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Business // Finance // Market // Technology

Yarn // Fiber *Spinning *Weaving *Knitting *Dyeing // Finishing // Washing // Drying *Nonwovens // Technical Textiles *Textiles // Apparel // Garment

ITMA ASIA + CITME 2012

The upcoming show will be a superlative parade of achievements, as well as being an indicator as to the success of the 12th FYP. The exhibitors are well prepared.

► **Review ITM**

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Innovations & Improvements

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ITMA ASIA + CITME 2012



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Innovations & Improvements

Part 3: Knitting

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Dear Reader,

the highlight of the year is about to begin for the Asian textile industry and the international textile machine industry with the ITMA Asia + CITME. Like you, we are also very glad about this parade of the best textile machines in the world. And it will be very exciting to see how the Chinese textile industry re-positions itself to deal with the new challenges of sustainability and environmental protection in connection with the increase in wages. Will the trend go in the direction of automation and energy efficiency? Will the companies create the quantum leap to becoming high quality manufacturers, and will the east coast become a high tech-area, as announced by Mr. Du Yuzhou, President of China Nationwide Textile & Apparel Council at the World Textile Summit (WTS) in Barcelona?

The 12th FYP has put forward some very ambitious aims and the ITMA Asia will be the first indicator for the important Chinese textile industry as to how the plan is proceeding. The interim result will interest every textile-producing enterprise in every country across the world, because the competition could be shifting.

In any case, the exhibiting textile machine enterprises are really well-prepared and the increase in exhibition space per exhibitor promises many machines and innovative stand concepts. In our top story we will be taking a comprehensive look at what will be happening in Shanghai.

In particular we are glad that we can present our own innovation at the ITMA Asia. Our new, free App for iPhone and iPad brings all TexData News and the TexData magazines via electronic means smartly to your

mobile terminals. We are looking forward to your downloads at the Apple Store from the 11th of June.

For some textile producers there is another reason to be cheerful: Two older brands are experiencing a renaissance and are being relaunched. Krantz and Artos are back. INTERSPARE, their owner, has restarted serial production and has prepared a new manufacturing hall for the K30, reporting that they're ready to accept many orders. More to follow in the next issue in which Managing Director Dirk Polchow will announce his plans in a TexData interview.

In our series Innovations & Improvements we deal with the subject of Knitting and we introduce many novelties from market-leading enterprises. We also report in detail about the ITM Texpo Eurasia in Istanbul as well as a short article about the Techtextil in Atlanta.

I wish you pleasant reading and provided that you are at the ITMA Asia, I wish you a fair to your liking.

Yours sincerely

Oliver Schmidt

ITMA ASIA + CITME 2012

The coming ITMA Asia / CITME 2012, which will take place from the 12th to the 16th of June in Shanghai at the Shanghai New International Expo Centre (SNIEC) is, for the Asian textile industry as well as for textile machine manufacturers from all over the world, a quite special highlight of the year.

And according to the organizers, the third event of this kind following 2008 and 2010 will be a fair of superlatives: more exhibitors, more visitors and at best, the boost desired by everyone involved in the entire Asian textile industry.



With 12 halls and 132,000 square metres of exhibition space, this year's show will be 30% bigger than the 2010 fair. In addition, the originally planned surface area was extended in April by 6,000 square metres to be able to offer a stand another to 80 exhibitors on the waiting list. All together, more than 1,230 exhibitors from 27 countries and regions will present their products. Chinese exhibitors make up the biggest country group, booking around 50 per cent of the total exhibition space. Besides China, the top participating countries in terms of space applications are Germany, Italy, Japan and Switzerland.

In 2010, 1,171 exhibitors from 28 countries presented their machines over a surface area of 103,500 square metres. 30% more exhibition space and just a light increase in exhibitors will result in the exhibitors presenting themselves to their Asian customers in an even bigger and more remarkable way, giving them the opportunity to shine with a huge number of machines and innovative stand concepts.

The fair proprietors, the European Committee of Textile Machinery Manufacturers (CEMATEX), China Textile Machinery Association (CTMA), the Sub-Council of Textile Industry, CCPIT (CCPIT-Tex) and China Exhibition Centre Group Corporation (CIEC), are preparing for a successful event. Mr Stephen Combes, President of CEMATEX, says: "Response to this year's combined show is beyond our expectations. The strong demand for space attests to the effectiveness and popularity of the combined show as well as the resilience of the textile and textile machinery industry."

And for Miss Maria Avery, Secretary General of CEMATEX, there's no way round the ITMA Asia + CITME. She says: "The combined show is now well entrenched in the textile machinery exhibition calendar. It draws leading textile machinery manufacturers and is a must-attend showcase for the Asian market, offering plenty of business and networking opportunities."

Once again, the fair is being organised and implemented by the tried and tested Team Beijing Textile Machinery International Exhibition Co Ltd and MP International Pte Ltd. Japan Textile Machinery Association (JTMA) is a special partner association of the show.

The organisers and the exhibitors have the same aim: In 2010, 82,000 professional visitors visited the fair. The target this year is to crack the 100,000 visitor mark. To ensure that ITMA ASIA + CITME is an industry-leading market place and to attract quality attendance, visitors must purchase badges to visit the exhibition. Visitors can purchase their badges online at www.itmaasia.com and www.citme.com.cn to enjoy an attractive 40 per cent discount. For added convenience, visitors may print their badges after successful registration. This time-saving feature further helps visitors avoid possible long onsite queues during the show. This service is also extended to exhibitors who wish to purchase badges for their guests.

“The combined show is now well entrenched in the textile machinery exhibition calendar. It draws leading textile machinery manufacturers and is a must-attend showcase for the Asian market, offering plenty of business and networking opportunities.”

Miss Maria Avery, Secretary General of CEMATEX

The exhibitors should also be able to count on good business. The positive textile machinery shipment statistics released in May 2011 by the International Textile Manufacturers Federation (ITMF) shows that demand for machinery has picked up.

Speaking at the press conference held on the 14th of June 2011 At SNIEC, Mr Fritz Mayer, Board Member of CEMATEX said, “As the global economy continues to show strong signs of recovery, we expect our 2012 edition to be even bigger than the previous showcase in 2010.” Explaining further, he said, “Currently, the textile machinery industry report card is looking much better, compared to the previous two years. The ITMF’s International Textile Machinery Shipment Statistics show that investments, which had decreased during the 2008 crisis, have picked up significantly.” And Mr. Wang Shutian, President of China Textile Machinery Association (CTMA), said: “With the recovery of the world economy and the beginning of China’s 12th Five Year Plan, we are confident that the combined show will score another success.”

According to Global Industry Analysts, Inc. (GIA), the global market for textile machinery is projected to reach US\$20.75 billion by 2015. The Asia Pacific region is expected to dominate as the single largest market, as local governments play a pivotal role in developing initiatives to boost textile machinery trade and bolster sales and investments.

The Asian region is forecast to emerge by 2015 as one of the fastest growing markets, spurred on by such initiatives. In China, for example, one of the priorities under the government’s 12th Five-Year Plan period (2011-2015) is to raise the craftsmanship, techniques and equipment to reach the international level for textile and other industry sectors.

Besides the development and application of high-technology fibres, energy-saving, emission-reduction and environment-friendly technologies will also be the focus for China’s textile industry in the coming years.

This appraisal of the GIA fits in ideally with the lecture on the 12Th FYP given by Mr. Du Yuzhou, President of China Nationwide Textile & Apparel Council, at the World Textile Summit (WTS) in Barcelona. At the WTS, Mr. Du Yuzhou said that, the east coast, which was responsible for a textile turnover of 1.56 Trillion US\$ in 2010 and the region where currently about 90% of the Chinese textile economy is located, is to be developed into a high-tech textile region. The intention here is to close the gap in relation to western production standards and equip the production plants with new, more productive and energy-efficient machines, with an emphasis on automation, mainly due to the fact that wages in the textile centres have risen 5-fold over the last 10 years. Additionally, the obligation to implement more environmentally friendly and more sustainable production methods requires new acquisitions.

“Whether economic growth has hit the bottom in the first quarter, or when growth will hit bottom, in the first quarter or the second quarter, is not important. The important thing is we are pursuing high-quality growth”

Shen Laiyun, spokesman at the National Bureau of Statistics

The year 2012, the ITMA Asia + CITME year, and the year of the dragon, which stands for awakening and for making big plans in the Chinese zodiac, could all be particularly suitable events to ring in these immense changes, which would surely then lead to an exceptionally high demand.

Seen in another way, the ITMA Asia could also prove to be the first indicator for the implementation of the current FYP.

The only thing that speaks against a superlative event is basically that China also has to master some problems in its economy. To name a few of these: Their rather high inflation, the constant pressure of the western states to further revalue the Renminbi, the amassed foreign exchange reserves of USD 3.2 billion which serves to dampen the weak-ish export situation, and also the sinking growth figures, down to 8.1% in the 1st quarter of 2012, where already the value of 8.9% in the 4th quarter of 2011 was the lowest value since the 2nd quarter of 2009.

It all sounds rather dramatic. However, this seems to be less of a headache for China than some of the western analysts. ‘China’s government is actively pursuing a lower growth strategy and cut its official forecast for 2012 to 7.5 percent in March, an eight-year low, in order to create room for structural economic reforms, particularly on prices it sets, without sparking a surge in inflation’, the news

agency Reuters said in a news release on 13th April 2012. And Shen Laiyun, spokesman at the National Bureau of Statistics, said at a news conference to release the GDP data: “Whether economic growth has hit the bottom in the first quarter, or when growth will hit bottom, in the first quarter or the

second quarter, is not important. The important thing is we are pursuing high-quality growth”.

Statements like, “high-tech area”, “high quality growth” and “structural economic reforms” point once more to what has already been announced at the 12Th FYP. China wants to change and must invest.

It looks as though exhibitors may hope for good business with customers from other Asian countries, too. Nations such as Bangladesh, Vietnam, Cambodia and Indonesia all have lower labour costs than China and will want to use the change in the textile production scenery in China to add to their own growth prospects within the textile industry.

The ITMA Asia + CITME is divided into 17 Chapters according to machine. Table 1 lists the individual Chapters. Sector-wise, spinning machinery forms the largest sector. This is followed by knitting, dyeing and finishing, weaving and winding. A hall plan can be found on the following page and the exhibitor’s overviews of the individual halls can be downloaded as a PDF in the run-up, under www.itmaasia.com.

Let’s have a look at the exhibitors and the highlights that the fair visitor can expect.

Associations

The German association **VDMA** (Hall E2, E5, W2) will come to ITMA Asia + CITME with the main topic “Efficient textile production” and the motto „ German technology @ ITMA ASIA: Sustainability meets profit.” The VDMA sees its member companies well prepared to give visitors to ITMA ASIA profound answers on how to increase energy or material efficiency and so to combat cost pressure and to fulfill the needs of the market. At ITMA ASIA the VDMA Textile Machinery Association will present the sustainability initiative Blue Competence for the first time in the Asian market.

VDMA says that government regulations aiming at higher energy efficiency have been passed in China and India. Adjusting to volatile energy and commodity prices as well as ecological requirements from retailers and consumers provide a challenge for textile producers throughout Asia. And VDMA sees itself as a solution provider for this challenges and wants to provide orientation in the green jungle answering all questions concerning sustainability, waste reduction, energy efficiency and lower consumption of water and dye stuff. To make their leading know-how visible the VDMA has created the Blue Competence label.

Fritz P. Mayer, Managing Associate of Karl Mayer Textilmaschinenfabrik and Chairman of the VDMA Textile Machinery Association says: “The German technology suppliers can play a major role to reach the targets in the upcoming change process of the Chinese textile industry. ITMA ASIA 2012 provides an excellent platform for the German textile machinery companies to demonstrate, how their products and services can help the Chinese textile sector to evolve into a modern high tech industry”.

At ITMA ASIA, the VDMA energy efficiency guide “Conserving resources – securing savings-potential” will be distributed in Chinese language. In this guide the determining factors for a comparing assessment of the energy efficiency of textile machinery have been worked out. And the VDMA will publish best practice examples from VDMA member companies. The success stories themed „Sustainability meets profit” will include examples of sustainable machines and components as well as sustainable textile products that have been manufactured with the help of machines from VDMA members.

112 German companies have registered for ITMA ASIA 2012 which is an increase of 9 % compared to the 2010 show. All renowned German manufacturers will be present at the leading trade fair for the Asian market. For visitors it will be easy and convenient to find and visit German exhibitors as most of them will use “Made in Germany” and “German Technology” logos. Furthermore, VDMA has initiated German sector groups in hall E2 (finishing), E5 (knitting & braiding) and W2 (spinning).

The Italian textile machinery industry powered by their association **ACIMIT** lays all the attention on technologically sustainable solutions. The Italian contingent is one of the largest to attend ITMA Asia. In fact, there will be 117 Italian textile machinery manufacturers. ACIMIT says that the Italian products in Shanghai are characterised by the completeness of the range and by the maximum attention placed on the efficiency and sustainability of the technology presented. From spinning to weaving, from knitwear to finishing, visitors from all over Asia will be able to see the high technological level of Made in Italy.

“China is our top market in the world”, stressed Sandro Salmoiraghi, ACIMIT President. “In 2011, we sold €450 million worth of textile machinery to Chinese companies (or 25% of our export business)”. Salmoiraghi continued. “In China, our customers need a qualitative upgrade in the machinery they use. Efficiency, cost reduction and environmental sustainability are issues which come up time and again in negotiations for machinery sales in China.” ACIMIT’s answer to the challenges is the green label, the ACIMIT “Sustainable Technologies” project, already presented at ITMA Barcelona last September. The green label will be placed on the machinery made by companies participating in the project and ACIMIT wants that it represents an operation of transparency.

(You will find a comprehensive story about sustainability goals will change the textile industry including the efforts and plans of designers, brands, retailers, fashion stores, associations, textile machinery companies and textile chemistry companies in the issue 1/2 and 3/4 of the TexData Magazine)

UCMTF, the French association, wants to remember that the French textile machinery has played a particularly important role in the historical development of the textile industry with for example the illustrious name of **JACQUARD**, the French inventor of the most sophisticated weaving technology. UCMTF sees that the French textile machinery is continuing to do so and it will be seen at next ITMA ASIA + CITME. UCMTF also sees a lot of challenges for the Asian textile industry and helps their members providing solutions that fit the highest expectations of their customers. French textile machinery industry comes with the members **NSC Fibre To Yarn** (Hall W3 Booth E 11), **LAROCHE** (Hall W3 Booth A 05), **VERDOL** (formerly **SWISSTEX France**) (Hall W3 Booth C 05), **AESA** (Hall W2 Booth E 10), **SUPERBA** (Hall W2 Booth B 01), **FIL CONTROL** (Hall W2 Booth D 21), **DOLLFUS & MULLER** (Hall E2 Booth G 30) and **STÄUBLI** (Hall E3 Booth E 01).

