That means learning from customers, collaborators and colleagues. Only by applying that knowledge can I help our company to remain focused on 'Think Quality' and remain successful developing solutions that create value."



Thomas Nasiou, who will take over as Uster CEO from April next year



RICHARD HOUGH

British Heritage & Innovation



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Enjoy the best of Milan

See the city from the rooftop of Duomo

Visit the church of Santa Maria delle Grazie to see Leonardo da Vinci's Last Supper

Explore Sforza Castle for a full view of Milan's history

Shop at the Galleria Vittorio Emanuele II

Eat at Joia, the vegetarian, Michelin starred restaurant described as a foodie haven

History of the city

Historically considered a gateway to the rest of the Italian peninsular, Milan has an eclectic history, having been ruled by the Spanish, the Romans, the Lombards and the Austrians before becoming a cultural and economic hub of Italy after the Italian unification in the mid-19th century.

Following Italy's unification, Milan's textile and fashion industry began to flourish and, having been known for its supply of luxury goods, in 1865 Italy's first major department store was opened in Milan by the Bocconi brothers. The store, originally called Alle Città d'Italia and renamed to La Rinascente in 1921, is now one of the top tourist attractions in the city.

La Rinascente is situated next to another

of Milan's most iconic buildings, Duomo di Milano

Duomo di Milano

Piazza del Duomo

Milan's cathedral was built in the late 14th century with work on the building continuing into the 19th century. Since then, the building has been restored and maintained, with archaeological excavations made in Cathedral Square over the course of the 20th century.

Remains of Roman walls were found in front of the facade of the Duomo and have been identified as what remains of the *Baptistery of San Giovanni alle Fonti*, the first baptistery in Christianity to have an immersion font and an octagonal construction.



Duomo di Milano





Duomo's stained glass windows are also a huge draw of the cathedral as is the array of sculptures which adorn the outside.

Once you have explored Duomo's rich history, take a walk on up to the roof. On the roof, you can wander at will and enjoy the beautiful skyline of Milan.

The Duomo Pass, which allows access to all of the above is priced at €15,00 for the roof terrace by lift, Duomo itself, the Museum and the Baptistery of San Giovanni alle Fonti.

Sforza Castle

Piazza Castello, 27029

The original castle was built in the 14th century by the Visconti family. Lord of western Milan, Galeazzo Visconti II built a fort straddling the medieval wall and encasing the postern of Porta Giovia or Zobia. The castle changed hands and shape over the following century until it came into the possession of Francesco Sforza. Originally from Romagna, Sforza was a military leader and politician, and having previously been hired to defend the city by Filippo Maria Visconti, he successfully laid siege to Milan and was welcomed by its citizens as a liberator. Once hailed as the ruler of Milan, Sforza began adding to the Visconti Castle under the proposition to beautify the city while defending it from outside enemies.

The castle that stands at the centre of Milan today, is the result of Sforza's design, having been restored to its former glory in the late 19th century. The castle is now home to multiple historic and art exhibitions, including being home to much of Leonardo da Vinci's work and also

Michelangelo's.

Visitors can experience the wealth of displays on offer for a €5,00 admission fee.

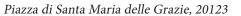
Cultural capering Sempione Park

Sforza Castle is surrounded by Sempione Park, which is the work of Emilio Alemagna who created an 'English' romantic garden with groves in imitation of the open countryside, waterways and broad paths, at the end of the 19th century. Over the years the 47 hectares of park have been embellished with a multitude of artworks.

One landmark in the park is the Arco della Pace (Arch of Peace) which symbolises the gateway to Milan. The arch dates back to the 19th century, but its origins can be traced back to a gate of the Roman walls.

Visitors should take a stroll through the park to or from the castle, which is also surrounded by a variety of nice restaurants, cafés and bars.

Church of Santa Maria delle Grazie



The Church of Santa Maria delle Grazie was built between 1466 and 1490 under the direction of Guiniforte Solari. In the refectory of the church, lies the ancient premises of the Court of the Inquisition, which is where visitors find *Leonardo da Vinci's Last Supper*.

The Last Supper was commissioned by Ludovico il Moro, from 1496 to 1498, and

the scene portrays the moment in which Jesus tells his disciples that one of them is about to betray him. On the opposite wall of the refectory there is an image of the Crucifixion, dating from the same period, by Giovanni Donato Montorfano.

The church itself boasts a double series

of side chapels, highlighting the Gothic background. The vaults bear frescoed decorations dating from the birth of the building, rediscovered after they had been hidden in 600 AD.

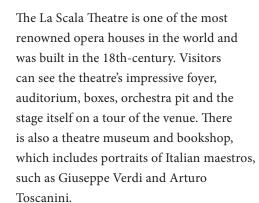
It is free to enter the church and 15 minute guided visits are available to see

the Last Supper costing around €25,00, and needing to be booked.

La Scala

TRÜTZSCHLER

Via Filodrammatici, 2, 20121



Museum tickets cost €7,00.

Shop 'til you drop

Galleria Vittorio Emanuele II

Piazza del Duomo, 20123

The Galleria Vittorio Emanuele II is one of the world's oldest shopping malls and is housed within a four-story double arcade. It was designed in 1861 and built by Giuseppe Mengoni between 1865 and 1877. The mall

encompasses high end restaurants and stores as well as being the connecting link between Duomo and La Scala. Well worth a visit, even if just to see the fabulous architecture.

Guadrilatero della Moda

Piazza San Babila

Guadrilatero della Moda is a fashion district in Milan formed by Via Montenapoleone, Via Manzoni, Via della Spiga, and Corso Venezia. The area boasts high-class shopping characterised by numerous boutiques and related retail outlets which represent most of the world's major fashion houses.

La Rinascente

Piazza del Duomo, 20144



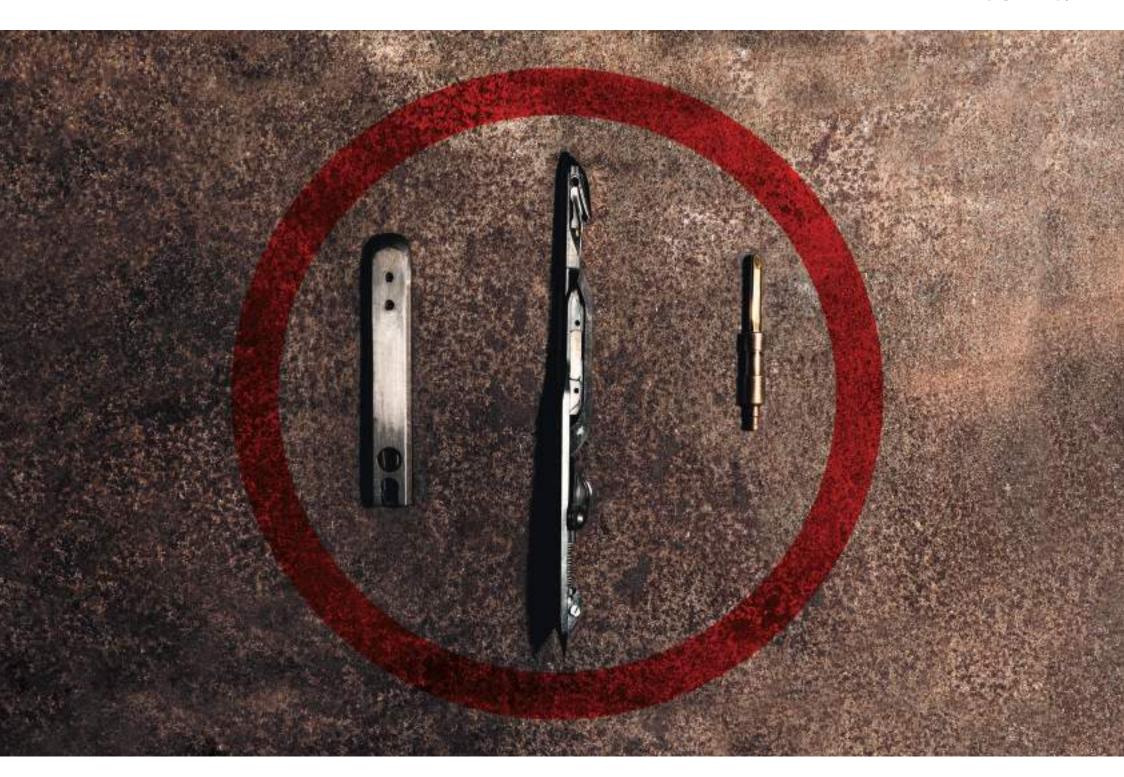
Italy's first major department store, La Rinascente has enjoyed moments of great success in its long history and has become famous across the globe as a point of reference for high quality shopping. The department store currently offers brands such as: Alexander McQueen, Gucci, Cavalli, Céline and more.



