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Business // Finance // Market // Technology
Yarn // Fiber *Spinning *Weaving * Knitting *Dyeing // Finishing // Washing // Drying * Nonwovens // Technical Textiles *Textiles // Apparel // Garment
Productivity and Supply Chain
ITMA ASIA + CITME 2014 Preview
Interview with Stephanie Müller, Hohenstein Institute
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Cotton News from International Cotton Conference 2014

Content

Dear Reader,

A lot has changed in China within the last three years. The 12th 5-Year Guideline set ambitious goals that require enormous effort and numerous investments – investments that also affect the textile industry and along with it textile mechanical engineering. I would like to mention China's efforts to rebalance its economy, shifting emphasis from investment towards consumption and development from urban and coastal areas toward rural and inland areas - initially by developing small cities and greenfield districts to absorb coastal migration. And China's plan to enhance environmental protection. Not to forget the increasing salaries and lower economic growth; a GDP growth of around 8% is expected, and it was even slightly lower in recent years with 7.7% in 2013 and 7.8% in 2012.

In restructuring the economy, it is absolutely essential for the Chinese textile industry to attain a higher degree of automation in order to maintain the industry in the face of increasing wages on the coast. This makes automation our top topic this issue. Automation increases productivity and also improves quality – both the quality of the textiles and the quality of production. For this endeavor, textile machine manufacturers from around the world, but especially from Europe, offer the most modern machines that enable highly improved energy efficiency and considerably lower water consumption. This brings us to the ITMA Asia + CITME 2014, this year's most important purchasing trade fair for the Asian textile industry and the last industry event of its size before the end of the 12th Guideline in 2015. This fair is the highlight of the year for us all and we're looking forward to it!

ITMA Asia + CITME 2014 is a stage where crucial investments can be made. And referring to this it may also be important to rethink a totally different process. That is to say, we sometimes hear that buyers focus more on comparing the prices than the quality. In German, we have the lovely word "Preiswert"; in English, one could also say "you'll get the value you pay for"– and that is different than expensive, even when the price itself seems high. Find out more about the ITMA Asia + CITME 2014 in our large trade fair preview, which also includes highlights from the most important exhibitors.

Furthermore, we would also like to give you an update on cotton. In March, the 32. International Cotton Conference took place in Bremen and we've summarized the conference's very current and high-quality contents in two parts for you; we begin this edition with part one, which includes the keynotes and consumers' expectations.
In this instalment of our country focus series, we report on an entire continent and introduce you to South America as a "Textile Country". The extremely low energy prices in the United States could also put wind in their textile industry's sails in the near future.

This edition is rounded out with brief looks back at the Index 2014 in Geneva and the mtex in Chemnitz.

Best regards
Oliver Schmidt

Productivity & Supply Chain

Four factors bring big changes to the textile value chain

by Oliver Schmidt

„The worldwide textile industry has been noticeably subjected to processes of change over the last few years. An example of this is in the area of cotton textiles which should primarily become more sustainable from cotton planting all the way up to the individual finishing processes of textiles such as clothing.

This relates initially to environmental viewpoints but also to social responsibility ranging from safety at work to adequate remuneration. Continuing with clothing as an example, the ever shorter periods between the creation of a collection and the delivery at the point of sale (time to market), so-called fast fashion result in substantial changes to the supply chain as geographical proximity to individual markets becomes a must (a container ship takes ca. 22-25 days from Shanghai to Hamburg).

„The tendency to concentrate on core competences is developing into an increasingly differentiated supply chain.“

Wikipedia

This scenario is familiar to us from the automobile industry where suppliers entering new markets compete most optimally through production plants sited locally. Thirdly the route to the customer is being changed by the displacement of the stationary retail trade as a consequence of e-commerce und online shopping. As if those changes were not enough, there is a fourth change in the form of a wave of automation especially in the emerging countries in the last few years causing wages to rise in the main production centers as well as creating a shortage of skilled workers.

The diagram *(next page)* shows a typical supply chain in the production of cotton clothing and incorporates the changes mentioned. Wikipedia refers to the creation which today we call the supply chain as follows: ‘The tendency to concentrate on core competences (outsourcing, reducing intra-organizational division of labor/production depth) is developing into an increasingly differentiated (i.e. including more collaborative work) supply chain.

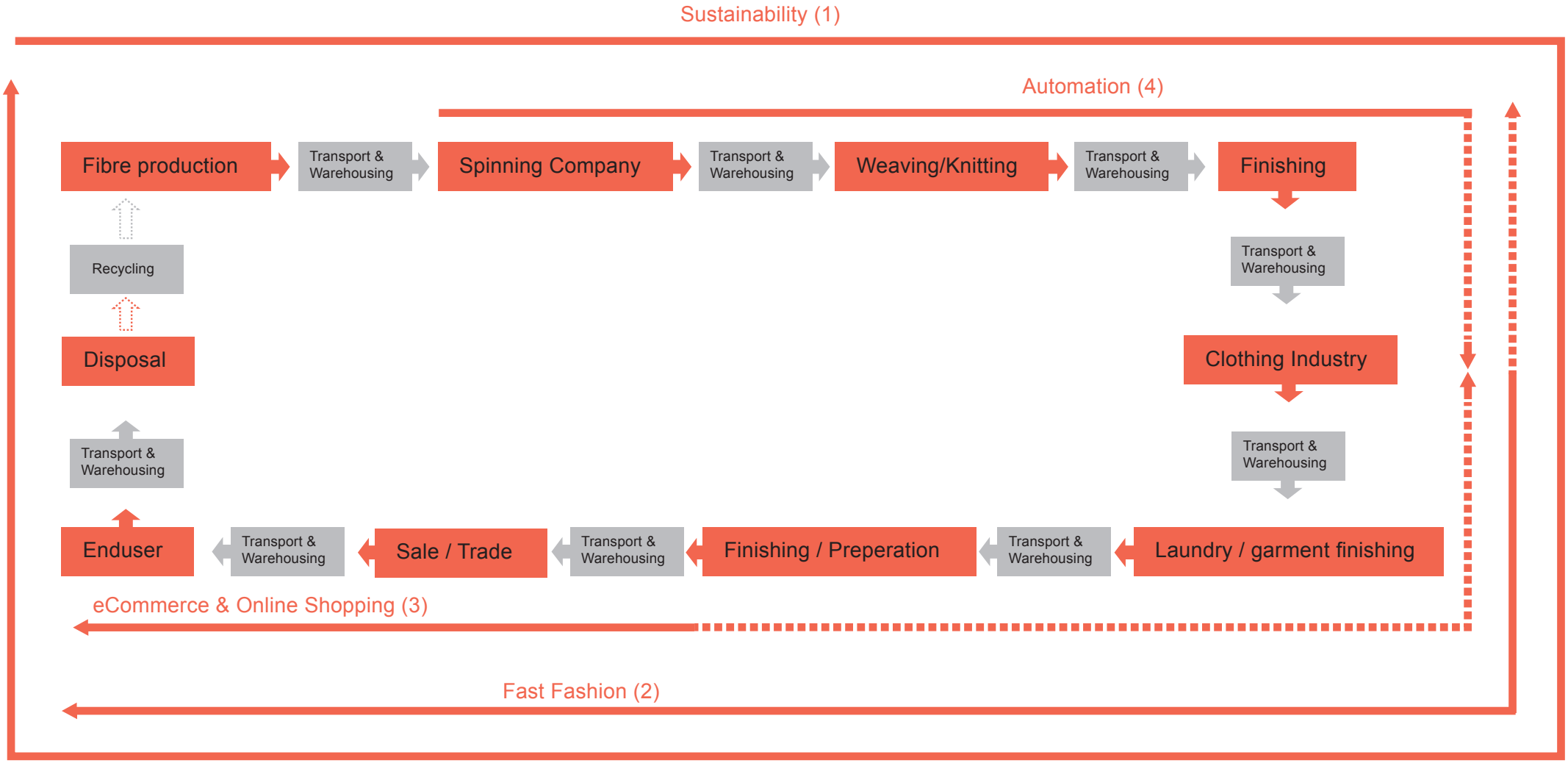
Increased competition in global markets, shorter product times to market, shorter product life cycles and high customer expectations have shifted the supply chains to the centre of decision making in business management. As a consequence retail manufacturers compete in the various target markets not on a vertically integrated basis but rather in alternatively structured complex supply chains connected systematically but consisting of entrepreneurial units acting autonomously.