The participants offer solutions for the long fibre spinning industry with new techniques to improve dramatically the quality standards, the operating and maintenance costs, and on line quality controls. The innovating range includes the design of complete lines. For the twisting and texturing of yarns with the opportunity to develop high-tech yarns for traditional and technical applications. Heat setting processes: new functionalities to yarns, for the carpet industry particularly. They will show Jacquard machines and dobbies developments with feasible spectacular increases in the speed of the production processes together with higher quality and more reliability.

In the field of dyeing the focus is on consistency improvements together with energy and water savings and in new sectors of the textile industry like the nonwoven processes UCMTF believes that the French machinery is also at the pinpoint of innovation.

Like the other associations UCMTF has a special view on solutions for more sustainability and environmental protection. For example recycling the textile materials at the end of their life cycle and transform them into new products, being environmentally friendly, is an issue on which the French machinery manufacturers are among world leaders.

At last UCMTF wants to let you know that French machinery manufacturers are less and less offering standard machines but, more and more, tailor made solutions designed with their customers and partners to enable these customers to introduce new products with high added value and compete successfully in their own national market and in the open world. Personal contacts are necessary to achieve this goal: permanent agents in each country, numerous visits by experts from France, participation in events or shows.

Spinning

Oerlikon Textile (Hall W2, Booth H01/F02), since the beginning of the year 2012 with the headquarter in China, has a home match in Shanghai and will present its broad e-save product portfolio. Show highlights include the Autocoro 8 rotor spinning machine, new solutions for ring spinning and winding systems, the FDY take-up winding machine WINGS, twisting and embroidery solutions and manifold premium components.

“Oerlikon Textile will present technology solutions especially for the requirements of the Asian market with a focus on a sustainable textile production. Our e-save program fits perfectly to the needs of our customers: Creating a higher productivity, saving more energy and the protection of the environment with a less waste production”, says Clement Woon, CEO of Oerlikon Textile.

Oerlikon Barmag will be presenting innovative solutions focusing on increasing productivity, saving energy and ergonomics. Initially, the main spotlight will be on WINGS for FDY yarns including the corresponding spinning pumps for the FDY process with WINGS.

A further information focus will be on the carbon fibers sector, with exhibits including the WinTrax carbon fiber winder. As the reinforcing fiber fabric in composite materials, carbon fibers are considered the materials of the future and promise solutions wherever light, but nevertheless stable, structures are required. Here, the manufacture of the fundamental fibers is considered extremely complex and challenging.



Oerlikon Wings

Oerlikon Schlafhorst will present their revolutionary new rotor spinning machine Autocoro 8 which is the first and only to spin a yarn at a rotor speed of 200,000 rpm. The new technology forms the basis for productivity increases of up to 25 per cent, machine start-up in minutes instead of hours, an excellent multi-lot capability and much lower spinning costs. Another products they will show are the BD 448, the longest semi-automatic rotor spinning machine in the world and the Zinser ring spinning machines 351 and 451 which promise unique process reliability with the Impact FX compact spinning technology and the CoWeMat doffer. And visitors can inform about the quality package of the Autoconer X5 which sets the benchmark for individually and flexibly adaptable package quality with maximum productivity.

Oerlikon Neumag will demonstrate their superior competence in BCF carpet yarns, staple fibres and nonwoven production. The leading supplier of highly advanced BCF carpet yarn machines will show the BCF best seller in 2011, the S+ with three ends per position, which is now available for the up-and-coming raw material polyester BCF. The BCF S+ for polyester is a perfect substitute for polyester spun yarn on account of its cost efficiency in production. Production systems for polyester staple fibres permit maximum capacities of up to 300 tonnes per day and cut operating costs at the same time.

For manufacturers of nonwovens such as geotextiles, compact inline systems with capacities of up to 80 tonnes per day offer suitable solutions as they permit small production batches and require few operators. Also on the agenda are machines or turnkey systems for the production of nonwovens from spunbond and meltblown to airlaid. Visitors to the exhibition can also navigate through the innovations in 3D on a virtual tour of the installation.

Oerlikon Saurer is putting the emphasis on energy saving with the new Volkmann CT: the eco-drive concept and spindles are the perfect complement to the e-save spindle family and help to save up to 40 per cent of energy costs, even for the finest yarn counts. Next new process: Volkmann Heat-SET integrates cabling, thermofixing and winding in one process sequence, thus reducing process costs and speeding up order completion. The new Allma TC2 two-for-one twisting machine can process every conceivable material in the titre range from 235 to 60,000 dtex. It thus satisfies the demand for top quality, application variety and production flexibility in the market for technical plied yarns. Its sister machine Allma CC4 is revolutionizing the tyre cord cabling market with energy savings of up to 50 per cent. And the Epoca 6 with its new drive system, optimal adjustment options and perfect thread cutting delivers the product up to 30 per cent faster with maximum reliability and embroidery quality.

As market leader, **Oerlikon Textile Components** is a byword for quality and know-how in the production of premium components for the filament

industry and staple fibre spinning mills and is exhibiting innovations for different applications.

Special exhibition highlights of Oerlikon Textile Components: in staple fibre spinning, the world's most versatile Texparts® PK 2630 SE weighting arms soon also available for Rieter and LMW spinning frames and Texparts® PK 2025+ weighting arms with excellent performance and flexibility even in difficult spinning conditions. Spindles with the Texparts® Zero Underwinding system prevent underwind threads and offer maximum reliability, efficiency and operator-friendliness in use. The novel curved edge of the Daytex® Shrinkage Belt is completely devoid of sharp edges, preventing tears from forming and thus extending the belt's service life. Accotex® Glass Forming Apron, which is setting new standards in durability, is also now available for all applications. The highlights for filament processing are the Heberlein® TexJet-ATY which leads to a new area in air texturing. The jet is the solution for low productivity caused by rapid contamination, the general level of yarn quality and the limited process window. Fibrevision® Unitens is the market leading On Line Monitoring system for all makes of DTY machinery operating 500,000 thread lines world-wide. Temco® Long Life plus Friction disc designed for abrasive yarn is wear protected for a 50 % higher lifetime. The Heberlein® AirSplicer-70-2 with long-life Phoenix knives expands the technical performance limits for high modulus fibres. The efficient and sustainable solution Temco® Nip Roller Unit consisting of Daytex® Cots and Temco® Nip Roller Bearings offers energy savings from up to 50% compared to conventional nip roller units.

This entitles the Temco® Nip Roller Unit as an “e-save” labelled key component.

Rieter (Hall W2, Booth No. A10) from Switzerland will be demonstrating its competence across the entire spinning process and presenting all 4 end spinning systems live on the stand. For the upstream fiber and spinning plant preparation, Rieter now offers 1 000 mm cans throughout thereby ensuring higher efficiency and convenience in the spinning plant. Multimedia presentations will convey to visitors a striking impression of the advantages and features of the new Rieter E 80 combing flagship. Rieter says that the know-how relating to financing, spinning mill planning, use of the right technological elements, selection of the correct spinning process as well as many other factors is necessary to achieve success in the operation of a spinning plant will present all this expertise at the fair. Rieter will present the following machines in an operational mode: the G 32 ring spinning machine, which produces ring and compact yarn – quality controlled by the ISM individual spindle sensor and the SPIDERweb mill monitoring system, the new fully-automatic R 60 rotor spinning machine, which produces excellent rotor yarn with yarn-like piecers and the new double-sided J 20 air-jet spinning machine, which will be introduced for the first time to the Asian market.



Rieter air-jet spinning machine J20

Additionally the company provides the opportunity to see the new 1.5 m wide C 70 card and the new E 80 comber with unrivaled quality and production levels will be introduced by Rieter with a multimedia presentation.

What the benefits and characteristics of the 4 spinning systems mean for downstream processing can be experienced by visitors in the Technology Corner. Here end products and fabric samples of the 4 Rieter yarns are available. The latest retrofits and high-quality original spare parts will be presented by Rieter's spare parts experts.

The German **TRUETZSCHLER** (Hall W2, Booth E01 in) will present latest innovations for the Asian market.

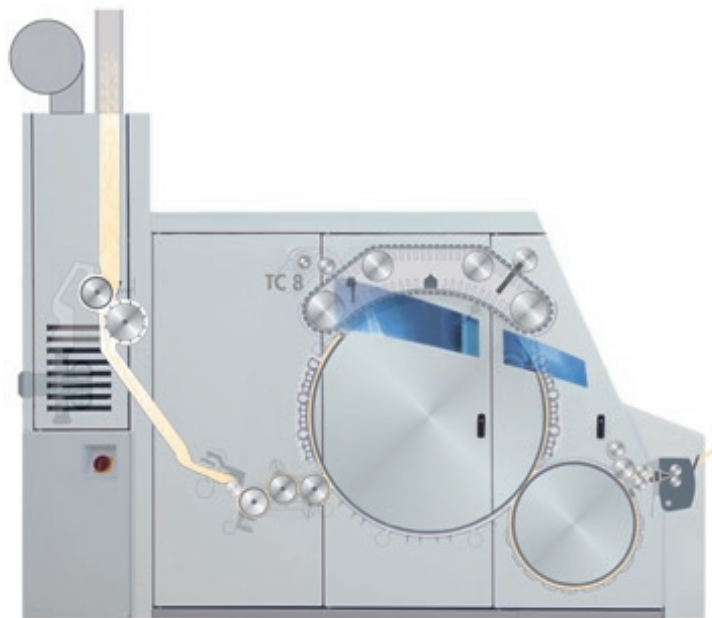
TRUETZSCHLER SPINNING is introducing the new card TC 8. This machine has been specifically designed for the Asian market and will be built at Truetzschler Textile Machinery Shanghai, TTMS. The TC 8 is the top card in the card segment with one metre working width. It offers high productivity and sets standards in its segment with regard to energy efficiency.

Depending on application, exclusive developments are part of the standard equipment of high production card TC 8:

T-Con, the optimisation tool for cards

MAGNOTOP, the magnetic fastening system for flat tops

NEPCONTROL, the online nep monitoring



Truetzschler Card TC 8

The new Truetzschler draw frame generation TD 8 is equipped with new sensor technology. The new feed sensor DISC LEVELLER TD-DL ensures consistently uniform sliver count, and significantly improves sliver count variation. The new quality sensor DISC MONITOR TD-DM in the delivery area of the draw frame, permanently monitors the quality data of the sliver.

The Truetzschler SECUROPROP SP-FPU is the only foreign part separator with three detection modules. Three different detection technologies in one machine, combined with three lighting principles, provide unprecedented efficiency.

TRUETZSCHLER NONWOVENS shows the new Bastian winder technology for the first time. Another subject concerns ready-to-use nonwoven lines with different web formation and bonding technologies. Only Truetzschler Nonwovens offers all common bonding types (spunlace, needling, thermal and chemical bonding) from one single source. The third key subject concerns lines for the production of man-made fibres and carbon fibres.

TRUETZSCHLER CARD CLOTHING TCC presents itself as leading card clothing supplier for the spinning and nonwovens industries. The focus will be on new developments such as the flats series NovoTop A and the first maintenance-free cylinder clothing FGX 1. In addition, the extensive service network in Asia and the service products are addressed by TCC.

Savio (HALL W2 - STAND F01) from Italy, with its high technological know-how, achieves the 90% of its turnover in Asia, and mainly in China, and announced that in the Chinese market a great demand for a quality upgrade of installed textile machinery manufacturing capacity is in process. The company is present in China with its own manufacturing plant located in the industrial area of Jining, Shandong province, being able to suggest proper customized solutions and provide any type of required service. At ITMA ASIA Savio will display its most important products both in the winding and the twisting segment: automatic winder model ORION SUPER M, POLAR/I DLS “Link type” and the new SIRIUS Two-for-One twister. Savio is presenting high-performance, energy saving and less labor intensive products, meeting the Chinese and, generally, Asian markets requests.

The Swiss based **SSM Schärer Schweiter Mettler AG** (Hall W3 / Booth C02), the inventor of the electronic yarn traverse system, let us know that they will continue their tradition of trend-setting with the presentation of breakthrough technologies. The focus of the show will be the exhibition of new solutions for cost effective and energy saving winding and yarn processing. With two new product launches and a number of innovations & applications for their well-known product range, SSM will exhibit a total of four machines.

For the first time in Asia, SSM will show a machine created by their new subsidiary SSM GIUDICI S.r.l. With them, SSM gained a strong market position in the field of false twist texturing of high quality fine count Nylon yarns, an application that complements SSM's established leadership in air texturing, thus expanding SSM's business in chemical fibre processing industries. Machines for *Dyeing/Rewinding* and *False Twist Texturing* will be on display:

Weaving & Knitting

Lindauer DORNIER GmbH (Hall E3, Stand F01) from Germany presents itself with two main focuses. Scientific developments, customized solutions and industrialization of the textile industry for excellent products is one focus and the development of technical textiles and applicable technologies the other one. The DORNIER system family of rapier and air-jet weaving machines offers any solution required for the production of technical textiles as well as top quality clothing fabrics.

Dornier will show the rapier weaving machine P1 PTS 4/S C, nominal width 220 cm, with a heavy filter fabric for the technical sector and the air-jet weaving machine A1 AWS 8/S G also with nominal width 220 cm for demanding wool weavers in the clothing sector.

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Strength and success go hand in hand – and demand the right equipment. Whatever your work involves, we are at your side – with the right technology to turn your goals, plans and visions into reality. We can supply warp knitting machines for producing every type of product, from lace, net curtains, clothing and functional textiles to technical textiles, as well as a full range of warp preparation systems for weaving and warp knitting. We have the expertise to support you in developing your own specific solutions. Let us put your ideas in motion!



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See you at ...