Arco della Pace







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Sustainable innovation ideas

TRÜTZSCHLER

ITMA 2015 is themed "Master the art of sustainable innovation" reflecting the key challenge of the textile industry and machinery sector

n the run-up to this year's VDMA Textile Machinery forum, Nicolai Strauch from VDMA Textile Machinery discussed with member companies how to add content such as technologies and concepts to the sometimes loosely used watch word sustainability.

The discussion's focus is on synergy effects of functional integration that enable sustainable textile production.

Dialogue partners are: Jürgen Brockmann, joint director of sales Thies; Wilhelm Langius, head of textile machinery at Neuenhauser Maschinenbau; Benjamin Mayer, managing director, Mayer & Cie, Steffen Müller-Probandt, managing partner DIENES Apparatebau and Thomas Waldmann, managing director VDMA Textile Machinery.

Nicolai Strauch: In this panel of industry experts we want to focus on the synergy effects of functional integration with regard to sustainability. Mr Waldmann, please let us know in a few sentences what significance the issue of sustainability has for the textile machinery sector.

Thomas Waldmann: For the VDMA member companies, sustainability is an integral part of their business. Already in 2011 we started the Blue Competence initiative. It aims to interconnect all Germany's mechanical engineering industry, pooling the resources, knowhow and strengths of VDMA members.

Textile machinery is one of 30 different mechanical engineering branches within Blue Competence. Altogether nearly 400 companies are participating. The textile machinery companies that are

participating represent about two-thirds of the branch's turnover. The initiative is also supporting the requirement of big client organisations. In March 2015 we agreed upon a co-operation with EURATEX, the European textile manufacturers association covering VDMA's Blue Competence initiative and the EURATEX-led Energy-Made-to-Measure campaign.

Nicolai Strauch: What does functional integration mean?

Thomas Waldmann: First of all, functional integration is a classic instrument of textile machinery engineering in order to shorten long processes or to make processes more efficient. There are numerous examples, just think of rotor spinning: compared to ring spinning, the flyer step could be skipped. These kinds of functional integration are still important but more and more they are complemented by integrating functions for the customer's product development. In future even "intelligence" will be incorporated in machines and components.

Nicolai Strauch: Mr Mayer, you are dealing intensively with the shortening of the process chain in textile production. What is it about and which economic and ecological benefits can a textile producer expect?

Benjamin Mayer: The normal sequence of events in circular knitting is that finished yarn runs into the circular knitting machine and is processed there. But our new technology Spinit starts working with the semi-finished "flyer" yarn, the yarn that has just left the pre-spinning machine, which is called

the flyer. The innovative feature of this method consists of integrating a part of the spinning process in the machine, before or during the knitting process.

Nicolai Strauch: What are the consequences for the production?

Benjamin Mayer: The semi-treated yarn is 3-5mm thick, and now it passes straight into the circular knitting machine, where it is spun and knitted afterwards. The entire machine park involved in this process is then no longer part of the plan. A company that carries out the entire

manufacturing chain from treating the cotton to the knitted product needs up to 40% less space to do the same job. We have also made some deliberate calculations: what does a kilogram of fabric cost normally, and what does it cost with Spinit technology? With Spinit, we can save as much as 25%.

Nicolai Strauch: What does function integration mean to companies that build machinery and components for producing man-made fibres?

Steffen Müller-Probandt: Firstly,



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60



Benjamin Mayer, MD, Mayer & Cie

Dienes has set itself the task of creating a modular pilot line in order to help research institutions in fibre technology in their efforts to develop new, innovative filaments. To this end, we ourselves have developed intelligent production modules that can be combined in a modular arrangement, so that the pilot line can be adapted to any new discoveries which are made during the development phase.

Secondly, as the world of machine building becomes increasingly globalised, there is a constant



Wilhelm Langius, head of textile machinery at Neuenhauser Maschinenbau

requirement to increase efficiency and productivity levels. This is why integrated solutions with continuously improving efficiency are in such great demand. In our concept "Multimode", the modules are sustainable because they can be operated very flexibly in the configuration of different process variants. In addition, the effort for software programming is minimised, which means that we ensure cost efficiency.

Nicolai Strauch: Where is the biggest



TRÜTZSCHLER

Steffen Dienes Müller-Probandt, managing partner DIENES Apparatebau

potential for function integration in the coming years?

Steffen Müller-Probandt: End-to-end system concepts have potential. As is also revealed clearly in the large-scale "Industry 4.0" project, the trend towards intelligent networking of production process data is becoming clear. This means more powerful machine controllers are needed. On the other hand, of course, it is equally essential to be able to distil the important information from this welter of data, in order to generate real added value.



Jürgen Brockmann, joint director, sales, Thies

This is why targeted function integration is becoming more important.

Nicolai Strauch: Mr Brockmann, automation is very often mentioned in connection with function integration. For instance, integrated robotic that helps to manage hard manual labour. How do you help your customers to minimise the human error rate in dyeing plants dramatically and to reduce harmful work

Jürgen Brockmann: In many factories,



Final assembly at Mayer & Cie





Central palletiser at Neuenhauser

the dye is still brought to the preparation vessel in buckets by the operators to ensure that the correct mixture is supplied for dyeing the next batch. We systematically continue to compress tasks in all production workflows as well as in the finished products.

Nicolai Strauch: With the new machinery line, it is not only the actual dyeing that is carried out by robots?

Jürgen Brockmann: That is correct. They also take care of all upstream and downstream process steps. A robot system picks up the bobbins with the yarn, individually or in batches, and loads them onto a self-propelled bobbin carrier for transporting to the dyeing machine or the dryer. This means that the lids on the dyeing machine and dryer must open and close automatically at the right time as well. Unloading of the bobbin carrier after drying is also automated.

Nicolai Strauch: What does this mean for your customers?

Jürgen Brockmann: With automation, the result of the dyeing process is unmistakably better, of very high quality. Subsequent additions of dyes and chemicals to correct the result are significantly reduced. Making repairs

after the run is very expensive for dyeing companies, and it seriously impacts the already very tight profit margins.

Nicolai Strauch: Let's go back to the start of the textile chain. Mr Langius, what advantages does automation offer for spinning?

Wilhelm Langius: As automation became increasingly widespread in natural and chemical fibre spinning mills, it gave rise to an enormous leap in productivity. It was then a logical progression to build apparatus and systems that use technology to enable them to handle the heavy, delicate bobbins for natural, chemical and carbon fibres. In our vision, automation has a far more complex role than is generally thought.

Nicolai Strauch: What does this mean exactly?

Wilhelm Langius: The purpose is not just to lower payroll costs. In fact, our chief consideration in this undertaking is to reduce the need for manual handling of bobbins and the problems arising therefrom to the barest minimum. In this way, we help users to improve the quality of their products.

But automated handling systems also provide other advantages, such as a safe, high-performance product flow through the entire plant configuration, or a better use of factory space through compact machines and systems. They also help to maintain a clean, tidy and efficient manufacturing environment and a safe,

ergonomically less burdensome workflow.

Neuenhauser is already considering Industry 4.0 for its future developments. But we have only just started. I believe that the economy will only become fully digitised in a series of many, many small steps.

Thomas Waldmann: Let me come back to the beginning of our discussion. Due to volatile prices for energy and resources as well as ecological requirements, sustainability is a main objective of technical developments. The solutions discussed by the member companies show different aspects of function integration. They enable greater efficiency, optimise production processes, reduce material consumption and make work flows easier for the operating staff - which means that they provide concrete examples of sustainability.

At the stands of the VDMA member companies at ITMA, textile producers from around the world have the chance to witness new machinery technologies that enable sustainable textile production, according to the organisation.



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Filtration at the fore

A recently published market report outlines yet more growth for the nonwovens filter market over the next five years. Sally Priestley finds out more about what's driving the filtration boom

recent industry report makes happy reading for businesses producing nonwovens for filter applications. What is already a strong sector of the industry is predicted to keep growing. The report predicts an increase of more than US\$1 billion for the global nonwovens filter market over the next few years, rising from US\$3.5 million in 2014 to an impressive

US\$ 4.6 million in 2019.

The report from market research firm Smithers Apex says that despite the slow and uneven recovery of global economies following the recession, which had a significant impact on the growth of nonwovens for filtration, the sector has held up well. It cites both the overall growth in the filtration market (driven by the increasing demand for cleaner water and air, for protection against pandemic

diseases, and for energy conservation) as well as the widespread replacement of textile and paper filter media.

Another key prediction in the report, The Future of Nonwovens for Filtration to 2019, is the continued increase in consumption of liquid filter media. It says that although air/gas filter media make up the larger share of global nonwoven consumption, liquid filter media is being driven by the large and increasingly performance-driven automotive/ transportation end-use, and is consistently growing faster than air/gas.