What our brief report finds fascinating are the complex alternative supply chains in competitive relationship to each other. It is possible to view these supply chains as a three-dimensional spider web with individual firms located at its junctions whose connections reveal far more than a two-dimensional structure could by showing the upstream procurement processes as well as the downstream sales processes. A company has always been dependent on its business junctions to ensure the competitiveness of its sectional supply chain initially in consideration of the costs. Supplementary to that the quality, the reliability of supply and flexibility. Every company needed to ensure that their contribution to the overall structure was performed. It was important for companies to be part of many alternative supply chains in order to minimize their dependence on a particular sectional supply chain. Should a particular sectional supply chain became uncompetitive the company was then able to continue operating successfully in the market through its other business connections.

This proves successful as long as the company does not itself become the problem in its supply chain. Should that be the case then the problem quickly translates into a domino effect as all alternative supply chains shift and the company can very quickly become isolated.

When we link these circumstances to the new challenges it becomes apparent a) what effects result and b) we can speculate a little as to why individual changes quickly develop into a trend.

A characteristic textile value chain



Let us start with sustainability. It has been established that sustainability is an additional factor to cost, quality and flexibility. Sustainability may still be the soft factor, i.e. an add-on that purchasers are happy to accept as the icing on the cake. In the long term it seems as if the weighting is shifting and that a 'green' sectional supply chain as well as compliance with minimum social standards could become a compulsory requirement.

The sections of the fast fashion supply chain should be considered separately as they have little or nothing to do with global competition. Their alternative supply chains are in competition with each other. It is interesting to note however that the sectional supply chains that supply the large markets of the industrial nations, e.g. the European Union, already possessing competitive advantages through strict state imposed regulations relating to the whole sustainability structure, meaning high environmental standards, employment regulations and safety at work, tariff agreements and minimum wages that can lead to their supply chains also becoming competitive on the global stage.

It is quite obvious that the major textile producing countries like China, India and Turkey have to increasingly concern themselves with this competion. Their only available route is to ensure the fulfillment of minimum standards for sustainability and the retention of market share through production units and price.

In addition it may be of interest for individual countries to access higher quality market segments to achieve the market share that they lose in lower quality market segments where the production of clothing has shifted to countries that offer significantly lower wage levels and where a 'fair' wage can actally be acomparably low wage. It is well known that the route has already been facilitated and is supported by reports such as 'The Swedish textile group H&M wants to have its garments sewn in Ethiopia in the future'.

Entry into these market segments requires however that the quality demanded by the respective segments can be sustained and delivered cost-effectively. Although the textile industry is able to grow through the resulting increased demand for textiles generated by a rising world population and the development of new textile applications, especially in the area of technical textiles (one only needs to refer to the 40% growth prognosis for global fiber consumption by 2020) it is more than ever also subject to cutthroat competition. China has long since laid the groundwork in its 12th five-year plan. The adopted resolve of promoting more protection of the environment serves a dual purpose here.

Firstly the government undertakes measures to counteract the heavy environmental pollution within the country and secondly it serves to make the indirect supply chain of its companies more sustainable. Hand in hand with more sustainability is also the desire for more quality.

Mr. Du Yuzhou, President of China National Textile & Apparel Council has already spoken of a Chinese high-tech coast at the WTS in Barcelona and Sauer CEO Daniel Lippuner reported in the TexData interview in July 2013 on the high demand for automated solutions. He said: „We've got some really great opportunities here and we're already doing very good business in China because of this FYP. Thanks to the influence of the government and the objectives set by the current FYP, we have an increased demand for automation with linking and auto-doffing. In China this accounts for 20-25% in ring-spinning machines in 2013 and has risen sharply.

Before this, almost all of the work in Chinese spinning factories was done by hand. Our Chinese competitors have a backlog with regard to automation, whilst we are receiving some very large orders. Incidentally, we are also seeing the same trend in other countries, such as Indonesia and India, for example. It is actually progressing even faster in India, where already 80% of spinning machines ordered have a high degree of automation. Although wages in India have not risen by very much at all, it is becoming more difficult to find qualified skilled workers." The same trend in total automation reported the Swiss Rieter in a recent news about their forum for the Chinese spinning industry.

They wrote: "After launching Rieter spinning machines, the manpower went down to 10 operators/10 000 spindles and the production efficiency keeps 5% higher than that of the peers, and the stable Com4® yarn quality is well recognised by their customers. And that's why we installed another 9 Rieter R 60 fully automatic rotor spinning machines (3 600 rotors) in 2012" said Mr. Tianjue Lo, Senior Vice President of Far Eastern Spinning Division.

The statement of Mr. Lippuner from Sauer Group adds the increasing scarcity of skilled labor to the problem of rising wages. It also indicates that modernization of the supply chain through automation solutions does not only apply to China but also to other textile countries such as India and Indonesia. And it also applies to other industries. The company Stäubli, best known as market leader for dobbies and cams and exhibiting as the Robotis business division at the Plastic Trade Fair K2013, reported for example on the trade fair as follows: „Stäubli looks back on a highly successful K Show in Düsseldorf. More than 3.000 visitors took this opportunity to gain information about groundbreaking innovations from the two divisions Connectors and Robotics.

„We've got some really great opportunities here and we're already doing very good business in China because of this FYP. Thanks to the influence of the government and the objectives set by the current FYP, we have an increased demand for automation with linking and auto-doffing."

Saurer CEO Daniel Lippuner

From Melt to Yarn

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The customised automation display for the plastics processing industry convinced the users entirely. Never before has Stäubli seen such a great demand for application specific products and solutions at a trade fair." Another example is a press news by Sonderhoff, the leading system supplier and manufacturer of polymer sealing, gluing and potting formulations, dispensing machines and automation concepts. They reported: "In 2014 Chinaplas showed that the demand for automated system solutions for liquid sealing systems is also very high in China, not least because labour costs are also rising in China and large quantities in good quality can only be achieved reliably by using high-quality machines."

A look at machine manufacturing yields a similar statement. German Trade & Invest reported in March 2014 as follows: 'The prospects for the market for machinery and equipment in the PR China for 2014 are positive. Despite strengthening Chinese competition German suppliers are holding their own remarkably well. Deliveries to individual segments in China were actually increased - despite an overall decline in machinery imports. Among other things the continuing trend towards automation has had a beneficial effect' Ashley Kindergan reporting for Credit Suisse assessed automation from the view of the investor. Ashley Kindergan writes: „China, in particular, is set to drive significant growth in demand for robots and other industrial automation technologies. A diminishing supply of workers has finally pushed wages higher in the country, and automation is looking more and more competitive to human labor from a cost standpoint."

A report by the company Schlafhorst in this issue on the subject of 'Package winding: a new wave of automation rolls in" names still more aspects for the textile industry.

We would like to show you an indication of how far the subject of automation can extend i.e. how extensive production depth can become by taking company Texpa as an example. As the worldwide leading manufacturer TEXPA is providing fully automatic installations for cutting, sewing, folding and packing of home textiles, based on more than 50 years of experience in mechanical engineering. 'Texpa's aim is to support its customers in the textile industry in the optimization of the manufacturing process by reducing manual work in favor of mechanization and automation. Texpa is currently expanding into the towel market by supplying automation technology. Zhejiang and Jiangsu are the most important manufacturing locations for bed linen. The German trade magazine 'Production' writes that 'in future Texpa is to focus on the bed linen business and plans to build the first fully automated production line for bed linen on the Chinese market'. All told, the position of automation becomes clear. Companies that convert production and take advantage of the opportunities offered by automation are able to continue to produce cost-effectively and at high quantities. Whoever is unable to keep pace then becomes a problem for their supply chain. The alterative then is the retreat into niches or a relocation of production which needs to be well considered though as wages in many countries are rising and well-trained skilled workers are difficult to find anywhere.