ITMA Asia + CITME
12 – 16 June 2012, Shanghai
Hall E 5, Booth B 10



KARL MAYER

Just across from our stand, the company STÄUBLI shows the rapier weaving machine P1 PTS 16/J G, nominal width 190 cm, with a premium Jacquard fabric for the home textile sector. DORNIER's new, pioneering and patented drive concept SyncroDrive® is one of the significant components of the new DORNIER system family of rapier and air-jet weaving machines. Peter D. Dornier, CEO of the Lindauer DORNIER GmbH gives the following statement for the ITMA Asia participation: "We strive for overall competence in the technical textile sector. This involves our technological knowhow for high-value solutions and also the intensive partnership with companies that implement the downstream processes."

Picanol (Hall E3, booth C10) from Belgium will present a wide variety of weaving machines, both airjet and rapier. For the first time on the Asian continent the new OMNIplus Summum will be shown. This weaving machine will be the new platform for further developments in the airjet segment. The main highlights of this machine are the new insertion system and the Picanol BlueBox system, the new electronic platform for Picanol machines.

Besides the OMNIplus Summum, also the OMNIplus-X will be on display. This machine is developed and produced in Picanol's Suzhou plant in China, but using the proven OMNIplus 800 technology. The OMNIplus-X responds to the requirements of the Asian mid-end segment and comes in weaving widths of 190 cm and 220 cm. As for the rapier machines, the highlight is an OptiMax weaving a technical fabric.

In total 6 Picanol machines will be on display. Five on its own booth. These are the OMNIplus Summum 4-P 190 weaving a lining fabric, the OMNIplus-X 4-P 190 weaving a shirting fabric, the GTXplus 4-R 190 weaving a bottomweight fabric, the GT-Max 8-J 340 weaving an upholstery fabric and the OptiMax 2-R 250 weaving conveyor belt fabric. One Picanol OptiMax with jacquard, an OptiMax 8-J 190 weaving a ladies wear fabric, will be on display at the Bonas booth.



Picanol OMNIplus Summum


Stäubli (Hall E3, Booth E01) will be showing a selection of its most modern products of the complete textile machinery range. This includes cam motions, dobbies, and electronic Jacquard machines with harnesses, weaving preparation systems with automatic warp drawing-in, leasing and warp tying machines. Stäubli will demonstrate two complete Jacquard installations on weaving machines. The first one is equipped with a type LX3202 with 12288 hooks producing tapestry and upholstery fabric on a 180 cm wide rapier weaving machine. The second is the new type SX electronic Jacquard machine with 2688 hooks weaving terry towel fabric on a 260 cm wide rapier weaving machine.

CX 182 type Jacquard machine for weaving narrow fabrics such as ribbons and labels will be shown with 192 hooks and harness with 4 repeats. For the first time in China the new developed dobby type 3060 can be seen. This new generation of rotary dobbies opens new areas of performance and reliability.





Stäubli rotary dobby

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**CONSULTING AND INNOVATION:
 REACH UNKNOWN DEPTHS WITH GROZ-BECKERT!**

ITMA ASIA + CITME 2012
 12-16 June 2012 Shanghai
 Hall E5, Booth H01

Today's weaving applications involve a lot more than apparel or domestic textiles. Technical textiles are unleashing unprecedented potential in ever newer expert application areas – and Groz-Beckert gives you access to them! Skilled experts give you all the advice you need. The comprehensive portfolio for the weaving sector also provides you with perfect solutions for all your needs – for instance PosiLeno®, the latest innovation in leno fabric production. Dive into the world of Groz-Beckert!

KNITTING , WEAVING , FELTING , TUFTING , SEWING

To complete the picture of the Stäubli shedding systems the refined positive cam motion type 1681, the negative cam motion type S1352 as well as the universal positive rotary dobby type 2658 are being demonstrated at the booth. Weaving preparation systems will present the SAFIR S30, the MAGMA, TOPMATIC and multilayer leasing machine OPAL.

On the same booth Group member Schönherr presents its lately developed exclusive carpet samples, including the ones manufactured with Multi Weft Selector, produced on the ALPHA 400 carpet-weaving machine. And Group member DEIMO (Hall E5, Booth A30) will exhibit state-of-the-art electronic drives and control solutions mainly for textile machines.

KARL MAYER (Stand B 10 in hall E 5) from Germany will present two high-speed warp knitting machines and two lace machines with new performance features in terms of efficiency and flexibility will impress them in particular. A Wefttronic® will also be demonstrating its capabilities for producing technical textiles in widths that have never been achieved before. This raschel machine with parallel weft insertion has a working width of 213” and complements the widths of 168” and 138” that have been available until now.

For the warp preparation sector, KARL MAYER will be showing its new fast, versatile Nov-O-Matic 2 with Isotens creel. This automatic sectional warping machine is setting new standards in quality and productivity for producing long production warps as well as for processing batches with short running lengths.

The visitors to this innovative company’s large stand, B 10 in hall E 5, will be treated to a first-class machine show. Two high-speed warp knitting machines and two lace machines with new performance features in terms of efficiency and flexibility will impress them in particular. A Wefttronic® will also be demonstrating its capabilities for producing technical textiles in widths that have never been achieved before. This raschel machine with parallel weft insertion has a working width of 213” and complements the widths of 168” and 138” that have been available until now.

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These high-tech solutions will be located on an impressive stand made from textiles, a concept that has already created quite a stir at ITMA 2011 in Barcelona. While the exhibition is taking place, KARL MAYER will also be holding its own in-house show at KARL MAYER (China) Ltd., Changzhou City, in the district of Wujin. The TM 4-T EL for producing terry goods will be on show here.

SHIMA SEIKI (Hall E6, Stand E01) from Japan celebrate this year their 50th birthday and will continue to provide the cutting-edge in flat knitting technology. ITMA Asia + CITME 2012 presents an excellent opportunity to showcase their current offering during this anniversary year. SHIMA SEIKI will be focusing on revitalizing and sustaining knitting industries in China and Asia in the future and with a diverse array of innovative solutions, SHIMA SEIKI is always at the ready to support the challenging market conditions of a transforming Asian market.

True to the original ITMA tradition of launching brandnew technology, a majority of the knitting machine models are first-time introductions at ITMA Asia + CITME and true to SHIMA SEIKI tradition, these machines represent technology that is unavailable elsewhere.

Shima Seiki wants to remember the following: “In these trying times, it is easy to lose sight of long-term goals in the pursuit for immediate profit. Through our exhibit, we intend to remind customers about the value of investing in a progressive company with the true potential to keep up with future market needs.”

Groz-Beckert (Hall E5, at Booth H01) from Germany is right at home with the diversity of technologies along the textile value chain and will be presenting its comprehensive range for different textile production and joining methods. With products and solutions Groz-Beckert will give answers to questions like how the Asian textile industry can make effective use of new potential? Which products and solutions increase production efficiency and process reliability? How can ecology and economics best be combined in the textile world?



Shima Seiki MACH2SIG

In the Knitting sector, Groz-Beckert will be presenting an entirely new knitting technology featuring the finest knitting cylinders in the world, as well as the finest precision components. These products enable textile production in the ultra-fine gauge E90 – a world record! The spotlight will also be on the Groz-Beckert CylinderMaster, which enables especially simple, reliable and safe cylinder changeovers on single jersey circular knitting machines. And with the Vo-LC™ Groz-Beckert is presenting a whole new needle generation.

In the weaving-machine components sector, Groz-Beckert will be presenting diverse healds, drop wires and high-performance heald frames. In weaving preparation, the focus will be on the fully-automatic drawing-in machine WarpMaster. The KnotMaster increases efficiency during the knotting of especially fine cotton warp.



Groz-Beckert WarpMaster with new computer generation

EcoStar – the new universal felting needle for extreme requirements – is a true highlight in the Nonwovens sector. As the first result of a far-reaching innovation initiative, in comparison with conventional needles it offers users longer service life combined with reduced energy consumption. Jetstrips for hydroentangled products, with process-water analysis included, are another major focus in Shanghai.

Customers in the Tufting sector can look forward to an extended online catalog. Groz-Beckert will be providing information about the increased level of detail plus the optimized search functions, all of which represent yet another improvement in functionality.

In the Sewing sector, Groz-Beckert will be presenting its market-tailored sewing and joining service to industry experts. New potential in the processing of fine materials in the chainstitching sector will be delivered by the needle system UY 128 in LPC geometry (Loop Position Control).

At the ITMA ASIA + CITME 2012 Groz-Beckert will again be providing highlights of diversity for the various textile production and joining methods – whether knitting, weaving, felting, tufting or sewing – and looks forward to welcoming numerous visitors from all over the world!



Monforts Thermex 8000

Dyeing, Drying, Finishing

Monforts (Hall E1, Booth B01) from Germany will highlight its MXL (moist cross linking) process to ensure non-iron and laundry fresh properties in association with the Thermex 8000 continuous dyeing unit. The process, developed by Ciba Speciality Chemicals together with Monforts, allows non – iron and laundry - fresh properties to be achieved on cotton materials with the shortest treatment times.

The new process, developed on the Monforts MXL® range, ensures processing times are reduced from more than 20 hours to just 3 minutes. It also offers greater flexibility and high process safety than conventional systems.

The Thermex Hotflue chamber, making its international debut in the MXL® mode of operation, is manufactured in stainless steel to withstand the process acidity.



Krantz

Meet us at hall E2,
Stand E 36.

The tradition and extraordinary quality of Krantz textile machinery lives. Last year we have setup the production line for the Krantz K30 tenter frame in a brandnew assembly hall and now even two digit orders for new equipment can be placed. Please visit our booth E 36 in hall E2 for all questions concerning spare parts, upgrades and new machinery of Krantz, Artos and Stentex machinery. We will be glad to meet you.



www.brueckner-tm.de


Quality makes the difference!



- Intelligent machine systems for textiles, technical textiles and nonwovens
- High quality products and technology made in Germany

- Tailor-made solutions in close cooperation with our customers
- Family-run and worldwide acting company with more than 60 years of tradition

Visit us at ITMA ASIA!
Hall E2, booth G05



Monforts will also demonstrate the latest software in process control technology to ensure economic and ecological solutions. References for technical textile applications will also be displayed. Further, Monforts technologists will be on-hand to offer advice for 'classical' textile and technical textile processing techniques.

The German machinery and line producer **BRÜCKNER** (Hall E2, Booth G-05) present themselves with many innovations on ITMA Asia. Highlights will concern energy efficiency, intelligent textiles and technical applications. Brückner says that with their technological know-how and decades of experiences they are in a position to supply each customer an individual tailor-made machinery concept. The intense process engineering advisory service for their customers on which they can rely anytime is also of very high importance for the company.

Brückner develops and designs for more than 60 years premium lines for the dry finishing of all kinds of textiles. And the company wants to be a leading company in the growing market of technical textiles and will offer a broad range of solutions on ITMA Asia. The focus is on tailor made lines, products and machines for nonwovens, coatings, the glass fabric industry and of course classical textiles. For example they will show the stand visitors the benefits of the new double belt thermofusion oven for the finishing of voluminous and highly-compacted non-wovens. The line works very effectively and with minimum energy consumption. In the field of coatings Brueckner supplies finishing and coating lines for very different applications and end products, for example airbags, light protection material, tarpaulin, grinding cloth, artificial leather, canvas and sport clothing - to name only a few.



Brückner nonwoven bonding oven

Whether screen or slop-pad coater, powder dispersion unit or full bath impregnating, floating knife or roll over cylinder coating machine.

And ITMA Asia visitors with shares in finishing should watch the Brückner energy saving systems and their environmental technology. With the newly developed systems users can save up to 35 % of energy depending on the process and the machine configuration. Heat-recovery systems for example pay back already from the first day and are a good investment for the future. With great pleasure they will show their latest system live on the booth at the fair. With the new ECO-HEAT heat-recovery customers will benefit with highly efficient plate fin heat-exchangers with anti-adhesion coating of their optimum power density. Due to their small size the heat exchangers are absolutely handy and are very easy to maintain.

The German company **Interspare** (Hall E2 Stand E36) will be present and providing information regarding the latest developments of their Krantz and Artos machinery. Textile producers with **Krantz**, **Artos** and **Stentex** equipment can get to know directly which possibilities Interspare can provide regarding these machines, as well as which optimisation possibilities there are for existing equipment, and when a possible order for new machines can be produced and delivered, all at the ITMA Asia / CITME in Shanghai. INTERSPARE is now able to deliver new equipment for their Krantz and Artos brands. Interspare managing director Mr. Dirk Polchow says: "Our production system is running and we're now in the position to be able to deliver a two-digit number of, for example, the Krantz K30 every year".

Interspare intends to promote itself in a "new way" to the Asian market at the ITMA Asia with the intention of persuading, above all, the old Krantz and Artos customers of the fact that they can continue to rely on these proven products. In addition to the Chinese market, other Asian markets such as India, Pakistan, Bangladesh, Vietnam and Cambodia are also of great interest.

"What is all-important for our Krantz customers is, for example, the ability to reproduce the processes", says Dirk Polchow. "The high temperature uniformity of the Krantz K30 offers an optimum pre-requisite for this."

And Hartmut Büchner, commercial manager at Interspare, who is quite an old hand in the business, adds: "The K30 was introduced in 1999 at the ITMA in Paris as a Krantz innovation. Because stenter frames have

developed a lot technologically over time, our low-maintenance, lubricant-free chain is still a product advantage, and the product remains state-of-the-art and can be compared with the very best stenters in the world.“

Interspare has made enormous developments over the last few years. The enterprise has recently established a new site and manufacturing premises in Reinbek in which the machinery is completely pre-mounted. The final assembly occurs directly with the customer. With the commissioning of the production plant in Reinbek, over 100 years of company history continues on, and the Krantz and Artos high-quality products continue to be produced in Germany.

(There will be an interview with Managing Director Dirk Polchow in the next issue 7/8 of the TexData Magazine. Polchow talks about the company's way from a spare part supplier to a textile machinery producer)

China Hi-Tech Group Corporation (CHTC) (Hall W1, Stand C1) will build its own showroom during ITMA Asia + CITME 2012 covering in hall W1 named as “CHTC Hall” to showcase different textile machinery segment including Cotton and Man-made Fibre products, Dyeing and Finishing and Nonwovens.

The groups will continue to present the latest technology in the field of “GREEN Innovation” and sincerely provide “one-stop” complete solution in the range of “Pre-treatment, dyeing and after-treatment”. The

Hong Kong based company announced that they now cover profound knowledge and experience of the continuous as well as the discontinuous finishing processes with the well-known brands **FONG'S, GOLLER, THEN, XORELLA, MORTFORTS FONG'S and FONG'S WATER TECHNOLOGY** in their portfolio.