Phil Mango, associate consultant at Smithers Apex spoke about the driving forces behind this booming market.



Looking at the global picture for nonwovens filter media consumption, which regions/countries have seen the strongest recovery and growth since the recession?



Some of the key markets in automotive and construction are still growing slowly in some regions, and there is even slower growth in emerging markets such as Eastern Europe and China. Asia has recorded the strongest growth rate following the global recession in terms of nonwovens filter media consumption. Between 2009 and 2014 the highest annual growth rates were in Asia, at 19% in value terms. This compares to the next highest growth rate of 6.4% in South America. Within Asia the strongest annual growth rate per country during this period was in India (30%) followed by China (18.1%) and Japan (10.5%).

How have businesses in this market typically achieved this growth over the last five years?



Nonwovens use in filtration has aggressively replaced older filter media materials like paper and textiles. Enhancements in nonwovens performance has helped maintain growth, and even grow consumption slightly in area and tonnage terms. Previously, stiffened, treated and pleated paper filters dominated many markets such as automotive and high-temperature applications. Now, wetlaid nonwovens can replace most of these without solvent-borne or carcinogenic stiffening or bonding chemicals. Most paper-based filters are, or will be, replaced by nonwoven materials. Spunlaid nonwovens and composites often replace cotton/polyester textiles, as they are cheaper, higher performing, and just as durable.



Can you explain more about the drivers behind the increasing overall global demand for filter media?

A

A number of factors are driving growth in the filtration market. First and foremost is the need for clean air to breathe and water to drink, but other factors include better fuel efficiency, resource conservation, government regulations and greater awareness of respiratory illnesses and health protection.

In automotive, emissions and fuel



economy are being regulated directly by governments, from Europe and North America to China. Global warming fears have also induced governments to strictly regulate industrial emissions, both gaseous and liquid.

Filtration is a key process as breathable air becomes a global issue. In Beijing, millions use face mask filters on a daily basis, and face mask filter consumption increased in value by US\$10.2 million over 2009-2014.

Filters help clean wastewater streams and questionable sources and help desalinate ocean water. Israel gets about 30% of its drinking water today from desalination and this is projected to increase to 70% by 2050. Potable or drinkable water is also a growing need globally. Potable water filter consumption increased in value by US\$34 million over 2009-2014.

For the near future the world will continue to require oil and coal-fuelled power plants. These emit noxious pollutants, and filtration makes the use of these fossil fuels feasible.

And finally, while the frequency and severity of airborne, pandemic diseases continues to increase, filters and especially low cost, high efficiency, disposable nonwoven based filters offer a universal layer of protection for the population. The ability to control the recent Ebola crisis in east Africa, as well as research vaccines, is completely dependent on filtration.

Q

How do you expect to see the market develop in terms of air/gas filter media against liquid filter media?

A

These two areas are predicted to grow at different rates to 2019. The value of liquid filtration is expected to increase by 6% per annum in value terms, while the value of air/gas filtration is expected to grow by a lower rate of 5.3% on average.

Within air and gas filtration the end-use market predicted to experience the greatest growth is HVAC, which includes residential or in-home filters used for heating, ventilation and air conditioning. Greater governmental regulations will also increase demand for nonwoven filters in HVAC.

The end-use market with the next highest growth is medical. Face masks and antibacterial filters are growing at an above average rate and are expected to continue to do so through to 2019, especially in consumer personal face mask markets.

In regard to liquid filtration, the end-use sector with the greatest predicted growth of 7.6% per annum through to 2019 is medical/pharmaceutical. Filters for medical products and pharmaceuticals are highly specialised and are used to produce very high-purity chemicals for drug synthesis, blood filtration and plasma separation.



What other developments do you expect to see impacting the growth of nonwovens filter media through to 2019?

A

International agreements to reduce global warming through reduction of greenhouse gases will require extensive use of filtration – in power plants to remove emissions, and in fuel filtration to permit tighter combustion chambers and more complete combustion. Increasingly frequent pandemics demand more and better filtration, to isolate infected populations, to protect healthcare workers, and to remove infectious materials from air and water. Dwindling fresh water supplies will demand more reuse of water (through filtration of wastewater), will require more desalination, and more portable filtration units. The increasing use of 'fracking' and oil recovery from oil bearing sands requires more and better efficiency filtration. The cost of energy depends on this process.

Q

What trends do you expect to see for nonwoven filter markets beyond 2019?

A

The trend towards removing smaller and smaller particles, in applications like fuel filtration, power plant emissions and biological fluid filtration, will continue beyond 2019. There will also be an increased need for functional filtration, where not only physical filtration, but chemical, electrostatic and reactive filtration will be developed and used. A whole new class of materials for filter media, like nanofibres, carbon tubes, and other advanced materials, will be developed and used in filtration past 2019. And finally, more sustainable materials will be developed for commodity filters. Recyclable and natural raw materials will reduce energy, and other resource usage in filtration processes.

Nonwovens technology is on display in Hall 3 at ITMA

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Hall 8, Booth F 107



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Dyeing without water

Supercritical CO2: an eco-friendly option and a commercial reality By Tansy Fall

O2 DYEING COMPANY
DyeCoo has received a lot of attention recently thanks to promotion of its technology by sporting giant Nike which launched its new collection of polo shirts, dyed without water.

DyeCoo's dyeing process has also been promoted by Adidas and IKEA; however the company said that this is more than just a marketing tool – DyeCoo is a commercial reality.

Melanie Wijnands, marketing and communications manager at DyeCoo, said: "Our focus at the moment is not the brands; our focus now is really working together with textile manufacturers. However, seeing that brands are looking towards our technology, recognising the potential of it, and also recognising

the marketing potential of it, is a good confirmation to have. It's a confirmation that the world and consumers and brands are actually waiting for a technology like ours.

"Of course it's a very powerful marketing tool if a company like Nike promotes your technology. It's actually interesting that Nike never before promoted the manufacturing method. It's the first time they're ever showing a piece of equipment on their corporate website. So for us that's a huge endorsement and it helps with our marketing."

Business development manager Olaf Lohle added: "We want to show that we're not a fairy-tale anymore, that we are real – not only for people who want to be sustainable, but we can also compete with our operational costs, so it's not just sustainability; we definitely have a competitive edge.

"We don't just want to be a marketing tool, we want to be doing real business, showing that companies can be more profitable using our equipment."

Whilst this unique dyeing technology has been around for some years, it wasn't possible to scale it to an industrial size. Ms Wijnands said that the founders of DyeCoo recognised the potential of the technology and that, if it could be industrialised, it could have huge environmental benefits and also economic benefits for the textile industry.

In terms of environmental benefits, were the whole textile industry to use the waterless dyeing process, enough water would be saved each year to provide every person on Earth with an extra 1,000 litres of water each, according to the company.

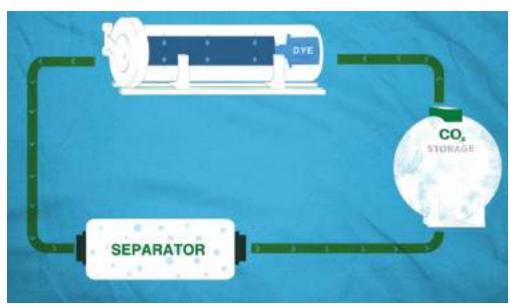
DyeCoo uses reclaimed CO2 so that it is already making use of a waste product.
Under a certain pressure and temperature the CO2 becomes supercritical, a phase between a liquid and a gas, and in that phase, dyes dissolve very easily, even more so than in water.

Ms Wijnands elaborated on the technology, saying: "It's a beam dyeing construction so fabric is rolled on to a beam, placed into a vessel, and then the CO2 runs through the dyestuff, absorbing the dye and being dissolved into the textiles.

"Of all the CO2 we use, 95% of it is reused after each batch so that's an interesting factor of the process as well, and the process is significantly shorter than with water dyeing. We also use less energy so that also adds to the



DyeCoo's technology consists of three vessels





DyeCoo's closed loop dyeing process

sustainability of the process but it also helps with the operational costs of course."

In addition, the process doesn't use any additional chemicals, which DyeCoo said facilitates a more even colour distribution, and the process also allows for 50% less dyestuff to be used. As a result, DyeCoo estimates that its process can reduce companies' costs by 40-60%.

DyeCoo's R&D department is working towards increasing the energy savings delivered by its technology; however the focus for the company is currently on working with its dyestuff providers to encourage them to develop their dyes in accordance with DyeCoo's technology, for use with a variety of fabrics.

Ms Wijnands said: "We're now focused on dyeing polyester but we're also interested in getting our dyestuff providers to further that scope to other fibres, so we're not standing still: we'll always keep developing and improving the technology.