What we should also point out as it has as yet not been so distinctly stated is that automation as a rule goes hand in hand with new purchases of machinery and equipment. The higher productivity of automation comes in addition to an increase in the productivity of the equipment itself. Thereby the supply chains from China are operating at the technical level of their counterparts in the industrialized countries and the competition as a whole is changing. The competitive advantages of location that play a role in 'fast fashion' are likely to become more important and should in the distant future only fully automated sectional supply chains compete with each other then energy costs for example would achieve a position of even greater importance.

President Obama is certainly correct when he sees a revival of American industry even though this may not be associated with a jobs miracle in manufacturing.

Let's return once again to sustainability. An interesting article appeared on the Dowser internet portal in December 2013on the subject of ' sustainable production' in the clothing industry. Dowser itself is also very interesting. The company describes itself as follows: „At Dowser, we present the world through a 'solution frame,' rather than a 'problem frame.

We're interested in the practical and human elements of social innovation: Who's solving what and how. We want to know how people come up with ideas, how they put them into practice, how they pay the bills, and what fuels their fire.

Dowser

' We're interested in the practical and human elements of social innovation: Who's solving what and how. We want to know how people come up with ideas, how they put them into practice, how they pay the bills, and what fuels their fire."

The aforementioned article is by Dr Maximilian Martin and is headlined 'Supply Chain Transformation in Global Apparel Is Possible Now'. Dr. Martin is the founder of Impact Economy, a group of impact and innovation specialists, each leveraging unique qualities to form a dynamic global team. Dr. Martin writes in the foreword: "While the growth record and projections for the industry in Bangladesh and other countries are impressive, with turnover in Bangladesh alone forecast to triple from 2010 levels by 2020, it is difficult to envision how these projections could be met in reality if health and safety issues are not addressed and the number of future accidents simply tracks the growth path. This Primer takes a systemic perspective to analyze both the challenges and potential solutions. At stake are the livelihoods and working conditions of millions of workers, a sustainable future for an industry that uses huge amounts of natural resources such as water, energy and chemicals, and serves consumers in advanced economies with fashion products that should be ethically sourced.

Based on extensive industry analysis, we cover specific solutions in this Primer that can help to take global apparel value chains to the next level.“

“Our findings indicate that creating a win-win of raising productivity and competitiveness, as well as social and environmental performance is possible. But an ambitious, systemic approach is needed to achieve industry transformation. This includes pulling the following four levers: (1) fostering total resource productivity and transparency across the supply chain; (2) upgrading the industry infrastructure by (impact) investing; (3) improving working conditions with a new level of ambition; and (4) studying and replicating the best practices of leading producers.

In addition to a whole host of leading examples, the Primer also includes four solution spotlights on key enablers of industry transformation, including:
(1) using information technology to foster shop floor transparency; (2) the implications of the emerging circular economy on business model disruption; (3) improving the use of chemicals in the manufacturing process; (4) and lessons learned from the RAGS Challenge Fund, an innovative effort to improve industry working conditions.” Dr. Martin touches on many subjects in his article that we have already presented to you in our reports on sustainability which do not wish to address in detail at this point, although a number of additional aspects are introduced such as ‘fast fashion’ in Japan, as our main subject here is the supply chain.

He summarizes as follows: “The conditions for change are moving into place in the textile and garment industry. The green transformation of the global economy is in process, and the resulting savings potential is considerable in an industry with such low total resource productivity. Blueprints for supply chain transparency do not yet exist but important foundational work is under way.”

Not to be underestimated are also the effects the internet along with e-commerce and social media has on the textile supply chain. The white paper “Fashion unleashed: the agile fashion supply chain” written by Lisa Harrington and published by DHL Supply Chain, states: “Rapidly changing and often unpredictable consumer buying behavior, enabled by the Internet, mobile communications and growing spending power, has made volatility and complexity the norm rather than the exception in the fashion sector.”

It continues: “It goes without saying that the fashion market is fiercely competitive. The Internet has raised the stakes exponentially. Competition now comes from anywhere in the world, and observes no rules of time or place. Fashion companies must meet this environment head on – or risk the consequences. In an industry where some products are as perishable as strawberries, this is no easy task. Not surprisingly, these forces are driving tremendous change in the fashion sector, particularly in supply chain networks and operations.”

The author reports on three major trends in the first part on ‘Current state and driving trends’. Trend 1 is named ‘The digitally empowered consumer.’ She describes the current and future online consumers in all their different facets and opportunites. Trend 2 is described as the ‚Rise of disruptive retailers’. In this, she primarily outlines the changes and opportunities of fast fashion, whereby there are a number of further interesting aspects here which we would like to introduce to you in future issues. Trend 3 is the ‚Growth of the global middle class’. Here, she describes and evaluates prognoses on population growth and the growth of the middle class which according to forecasts by the World Bank is to number over 1 billion people worldwide by 2030. She writes: „Reacting to these demographic shifts, the fashion sector is adopting a market model which balances demands for localization of offerings with the need for operating efficiency.“

The second part ‘Tailoring the fashion supply chain’ deals with the likely changes to the supply chain. One criteria is flexibility which implies the quick adaptation to requirements incl. rapid scalability. Another is segmentation. “Supply chain segmentation tailors the supply chain to the customer segment. Under this model, products and/or customers with different characteristics are served through different supply chain processes, policies, and operational modes.”

Segmentation has similarities to the model of sectional supply chains and would strengthen particular routes as certain customers are optimally supported by it.

She writes: „Based on the overall efficiency versus responsiveness trade off, companies choose the right approach and execution partners for each key driver – i.e. supply chain network, facilities, inventory, forecasting and replenishment and transportation. The third criteria 'Taylored sourcing' divides segmentation to an even further extent. „Decisions would develop tailored to demand and product characteristics." 'Postponement' follows as a fourth criteria. "Postponement delays final product differentiation until closer to the point of sale. While not a new concept, postponement today helps companies quickly ramp up in fast-growing markets while at the same time optimizing production."