One highlight will be the new generation of TEC series High Temperature Dyeing Machine. The state-of-the-art design achieved the aspects of putting “Low Cost, High Quality and Environmental Protection” into the production line? The machine is suitable for different dyeing process with various types of natural, synthetic, blended fibers.

The new TEC Series is offered various capacities per chamber: 300kg (JUMBOTEC), 250kg (MIDITEC) and 200kg (MINITEC). Fong's will show the MIDITEC (250kg/tube) with FC30 color multi-function controller, which is a new generation.

Then will present the latest version of the legendary THEN-AIRFLOW®, the SYNERGY 500 G2, which is suitable for all kind of fibres (except pure wool), making it the perfect high temperature choice for every dye house. The latest model benefits from extra features, like for example the self-cleaning filter system or the “hot drop” facility, saving additional 25% of process time and giving the customer one batch more per day- not to mention the savings in chemicals, energy and water.

In the new UNIVERSA of Goller, the conveyor belt is made of stainless steel in design which will bring a more stable condition in the transport of fabric.

The new XORELLA XO-Series uses key components with uncompromised quality and excellent engineering in both performance and reliability to help the customers to save the energy consumption by 15%-25%.

MONFORTS FONG'S has been producing MONTEX 6500 stenter range since 2010 and the machine is available for China and South East Asia.

Continuing its theme 'Go green with Thies', the German textile machinery manufacturer **Thies** (Hall E1, Booth C01) will exhibit its recently introduced rope dyeing machine iMaster H2O; offering a significant reduction of water consumption, chemicals, dyestuff and energy.

The iMaster H2O features a completely new design of rope dyeing for the processing of knit and woven goods.

By installing the transport winch inside the kier, cotton, synthetic fibres and their blends, including articles with a high elastane content are processed with significantly reduced elongation, resulting in fabrics of improved stability and surface appearance while offering increased flexibility in the processing of a wide range of products.

An additional focus has been on the significant reduction of water consumption together with a decrease in the consumption of chemicals, dyestuff and energy. In practise it is possible using conventional techniques, without the need for air technology, to work comfortably with a liquor ratio of 1:4.

Complex rinsing systems combined with 'intelligent functions' for the pre and post treatment of the fabric help to further reduce the total water and energy treatment.

"Saving Costs – Conserving Resources" is the motto of **Mahlo** (Hall E1, Booth B12). The company will present innovations from measuring and control technology for the worldwide textile industry as well as for the coating, plastics and paper sector.

Mahlo demonstrates how energy efficiency can be optimised in industrial corporations and the ecological balance improved on a sustainable basis with the presentation of the new ATMOSSET SMT-12, a dynamic cylinder dryer control system, which already experiences a major demand because of its high savings potential.

Amongst others, a demonstration system with circulating product web will be presented. Here you can view the new straightening concept ORTHOPAC XRVMC-12 at its best. As the first and only straightening system it offers the advantageous combination of simultaneous feedforward and feedback control of the straightening process.

For the coating and converting sector Mahlo presents the modular and traversing process control system QUALISCAN QMS-12. On display is the measuring frame WEBPRO M, which can be equipped with up to 3 sensors.

Benninger (Hall E2, Booth D10) shows a complete CPB dyeing station for knits. With the CPB dyeing process the reactive dye is fixed at room temperature.

Modern CPB dyeing systems with controlled dyeing conditions and the developments of the dyes themselves, this method for cellulose fibres for woven fabrics and knitwear can be used without restriction anywhere in the world.

Despite the massive efforts of machine designers to reduce the liquor ratio, the finishing of knitwear in jet dyeing machines still requires large amounts of water and therefore also large amounts of energy.

In addition to quality benefits the continuous open width finishing process also offers savings particularly in terms of water and energy. Benninger's bleaching and washing plants and the Benninger Küsters DyePad suit this type of application perfectly.



Benninger - Küsters DyePad BASIC for Dyeing

ITMA Asia CITME - Other suppliers

AUTEFA Solutions (Hall W1 Stand A 01) from Germany will provide information about the latest developments and demonstrate the Stylus DZ needle loom under production conditions.

The Stylus DZ needle loom is equipped with the innovative Varilptic drive system. Purely vertical and elliptic motion sequences are implemented with just one drive by the corresponding offset settings in the two eccentric gears which make up the drive system.

The name AUTEFA Solutions represents companies with a long tradition and a history of years of successful participation in the market.

These are the AUTEFA companies in Friedberg, the Austrian sister company Fehrer in Linz, and the Italian company F.O.R./OCTIR in Biella, which have in common that they build machines for the nonwoven industry.

Forbo Siegling / Movement Systems (Booth W5Bo3) is showcasing its latest product developments. Its new printing blankets ensure top printing quality and enhanced web-laying belts optimise the way the product lies. New power transmission belts set standards, offering energy-efficiency and longer product lives. The belting specialist will be presenting its company and latest product innovations from 12 to 16 June this year.

Printing quality is paramount. Which is why Forbo Siegling has developed two new printing blankets that set standards in rotary, flat-bed and digital printing. They have polyester tension members and produce even more accurate printing results. The Print 6646-2.15E is single-ply and has a low-noise underside.

The second innovation in the manufacture of non-wovens is the extremely light, two-ply web-laying belt NP 6711 with a low-drag, finely patterned belt surface. The lightweight design ensures especially quiet tracking, particularly when the widths laid are wide. Also Forbo Siegling's new rotor belts for OE machines are new benchmarks in rotary power transmission technology.

We want to close our short preview at this point and hope that we could give you a first small foretaste of all the innovations and show presentations of leading companies. Now it will be on you exploring the technical highlights, talking to technical specialists about problems and future plans and searching for the opportunities best matching your needs and your business goals.

We will be back with our ITMA Asia + CITME review in the next issue.

Turkish textile industry in the mood to buy at the ITM Texpo Eurasia

„Textile machine trade fairs should take place in textile countries“, says Necip Güney, marketing and sales manager of the TEKNİK Fuarçılık during the run-up to the fair, and we want to take this sentence and see how the ITM Texpo Eurasia, which took place from the 21st to the 24th of April 2012 at the Tuyap Beylikduzu Fair and Congress Centre in Istanbul, measured up.

by Oliver Schmidt



We begin our report with the soft factors. Turkey is simply a country with very friendly people. Good manners and hospitality have a high significance, and are adhered to, something which always makes a visit, either on business or privately, very pleasant. The ITM corresponded to this - it was well organised and always showed itself from its best side. It was a bit of a pity that the Tüyap fair location was situated about 40 km away from the city centre, so that exhibitors and visitors alike needed a day or two to remember exactly where they were. Unfortunately, a short evening excursion to places of interest is not quite as tempting with a two hour journey included.

The organisation and processing at the fair seemed slightly confused and rather hectic at times, but all in all everything ran smoothly and professionally. Halls, stands, subdivision, admittance, catering and chill-out places; all of the little things which can have a decisive influence on the success of a fair and occasionally even swing the decision to buy or not to buy, as well as the atmosphere, were all really good and just so. There were neither big crowds, nor empty spaces. The visual impression of the fair days was that everywhere there were visitors, that there were lots of discussions taking place, and that, nevertheless, the fair area could still accommodate more visitors.

The fair hosted over 40000 local and foreign visitors from 65 countries. More than 500 purchasing professionals came from Bulgaria, Georgia, India, Iran, Egypt, Lebanon, Uzbekistan, Serbia, Russia and Jordan.

The exhibitors' stands bore witness to a convincing and creative presentation, as did the reception and conversation area, and many market-leading enterprises wanted to, and were able to, show their visitors and customers from Eurasia their appreciation by showing their machines within a pleasant ambience.

The biggest stand by far, and with it the most machines on display, belonged to the HAS group from Turkey, who used their home advantage to demonstrate their own strength and their will to expand. The HAS group is a very interesting enterprise. Started as a toll manufacturer about 20 years ago, then active as a cooperation or manufacturing partner, the enterprise began to produce under its own label some years ago and has grown well since then. The HAS group is active in the finishing sector and fits in to the segment alongside huge German enterprises like Monforts and Brueckner. What appears to be difficult to impossible, if one takes into account the innovative strength and standing of both German enterprises in the market, has been successfully mastered by the HAS group through two specific factors. On the one hand, Turkey has a strong finishing industry, so that a lot of potential buyers exist, so to speak, on their own doorstep, and secondly, their prices. "Many customers in Turkey compare not the ROI, but purely and simply the purchase price" a German sales manager told us. Meanwhile the HAS group has a significant market share in Turkey and is expanding with sales branches in other countries. India, Bangladesh and South America are some examples. Growth, when others are still suffering from the after-effects of a crisis, brings a lot of self-confidence, and that is the way that the HAS group also appears.

Convinced of its own strategy and products, slightly reminiscent of hype branches, this enterprise catches the eye and means to do so. Metin Zerlu, area sales manager also told me: “We want to grow, want to get on, and be successful. Here the shops run very well. We have sold the Tumbler 5 times already, and there are bound to be more“. It will be interesting how the HAS group present themselves at the ITMA Asia, and how they intend to persuade Asian customers of their products.

As expected, the presentation that world market leader Oerlikon put on was nearly as large and just as stylish. The strength reflected in their “Innovation has a name“ claim could also be seen on their exhibition stand, even if their machines were absent. Many visitors would certainly have liked to check out the new Autocoro 8. However, although the machine was not on site, Oerlikon had thought up something clever to make up for it. They displayed a single spinning unit with which their sales reps were able to demonstrate the advantages of the machine, something which was of interest to the visitors. The Oerlikon employees hardly had to help, because some technically experienced visitors were already advising their colleagues, while the Oerlikon reps were still dealing with their previous business negotiations. In Turkey, spinning is a very important industry which is experiencing growth, and there are state aid programmes for sector expansion, including energy price reductions. The value of Turkish custom to the company was displayed in the fact that every member of the Oerlikon management team was present at the ITM. An opportunity for Turkish customers and the press to get to know the new CEO, Mr. Clement Woon.



At the Oerlikon press conference the new CEO of Oerlikon Textile, Mr. Clement Woon gave an outlook to the press about the company's market position in the Turkish market and their e-save strategy. (f.l.t.r. Stefan Kross, Clement Woon, Gerard Küsters, Daniel Lippuner)

At the press conference staged to mark the event, Clement Woon described the general Oerlikon orientation. Oerlikon describes itself as the largest textile machinery manufacturer worldwide and as the company with the most comprehensive portfolio in the industry both with a focus on fiber and yarns. Mr Woon sees as the key success factor the strong investment in R&D with 213 Mio. CHF in 2011 for the whole Oerlikon Group. Oerlikon have excellent technical expertise in their various companies and a strong focus on innovation. “With our innovations we primarily focus on the world’s mega-trends and offer technological solutions that meet our customers requirements“, said Clement Woon. The global mega-trend that is Sustainability is something that Oerlikon are dealing with using their e-save strategy, started in 2005 by Oerlikon Barmag. Developing energy efficiency solutions with eco drive systems and spindles, technological innovations with higher productivity and less waste production are the strategies that Oerlikon are implementing together with a progressive improvement in quality for chemical fibres, staple yarn, synthetic staple fibres and non-wovens. Mr. Woon additionally mentioned the importance

of the Turkish market to Oerlikon and presented the Oerlikon nationwide Turkish network, which reaches from their strongholds in Istanbul and Gazientep right down to the Syrian border.

After Clement Woon, Stefan Kross, now with the merging of the business area into 3 units Head of Oerlikon Textile Manmade Fibers, made a speech about the innovations made by Oerlikon Neumag and Barmag. Mr Kross sketched the way that Barmag are making toward green production, including the special Wings POY success story. Since their market launch in 2007, over 12,000 Wings POY machines have been sold, and there are 9,000 spinning positions to deliver in 2011 to 2013. Following this he spoke about the start of the WINGS FDY success story, with over 2,000 sold positions, with 2,000 positions still under negotiation. At the end he spoke about Neumag, who have between 65-70% of the global market share, making them the absolute market leader in the broad field of carpet yarns.

Gerard Küsters, Schlafhorst manager and now Head of Oerlikon Textile Natural Fibers, said that Oerlikon Schlafhost is an innovation leader for ring spinning, winding and rotor spinning. Products like Zinser Ring spinning machines, Autocoro Rotor Spinning and Autoconer Winding are famous enough not to have to give them a big introduction. The new Autocoro 8, the revolution at the ITMA, has already been sold 150 times. This is not bad, but in comparison to the 3 million spinning positions sold worldwide of the BD machines, it seems expandable.

Then Mr. Küsters spoke in detail about the increase in productivity, as well as about the new developments in energy efficiency. (You can find out more on this subject on the Oerlikon website).

<http://www.oerlikon.com/textile/>

To conclude his speech, Mr Küsters turned his attention to the 40% reduction in energy consumption at Oerlikon Saurer Twisting Volkmann CT, a feat achieved whilst simultaneously increasing yarn quality.

To round off the press conference, Daniel Lippuner, Head of Oerlikon Textile Components, introduced the various products in his range, for example, the Texparts PK 2630 SE weighting arm and the Heberlein TexJet ATY air texturing jet. In particular, Mr. Lippuner once again pointed out the fact that Oerlikon Textile Components has had a franchise store in Turkey that can deliver the components and spare parts important to spinning mills since 2009.



Oerlikon Schlafhorst rotor spinning machine Autocoro 8

In the Q&A session that followed, the question was posed as to the relocation of their headquarters to Shanghai. Clement Woon explained that the location of the headquarters makes little difference, because Oerlikon is represented locally in every textile-producing country, always in close cooperation with the customer. Gerard Küsters then added the Oerlikon motto: “Be close to the markets, choose the right setup!”

Back to the exhibition. The knitting area registered the greatest visitor numbers by far, which should not come as a surprise, because the Turkish textile industry traditionally has very strong roots in the knitting industry. Exhibitors in this area were, for example, the German company Karl Mayer, Mayer & Cie, Stoll und Terrot, the Japanese company Shima Seiki, and Pai Lung from Taiwan. If one could project business transactions dependent on the number of the visitors to a stand, the German company Stoll, who displayed some of their latest products in the flat bed sector, and the Germans Mayer & Cie, who displayed three of their very modern circular knitting machines, they must both have done some fantastic business. The communal stand of both of these enterprises was generally completely full of visitors, and the reps on the stand were very busy indeed. Our own interview took place after a wait of about 3 hours. The Area Sales Manager at Mayer & Cie, Mr. Torsten Meile, told us that business was going well, and that they had already sold more than 70 machines directly from the stand, contrary to the standard business transaction period in Turkey, which takes a little longer, this being part of the ancient Turkish commercial tradition. Stoll declared similar results from their stand.