"The technology we have is actually suitable for all fibres so it's not that our technology is lacking something, it's that we need to find suitable dyestuff to fit with our technology. That is really up to dyestuff providers. They are the chemical part of the technology and that is not 100% caught-up to us yet, so we're not looking at polyester in particular but we are looking to increase our working together with dyestuff suppliers to see what the possibilities are."

DyeCoo has manufacturing facilities in Taiwan and Thailand, with its head office based in the Netherlands. However, the company works with dyestuff suppliers worldwide and will be continuing to look at the global market for new partners.

Ms Wijnands continued: "Working together with dyestuff providers is very

important for us because it means these suppliers will catch up to our technology and will develop the correct chemicals for us, meaning that we can process other fibres."

DyeCoo is also looking to invest within the company and said something that is very important for its own development is setting up a maintenance and service structure, ensuring that it can service its customers across the globe.

"We haven't clarified that perfectly yet, but we are currently in two countries, so we're just setting up the basics for those two countries for now. We're doing it on our own, so not via dyestuff providers," Ms Wijnands added. "The focus is eventually not to just sell a piece of equipment but the vision is to provide companies with a solution, maybe build a factory of the future where we're not only focused just on dyeing but also pretreatment and finishes, because the technology is also very suitable for those elements of textile processing.

"For example, cleaning of a textile before it can be dyed is something that we're looking into, as currently water is also used for that, and also the finishing of textiles – maybe making clothing waterproof. But these projects are really



Loading fabric into the vessel

only in the start-up phase.

"We're not just trying to sell a large amount of steel to our customers; we really want to work with them so we can provide the complete solution that also fits with their current infrastructure and their market, and their wishes."

DyeCoo is exhibiting at Stand C114 in Hall 14 showing one of the three vessels that make up the CO2 dyeing machine. Mr Lohle concluded: "We have a vessel on our booth so that people can see that it's tangible.

"The machine always consists of three vessels but, due to the size of the machine, the idea is to show with one vessel how it works: how it opens, closes and how the fabric is wound on to the beam."

Dyeing and finishing machinery is in Halls 6, 10 and 14.





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Expanding horizons

Myanmar (Burma) is rapidly expanding its knitwear industry. A large development led by a Brit is making inroads with high street brands. Jozef De Coster reports

ne of the five goals of Myanmar's National Export Strategy 2015-2019 for the textile and garment sector is to significantly increase exports of knit products. This special goal should not come as a surprise given that in 2012 only 7% of the \$908m total garment exports were knitted or crocheted.

Knitting machinery manufacturers are targeting its fledgling knitwear industry. Among these was the big Chinese manufacturer of flat knitting machines Ningbo Cixing.

The German knitting needles and parts exhibitor Groz-Beckert said it has eight knitwear customers in Myanmar. Looking ahead, director Andreas Dietz of Groz-Beckert East Asia said he expected more

Chinese and Hong Kong investment in Myanmar, particularly in flat knitting.

Jacob Clere, project manager at MGMA (Myanmar Garment Manufacturers Association) pointed out that among the more than 300 members of the association, currently the factories which specialise in wovens dominate. But the number of knitwear product manufacturers is growing very quickly. Among them are:

- Hong Kong sweater manufacturer Prosperity (825 workers);
- Chinese cardigan producer Myanmar Century Liaoyuan Knitted Wear (1,500 workers);
- Taiwanese sweater producer Zuyuan Edenweiss Sanwa Industry, specialising in organic alpaca sweaters (458 workers);
- Two sock companies, Hong Kong manufacturer United Knitting Myanmar (300 workers) and the Korean company Lia International (430 workers).

According to Dr Monika Stärk of AHK, the Delegation of German Industry and Commerce in Myanmar, Adidas is working with two sock companies in the country. There are also some decent-sized knitwear factories which produce T-shirts and other

products, and a number of smaller ones.

One of the handicaps of Myanmar is that the country has been out of global sourcing networks for nearly a decade (2003-2012) because of economic sanctions imposed by the US, the EU, Canada, Australia and New Zealand.

But in mid-2013, the EU included Myanmar under its 'Everything but Arms' scheme, followed by Canada reinstating duty-free and quota-free trade with Myanmar in March 2015. Japan also widened its tariff exemptions in April 2015, allowing all knitwear products made in Myanmar to enjoy duty-free access to the Japanese market.

Statistics provided by the European Apparel and Textile Confederation, Euratex, of EU clothing imports from Myanmar,

Year	Woven clothing	Knitted, or crocheted	Total cloth- ing
2009	116.7	13.1	129.8
2010	122.5	1.9	134.4
2011	122.8	10.0	132.8
2012	103.8	7.7	111.6
2013	117.5	13.3	130.8
2014	195.5	38.6	234.2
Source: Euratex			

Table 1: EU28 Clothing imports from Myanmar (€m)



A new factory will be built next to Prosperity Knitwear







indicate that these imports actually fell during the crisis period 2010-2012.

However, in 2013 and especially in 2014 they soared. Leading companies such as H&M, Marks & Spencer and Adidas are expanding their business with Myanmar, so it can be expected that EU imports will continue increasing strongly in 2015 and for the coming years. Table 1 shows that recently EU knitwear imports from Myanmar grew much faster than woven clothing imports.

The rush of foreign investors into Myanmar after the flood of reforms achieved by the Government in 2011 and 2012 may be a blessing for the country but it also raises some concerns. New investments in the garment industry create much needed jobs for young workers, mostly women with limited education and bring in valuable know-how and foreign currency. On the other hand, most locally-owned garment factories are no match for the newcomers in the unavoidable competition for good workers and export orders.

Many initiatives have been taken by ILO, the EU (Smart Myanmar), MGMA (Myanmar Garment Manufacturers Association) and other organisations in order to improve the CSR and competitiveness level of local companies.

H&M, GAP and six other garment players have joined Business for Social Responsibility (BSR) Myanmar Responsible Sourcing initiative whose aim is to assist the local industry to grow in a sustainable manner. In spite of all these support efforts it is tough for local garment manufacturers to bridge the gap caused by nearly ten years of trade isolation due to international sanctions (2003-2012).

It will take most local manufacturers a long time to reach the level that is demonstrated by, for example, the Hong Kong investor Prosperity Knitwear Ltd.

Its factory is strategically located close to the Thilawa Special Economic Zone, developed by a Japanese joint-venture on the outskirts of Yangon and is only minutes away from a deep-sea port under construction.

TRÜTZSCHLER

The Briton Alan Renton, who runs the factory, learned the trade in enterprises in the UK (Pringle of Scotland), Mauritius, Madagascar, South Africa (Floreal) and Bangladesh (Crystal Group).

Mr Renton brought with him a handful of top knitwear experts he had worked with during his international career. Prosperity started operations in October 2014 and delivered its first orders to Marks & Spencer in March 2015. Since then, other potential customers showed interest,

such as KappAhl and Camaieu.

Mr Renton has apparently no doubts about Prosperity's growth opportunities in Myanmar. He intends to increase the factory's annual capacity from its current 600,000 pieces to 800,000-1,000,000. Mr Renton also struck a deal with a landowner to acquire a plot of land just beside the present factory. Work has already started on construction of a new big factory for 2,500 workers. By the end of 2016 both factories together should produce 2.5m pieces, a number that could be gradually extended to 3.5m-4m.

Profitable growth is not the only goal Mr Renton is pursuing. "People are my biggest concern," he said. He puts big efforts into personally selecting the factory workers and following-up their individual and group performance, using an easy to understand visual communication system.

Prosperity's remuneration package includes free transport, a daily meal and medical care. Productive workers can now easily earn double the minimum wage proposed by the Government (\$3.20/day). The photographs of 'The Best Employee of the Month' show that mostly women (70% of the workforce) out-compete men. Prosperity took a proactive stance towards environmental requirements. "Many ecofriendly investments weren't legally needed, but we wanted to do them," said Mr Renton.

Knitting machinery is in Halls 5 and 7.



Jacob Clere of the Myanmar Garment Manufacturers Association says interest Alan Renton, who runs Prosperity Knitwear, with a sweater destined for Marks from Chinese and Korean investors in garment production in Myanmar is huge & Spencer











Shifting fortunes

With turbulence in China's economy making headlines, a new Department of Commerce report draws some firm conclusions on US destinations for textile exports. Adrian Wilson reports

extiles made in the USA will be more affordable than Chinese products by 2018, according to the Boston Consulting Group (BCG).

And ironically, a year later, in 2019, China will overtake the USA to become the world's largest apparel market, Euromonitor predicts.

Annual apparel sales in China are forecast to reach \$333bn in 2019, an increase of 25% over the \$267bn in 2014. Sales in the USA are estimated to reach \$267bn in 2019 – only 3% higher than \$260bn in 2014.

Onshoring

The gap between China and the USA in terms of textile production costs though, is narrowing, in part due to wages in China having risen by more than 7% each year for the past 15 years, while pay in advanced economies like the USA has risen by less than 1% annually.