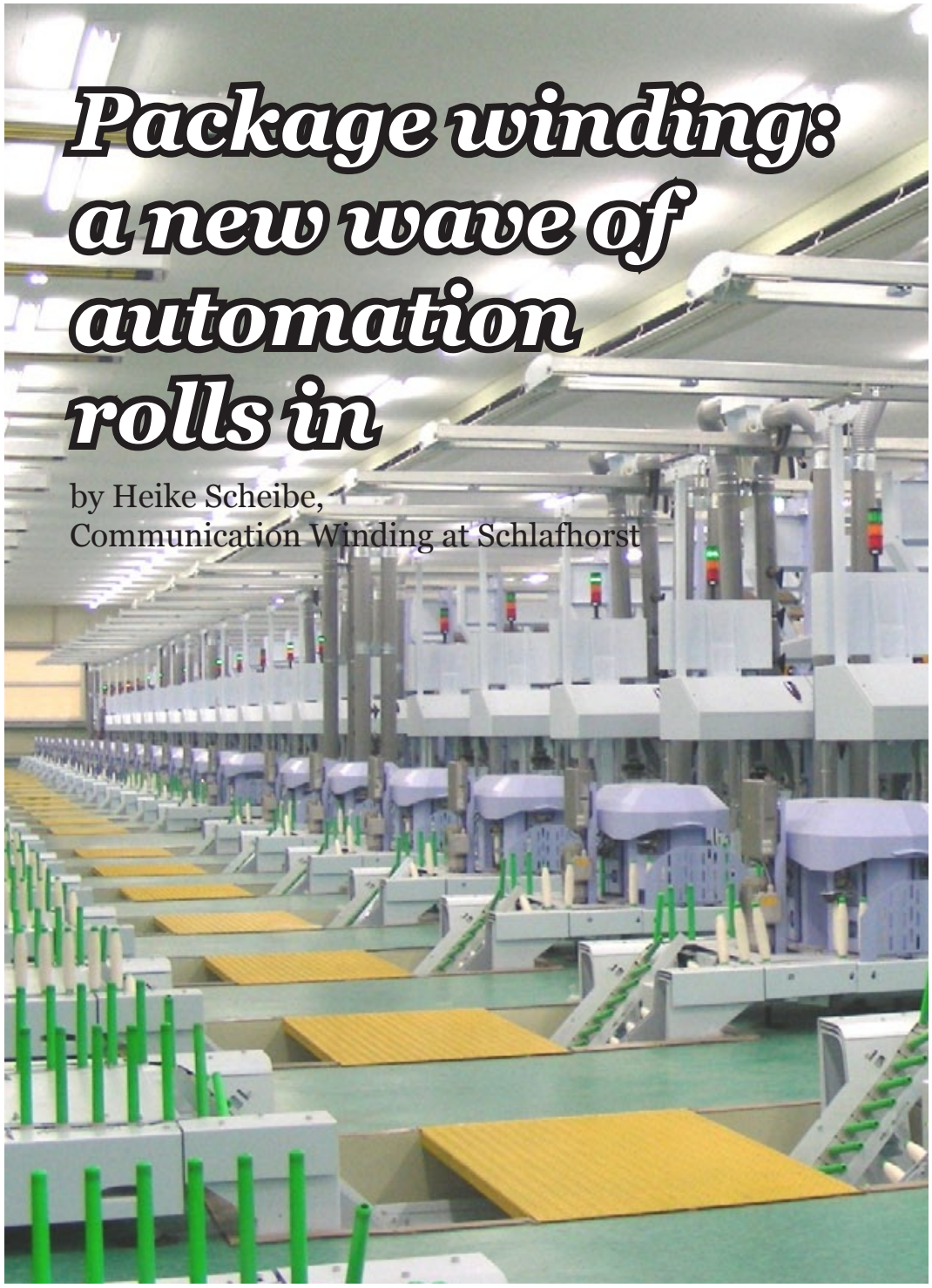
The fifth criteria of 'Shared networks' refers to cooperation between manufacturers in the area of logistics as it is of importance but nevertheless not part of the actual competition between them. And the sixth and final point Ms. Harrington names ‚Accelerated inventory'. „Using this approach, product does not move from the factory to warehouse stock, but instead flows directly from manufacturer to a consolidation point operated by a 3PL." The author arrives at the following prognosis in her view of 'Prospering in disruption ':"To prosper in this environment of light-speed change, market disruption and wide-ranging complexity, fashion retailers and manufacturers must create and manage supply chains that are 'fit for purpose'. This means being able to serve markets around the world with a supply chain that is resilient enough to withstand shocks, agile enough to respond quickly to sudden or unexpected change, flexible enough to customize products and efficient enough to protect margins."

As stated at the beginning of our article, these consist of numerous changes and additional major demands placed on textile companies worldwide in asserting themselves over competitors in their own supply chain and positioning themselves in regard to their customers.

Transparency, a high degree of organization with production optimized by automation and most modern machinery are the factors for confronting the challenges depicted for the future. In this regard ITMA Asia + CITME 2014 once again offers a good opportunity to interact with the machinery manufacturers by consulting them in regard to one's own views and objectives or to set out requirements.

http://www.impacteconomy.com/papers/IE_PRIMER_DECEMBER2013_EN.pdf

http://supplychain.dhl.com/fashionagility2013



Package winding: a new wave of automation rolls in

by Heike Scheibe,
Communication Winding at Schlafhorst

Since 2012 Schlafhorst has been experiencing a sharp increase in demand for customised automation solutions in the package winding department. A new wave of automation is rolling through the global textile markets that will change the industry significantly in the next few years.
With the Autoconer X5 and its new modular automation options, Schlafhorst offers spinning mills worldwide an optimal opportunity to ride this trend successfully.

Automation becoming more individual

There are basically three factors that trigger major automation initiatives in the industry: rising labour costs, a shortage of skilled staff and growing quality requirements. Rapidly rising investment in automation of the package winding department is currently marking a new trend.

Until recently, the main markets of China, India, Pakistan, Bangladesh and Vietnam invested primarily in the Autoconer RM manual machine type. Since 2012 the proportion of automatic Autoconer X5, type D and V winding machines has been increasing steadily and perceptibly.

China and India above all are proving to be trendsetters. The degree of automation in these markets is growing dramatically. It is noticeable that the trend towards automation has become much more individual. Gradual automation in differentiated stages is just as feasible as the complete integration of the material flow of the ring spinning machine and package winding department for maximum efficiency and quality.
For this reason Schlafhorst now offers its customers made-to-measure process automation solutions, which are optimally coordinated to the profile of requirements of each market and company, with the modular machine concept of the Autoconer.

Autoconer - the name says it all

Competence in creating innovative automation solutions is a tradition at Schlafhorst. The Autoconer 107 in 1962 was the first machine for automatic package winding to be ready to go into series production. Its automated sequences for eliminating yarn breaks and for bobbin changes were groundbreaking at the time. Time-consuming manual joining of the yarns and changing every single bobbin by hand were thus consigned to history.

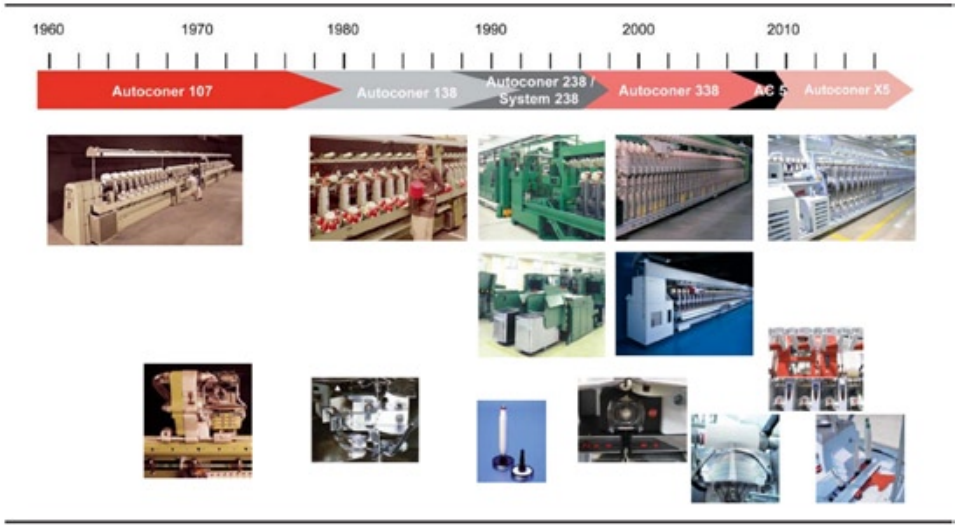


Fig. 1 Autoconer: continuous innovations for automatic package winding

In the years following, the name Autoconer became synonymous with automation in the package winding department. Operation was simplified continuously, and more and more sequences were automated.

An important impetus for automating the material flow and processes came during the 1980s from the then main markets of the textile industry in Europe and America, where rising labour costs led to a strong shift towards automation. With its caddy transport system for the Autoconer system 238, a feature that is unsurpassed even now, Schlafhorst created a milestone for the entire industry.