Just as content with the number of visitors and business transactions was Mr. Motofumi Nakanishi, Area Sales Manager at Shima Seiki, and Maik Kretschmer, Sales Rep from Terrot which was re-established in 2006 in Chemnitz (Germany).

The highlight of the Knitting area was the HKS 3-M Trickot machine from Karl Mayer which was set in motion every hour on the hour, shining whilst displaying its technological advantages. The Karl Mayer stand was generally well visited, and qualified engineer Rainer Kemper, Senior Manager at Warp Knitting, was quite satisfied with the interest in the machine, and business in general.



Karl Mayer tricot machine

The Spinning area did not have as many visitors as did the Knitting area, although there were many customers in the Yarn Market, which ran parallel.

Rieter, the Swiss model enterprise, constructed a highly visible stand, right at the entrance of Hall 2. Large, spacious and well organised – just as we'd expect from Rieter. The highlight of the exhibition was a working Rieter K45 Compact spinning machine on which core and fancy yarns were spun to show the flexibility of the machine, as well as the quality of the thread itself.



Rieter K45 ComforSpin machine

The K45 was very popular amongst the Rieter's Turkish clientele, and it was later donated to the Ege University in Izmir following the exhibition. Originally, Rieter's idea was to present a range of textiles made from different materials spun on a range of spinning machines. They had intended to research the customer market as to which Rieter machine could best finish each type of material. Rieter is the only company to offer spinning machines of all 4 types. Jürg Grest, Rieter Project Leader TIS for Technology Yarn Reel Systems, took time out to explain everything to us. He reported that Rieter has a high share of the market, and has had a number of constant customers in Turkey for many, many years, and that, accordingly, business is going well.

The German spinning preparation market leader Truetzschler was on the booth of their local representative. The visionary concept of a stand in the form of a tunnel stood out from the rest, and also increased the appetite for the ITMA Asia, and the expectancy of other possible surprises in the presentation area. Not to be outdone, Truetzschler brought on their new star product, the new card TC 11. Truetzschler Sales Manager Gerd Paul Wienands sees the Truetzschler Card technologically far advanced, with the proviso of an explanation of the advantages of higher productivity and energy efficiency because sometimes, unfortunately, only the cost is considered. He reacted with slight restraint to questions regarding business transactions, but all in all, seemed to be quite satisfied.

The Italian companies Savio and Marzoli introduced some of their new developments live to the Turkish customers on site.

Although the crowds were not as big, the reps on the stand were constantly involved in negotiations and displayed their machines. Just as at the ITMA, the Marzoli stand was very well equipped with machines, but their stand was not quite as large and as smart as at the ITMA.

We were disappointed by the fair participation of the weavers, because it was the weaving mill which was one of the highlights announced in the run-up to the ITM by the organiser. ITEMA were represented by the stand of their local rep and well nigh disappeared amongst the flock of brands, the Belgians from Picanol had a small stand, as did the Swiss company Stäubli and Smit from Italy. The Germans from Lindauer Dornier didn't turn up at all. It doesn't look as though Turkey is about to become a great weaving centre in the near future.

We have already reported about the dominance of the HAS Group in the Finishing area at the ITM. Also exhibiting were Monforts, Mahlo, Brückner und Thies from Germany, Santex and Benninger from Switzerland, and Fongs from Hong Kong. While Benninger presented one of their machines on site, and Josef Kleinheinz, Head of Sales, was fairly content with the level of business and negotiations, Santex set up a simple info stand. The Monforts' reps were always occupied talking to customers, and business seemed to be going well, according to the expressions on the faces of their reps. The German company Thies also received many visitors as they presented their new iMaster, and were pleased with progress at the fair. Besides the Knitting area, the area that received the greatest visitor attention at the fair was the Printing area.

However, one could not be certain what the driving force behind this was: A genuine interest in business opportunities or for the free giveaways, which are always popular at this type of event. The most popular port of call was the RoqPrint Oval Screen Printing machine from the Portuguese manufacturer Sroque, who demonstrated how a black cotton T-shirt could be printed with an additional flock motif within 5 minutes. Good money can be earned with such a machine and a suitable number of orders, and the ROI can be recouped at best within one year. Sroque export manager Europe, Turkey and Pakistan, Sasa Zarkow, reported that they sell the machine mostly in Portugal and in Brazil, but are now breaking into other markets too.



sroque_SetRatioSize700250-roqprintoval

Amongst many other exhibitors were the major players: Storck Prints from Holland and Kornit Digital from Israel, both represented by really big stands and a decent product portfolio. Storck Prints (spgprints) presented themselves as a total systems provider for the textile printing industry. As to their innovations, the Dutch company displayed the brand new Sphene digital textile printer and the unique NovaScreen® rotary screens. Kornit also presented a wide range of their machinery. Jonathan Yanai, Business Development Manager Europe, reported to us that he was receiving more visitors and doing better business than he had expected. In attendance for the first time at the ITM was the printing machine manufacturer Durst from South Tirol who have recently extended their portfolio with digital printing systems for textile printing. They had previously exhibited at the ITMA. Their Kappa machine which was on display was very popular, and Durst seem to have set foot firmly into a new market segment. In addition, Christoph Gamper, EVP and designated CEO of the Durst Group said: “Kappa 180 has been accepted very well at its debut in Turkey at ITM 2012. Durst together with distribution partner Saatcioglu, is proud to announce that the first 3 installations go to Kral Textile, Turbo Textile, Akteks Textile. I’m personally delighted that we have been able to start so well at ITM and now, in partnership with Saatcioglu, we will be the primary choice when it comes to speed and uncompromised quality for digital textile”.

We ought not forget the Swiss company Uster which was recently taken over by Toyota Industries, and who presented their latest developments in test systems on a very large and spacious stand. At Uster too, one notices over and over again that the quality of the products and the marketing simply fit together well. Uster also let slip that the Tester 5 on display had already been snapped up.

Well. High-quality machines can probably be built by many enterprises. But to give the enterprise a philosophy, to build up a really strong brand and live this spiritually too; that can be done by far fewer companies, we think.

To conclude, a word or two about the Yarn market and the Hightex 2012 which ran parallel.

The Yarn market took place in Hall 6 and many exhibitors presented their yarn products on rather chic and innovative stands. We spoke to Mr. Murat Bayrak, Marketing Manager with Haksa Textil, one of the big yarn suppliers in Turkey with a wide portfolio of yarn. They produce on Rieter R 40 machines. Mr. Bayrak reported that the yarn market has changed a lot in Turkey recently. The order amounts are getting smaller and concurrently the trend is leaning towards more variety in colour and yarn composition. There are so many repeat orders and short-term delivery requests that

Haksan functions practically as a customer warehouse. Haksan meets this trend with an internationalisation of their business. Their aim is to deliver globally and to become more independent from regional economic crises. Up until now, their most important sales areas are Russia, China, North Africa and South America.

The Hightex appeared not really separated from the ITM and was also accommodated on the margin in Halls 8-9. However, Dilo Systems, a market-leading enterprise was in the Nonwovens area on site. Indeed, “only” with an info state, after Dilo had aroused enthusiasm with a complete Nonwovens Line in work fashion at the ITMA. Hjalmar Schwab, Sales Engineer at Dilo, did not give away much. He merely alluded to the fact that some business deals were being concluded here that were in fact initiated at the ITMA in 2011.

Let’s look back, in our conclusion, to the starting point of our report: “Textile machine trade fairs should take place in textile countries“. We say yes, because the possibility is thereby given to many people from textile-producing countries to further educate themselves and to receive an impression of the state of these technologies. And we say yes, because it is simply fair that products should be shown in the countries which are supposed to buy them. And we say yes, because the ITM was, all in all, simply a complete event, even if one could maybe criticise that the dates included a public holiday, which was not quite optimum on the Monday. However, we say clearly no if that statement should imply that all textile machine trade fairs should take place in textile countries.

The ITMA remains the most important exhibition as it offers unique possibilities for worldwide networking and excellent infrastructure of the exhibition location cities providing a completely different potential for the exhibition of machines.

And with all the praise that does indeed go out to the organiser, a cooperation of TEKN_K Fuarcılık and TÜYAP with the support of TEMSAD, they must allow for a little criticism, too. Four weeks after the fair, there is still no new information available on the web page, e.g., regarding the numbers of visitors. It would be a great improvement if they could correct this for the next ITM exhibition in 2014. Unfortunately, this information is also absent under www.itm2012.com, however, it may be found soon under www.itm2014.com. The domain, at least, has been registered.

Impressions ITM 2012



The ITM Texpo Eurasia took place from 20.-24. April at Tüyap fair convention center in Istanbul.



There have been many visitors during the 4 days although the Monday was a celebration day in Turkey.



First point for many visitors was the map with an overview about the halls and stands.



The yarn market took place in halls 5 and 6 with many exhibitors and nice presentation concepts.



Turkish yarn business has changed in the last year to smaller order quantities with more diversity in the yarns and less stock-holding.



Rieter from Switzerland presented yarns from all four kinds of spinning. The attraction of the the booth was a K45 compact spinning machine for finest yarns.



For the Turkish HAS Group ITM was a home match and they presented with an amazing stand concept and a whole drying line.

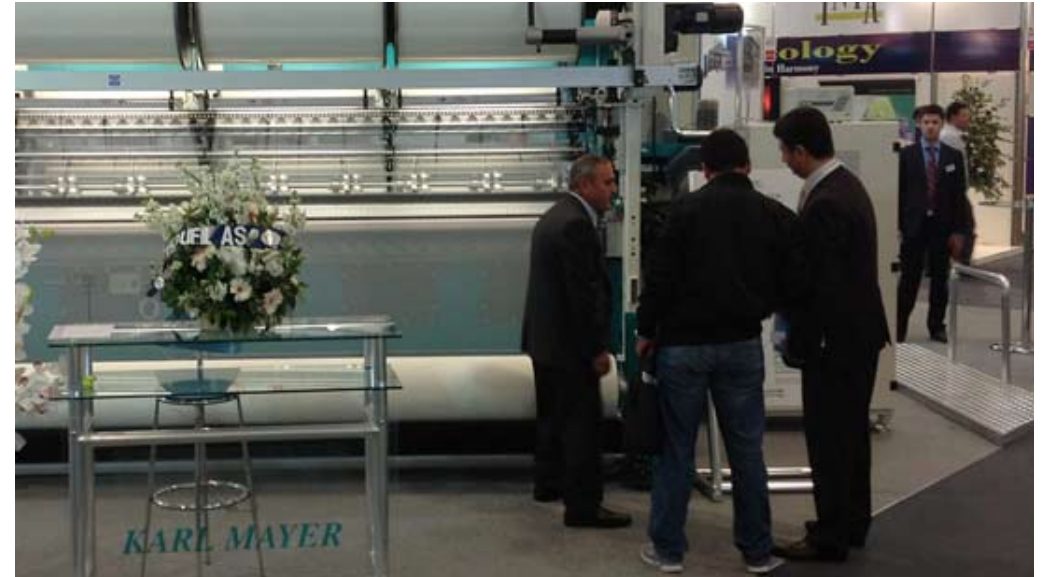


The most visited hall was the knitting area where market leading companies presented their innovations.

Impressions ITM 2012



German Stoll and Mayer & Cie shared one booth which was an attraction for the knitting buyers.



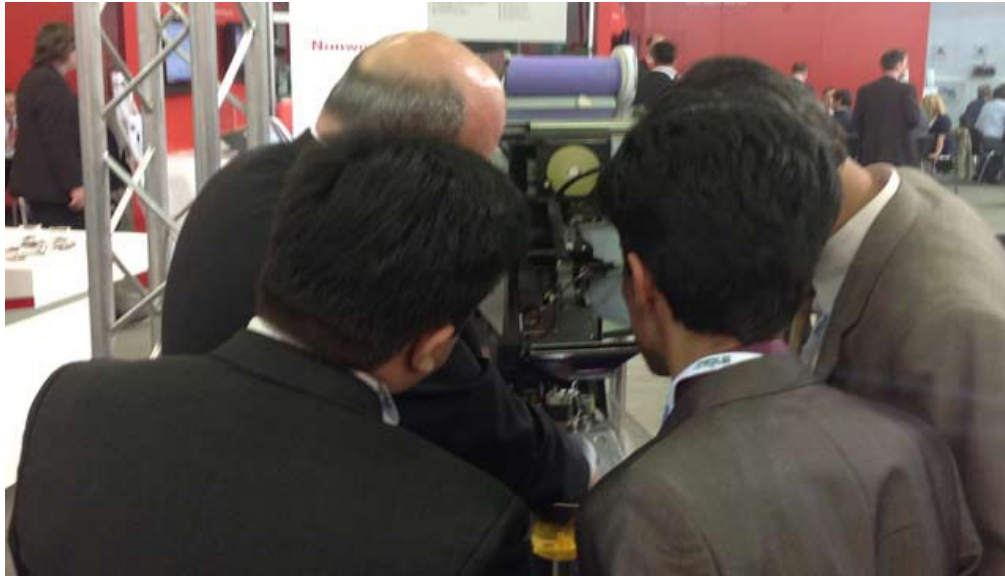
Visitors loved to see the Karl Mayer trikot machine in action. Every clock hour the warp knitting number one demonstrated their technological advance.



Circular knitting specialist Terrot from Germany also announced good business.



As could be imagined the Oerlikon booth in hall 2 was always crowded.



Many visitors showed great interest in the new rotor spinning machine Autocoro 8 and the stuff didn't get a break while explaining the functionality of this revolutionary technology.



The German spinning preparation market leader Truetzschler was on the visionary booth of their local representative and showed their new card TC 11.



Spinning specialist Marzoli from Italy showed several of their ITMA innovations in working mode.



USTER from Switzerland showed their latest innovations and let all the visitors know that the presented Tester 5 had already been sold.