In a survey conducted as far back as April 2012, BCG found that 37% of US manufacturing companies with annual sales above \$1bn were considering shifting production facilities from China to the USA –

subsequently only intensified, and even
Chinese companies are now siting plants in
the USA, rather than their own country. Two
mies recent examples are the Keer Group and JN
fibers, which have invested \$218m and \$45m,
respectively, in new yarn plants in South
Carolina.

"The US textile industry directly employed
499,500 workers in 2014," said a spokesperson

or 'onshoring'. Of those companies with sales

The practicalities of such ventures have

above \$10bn, the figure was 48%.

"The US textile industry directly employed 499,500 workers in 2014," said a spokesperson for the Washington-based National Council of Textile Organisations (NCTO). "Additionally, for every one direct textile job, there are an additional three supported. On average, textile jobs pay 143% more than apparel store workers and receive health care and pension benefits. The US textile industry is also very important because the US military relies on it to make more than 8,000 different textile products per year."



Global textile and apparel trade – export and import – is currently growing at an annual 6.6% and from a value of \$707bn in 2013 is expected to be worth \$1.18tr in 2020, according to the forecasts of a range of analysts.

Of this business, 56% is accounted for by apparel, 17% fabrics, 7% yarn, 6% fibre, 4%

home textiles and 10% other.

The biggest exporting countries are currently China, followed by India, Bangladesh, Vietnam and Spain, with Vietnam having achieved the highest growth in recent years.

As destination markets, the EU27 countries, the US, China and Japan generate almost 75% of the total value of all of these products.

US exports

It is against this backdrop that big opportunities are foreseen in the next few years for exports of US-made technical textiles and nonwovens, as outlined in a new report from the International Trade Administration (ITA) of the US Department of Commerce.

The report is based on the premise that the demand for US technical textiles around the world accelerates at a pace comparable with a country's domestic growth in conventional textile manufacturing.

As such, it highlights the key markets in which US producers of technical textiles and nonwovens are expected to achieve increased export sales, based on past export performance and projected growth estimates to 2016.

Key products include speciality and industrial fabrics such as geotextiles and automotive trim, medical materials for less-invasive surgical procedures, infection control and accelerated healing, and advanced



A new Monforts Montex stenter at Döhler in Santa Catarina, Brazil. The country's textile and apparel sector is the nation's second largest employer and \$8bn has been invested in a recent upgradation project









protective apparel.

Mexico

Mexico's textile and apparel industry accounts for 6% of the country's gross domestic product, employing almost 415,000 workers - nearly 20% of all manufacturing employment in the country.

Its industry is based on competitive labour costs and geographic proximity to the US and the pattern has been for US companies to supply textiles and fibres to Mexico's in-bond processing factories (known as maquiladoras) which receive favourable finance and trade treatment. The maquiladoras then re-export these inputs after processing in the form of finished garments.

After losing a portion of its US market share to developing countries, Mexico has been clawing back some of its competitiveness through expanding its reach in other textile markets.

The country is expected to become the largest economy in Central and South America within ten years.

Mexico accounted for approximately 26% of total US textile and apparel exports in 2014, which increased 8% from \$5.8bn in 2013 to \$6.2bn in 2014.

Mexico accounted for 36% of total US technical textile exports in 2014.

Starting point

Mexico is recommended as an ideal starting point for new US exporters by the Department of Commerce, as a result of the well-established trading relationship and relatively low market access barriers.

A challenge, however, is Mexico's tax authority, which has been conducting extensive NAFTA verification of origin audits for textile and apparel imports since 2007. Companies selected for audits must respond with all requested documentation within a very short period of time or risk being penalised for noncompliance.

Brazil

It's no surprise that US Free Trade Agreement (FTA) partners Mexico and Canada are the biggest export markets for US technical textiles, but much more business is expected in Brazil in the coming years.

Brazil has experienced rapid GDP growth rates and has rebounded most quickly from the global economic crisis, the ITA report notes. Its textile and apparel sector is the nation's

second largest employer and \$8bn has been invested in a current programme focused on both the acquisition of modern manufacturing equipment and the promotion of its professionals through training programmes.

According to the Brazilian Textile and Apparel Industry Association (ABIT), the country has around 30,000 textile and apparel manufacturing companies employing over 1.6 million workers. The industry generated revenue of \$55.4bn in 2014.

Globally, Brazil is the fifth largest textile manufacturer, the fourth biggest clothing industry and the second largest denim producer. It is self-sufficient in cotton production and produces some 5.5bn garments each year.

Brazil, however, imposes high tariffs on exports across diverse sectors, including textiles, and also applies federal and state taxes and charges to them. This can effectively double the actual cost of importing products into the country.

Producing textiles in Brazil is expensive and the cost of labour is particularly high but at the same time the country's bureaucracy is very challenging for both importing and exporting textiles.

Colombia

Future ITA reports are very likely to include Colombia as a destination for US exports. In the past few years, Colombia's textile and garment industry has broadened its horizons via a range of new trade alliances with Mexico, Peru, Honduras, Chile and Canada, while the 2012 US-Colombia Trade Promotion Agreement (CTPA) and a free trade agreement (FTA) with the EU in 2013 are opening up a host of new product categories to duty-free trade.

While the country's \$7bn textile and apparel industry only accounts for 2% of Colombia's economy, it directly generates 110,000 direct and over 200,000 indirect jobs, representing 20% of the country's manufacturing total.



Infrastructure projects ensure a healthy demand for geotextiles worldwide. Courtesy TenCate







ITMA 2015, Milan, Italy, 12-19 November 2015, Hall H7, Booth D124

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China

The US Department of Commerce also sees big opportunities for its companies to increase business throughout Asia, and while China is still the number one supplier of textiles and apparel to the US, it is also now the fourth largest market for exported US textiles and apparel, which increased by 27% between 2009 and 2010, although growth has subsequently fallen each year to around 7.4% in 2014.

Declining overseas orders and rapidly rising increases in labour and other costs in China have led directly to the growth of textile and apparel markets in other Asian countries and as a consequence, China is already shifting to more value-added products, namely technical

Doing business in China, however, like Brazil, can be difficult. Companies looking to import textiles or apparel are faced with complex governmental taxes and regulations and an equally difficult and often opaque commercial environment.

Chinese Government policies also favour domestic development and under its 'Demonstration Bases Common Service Platform' export subsidy programme, prohibited export subsidies appear to be being

In February 2015 the US Trade Representative decided to pursue dispute settlement consultations with the Government of China at the World Trade Organisation (WTO), in respect of the Demonstration Bases Common Service Platform programme.

Vietnam

Vietnam's textile and apparel industry is growing faster than that of many of its

regional competitors and foreign companies are starting to pour money into the country to take advantage of potential economic opportunities from future free trade agreements, the ITA noted.

With more than 3,800 companies, the Vietnamese textile industry is the country's leading export sector and now ranks fifth worldwide, with a labour force of more than two million people, of whom 1.3 million are working directly in the industry.

The US-Vietnam Bilateral Trade Agreement (BTA), which entered into force in 2001, forms the basis for the current trade between the two countries and served as an important precursor to Vietnam's accession to the WTO in 2007.

As the BTA has opened up new markets for US goods and services, and as Vietnam meets its WTO commitments, its market represents the next great opportunity for all types of US companies, including those producing textiles, the ITA believes.

Vietnam's textile and apparel industry has benefitted from increased foreign investment over the past few years and it grew consistently through the economic downturn of 2008-2009.

About 70% of Vietnam's textile and apparel production is via "processing trade" using imported textiles and other inputs, predominantly from China.

Pending trade agreements, however, have the potential to divert some trade from China to the US. Investment in fibre, yarn and textile manufacturing is rising, particularly for spinning and weaving, so the quantity and quality of textile production is likely to increase.

Many overseas textile and garment companies in the region have already begun to move production to Vietnam. Major US retailers such as Nike, Sara Lee, JC Penney, Express, the Gap, Macy's, Nordstrom's, Mast Industries and American Eagle now source a sizeable portion

of their imports from Vietnam.

Vietnam is becoming known for being a prime location for investors operating in the textile industry. Manufacturers are heading to Vietnam assuming a positive completion to the Trans-Pacific Partnership Agreement (TPP) between several Pacific Rim countries that was expected to be finalised in 2013 but has yet to be resolved.

Under this free trade agreement, Vietnam could see tariffs on textiles and garments drastically reduced. In order to take advantage of this potential tariff reduction, foreign companies must physically locate themselves in Vietnam and begin producing textiles and garments for export.

Vietnam's textile industry will depend on demand from the US and the EU, which account for 18% and 14% of Vietnam's exports, respectively. This demand is expected to contribute to export growth of 20% this year, with export businesses - especially foreigninvested manufacturing firms - providing a much needed boost to growth.