A holistic view of automation

The major strength of Schlafhorst was and is its ability to look at processes in the spinning and winding mill as a whole in order to be able to introduce functional innovations into the individual process stages. Automation was thus looked at from a wide variety of angles too. It is found in different sequences in the winding process, for example:

- in the winding process itself and its operation
- in package handling
- in bobbin transportation and handling
- in the process sequence between spinning and winding

With regard to automatic operation of the winding process, for example, sensor-monitored process sequences and central setting of the winding parameters at the Informator were introduced. These advances eliminated labour-intensive mechanical adjustment and settings at the individual winding positions. The introduction of the Autoconer 338 was accompanied by the facility for setting the yarn tension regulation centrally, Autotense FX, and the sensor-controlled, centrally adjustable suction plant with AVC system, which rendered the laborious exchange of pulleys superfluous. The introduction of single drives on the Autoconer 5 was a prerequisite for being able to configure further winding parameters centrally, such as the suction arm spacing, the splicer feeder and the waxing.

Innovations in automation resulted in a marked reduction in operator workload even on the manually operated winding machine Autoconer X5 type RM, especially with regard to package handling.

The intelligent X-Change doffer is an automation unit that facilitates multi-tube handling and automatic lot changing without manual winding-on at each winding position among other things.

The last two points are the automation stages which permit the greatest staff savings to be made. Intelligent automation functions were conceived that both reduced the outlay on operators and improved quality.

Modular material flow automation

The long-term strength of an automation strategy is only demonstrated by the interaction of the modules. Schlafhorst offers every customer the right automation concept with the modular installation and material flow automation of the Autoconer X5. Textile companies with a clear automation strategy will therefore quickly find the optimum solutions for implementing their plans consistently at Schlafhorst. Customers opting for automation for the first time will receive extensive advice from the market and technology leader with regard to changing over their operating sequences. The more individual the requirements, the more important it is to support customers in the design phase.

Fig. 2 Autoconer X5, Type D with new intelligent material flow technology

By examining all design variants and using detailed model computations Schlafhorst finds the most efficient and productive solution for each individual customer. Two machine types that are well known and proven over decades for an automatic material flow are the standalone version Autoconer X5 type D and the Autoconer X5 type V, which is directly linked to the ring spinning machine. On the type D, the bobbins are transported manually to the winding machine on large bobbin trucks and then placed onto the caddies via the flat circular conveyor. On the type V, the bobbins are supplied via an interface to the CTS transfer station, which places the bobbins on the caddies and supplies them to the Autoconer. The empty tubes are returned automatically via the same interface and put back onto the peg trays of the ring spinning machine.

The type D machine can be located independently of the ring spinning machine. When switching from a manually operated machine to an automated system, the previous process sequence can be retained virtually unchanged, therefore. And it means more productivity and greater independence from personnel while retaining a high level of lot and material flexibility thanks to the automated bobbin handling.

By its direct linkage to the ring spinning machine, the type V machine paves the way for complete process integration between spinning and winding. The spinning and winding machine as well as transport and storage can be optimally coordinated to one another without any operator intervention.

This results in higher productivity and improved quality with maximum staff cost savings. The optional SPID spindle identification system for the Autoconer X5 type V in particular opens up new possibilities of direct online quality control.

The quality of each individual spindle can be monitored 100% and promptly by the system, meaning that quality problems are detected much earlier than in normal laboratory tests and can be pinpointed precisely.

Targeted early maintenance enables diminishing quality values to be remedied before they fall below the quality limit. However, high process integration in linked systems comes at a price. Converting a spinning mill with a manual process sequence to an automatic material flow calls for new sequences and a different space concept.

Even on the type V, a highly integrated automation solution, Schlafhorst has taken maximum flexibility into account. The interface between ring spinning machine and package winder on the type V can likewise be custom configured and adapted to the space available as well as to process sequences in the company. A direct link is possible, as is a link via bobbin bridge or an underfloor link. It can be linked to ring spinning machines from all manufacturers.

Fig. 3 Autoconer X5, type V as underfloor link

Custom-built and individual - the new machine type T

To cater even more specifically to customers‘ requests, Schlafhorst has extended the product family to include the Autoconer X5 type T machine, which following manual central presentation of the bobbins prepares them automatically. The new machine type is an ultra-modern entry-level model for step-by-step automation of the package winding department.

The type T can be equipped with the same automation modules that were developed for the type D. For example, customers can reduce manual intervention at the machine to a minimum with the new yarn seeker and the automatic bobbin tube remover.

FlowShare FX, the smartest material flow concept on the market

Most recently Schlafhorst has revolutionised the material flow on the package winding machine itself through FlowShare FX, the smartest material flow control system on the market. The system guarantees a continuous, self-regulated supply of bobbins to all winding units by reliably compensating for variations in the material supply. The individual functions of the system complement one another in their effect, offering a maximum leap in productivity. Vario Reserve adjusts the number of reserve bobbins at the winding unit flexibly to meet the requirements. High Speed Feeding supports the requirement-driven supply of bobbins to the winding units by variable adjustment of the supply speed under sensor control.

But it is Intelligent Bobbin Sharing that makes the autonomous material flow control system perfect. This innovative function, which is only available on the Autoconer X5, ensures an intelligent exchange of bobbins between the winding units. If one winding unit is threatened by a shortage of bobbins, the adjacent unit promptly surrenders a reserve bobbin. Waiting times are avoided thereby.

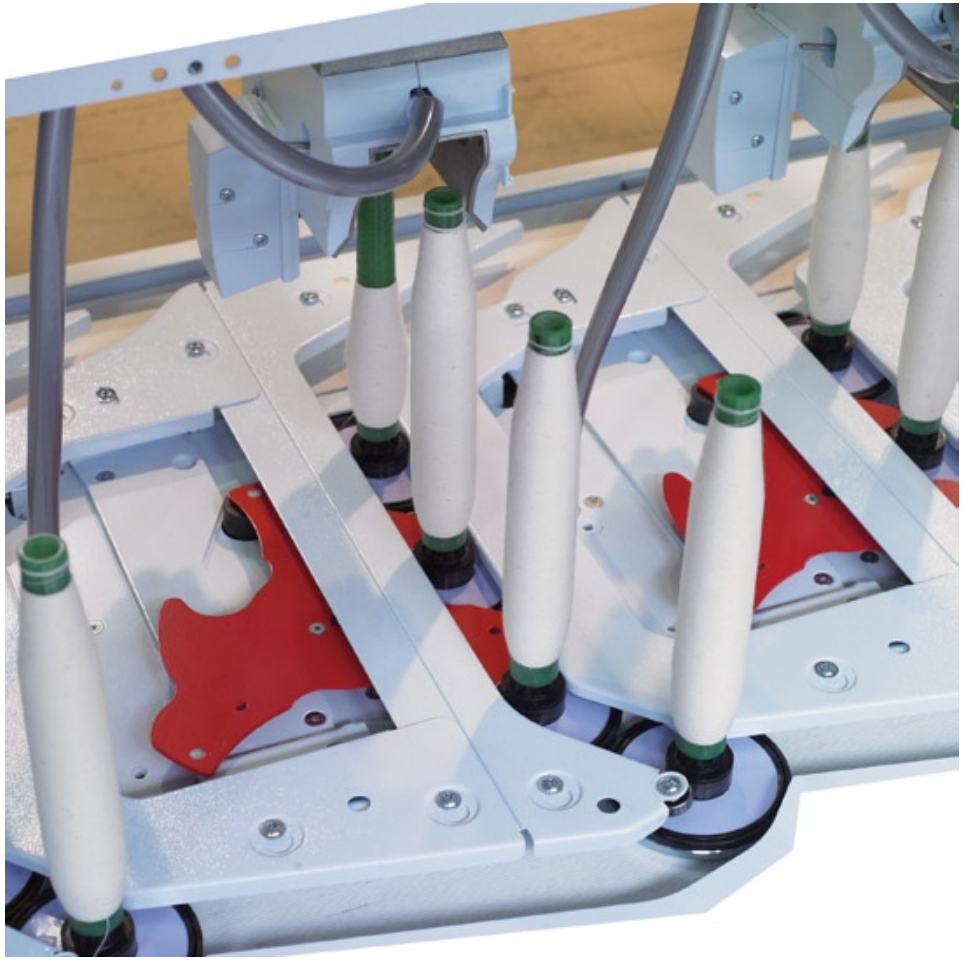


Fig. 4 FlowShare FX - with Vario Reserve secure and flexible supply of all winding units

FlowShare FX is therefore the optimum expansion for the previously tried and tested FX technologies for top package quality - Speedster FX, Preci FX, Autotense FX, Ecopack FX, propack FX and Variopack FX - and now for the ultimate in material flow reliability.