Impressions ITM 2012



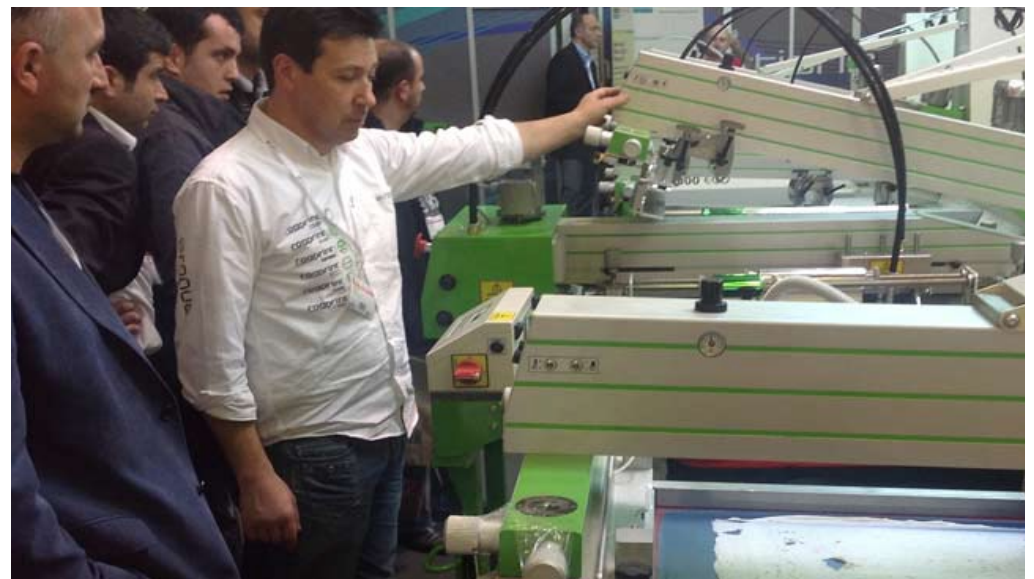
Starlinger from Austria addressed many visitors with their machinery for high innovating packaging solutions for example for concrete sacks.



Dilo Systems joined Hightex and was concentrated in closing the business they had prepared on ITMA where they had shown a complete nonwovens line.



Monforts people were to busy to talk to us because business demanded all the man power and went very well.



As always on exhibitions producing samples for the visitors is a good marketing instrument to get attraction - here done by sroque from Portugal.



Storck Prints (spgprints) from The Netherlands presented themselves as a total systems provider for the textile printing industry.



kornit Digital from Israel is a heavy weight in digital printing and presented a wide variety of their machinery.



Durst form South Tyrol in the Alps broadend their business very successfully from a ceramic printing specialist to textile printing.



Next ITM will be in 2014.

Review: Techtextil North America 2012

Back to Pre-Recession Level

The ninth edition of Techtextil North America, now incorporating ATME-I, took place April 24 – 26, 2012 at the Georgia World Congress Center in Atlanta, Georgia. The show was co-located with Texprocess Americas which resulted in a dynamic synergy creating the largest and best technical textiles, nonwovens, textile machinery, sewn products and equipment trade show in the Americas.

The 2012 Techtextil North America event hosted 314 exhibitors from 22 countries including international pavilions from Belgium, Canada, China, Germany, Italy and Portugal with a total co-location attendance of 6,800 from 62 countries and 475 exhibitors from 26 countries.

Michael Jaenecke, Director Brand Management Technical Textiles

/ Techtextil commented, “It was already the 9th Techtextil North America and yet I can not remember such a busy show - from the very first minute of the first day. The feedback from the busy floor was very positive regarding quality and quantity of the business talks. The reasons are various, amongst others the recovery of the US economy, the combination with the premiere of Texprocess Americas and the support of the associations ATMA and SPESA. Due to their success at this show some companies and country pavilions gave options for Techtextil North America 2013 in Anaheim, California.”

“Techtextil North America and Texprocess Americas is a must go to show for anyone whose business is connected to the textile industry.”

Atayne, Jeremy Litchfield, President & CEO, USA

The 2012 Texprocess Americas event hosted 161 exhibitors from 11 countries including international pavilions from China and Germany, as well as a SPESA-IT and SEAMS pavillion with a total co-location attendance of 6,800 from 62 countries.

John Gallagher, President of Messe Frankfurt USA, on the conclusion of the 2012 edition commented “I am extremely pleased with the results of Techtextil North America and Texprocess Americas. Our attendees experienced three days of informative symposiums and a busy exhibit floor with business being conducted. The positive comments I heard bode well for the industry. We look forward to these events continuing to be the meeting place

for these industries.” The kick off to the event was the keynote address by Miguel Caballero, known as The Armani of Bullet Proof Clothing. Miguel’s speech regarding his business and how far he has come with his innovative ideas which brought his designs to life filled the audience with excitement which they took to the show floor.”

ATME-I Incorporation

2012 saw the first edition of Techtextil North America with the incorporation of American Textile Machinery Exhibition–International (ATME-I). The American Textile Machinery Association (ATMA) and Messe Frankfurt USA have agreed on the inclusion of ATME-I with Techtextil North America every even year starting in 2012. Clay D. Tyeryar, President and Assistant Treasurer for the American Textile Machinery Association (ATMA) commented, “I was very pleased with the incorporation of ATME-I into Techtextil North America. The quality and quantity of attendees was the best we have seen in over a decade in North America. We are looking forward to the continuing cooperation in 2014.”

“My colleague and I came away with some cool ideas that will enable us to be a bit more creative on future projects.”

Kimberly-Clark Corporation, Blaine Kessler, Global Non-Wovens Research & Engineering Development Lab Mechanical Engineering Support, USA

„Techtextil North America was an ideal venue for us to debut our products and technology to the technical textile industry.”

Kraig Biocraft Laboratories, Inc., Kim K Thompson, CEO, USA

SPESA EXPO Incorporation

The launch of Texprocess Americas incorporated SPESA EXPO to bring to the Americas the largest and best sewn products and equipment trade show of its kind. Messe Frankfurt USA and SPESA concluded agreements in April 2010 to cooperate, co-produce and launch Texprocess Americas every even year in Atlanta. Dave Gardner, Managing Director of SPESA reported on the results of the show stating “from 2010 to 2012... what a difference two short years makes! From SPESA EXPO to Texprocess Americas. From a business climate that was just recovering to one with more positives and more stability. From off-shoring to on-shoring. As evidenced by the inaugural 2012 edition of Texprocess Americas business is back. As the co-producer of Texprocess Americas, the SPESA association is completely pleased with and proud of our partnership with Messe Frankfurt and our agreement to merge SPESA EXPO into Texprocess Americas. As we predicted, the co-location of Texprocess Americas with Techtextil North America proved to be advantageous for our exhibiting members and for the industry as a whole.

The results from this year's successful, inaugural launch of Texprocess Americas will designate this exhibition and symposium series as a "must attend" event for the entire textile and sewn products industry in the Americas."

SPESA is the only US-based association representing suppliers of equipment, technology, and services to the sewn products industry. SPESA members are the primary exhibitors in Texprocess Americas.

Symposia 2012

Both Symposia were held concurrently with the exhibitions and developed by industry experts. The Techtextil symposium contained twelve sessions with more than 48 presentations in a variety of formats that covered a wide range of topics from high performance nonwovens, sustainable materials, military developments and research to medical textiles. And the Texprocess symposium contained nine sessions with more than 40 presentations in a variety of formats that covered a wide range of topics from Sourcing to the European Market, Manufacturing Technology, World Supply Chain and an International Trade Update Session.

"We feel the Techtextil North America was beneficial to assisting Navis TubeTex to continue expanding into the technical and industrial markets."

Navis Tube Tex, Jeff Dixon, Senior Director, International Sales, USA

Those who attended the symposia felt the sessions were informational and the speakers extremely knowledgeable. One in particular, Connie Chiueh, Material Innovation Team Leader-Footwear with Reebok International Ltd, USA stated "the symposium gives a nice cross section of new material developments occurring in many different industries, which is beneficial for any material specialist looking for new innovations." Other attendees, such as Jim Kaufman with TEAM felt that "the speakers were engaging and the content was in line with the direction of our business today. There were good questions from the audience and afterwards, there were still attendees talking with the speakers. It was nice to attend sessions that were directly relevant to our business interests and future."

Oscar Chavarria, Director of Manufacturing, Williamson- Dickie Mfg. Co., USA, said "I thought the event was very insightful. My main purpose for attending was to gather up intel on the different market outlooks for our industry. I thought the panelists were very knowledgeable in their fields and came prepared with a well of information."

And Fernando Lobo , Sr. Manager, Costing Engineering, COACH , USA, commented, "I participated in two symposiums: New Technology and Manufacturing Technology. The quality of the material presented the high energy of the presenters and the eye-opening presentations featured a great deal of innovation and improvements to the technology throughout the years. The best part of it was that all that technology was available for all to see at the show. "

A Great Indicator that the Industry is Growing and Moving Forward

All of the statements, the good reports regarding business transactions, networking and know-how transfer allow us to hope that the crisis has finally been shaken off now and that we can move on. However, the evident euphoria will probably have referred rather to technical textiles, the reason why being quite clear. Technical textiles are, first of all, a growth market, and secondly, this is a segment of textile production in which research into materials, machines and manufacturing processes has brought about a lot of innovation. Thirdly, the market segments itself even further, and products can be better demarcated from the competition, and claims are to be staked.

Fourthly, it's not just about the price here, and fifth, the companies from Western Europe and North American still have the biggest share of this market. These are five good reasons for participant euphoria.

And maybe the reason for the good surrounding business in the traditional textile and clothing segments of the ATME is not simply the overall recovery of the US economy, but also the general good mood and its ability to breathe a little life into all segments. This would mean that the organisers' concept has been completely successful. We only have to look at the stock exchanges to know how important a confident mood is.

Our conclusion: All in all, both visitors and exhibitors were very satisfied with the exhibition, and the organisers are looking forward to next year. Then the 10th edition of Techtextil North America will take place from 19th to 21th March 2013 at the Hilton Anaheim in Anaheim, California. The second edition of Texprocess Americas will be held in May, 2014 at the Georgia World Congress Center in Atlanta, Georgia and will once again be co-located with Techtextil North America. And the next Texprocess in Frankfurt will take place from June 10-13, 2013. It will be co-located with Techtextil (June 11-13, 2013).

We will take a closer, more extensive look at the innovations on display in the non-woven and technical textile areas in our 11/12 issue.

Innovations & Improvements

Part 3: Knitting

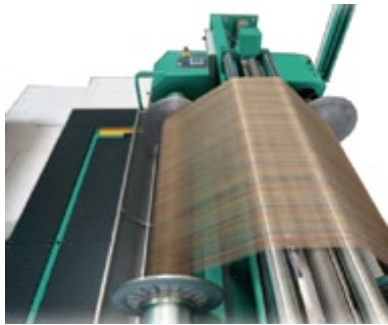
„In this issue of our six-part series, in which we want to have a look at new developments and improvements in machines and processes over the year, we'll be taking a closer look at the Knitting area – as usual along the textile value chain. In the Knitting area there have been some impressive innovations, and market-leading enterprises are reaching constant new heights in their machines due to their R&D results. Developments are focussing on an increase in the speed of the machines, resulting in higher productivity. Besides that, there are also attempts to achieving even more flexibility and the use of even finer knitting mill and hosiery yarns. The most interesting developments of course are the research results of three leading companies in the field of combining knitting with spinning. Mayer & Cie, Terrot and Pai Lung have presented their prototypes to the international press at last ITMA in Barcelona and the first signs are promising. We tell some facts and give an outlook.

Let's start.



Sample warping machine

The German **Karl Mayer**, a leading manufacturer of warp knitting and warp preparation machines, has introduced the **Multi-MATIC®** - a new warping machine for a new segment – at the last ITMA in Barcelona. This latest innovation from KARL MAYER produces sample and production warps of average length at a maximum warping speed of 800 m/min and can process up to 128 yarns. It should bridge the gap between the GOM 24 and the Nov-O-Matic and can process five times more yarns than the GOM 24, besides larger samples, more colours and different yarn material. The machine has a warping length of 35-1500m, a working width of 2250mm, a beam shaft length of max. 2900mm and a layer height of max. 40mm.



Karl Mayer's new Multi-Matic MM 128 sample warping machine

The beaming speed is 150m/min and the color change speed 800m/min. The yarns are taken off directly from bobbins on a standard creel, selected by means of yarn guides in line with the pattern, and placed either with or without using a rotating drum to build up the warp. The selection system is computer controlled and operates automatically on the basis of single thread selection. The yarn is placed at an accuracy of 0.05 mm and the acceleration of the linear motors is 200 m/sec². The drum receives its movement impulses from a torque motor. With these sophisticated features, the new Multi-MATIC® can process virtually every type of yarn – from silk and natural-fibre yarns through viscose, polyester and polyamide to filament yarns. The Multi-MATIC® gives weaving mill the chance to react quickly to the rapidly changing fashion trends of the current markets, with their short development cycles, and also allow them to produce even short runs economically.

Circular knitting machinery

The **Relanit 4.0** by **Mayer & Cie.** seems to be the high speed champion among the single jersey machines. The latest version of the ultra high speed series from Mayer & Cie. achieves incredible 70 revs. in a 30 inch machine during the production of plain single jersey fabric with a speed factor of 2100 thus facilitating production quantities of more than 1500 kg per day. The Relanit 4.0 comes with diameters from 24 to 36 inches and has 4 feeds per diametrical inch. Gauges are from 18 to 28.

The belt drive is controlled over special servo motors which can be operated from the display of the machine. This guarantees an exact yarn supply and avoids fluctuations in the yarn quantity supplied which in general can appear because of lint and oil accumulation when working with belt drives with quality wheels. In order to further increase the efficiency of the machine the Relanit 4.0 has got a computer-controlled knit-on aid which increases the yarn tension for the knit-on process automatically for a short time.

The **S296 - 2** is claimed by **Terrot** as the machine with best price-performance ratio in High Speed Single-Jersey for perfect Elastane platine. It is a further development of the S296 – 1 and comes with a wide range of diameters from 26 to 44 inches. Gauges are between 12 and 54. A wide range of different yarns together with up to 4 needle tracks enables large variety in fabric structures. The knitting head has been completely re-engineered with convertible low cost new cylinder needle. The S296-2 offers high flexibility and efficiency in the production of different stitch structures with up to 4 needle tracks. Its ideal distribution of 102 feeds over 32" diameter is proven in practical day-to-day operation.