Figures from the Vietnam Textile and Apparel Association (Vitas) show that 70% of more than 3,700 textile factories in the country make apparel. Only 6% produce yarn, 17% make fabric, and 4% are dye houses. As such there is a huge void in textile production and as Vietnam's technical textile industry continues to evolve this will only increase opportunities for exports from the US.

Vietnam is a true emerging market, offering ground floor and growing opportunities for US exporters and investors, the ITA believes. In addition, with plentiful competitively-priced labour, it has a distinct cost advantage over other countries such as China. Vietnam has also developed supportive government policies, started to implement major infrastructure projects and introduced incentives for foreign producers.



Advanced protective garments are a key sector for US exports. Courtesy TenCate





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Machinery shipments decline slightly in 2014

Last year saw a slight decline in textile machinery shipments worldwide, however, some sectors rebounded

hipments in most textile machinery segments experienced declines in 2014, according to the 37th annual International Textile Machinery Shipment Statistics released by the International Textile Manufacturers Federation (ITMF).

The report covers six segments of textile machinery, namely spinning, draw-texturing, weaving, large circular knitting, flat knitting and finishing machinery.

The 2014 survey was compiled in cooperation with some 110 textile machinery manufacturers compared with 112 in 2013, representing a comprehensive measure of world production.

Global shipments of large circular knitting machines fell by 22% from 36,575 in 2013 to 28,502 in 2014, the lowest level since 2009. For this category Asia is the world's leading investor. Nearly 88% of all circular knitting machines are shipped to Asia and with a share of 60% (close to 17,000 shipments) of worldwide deliveries, China is the single largest investor. India and Turkey rank second and third with 2,464 (8.6%) and 1,325 units (4.6%) respectively.

Last year was good for the electronic flat knitting machinery segment as global shipments grew by 31% to 46,100 machines. This was the first increase since 2011. Rising demand for knitted garments and increasing application for manufacturing technical textiles is likely to have driven demand.

Asia received the highest share of shipments. More than 85% of all deliveries went to Asia, with China being the largest investor with a share of 42%, equivalent to more than 19,000 units.

Including China, four of the five largest investors in flat knitting machines are Asian countries. Second and third are Bangladesh (11,312 units) and Vietnam (1,956). Turkey ranks fourth with 1,879 machines and India fifth with 1,840 units.

Short staple

The level of short staple spindles declined to 9.8 million spindles, the lowest level since 2009 and also lower than the ten-year-average of 10.9 million, according to ITMF.

Most of the new short staple spindles (91%) were shipped to Asia, but shipments fell by nearly 17% year-on-year. China, the world's largest investor in short-staple spindles, experienced a decline of nearly 29%. Four of the five largest investors in short-staple spindles originate from Asia – China, India, Vietnam and Indonesia. Shipments to Turkey, the fourth largest investor, increased by 5% in 2014, the third consecutive increase.

Global shipments of long-staple (wool) spindles increased by 70% from 80,800 in 2013 to 137,650 in 2014. That is the strongest increase since 2012. The majority of long-staple spindles (69%) were shipped to Europe. Shipments to Turkey rose to 67,000 which is equivalent to a share of 49% of

global shipments.

Within Europe Belarus and Italy came second and third with shipments numbering 21,216 and 10,584 spindles, respectively. In 2014, shipments to Asia increased marginally by 0.2% to 29,000 spindles.

Shipments of open-end rotors improved moderately in 2014 by 2.6% after they declined in the previous two years. The number of shipments reached 454,720, the highest level since 2011 and well above the long-term average of 402,669.

Nearly 67% of worldwide shipments of open-end rotors were destined for Asia though the pace is declining. Shipments to Asia fell by 13% after declines of 13.9% and 11.9% in 2013 and 2012 respectively. Also, in South America shipments declined (-9.3%). In contrast, shipments to Europe and, especially, North America saw strong increases of nearly 27% and 402% respectively.

Draw texturing

Global shipments of single heater draw-texturing spindles (mainly used for polyamide filaments) increased by 76% from 2,600 in 2013 to 4,576 in 2014. At nearly 57%, Asia accounted for most shipments of single heater draw-texturing spindles followed by Western Europe with 20% and South America with close to 15%.

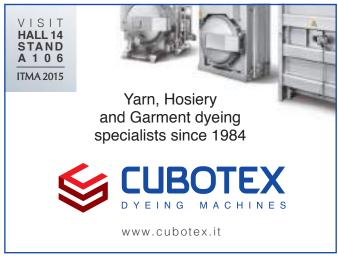
In the segment of double heater drawtexturing spindles (mainly used for polyester filaments) the downward trend continued and global shipments fell by 12% on an annual basis to 443,352. However, the pace of decline moderated somewhat compared to 2013 when shipments fell by nearly 30%. Asia's share of worldwide shipments amounted to close to 88%. China remained the largest investor accounting for 60% of global shipments.

In 2014, worldwide shipments of shuttleless looms fell by 14% to 71,667 units, the third decline in a row. Shipments of water-jet shuttleless looms dropped by 30% to 24,220, the third fall since 2012. Shipments of air-jet looms also declined though this was the first fall after four years of increases.

The number of shipped air jet looms contracted by 19% to 20,176 in 2014. In contrast, deliveries of rapier/projectile looms shipments rose by 14% from 23,828 in 2013 to 27,271 in 2014, the highest level since 2006.

Shuttleless looms

As in previous years the main destination of shuttleless looms was Asia, accounting for 97% of worldwide deliveries. The percentage of the three subcategories is relatively even. Water-jet looms accounted for 36% of shipments to Asia, 35% are rapier/projectile looms and 29% are air-jet looms. In Europe and North America 73% and 54% of shipments are rapier/projectile looms, while the share of water-jet looms is only 7% and 11%, respectively.







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in pictures











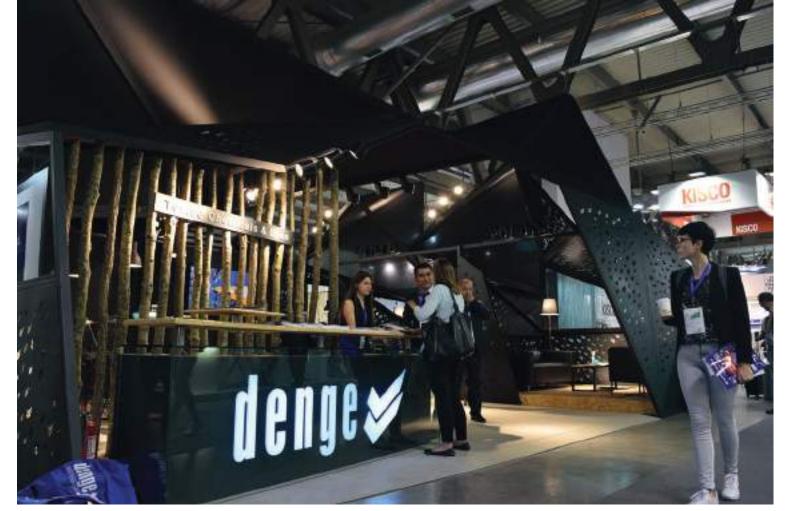


in pictures



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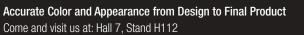
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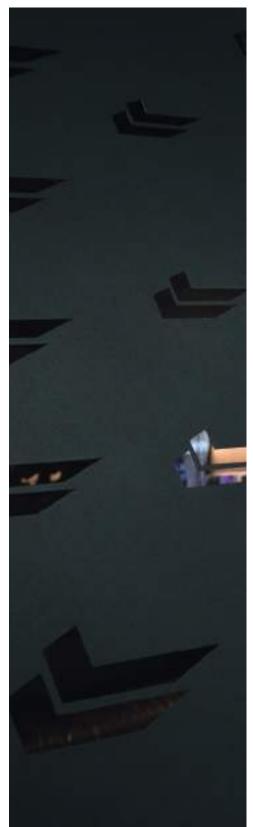
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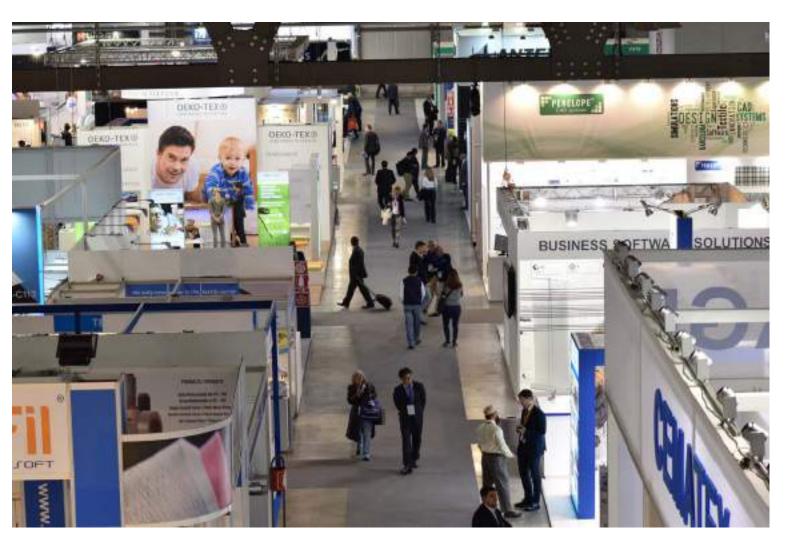
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TRÜTZSCHLER