Highly productive and economical

More productivity, more efficiency, more economy - those are the priority objectives that Schlafhorst is pursuing in the development and improvement of automation solutions. Higher cycle rates have been achieved on the new flat circular conveyor and the improved CTS transfer station. New operating principles on both units result in higher functional reliability at the same time. The consequence is an extremely reliable, fast process sequence without disruptions.

Thanks to the perfect interplay between the individual innovations, Schlafhorst also constantly achieves synergy effects in the material flow. Thanks to FlowShare FX and higher cycle rates, the Autoconer X5 type D can therefore now also be supplied with up to 70 winding units - a significant leap in productivity!

Successful automation with Schlafhorst - a summary

Nowadays every company needs a flexible and individually configurable automation solution due to the individual basic conditions in its market. Textile companies that want to achieve successful automation will find a partner in Schlafhorst that considers the specific processes in each individual company as a whole and delivers made-to-measure automation solutions thanks to its modular concept.

Customers with excellent process automation have been trusting in Schlafhorst‘s competence for many years. In the latest wave of automation, the textile companies that will benefit above all from the know-how of the market leader are those that invest targetedly in automation for the first time and strive for future-ready solutions that are easy to realise and capable of expansion.

ITMA ASIA + CITME 2014

„It is only a little more than a week until the largest and most important textile machinery trade fair, the ITMA ASIA + CITME opens once again in Asia displaying a showcase of superlative achievements.

To be held from 16 to 20 June 2014 at the Shanghai New International Expo Centre, the show will gross 152,200 square metres in 13 halls, 15 per cent larger than the last edition in 2012 (12 halls, 132,000 square metres).
To-date, the event has attracted the participation of 1,351 textile machinery manufacturers (2012: 1230) from 27 countries and regions. Taking up the largest exhibition area are Chinese exhibitors, booking slightly over 66 per cent. European manufacturers, taking over 22 per cent of the total exhibition space, are the next biggest contingent. There is a marked increase in the exhibitors from China. In 2012 Chinese exhibitors booked around 50 per cent of the total exhibition space.

All the signs point to this, the 4th event of this kind, promising to be a very special one indeed. Seldom before has investment in state-of-the-art technology been so decisive for the future of the Chinese textile industry. China wants to invest and China also must invest to be in accordance with the current 5 year plan. This still has until 2015 to run and although the ITMA comes to Milan next year as well as a Techtextil will take place in Frankfurt now is the time to continue with the rethink already in progress and step up the implementation. The many changes demanded to the textile value chain require technological updates and a rethink in area of production. Where 'man power' was formerly the decisive criteria of competitveness and growth the future is being shaped ever more by fully automated processes utilizing machines of the highest productivity to supply textiles in great quantity and of the highest quality while also delivering cost benefits. The aim is to ensure your own company fit to play its part in the textile supply chain through targeted investment in the future.

Two important personalities in the industry also see it that way.

Mr Charles Beauduin, President of CEMATEX, said: "Textile machinery manufacturers are still buoyant about the Asian market, particularly China. Investments in cost-effective technology to help the textile and garment industry stay ahead of the competition are still strong. As such, our combined show will continue to be the unrivalled marketing platform for textile machinery manufacturers tapping into the vibrant China market."

Mr Wang Shutian, President of China Textile Machinery Association (CTMA), added: "Interest in the combined show remains extremely strong, especially from Chinese textile machinery manufacturers. As China's textile industry continues its transformation, the demand for advanced machinery and technology is on the rise. This is also reflected in the current uptrend in textile machinery trade."

According to a forecast by Global Industry Analysts (GIA), the global market for textile machinery is poised to reach US$22.9 billion by 2017. This is US$2.15 billion more than GIA forecasted for 2015 (+10.3%). The market is defined by a marked shift in demand from traditional machinery to more advanced technologies. Fuelled by increasing investments in textile production, the Asia Pacific region remains the greatest and fastest growing market for textile machinery.

That applies to Asia and also more especially for China. Even though the decline in Chinese economic growth to 7.8% in 2013 has generated controversial discussion relating to its future role as an economic power China still remains the undisputed number one in the production and export of textiles and clothing. According to statistics from the General Administration of Customs, China's exports of textiles and garments amounted to US$26 billion in 2013. This is an increase of 7 per cent over the same period last year. The most important export countries for clothing were the USA, Japan, Hong Kong (China), Germany and Russia. The greatest growth rates in exports wera achieved by Vietnam with 141.9%, Kazakhstan with 67.3, Malaysia with 55.1 and Russia with 39.9%.

And another point is that China's domestic demand for textiles and garments is expected to maintain a steady growth rate in view of the development of the national economy, progress in urbanisation and rising income levels. This will continue to be the main driving force for the development of the textile industry.

The Chinese textile industry invested CNY779.3 billion in fixed assets in 2012. The development and application of high-technology fibres and environment-friendly technologies will be the focus of China's textile industry in the coming years. All these record figures and facts indicate that there should be another record number of visitors. The 100,000 visitor level should be in reached this year after the 82,000 trade visitors achieved in 2010 and a trade visitorship of 92,000 from 106 countries and regions in 2012.

The event organizers have at any rate done all they can and to strongly promote it. In China, an intensive roadshow covering Fujian, Guangdong, Shandong and Zhejiang provinces has been performed.
A very high visitor figure depends of course on how many visitors travel to Shanghai from the other Asian countries. For this ITMA ASIA + CITME 2014 has been promoted throughout Asia by means of numerous roadshows and visits to trade associations. Roadshows in India, Indonesia, Pakistan, Turkey and Vietnam have drawn very positive responses from the local industries, and delegations and groups of visitors from key textile manufacturing economies have indicated their intention to visit the showcase.

Expectations are that many visitors will arrive from India as India wants to grow faster than China in the export of textiles in the next 5 years. The Business Standard reported the following on 6 May 2014: „The textile ministry has made a comprehensive plan to increase export growth rate from present level of 6-10% to 15-20% in next five years, in the 12th plan period. Towards this Planning Commission has already allocated Rs 2,5931 crore to the ministry for overall schemes and the textile upgradation fund will continue." The India ITME showcase of textile machinery in India will however only take place in 2016.

In the global exports of Textiles, India ranked as the third largest exporter, trailing European Union and China. In the global exports market of clothing, India is the fifth largest exporter, following Bangladesh, Hong Kong, the EU and China.

Exhibitors should also expect good demand to be generated by the other Asian countries. Countries like Bangladesh, Vietnam, Cambodia and Indonesia having low wage costs in contrast to China will want to take advantage of the changes in the textile production environment to drive their own growth and attract sections of the Chinese textile and production industry to their own country. For fair visitors the tried and tested system of online registration has been retained to avoid long queues forming. Visitors are advised to plan their visit early and 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.

Let us now take a look at the exhibitors highlights which are those things that really matter for textile producers. As ususal we have structured our preview along the textile value chain in an alphabetical order.

Spinning

Oerlikon Manmade Fibers (Hall W3, Stand F01)
Oerlikon Manmade Fibers is a Chinese Partner for half a century now and the company is celebrating this extraordinary anniversary with all its guests at its trade fair stand. The focus of the trade fair attendance of the world's leading manmade fiber manufacturing solutions provider is the entire process chain: From Melt to Yarn, Oerlikon Manmade Fibers accompanies yarn manufacturers with innovative technologies and sophisticated services. Here, environmentally-friendly and sustainable, e-save certified solutions are in the foreground.