Another development of **Terrot** is the **SCC6F548**, an Terrot Electronic-Jacquard Single-Jersey with 3-Way-Technique and 4 or 6-colour stripers for frequent and rapid pattern change.. Striper Technology in Single-Jersey has already a very long tradition at Terrot - up to 6 colours stripping in addition with the combination of 3-Way-Technique and the new development fine gauge E36 follows the new trends in fashion.

The new **S4-3.2 R II** by **Mayer&Cie.** is for single striper fabrics and combines productivity and flexibility. Mayer&Cie. Claimed the machine the first striper machine in the world being in a position to produce single striper fabrics with 3 or - by combination of individual feeders also with more colors - at 3.2 knitting feeders per inch.

While the majority of striper fabrics are generally produced with 1.6 knitting feeders per inch (which corresponds to 48 knitting feeders at 30 inch diameter), the absolute limit for 3 colors was at maximum 2.4 knitting feeders per inch for 3 colors so far. The patented Mayer & Cie. solution offers the possibility to produce single jersey fabrics with 3.2 knitting feeders per inch for the first time (which corresponds to 96 knitting feeders at 30 inch) and this with up to 4 needle tracks and full plating of elastomeric yarns on every knitting feeder.

Believing Mayer&Cie the productivity should be up to 70 % higher compared to the current production of 6 color striping fabrics as well as the possibility to use this machine as fully-fledged high-performance single jersey machine with a linear speed of 1.56 m/s (corresponds to 39 revolutions per minute at 30 inch). It could be possible that with this development the traditionally high costs involved in the production of striper goods will in future be reduced.

The **MJ3.2 E DNS** with a gauge of 60 is a real highlight in the fine gauge single jersey jacquard machine sector with fully electronic needle selection.

Mayer & Cie announced it as the first fine-gauge Jacquard machine and says that the machine breaks all hitherto existing limits in the production of circular knitting single jersey fabrics. The unlimited pattern variety which is now also possible for extremely fine fabrics opens up completely new collection possibilities particularly to manufacturers of night and underwear. But also manufacturers of technical applications should likely to become interested in the new fabric qualities.

The Double Jersey **UCC572** from **Terrot** now comes with a gauge of E40. With a system density of 1.6 feeders per inch diameter, optimum operating convenience is assured. Ideal space conditions between the knitting systems take account of the need to adapt a range of supplementary attachments, permitting the production of interesting patterning variants. The ceramic PIEZO selection elements form the electronic-mechanic interface which reliably implements the knitting information even with extremely fine machine gauge at high speeds. Gauge is up to E40 and diameter size is 30 inch.



The **Terrot UCC572T** with a diameter of 34 inch and a gauge of E16 is designed for the production of transfer fabrics. It offers highest production output at utmost efficiency.

The Mini-Jacquard model **UP592M** is one of the latest **Terrot** developments and Terrot says that it stands out by its appliance in the cost-efficient production of Mini-Jacquard mattress ticking.

The combination of a high number of feeders and machine speed allows a high production output.

This latest **Terrot** development of the 8-lock model **I3P284-1** in fine gauges E40 – E50 offers a wider range in knitting structures thus rib and Interlock stitch formations can be combined to new fabric structures.



Terrot UCC572T

Tricot machines

Karl Mayer's latest development in the field of high-performance tricot machines is the **HKS 2-3 E**. Karl Mayer said that the concept of machine type HKS 2-3 E is based on the outstanding features of an 'expert', being definitely the fastest 2-bar high-performance tricot machine ever built. The knitting motion and the knitting elements are clearly designed for the production of purely elastic articles. The machine can reach speeds more than 3,000 min⁻¹. At ITMA in Barcelona Karl Mayer presented the 50 gauge HKS 2-3 and followed the trend to finer gauges. The machine is also available for a gauge of 28, 32, 36 and 40. The 50 gauge machine is especially for lingerie; in general the HKS 2-3 is to produce swimwear, elastic tulle, sportswear, outerwear and lingerie. The exhibited machine had a working width of 130 inches. Additionally a working width of 170 inches and 180 inches are available. There are 2 warp beam positions (free-standing), for sectional beams of 812 mm (32 inches) flange diameter. Optional are 2 warp beam positions (free-standing), for sectional beams of 1016 mm (40 inches) flange diameter.

An important feature of the HKS 2-3 E is the fact that the rear ground guide bar (GB2) is exclusively intended for elastane processing. Moreover, being equipped with an extra-fine compound needle system and especially designed knitting elements, this machine ensures the production of textiles showing a filigree and uniform loop appearance. This is also made possible by tailor-made fabric take-up and batcher executions.

The HKS 2-3 E is best-designed for the requirements of the elastic fabrics market and Karl Mayer said that the 50 gauge version is unique in the market for tricot machines.

The completely newly developed **HKS 3-1** of **Karl Mayer** should address all manufacturers operating in the 'Rigid and Semitechnical' sector. This high-speed machine is the latest in the HKS machine series to be changed over to the successful CFP concept, and sets new standards in terms of speed among the three-bar tricot machines. With the change HKS 3-1 can now operate at much higher speeds and with greater temperature stability.

In order to change over the entire machine to operating at these higher speeds, all the movement sequences at the knitting point were harmonised more precisely with each other, and specific details were optimised. For example, the machine frame was upgraded by carrying out extensive computer-aided calculations. The yarn guide and tensioning devices were also modified. With a fine compound-needle system, the HKS 3-1 obtains a filigree and uniform loop appearance.

When equipped with an elastane device and an elastic batcher, the HKS 3-1 becomes an efficient partner for the production of top-quality elastic articles in the higher machine gauges. Gauges are 20, 22, 24, 28 and 32. The portfolio of working width is 130, 170, 180 and 210 inches. The machine is equipped with individual needle bar and tongue bar synchronously milled, compound sinker and 3 ground guide bars.

There are 3 warp-beam positions, free-standing, for sectional beams with a flange diameter of 812 mm (32 inches) and optionally a flange diameter of 1016 mm (40 inches).

The HKS 3-1 offers an efficient production of elastic and inelastic textiles with small patterns or structures. It can produce lingerie, swimwear, sportswear, shoe fabrics, outerwear and automotive textiles.

LIBA Textile Machines from Germany has introduced at last ITMA the new **COPCENTRA 2K-TWIN GreenLine** 2-in-1 tricot machine. This machine knits 2 different products at a time using the same frame and engine. The advantages are less energy consumption, less heat out and more space available on the production floor.

Lace machines

In the 'Lace' sector, KARL MAYER presented the new, highly productive Textronic® Lace TL 59/1/24 at ITMA. The machine lays between the well-established models TL 43/1/24 and TL 71/1/36 and closes the gap in Karl Mayer's portfolio for Textronic lace.

It is based on the same principles as its predecessor, but shows some improvements in terms of flexibility and efficiency. This new machine is available in a gauge of E 24 as well as in a gauge of E 28. The TL 59/1/24 can also achieve an enhanced maximum speed.

This exceptional speed has increased the price-performance ratio by 20 % compared to its predecessor. This success is mainly the result of integrating the well-tried string bar concept and the efficient KAMCOS® system.

As an optional extra, the machine can also be equipped with the Positive Patternbeam Drive (PPD) for active, tension-controlled yarn feeding. The TL 59/1/24 displayed at last ITMA had a width of 130 inch and produced sheer lace ribbons with a delicate pattern.



KARL MAYER Jaquardtronic Lace

Raschel machines

Another new development in the lace sector is the Jacquardtronic® Raschel machine **JL 40/1 F** of **Karl Mayer** for lace which produces functional yet exquisite lace. The JL 40/1 F produces lingerie fabrics with light-control effects, a soft handle and a low weight, but they also feature all the typical elements of fine, conventional lace. The JL 40/1 F has been equipped with a special bar configuration to enable it to produce fabrics with all these many characteristics. This new arrangement and the possibilities offered by the split yarn threading-in arrangement, mean that the jacquard guide bars can work to form stitches and smooth panel goods having light-control characteristics, without working the conventional pillar stitch/weft construction.

The jacquard bars also enable simple yet effective spotted patterns to be worked in the dense, functional fabric bands. Fine lace fabrics with smart, comfortable compression characteristics are produced, which feature entwined floral and decorative elements as produced on multibar machines and which are used in the tapes and ribbons of lace lingerie.

Karl Mayer said that the JL 40/1F has an easy handling and a short setup time. The working width is 134 inches and the gauge 28. The machine is designed to operate at a maximum speed of 750 min⁻¹.

The new **RSJ 4/1** again by **Karl Mayer** is a quick way to produce fabrics with a lace look.

The RSJ 471 is Karl Mayer's answer to the fact that light and airy lingerie fabrics with a lace look and sportswear incorporating functional zones are in increasing demand. The Rascheltronic® has been specifically optimised to make it considerably faster and more creative than its predecessor. The yarn feed system for the jacquard bars has been expressly modified to increase the range of patterns that can be produced. The yarns used to be delivered from a warp beam all together in a single assembly, but the yarns are now fed to both jacquard bars from two warp beams that are arranged as a mirror image in relation to each other. The separate feed arrangement enables the jacquard bars to execute opposite movements and thus to work patterned net grounds, for example.

These fabrics, which have already become successfully established on the market as spot net fabrics, can now be produced much more efficiently on the RSJ 4/1. The machine offers top productivity and high efficiency, safety in operation, simple maintenance, a wide pattern variety and flexibility also with small yardage. Karl Mayer said, that this innovative Rascheltronic® offers an impressive and more attractive price-performance ratio, in comparison with jacquard circular weft knitting machines.

The RSJ 4/1 has a working width of 130 inch and can handle gauges of 28 and 32. It is equipped with a single-needle bar, a knock-over comb bar, a tongue bar, a stitch comb bar, a Jacquard bar in split execution (JB 1) and 3 ground guide bars (GB 2 up to GB 4).

The RSJ 4/1 can produce patterned corsetry, elastic and rigid lingerie, elastic and rigid patterned tulle, sportswear and decoration fabrics and is best for elastic and rigid qualities.

Producing garments on warp knitting machinery is not new, but it is the **DJ 6/2 EL** by **Karl Mayer**, which was paid a lot of attention at last ITMA when the company produced 3D shapewear panties developed by KARL MAYER in a gauge of E 28, and incorporated additional elastane into specific zones.

The DJ 6/2 EL with integrated Positive Patternbeam Drive (PPD) is an innovative system which actively supplies the knitting process with additional yarns from pattern beams at three locations, which enhances the functional aspects of the textile products. The leg seams and the waist opening of the 3D pantie with its border are incorporated directly into the garment so that they do not roll over unattractively, and create smooth transition points between the garment and the body.

The DJ 6/2 has 4 ground guide bars, a working width of 44 inches and is build for 24, 28 and 32 gauge.

The **Positive Patternbeam Drive** (PPD) is a motor-driven delivery unit. It actively feeds yarn from the pattern beam to the knitting process and therefore offers a gentle handling especially when processing difficult fancy yarns at high speeds. Now there is no need to restrict the speed to 600 min⁻¹.

Further advantages are a textile having an exceptionally uniform appearance and minimal downtimes compared to the passive system.

Maximum machine availability has been achieved, especially by using pattern beams having a package diameter of 14 cm, whose running time has been increased by a maximum of about 50%. However, above all, the PPD system dispenses with the time-consuming processes involved in balancing and rebalancing the pattern beams.

The PPD is build in various machines of Karl Mayer.

The new **PRO SIZE** box of **Karl Mayer** is also designed to offer maximum productivity and flexibility, especially when setting the yarn density. The innovative, compact size bath applies the size extremely efficiently and flexibly. It can process every type of spun yarn, enables higher warp densities to be achieved than is currently the case, and can also operate at high size concentrations and viscosities. In view of the process engineering the new size bath combines three highly turbulent, flow-intensive application zones, which are produced by pairing three counter-rollers with a common main roller, together with state-of-the-art technology for applying liquids, foams and pastes.

This modern jet application system replaces the dipping process used until now. Before every nip point, this ensures that the sizing agent is applied to the yarn uniformly and in a controlled manner, minimises the amount of processing liquor required, and reduces the volume of effluent produced.

The warp yarn is transported in an assembly, without crossing each other and without twisting. Sticky, crossed yarns and yarn clumping are virtually eliminated and the optimum elongation can also be set. The conventional size box with its dipping application system restricts the minimum yarn density to 40% of the total number of yarns as a function of the working width. The maximum yarn density should not exceed 80% of the total number of yarn ends. When working with higher working widths, double size box systems having smaller widths – larger than 2,000 mm – have proved to be the most suitable.

PRO SIZE enables the minimum yarn density to be reduced to 20% of the total number of yarns and the maximum warp yarn density to be increased to 95%. Even at high warp densities, a uniform film can be applied over the entire warp width in working widths of 2,400 mm, 2,800 mm or 3,200 mm using the innovative PRO SIZE machine with its single box system, i.e. a machine that has just one application system. PRO SIZE is also available with a working width of less than 2,400 mm, more specifically of 1,800 or 2,000 mm. By using just one application system, the warp does not have to be divided into sections, and the processing effects are uniform for all the warp yarns - from application of the size, through drying to stretching. Reducing the length of the free yarn paths in post-drying also increases the yarn stability.

The amount of waste, space required and handling processes are also reduced.

Flat knitting machines

The new **MACH2X153 18L** machine is the latest model in **SHIMA SEIKI's** flagship MACH2X series. Like other MACH2X machines, it can knit beautifully shaped WHOLEGARMENT® knitwear with the highest-possible quality at more than twice the productivity over previous models, but this time with the capability to produce sophisticated ultrafine 15 gauge knitwear. The MACH2X153 18L features a special large-hook version of Shima Seiki's innovative SlideNeedle mounted on 4 needlebeds at 18-gauge needle pitch, which effectively yields very tight, high-grade fabrics in the 14-18G range.

The capability to knit ultrafine gauge WHOLEGARMENT knitwear using all-needle is exclusive to SHIMA SEIKI. In this respect the 18L machine possesses significant advantage. The inherent characteristics of WHOLEGARMENT® production of knitting an entire garment in one piece without the need for linking or sewing processes is especially beneficial to ultrafine gauge, because the labor required for linking and sewing such fine gauge items is very specialized and would have difficulties matching the machine in speed, quality and consistency.