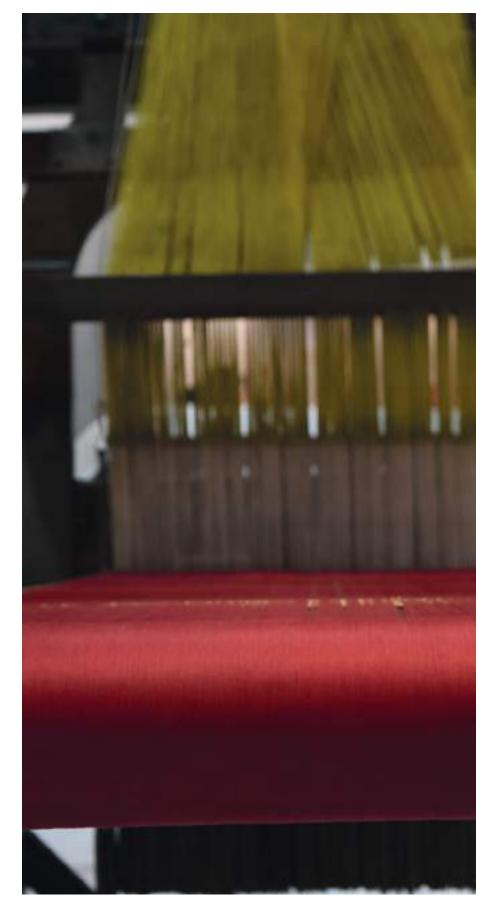


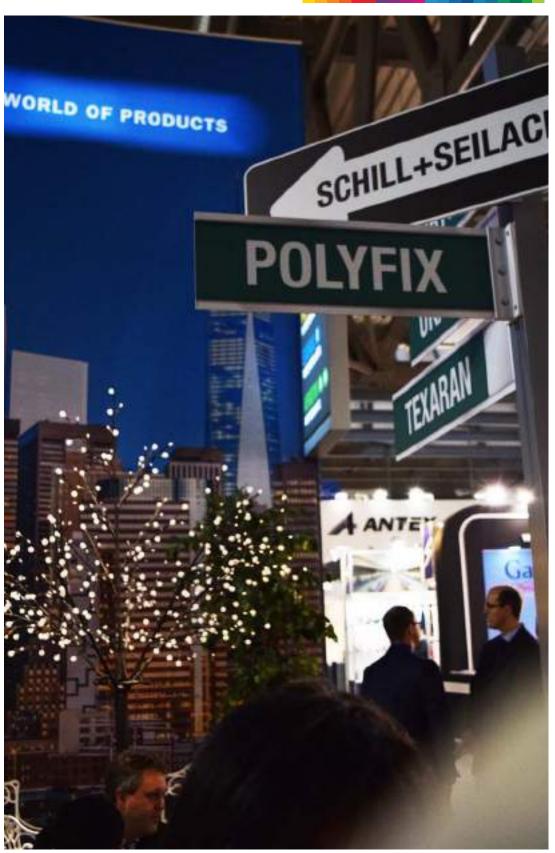




<u>75</u>

in pictures





Get your daily dose of inspiration

Today's speaker is Dr. Christian Weber from McKinsey Solutions. Come by Novozymes' booth H8-E119 at 3 p.m. and hear him talk about:

"Green fabrics – energy-efficient operations in the textile industry"







Egypt falling short in global competition

Egypt's textile and clothing sector is failing to exploit the country's cotton growing strengths, writes Paul Cochrane

he Egyptian textile sector is a mixed bag, succeeding in certain sub-sectors and struggling in others, while failing to add value to its core strength in cotton production.

It has managed to weather the ongoing political instability, but exports are weak due to lower demand from Europe, and the overall sector is straining to keep up with global competition. With Egypt lacking a diversified garment supply chain, with weaknesses in spinning and weaving, as well as dyeing and design, some firms – particularly in woven textiles – are shifting horizontally.

"The market is really bad, especially after the euro dropped, as most exports are directed towards Europe, unlike the ready-

made garment sector, and companies are facing some problems," said Dr Dalia Rady, executive director of the country's textile export council (TEC), part of the ministry of trade and industry. The agency promotes overseas sales of cotton, acrylic and polyester yarns, sewing threads and fabrics.

According to TEC statistics for the calendar year 2014, there was a year-on-year 6% growth in textile exports, which generated receipts of US\$968 million. But notably, due to the drop in the value of the euro and sluggish economic growth, export receipts dropped 5% in the fourth quarter of 2014.

By comparison, during the height of the instability that followed the country's January 2011 uprising that toppled long-time President Hosni Mubarak, exports dropped by 8% year-on-year in 2012, being then worth US\$812 million. Meanwhile export growth was 12% in 2013, generating US\$912 million that year.

And while these pan-industry trends represent switching fortunes, the position is more complex when you delve deeper. While textile exports have risen overall over the past five years, this is because of a strong performance by certain sub-sectors. Exports in 2014 of cotton yarns and sewing threads, for instance, dropped 15%, while overseas sales of cotton fabrics were up 19%; sales of acrylic fibres slumped 27% and acrylic fabrics by 43%, while acrylic yarn and sewing thread exports rose 89%.

In the area of cotton yarns, Egypt is exposed to the demand fluctuations in its

two major export markets, Italy and Turkey, which account for 60% of sales, according to the TEC. However, demand for denims has bolstered fabric exports, with Egypt the seventh largest provider to the United States.

The slump in acrylic fibres was largely due to a slowdown in production at the Alexandria Fiber Company, said a TEC official. Owned by India's Aditya Birla Group, some US\$150 million had been invested in this Egyptian wing of the company, discouraging further investment by other firms in acrylic yarns. It had been the number-one producer in the Egyptian sector, with a 1.5 kilometre-long production line, but is now ranked seventh in exports.

The industry's mixed results have continued in other sub-sectors. Exports of synthetic and artificial filaments, yarns and sewing threads dropped by 37% in 2014, while overseas sales of woven fabrics of synthetic and artificial filament yarns rose by 29%. Exports of polyester filaments, raw wool, treated wool and wool waste rose 31%; those of wool yarns dropped by 73%, while overseas sales of wool fabrics rose by 124%, according to TEC figures.

What is striking is that exports of nonwoven fabrics have surged, growing 800% in 2014. "It is due to newcomers in the sector – Egyptian and Czech nonwoven firms – that exports are still going up as there's lots of demand in the market for nonwovens, and medical companies are investing in dressings," said Dr Rady.

In ready-made garments, Egypt is still a global player, but as with textiles, exports have been hit by a drop in European demand. Prior to the 2008 global financial crisis, exports were fairly evenly split between the US and EU, with Egypt taking advantage of duty-free

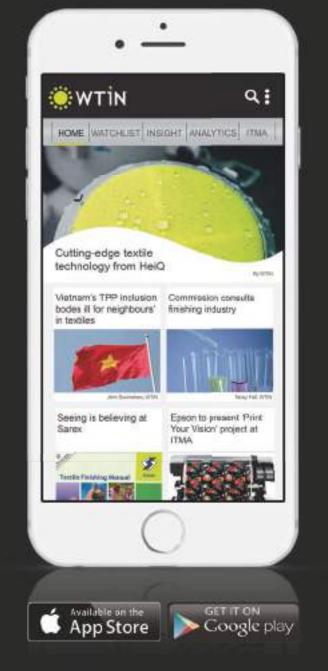


 $Samer\ Riad,\ general\ director\ of\ the\ Riad\ Group,\ visiting\ Washington\ DC-his\ company\ exports\ to\ the\ USA$

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access to the US market through products made at Qualified Industrial Zones, which have been in operation for a decade – and of which there are now more than 25.

However, over the past two years, the US has accounted for around 60% of Egyptian clothing exports, according to Mohamed Kassem, managing director of World Trading Company in Cairo, which exports garments. In 2014, Egyptian clothing exports to the US increased 3% on the previous year, while those to the EU were down by 1-2%. Overall Egyptian clothing exports were estimated at US\$2 billion. "That is about the same as 2013, as we grew in one market and went down in another, so essentially no growth. Other export markets are just US\$150 million," said Mr Kassem

One major drawback for Egypt is its inability to take full advantage of its close proximity to Europe. Prior to the 2011 uprising, a fast boat was operating between Alexandria and Italy, but the service has since stopped.