In concrete terms, the showcased product portfolio will range from continuous polycondensation systems (CP), state-of-the-art methods for environmentally-friendly direct spin-dyeing using the 3DD mixer technology all the way through to the very latest high-speed winders for POY, HOY, FDY, IDY and BCF processes. In addition to exhibiting spinning pumps, the company will also be focusing on production solutions for nonwovens and for specialty yarns.

"Once again, we will be deploying virtual reality at our trade fair stand: in our virtual showroom, we will be displaying our technologies in 3D, hence taking visitors on a journey through our systems and machines", explains marketing expert Rickey Steele, who will be accompanying customers through virtual worlds during all five days of the trade fair.
WINGS POY 1800 boosts yarn production by another 20 percent
Oerlikon Barmag has set a new benchmark for the efficient production of polyester fibers with its new yarn winder WINGS POY 1800. The new winding unit boosts productivity by another 20 percent using virtually the same amount of production space as the previous model. "With WINGS POY 1800, we are once again underscoring our technological leadership in the area of filament spinning. We will use this technology to sustainably bolster our market share of more than 40 percent in the manmade fiber machinery industry", says Stefan Kross, CEO of Oerlikon's Manmade Fibers Segment. Compared to its predecessor model, WINGS POY 1800 can accommodate twelve bobbins instead of the previous ten bobbins which required highly sophisticated technical developments.

Premiere: the new Oerlikon Barmag WINGS POY 1800 will be first time shown at an exhibition worldwide. (c) 2014 Oerlikon Man Made Fibers

The new **WINGS** take-up concept, designed for the special requirements of economical nylon HOY production, offers all the benefits of the reliable WINGS POY winder.

The **eFK manual and eAFK automatic texturing machine** showcase the evolution of 'made by Oerlikon Barmag' texturing: tried-and-test solutions such as the take-up system and the pneumatic yarn string-up device have been retained and new technologies have been deployed where they markedly im-prove machine efficiency, profitability and handling. At the ITMA ASIA + CITME Oerlikon Barmag will be presenting new innovative features for the texturing technologies.

The new, compact **Staple FORCE S 1000** plant is specially laid out for the economical production of staple fibers in small lots of up to 15 tons per day, as required for the production of carded nonwovens. The Staple FORCE not only impresses with its low initial investment and compact construction, but the energy costs are also significantly reduced as a result of replacing steam and water baths with a dry-drawing process.

WinTrax is the solution for the eco-nomic production of carbon fibers of the very highest quality with a simultaneously perfect package build. Flexible, simple to operate and with minimum maintenance requirements, WinTrax is available either as a manual or as an automatic winder.
In addition to the machine exhibits, Oerlikon Manmade Fibers will also be showcasing its expanded **range of services** under its 'Partnering for Performance' motto.

And Oerlikon is hoping to offer new services especially within the Asian market, which has grown immensely in importance above all over the past few years and which today – with more than 70 percent of worldwide manmade fiber produc-tion – is the center of a global industry. Oerlikon Manmade Fibers is able to draw on a very well-developed network and established processes, especially in China. And it goes without saying that the Oerlikon Barmag and Oerlikon Neumag service experts bring many years of experience with them.

With its **e-save program**, Oerlikon Manmade Fibers introduced a label for energy-efficient systems, machines and components back in 2004. Over the past ten years, e-save has firmly established itself as a trademark for a comprehensive efficiency program. This underlines the trailblazing role that Oerlikon Manmade Fibers plays in commercial success and sustainability. Meanwhile, all Oerlikon Manmade Fibers innovations are developed with the following four e-save factors in mind: energy, economics, environment and ergonomics.

PTC Group (Bräcker, Graf, Novibra and Suessen) (Hall W4 / Booth C 07)
The 4 companies Bräcker, Graf, Novibra and Suessen (Hall W4 / Booth C 07) unites world's leading brands for the supply of technology components to the textile industry, forming a global provider of components for all spinning technologies and will present at ITMA Asia the latest development to improve fibre yield and productivity, as well as power savings opportunities.

Graf sets the focus at ITMA Asia on their Resist-O-top flexible flat clothing, DSW Flat Grinding Roller and the TSG Traversing Resharpening Device. Also of graet interest for visitors will be Graf' s ASG Doffer Resharpening Device.

Novibra will demonstrate the advantages of their NASA HPS 68 spindle which has become a new standard for highest speeds and requirements for modern spinning mill needs. And the company will show their new clamping crown CROCOdoff with improved "CROCO teeth".

SUESSEN will have a running ring spinning machine on the booth to demonstrate the show highlights. Naturally, the machine is equipped with the HP-GX 3010 Top Weighting Arm, the ACP Quality Package NT and the EliTe®Compact Spinning System. In Open-End Rotor Spinning SUESSEN will present their Modernisation SpinBox SQ as a drafting model, equipped with SUESSEN Premium Parts Spinning Components such as ProFiL®Rotors, ProFiL®Navels, ProFiL®Pads, TwinDiscs, TorqueStop, SOLIDRING, Fibre Channel and SUESSEN Premium Parts Spare Parts as ProFiL®Cartridge.

Bräcker will exhibit their well known, high quality key components for ring spinning machines: redORBIT Spinning Rings – designed for the production of high quality yarns at top speed, Bräcker OPAL® ring – the answer to the demands of today's fast paced spinning industry, where the spinning mills have to work with very tight cost control, whilst adapting quickly to the ever faster changing markets, TITAN Spinning Rings, of which so far more than 30 Mio pieces have been sold and a range of new travellers.

Reiners + Fürst (Hall W2 / Stand G12)
R+F will show the latest generation of TURBO chromium coated rings and AVUS ring travellers as well as enhanced J- and Nylon travellers. The new generation of J-travellers includes further improvements of the running performance and allows prolonging the traveller service life-time. The improvements are especially confirmed on fine counts and on yarns spun from sensitive fibre materials. For the processing of glass fibres R+F is introducing the newly developed series of horizontal travellers for twisting of fine fibre-glass filaments on rings in the height of 4.8 mm.

Rieter (Hall W4, Booth No. D01)
Rieter comes with the competence in 4 spinning systems to ITMA Asia. On its exhibition stand Rieter will be demonstrating its competence across the entire spinning process and presenting all 4 end spinning systems live on the stand.

Rieter stated 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 competences are necessary to achieve success in the operation of a spinning plant and is presenting all this expertise at the exhibiton.

Visitors are invited to admire numerous highlights and innovations live on the Rieter exhibition stand.

The **C 70 high-performance card** achieves excellent quality values at highest production for all yarn applications. This is based on the well-proven 1.5 m working width and maximum active carding area. Focus is placed on the economic production of carded and combed ring yarns. Precise flats guiding and innovation in the pre- and post-carding area allow, with the selective waste extraction, excellent raw material exploitation and sliver quality. With the integrated grinding system IGS, the sliver quality is maintained at a high level. By utilizing draw frame modules instead of the classical can coilers, the customer has the possibility to optimally layout the process.

The **SB-D 22 double-head draw frame** without autoleveling guarantees maximum machine efficiency with a unique can changer up to 1 000 mm. The machine concept is labor- and space-saving. At delivery speeds of up to 1 100 m/min the mill-proven Rieter 4-over-3 drafting system ensures outstanding yarn quality. Unique centralized drafting system setting and easy modification of the delivery speed on the display panel also enhance customer benefits. Energy consumption is some 20 % lower than for other manufacturers' machines.

The **G 32 ring spinning machine** complements Rieter's ring spinning technology for standard applications. The textile-technological functions of the mill-proven Rieter ring spinning models have been optimized to achieve cost-efficient yarn production.