Productivity is on par with other MACH2X machines, with a maximum speed of 1.6 meters per second and Shima Seiki's Rapid Response R2CARRIAGE® for quicker carriage returns after each course.

Combined, productivity is more than doubled compared to previous models.

In order to keep up with the increased speed, Shima Seiki's i-DSCS Digital Stitch Control System with Intelligence undergoes a standard upgrade to a brand new system called i-DSCS+DTC featuring Dynamic Tension Control. i-DSCS+DTC permits variable electronic control of yarn tension, thereby supporting high-speed knitting of delicate yarns while reducing the chance of yarn breaks.

With the brand new MACH2X173 8L **SHIMA SEIKI** offers a solution for very high quality middle-gauge WHOLEGARMENT production. Such features as all-needle knitting, the SlideNeedle, R2CARRIAGE, a maximum knitting speed of 1.4m/sec, i-DSCS+DTC and pulldown device allow stable, high-speed knitting of high-quality items. Large-hook SlideNeedles mounted at 8G pitch yield high-quality WHOLEGARMENT products in the 6G~10G range very efficiently. With all-needle knitting, cable patterns and traditional Aran knits can be produced easily using the double racking mechanism, maximizing the middle gauge capabilities of the MACH2X 8L machine.

Affectionately referred to as “SWG-Mini,” **SHIMA SEIKI**'s compact line of WHOLEGARMENT machines—**SWG041N**, **SWG061N** and **SWG091N**—allows customers to participate in the WHOLEGARMENT market with minimal investment in niche products. Among them, SWG091N in particular is especially capable due to its 36-inch knitting width, for knitting such items as gloves, socks, hats, mufflers, neckties and other small accessory items, as well as garments such as infant knitwear, kids' one-piece dresses and ladies' leggings and tanktops. A new 18G version was shown for the first time at ITMA 2011.

The world's first flat knitting machine that can perform shaping in 21 gauge, **SWG-FIRST154 S21** of **SHIMA SEIKI** features improvements across the board over the previous FIRST-series machines. Quick carriage returns using the R2CARRIAGE system yield significant increase in productivity. In addition to the SlideNeedle, its loop pressers and transfer jacks permit a wide variety of patterns in a wide range of gauges never before possible (18G~26G for single jersey; 18G~20G for ribs). SWG-FIRST154 also features i-DSCS+DTC to handle high-speed knitting of the fine and delicate material used in knitting the finest-gauge fabrics.

SHIMA SEIKI machine **MACH2SIG** revolutionized intarsia knitting when it was released two years ago, and it continues to lead the industry with its uncompromising intarsia knitting capability. With a maximum knitting speed of 1.4m/sec combined with quick carriage returns using the R2CARRIAGE system, MACH2SIG is fast enough to live up to its “MACH2” designation. What makes it even more productive however, is its capacity for 40 intarsia carriers—the most in the world—and improved programming speeds using the new yarn carrier setting software that allow users to take full advantage of all those carriers. For ITMA 2011, MACH2SIG was shown for the first time in 18G.

SCG122SN is **SHIMA SEIKI**’s answer to coarse gauge shaped knitting, with a variety of specialized functions to aid in that purpose. With the SlideNeedle, spring-type sinker system and double racking mechanism, bold and interesting designs can be produced with the look and feel associated with hand-knit garments. The 3G machine is capable of producing fabrics with texture in the 2G~4G range. The optional i-DSCS+DTC digital stitch control device with intelligence and dynamic tension control can handle thicker and heavier yarns while preventing sag, and difficult-to-knit fancy yarns can be knit with consistent quality.



SHIMA SEIKI SSR knitting machine



SHIMA SEIKI SCG 112 SN knitting machine

The **SSR112** was originally **SHIMA SEIKI**'s answer to the demands of emerging markets that are currently undergoing a very fast paced transition from hand-flat machines to computerized flat knitting machines. To keep up with such demands, SHIMA SEIKI said that they performed a complete re-think of what it takes to produce a knitting machine. All aspects involved in machine-building were re-evaluated, resulting in an all-new machine that not only realizes high cost-performance, but also offers a completely new perception of value that can only come from SHIMA SEIKI. Despite its tremendous economic value SSR112 retains such proven innovations as spring-type sinkers and stitch presser for versatility, maximum knitting speed of 1.2m/sec and R2CARRIAGE for high productivity, and DSCS digital stitch control for quality and consistency.

The German **Stoll** has improved their **CMS 502 HP** and **CMS 502 HP multi gauge**. These machines are equipped with even more compact knitting systems and shorter carriage reversal times which results in a productivity increase of 10%. The newly developed Productivity Enhancement Pack reduces many knitting sequences and time relevant side sequences which adds up to another 4 % on top! Thus, these two machines truly deserve the title "High Productivity".

Combined spinning-knitting machines

The **Spinit** system is the R&D result of **Mayer & Cie** concerning the integration of the spinning process into a knitting machine. Spinnit has been presented at ITMA in Barcelona to the press by the German company's Head of Research & Development, Wolfgang Bauer.

The machine is still in development and not available in the market. The idea behind the system seems to be revolutionary. The spinning process is integrated and the knitting machine also spins the yarn and has the demand to eliminate the ring spinning and yarn twisting processes.

Therefore the machine has roving bobbins in stead of yarn packages and the roving first passes through a sensor to detect imperfections and then through a three roller drafting unit to reduce the linear density and after that comes to the spinning unit which is an airjet spinning system. At last the knitting process starts.

There are more technical details integrated in the whole process and there some requirements and there are some limitations, too, but all in all the development could become a serious option for knitting mills. Mayer & Cie announced that a factory with 25 Spinit machines which produces 500kg/hour could replace 20,000 ring spinning spindles, 380 winding units and 20 high performance circular knitting machines.

Terrot' s name for the direct spin-knit process is **F132-AJ**. Terrot announced the machine as the new dimension of fabric knitting. The direct spin-knit process uses an air jet spinning system. It does not mount the rovings, clearing or drafting units or indeed spinning nozzles on the knitting machine. Instead it has a creel type arrangement on three sides of the machine which house the complete rovings to spinning process. In other words, yarns are spun by the side of the machine and then fed to it in a more "normal" way. The F132-AJ spinning unit can be fitted to all Terrot Single-Jersey and Double-Jersey machines. The direct spin-knit system is even suitable for high system densities and large diameters (up to 120 feeders) and can be used in gauges from E20 - E36.

The spinning system, which is modular can be fitted with 24, 32 or 40 spinning heads per unit and has an integrated flyer, integrated fluff removal and integrated monitoring process.

The fabrics have a top quality feel and look, a soft handle and good dyeability with rich colours. Elastane plaiting is also possible with the new Terrot system. The F132-AJ has a speed factor of up to 600 (20rpm, 30") and unfinished fabric output of up to 360kg/24 hours (20rpm, 30").

Terrot says that the new procedure offers a remarkable customer's benefit with respect to 33% – 40% less required space, up to 50% energy savings, up to 30% less investment costs and up to 50% less production costs.

Pailung from Taiwan also is working on a development for a combined spinning-knitting machine. The prototype was on their booth at ITMA Barcelona in a box with no windows and it was not possible to get a view on it. Rumors say that the principle is in general the same as of Mayer&Cie.

(We will talk to all three manufacturers to receive latest information about the products and when they will be brought to the market. Please read more in one of our next issues)

Other machinery and accessories

In the Knitting sector, **Groz-Beckert** will be presenting on ITMA Asia an entirely new knitting technology featuring the finest knitting cylinders in the world, as well as the finest precision components. These products enable textile production in the ultra-fine gauge E90 – a world record!

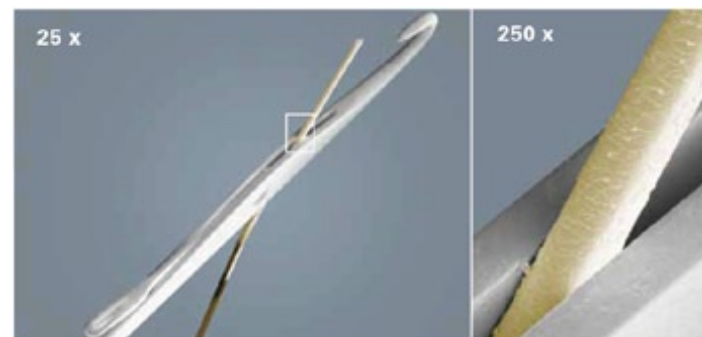
The Groz-Beckert CylinderMaster enables especially simple, reliable and safe cylinder changeovers on single jersey circular knitting machines.

And Groz-Beckert has developed a whole new needle generation which is named Vo-LC™.

The production of particularly fine knits on large-diameter circular knitting machines and seamless bodysize machines imposes stringent demands on the precision of needles. The new **Vo-LC™ generation** from **Groz-Beckert** offers the ideal solution: **Vo-LC™ LOOP CONTROL® needles** by Groz-Beckert are manufactured to an extreme degree of precision. To obtain a completely uniform loop structure, production tolerances of less than the diameter of a human hair have to be achieved.

At the core of **SHIMA SEIKI's** “TOTAL FASHION SYSTEM” and “TOTAL KNITTING SYSTEM” integrated supply chain concepts is the **SDS-ONE APEX3 3D design system**. It links together the various stages of planning, design, patternmaking, programming, production, sales promotion and retail sales into one smooth workflow. Critical to the implementation of these systems is super-realistic simulation capability used for virtual sampling, which effectively eliminates the need for costly and time-consuming samplemaking.

At ITMA, a special display invites visitors to compare virtual samples with real ones; even challenging them to guess which one is real. SDS-ONE APEX3 also features all-new 3D software and KnitPaint programming software, the latter containing the know-how of experienced technicians. Also available is new software catering to other industries such as circular knitting, weaving and printing. As with flat knitting, substituting actual samples with virtual samples reduces time, cost and material waste associated with samplemaking, and improves communication as well.



GROZ-BECKERT Vo-LC Loop Control

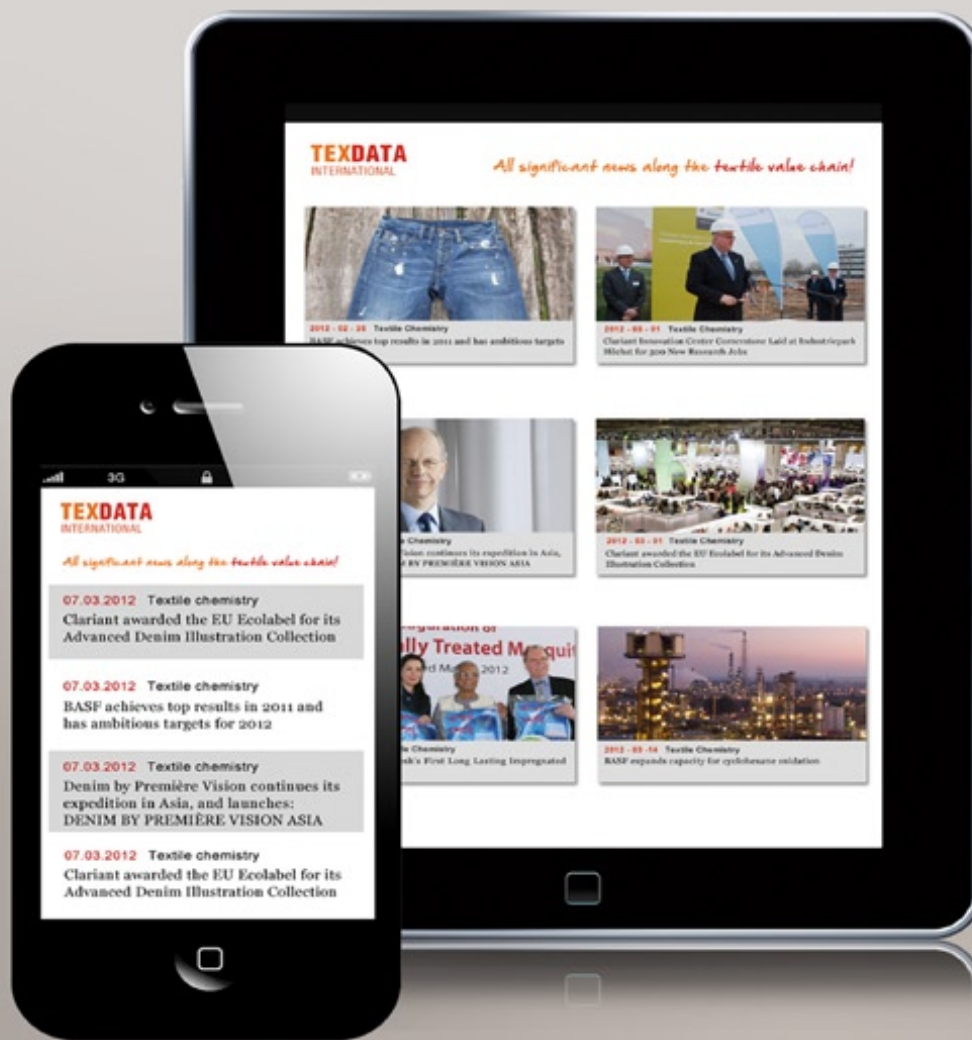
Conclusion

The innovations and improvements in knitting follow some mega trends of the whole textile machinery industry: more productivity, better and smarter control systems and less energy consumption. More convenience in operating and lower maintenance are also goals for all the textile machinery companies producing knitting machines, but it could be stated that these are goals for each company in the machinery industry.

A very special trend in knitting are finer and finer gauges and with the announcement of Groz-Beckert presenting a new knitting technology with a cylinder and components for a gauge of E90 on ITMA Asia the industry will reach a new all-time-high. If you watch the picture of Groz-Beckert showing a comparison of a human hair with one of their new needles it is hard to say, whether this development can go on in next years. It seems a little bit that we are coming to an end, but who knows what technical finesse the R&D departments can imagine.

And it will be very interesting to trace the path of the spinning-knitting combined machines to the start of production. Maybe ITMA Asia will give us new information. The integration idea behind the process could bring us to the vision that in future we will have only one extremely flexible machine for the process of producing a garment in total. But this future seems far away.

We want to close our report with good news for the knitting industry. At the ITM in Istanbul the knitting hall was the best visited place of the exhibition. Knitting machinery companies announced good business and knitting mills made their investments to be well prepared for rising orders. They have bought more productivity, less energy consumption and the equipment to produce knitted fabrics and garments for the coming trends in fashion.



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