"It was wrong to stop it. As much as we are close to Europe, the irregularity of shipping to the EU makes our turnaround time longer than what it should be," said Mr Kassem. "We are shipping to the east coast of the US in 11 days, and to the UK in a week to 10 days, which makes no sense.

"What we would like to see is that we produce during the week, ship Thursday evening, and during the weekend it sails to the EU, being on the shelves by Monday. That is a dream that as an industry we all have."

That said, the Egyptian clothing and textile industry's struggle to export more to the EU goes beyond logistical constraints. It is related to the production chain itself. "Fast fashion is taking over all the time, which is very challenging in a country that doesn't produce its own raw materials," said Samer Riad, general director of the Riad Group, which makes blended and cotton-based knits for European and American retailers, including Inditex and Germany's Otto Group; around 70% of exports are to Europe.

This is all the more galling of course, given Egypt's high-quality cotton sector, but the intermediate backward linkages are uneven in capacity and quality: "So we have to import yarn, and need to be flexible and quick, which is the challenge of course," said Mr Riad.

One issue is that manufacturers tend to be integrated, catering to their own lines. Egypt lacks independent mills able to



A clothing retailer in Egypt under a portrait of former President Gamal Abdel Nasser Hussein



Shirts on sale in Cairo

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provide small quantities for quick delivery, and in more specialised areas such as fabrics or dyeing, the country's textile sector is not well developed. "There are also issues with a lot of trims and accessories, and with items you still can't get locally, like elastics, laces, and straps," said Mr Riad. "In denim, the quality of dyeing is improving but it's a quick-moving industry, so as fast as we are moving, we're still one notch behind in fast fashion."

And even Egypt's cotton sector is not what it was. The country has, of course, been renowned for its cotton, known locally as 'white gold'. But production has declined due to less arable land being given over to the crop, strikes at mills and lower global demand for long-staple cotton, the country's speciality. Indeed, out of the global production of 26 million tonnes of cotton, just four million tonnes is now longstaple, of which Egypt accounts for 25%, according to Ahmed Elbosaty, chairman and managing director of Modern Nile Cotton Company, and president of the

Alexandria Cotton Exporters Association.

A problem is origin marketing. Egypt's quality cotton exporters have focused on selling to high-paying overseas rather than domestic manufacturers, forcing Egyptian garment exporters and related spinners to import lower-quality cotton. Indeed, 70% of Egypt's spinning capacity is for cotton that is cheaper and coarser than the quality Egyptian staple fibre.

While 30% of mills have state-of-the art facilities, the mass production of 'Made in Egypt' garments has devalued the reputation of Egyptian cotton itself: "There is a lot of confusion worldwide as to what is produced here and what is Egyptian cotton. In ready-made garments, up to 90% has zero Egyptian cotton, being mostly imported," said Mr Elbosaty.

To address this problem, moves were underway prior to the revolution to put Egypt back on the map by expanding capacity at the leading 15 mills. Also, a registered trademark of '100% Egyptian Cotton' was introduced. "Before 2011,

everyone was studying to add capacity, and this was going to create the market for Egyptian cotton, but it all changed due to the [political] events," said Mr Elbosaty. "With the problem of quality nowadays, the most dangerous thing to do would be to go on a [global] campaign."

The uprising and ongoing instability has also weakened cotton production. While production rose 30% over the past year, strikes at cotton mills have resulted in a lower intake of Egyptian cotton, and short staple cotton has "kind of collapsed," said Mr Elbosaty. Wages have also increased for pickers, nearly trebling in certain areas. "Wages far exceeded the 50% benchmark of the cotton price. The only thing helping is the devaluation of the Egyptian pound, or else we'd be completely off-market," he added.

While addressing cotton production and related spinning is key to the sector's future, the development of local weaving also needs to be encouraged, say experts: "Investment is needed not just in spinning but in weaving, where there is a net

shortage, and from there a chance to also improve finishing," said Shiraz William, vice-president of marketing at Medtex, part of Pakistan's Saif Group, and Egypt's third-largest textile exporter at US\$200 million overseas sales, with a capacity of almost 60,000 spindles.

"You can't just be successful in textiles by bringing cotton from the outside. The best chance is to find more value-addition for Egyptian cotton fibres as there are certain varieties which are probably irreplaceable in terms of dyeability and durability."

Dr Rady also believes Egypt should shift into niche markets, tapping consumers willing to pay the high price commanded by its best cotton.

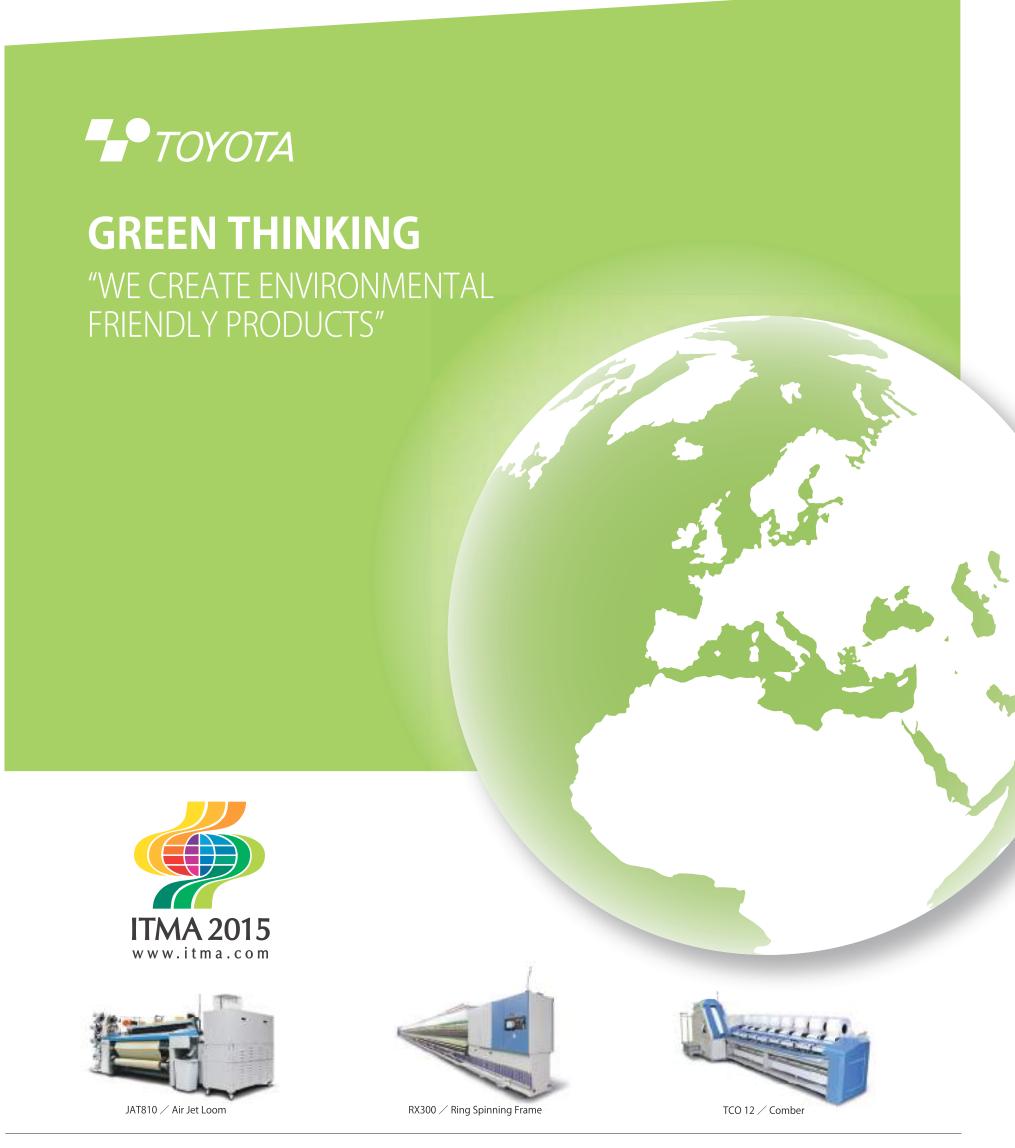
"If we keep working on classical products, competition will remain very tough as I'm not sure how we can compete with Asian countries," she said. "But the map of exports is changing, and even investors in classic sectors like cotton are considering re-investing in other sectors," such as nonwovens.



Denim on sale in Egypt



Ahmed Elbosaty, chairman and managing director of Modern Nile Cotton Co



Weaving Booth HALL 3-D109 / Spinning Booth HALL 2-D103

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