With the suction tube ECOrized for the ring spinning machines G 32, G 33, G 35 and G 36, the suction power can be reduced by up to 50 percent. An effect that sustainably lowers energy costs in the spinning mill.

The **R 60 fully automated rotor spinning machine** sets new standards in terms of quality, productivity and flexibility with reduced energy consumption. The improved spinning stability of the new S 60 spinning unit enables up to 5 % higher output to be achieved with improved yarn quality. The productivity of the machine with up to 600 rotors and up to 6 robots is enormous. The option of independently operating machine sides offers additional flexibility.

The design of the fully-automated, double-sided **air-jet spinning machine J20** has been advanced in terms of productivity.

The Rieter J 20 Air-Jet Spinning Machine offers a delivery speed of 450 m/min (c) 2014 Rieter

200 spinning units and a delivery speed of 450 m/min ensure economical production. High performance is supported by a new piecing preparation system which reduces piecing time to half. The new winding unit ensures optimal package build-up and higher package weight. Technological innovations enable, for example, the softness and hairiness of Com4®jet yarns to be adjusted.

Furthermore Rieter provides information on the benefits of the 4 Rieter Com4® yarns by means of various end products and fabric samples.

Saurer (Hall W02 / Booth F01)

ITMA Asia in Shanghai will take place just before the "first birthday" of the new Saurer Group. This is the first time for the Group to gather all business units under the Saurer umbrella on one booth.

Autocoro 8 comes with considerably more spinning positions (c) 2014 Saurer Schlafhorst

On roughly 800 m2 Saurer will display novelties in all business Units.

They will show a new Zinser ring spinning frame and a new generation Schlafhorst BD rotor spinning machine, new features on our Schlafhorst winding and Saurer embroidery machines, a new product from the Jintan preparation side and as always, the components brands will display several new innovations. As a part of the Saurer philosophy of innovation and sustainability, Saurer has created a **new label: E3** - the triple added value that will also be launched on ITMA Asia in Shanghai.

Schlafhorst comes in the role of a pacesetter for the industry. Whether Autocoro or BD, rotor spinning machines from Schlafhorst are in a class of their own.

The company's flagship, the **Autocoro 8**, can now demonstrate its true profitability on 552 spinning positions. With rotor speeds of 160,000 rpm tested in practice and new automation solutions, the Autocoro 8 is responsible for a sensational jump in productivity. More and more spinning mills are now producing high-speed yarns constantly at 160,000 rpm. Reports of sensational boosts in productivity are making the industry sit up and listen. With a new maximum machine length of 552 spinning positions, the Autocoro 8 is 15% more productive. But this unchained productivity doesn't take up any more space, because the Autocoro 8 with its single-drive technology is still 13% more compact than belt-driven machines of comparable length from other manufacturers.

New, intelligent automation solutions ensure even greater productivity, permitting a seamless lot change on single-lot machines among other things. At the same time, batches can be reliably separated if needed without all spinning positions having to run out first when spinning cans or components need replacing. In other words, changing material no longer kills productivity.

In the world of semi-automatic machines, the **new BD 6** is in a class of its own. Even with the basic specification it produces packages with the Autocoro character. The patented digital piecing technology DigiPiecing with its high level of piecing reliability and the highly precise winding technology from the Autocoro are capable of even more. On its 480 spindles the BD 6 achieves a take-up speed of 230 m/min. This is 40% faster and more productive than its predecessor.

An effective tool in reducing the labour requirement in the ring spinning mill is automatic doffing. Using the most effective, reliable doffer in the world, the **CoWeMat** from **Zinser**, up to 61% of labour costs can be saved depending on the yarn count and bobbin format. At the same time, the CoWeMat reduces the staffintensive logistics outlay in the mill.

The interruption-resistant, unsorted tube feed CoWeFeed guarantees frictionless processes that eliminate the need for operator intervention and reduce operator input by 66%. The fully automated link to the winding machine, in which the spinning and winding capacity can be suitably coordinated, offers even greater benefits than this standalone solution. This increases the efficiency rating of the overall installation thanks to optimum utilisation.

ZinserRing 72 and ZinserImpact 72, a new machine generation

The **new ZinserImpact 72 compact** spinning machine will be on display in combination with the Autoconer X5 at Schlafhorst‘s exhibition booth in Shanghai. The new ZinserImpact 72 is equipped with the world‘s most efficient self-cleaning compact spinning technology, Impact FX. This new machine generation of the ZinserRing 72 and ZinserImpact 72 with its proven top-notch technology and various automation options offers the maximum productivity, quality and profitability.

In Shanghai, Schlafhorst presents the **Autoconer X5** linked to the new compact spinning machine ZinserImpact 72. The trend towards automation of the ring spinning mill continues unabated. Following Indonesia, Thailand and Korea, a real wave of automation is now engulfing China and India in Asia. The automation highlight on the Autoconer X5 being exhibited is **FlowShare FX**.

Schlafhorst has once again fundamentally improved the logistical intelligence and process reliability of the Autoconer with what is currently the most modern, smartest material flow technology.

FlowShare FX is the only system on the market to balance out fluctuations in the material supply entirely independently and reliably:

Vario Reserve adjusts the number of reserve bobbins to match the requirement, High-Speed Feeding uses a differentiated belt speed to ensure a supply to meet this requirement and Intelligent Bobbin Sharing exchanges bobbins between the winding positions entirely autonomously if a material bottleneck threatens. This added intelligence in the material flow increases the reliability, productivity and efficiency of the spinning and winding process. The machine at the exhibition booth is also equipped with the top features of Schlafhorst's winding and splicing technology. PreciFX, Autotense FX, Ecopack FX, Speedster FX and the injection splicer guarantee a unique package quality while maintaining a high level of productivity.

Furthermore Schlafhorst presents two interesting retrofit packages among others. With the **Autocoro Modernisation Kit** for machine extension, the Autocoro 8 can be extended to 552 spinning positions, thereby increasing the productivity per machine by around 15%. The **Zinser Modernisation Kit** for compact spinning technology integrates the world's most efficient compact spinning technology into Zinser ring spinning machines of the 350, 351, 450 and 451 series.

Allma and **Volkmann** will be presenting innovative products and solutions for the sectors of staple fibre yarns, carpet yarns, tyre yarn, technical and glass filament yarns. Energy efficiency is an absolute must for every company. The twisting and cabling machines from Allma and Volkmann speak for themselves with their low energy consumption and efficient use of resources.

Allma and Volkmann machines excel with their high cost-effectiveness, which is achieved through faster production speeds, a reduction in the outlay for investment and air conditioning and low operating and maintenance expenditure.

In the **CompactTwister**, the Company presents their high-performance twisting machine for staple fibre yarns with E3 technology, which impresses with its triple added value through the factors of energy, economics and ergonomics. It is possible to achieve savings in energy of up to 40% thanks to the eco drive concept and the eco spindle technology with adjusted spindle combinations. Productivity of the CompactTwister is 30% higher thanks to faster delivery speeds of up to 120 m/min. Operating costs are reduced on account of lower expenses for energy, floor space and maintenance.

With its pioneering technology, the **CableCorder CC4** cabling twister provides energy savings of up to 50% in the tyre cord cabling process. As energy costs constitute by far the greatest block of expenses in the overall cabling process, these savings represent a revolutionary cut in production costs for producers of tyre cord.

Saurer Embroidery is the global market leader for embroidery production systems. It represents the accumulated experience of many generations combined with today's knowledge and skills to benefit the future of textile production.

Epoca 6pro opens new dimensions with regard to adjustability and performance. A machine which is custom tailored for an era where orders are getting smaller and smaller but the demands and requirements are growing continuously. In addition, the orders need to be produced with fewer personnel and in a considerably shorter time. The new concepts for drives, configuration and thread-cut guarantee maximum productivity and absolute reliability. The average production speed for the Epoca 6 pro is up to 30% higher, while retaining absolute reliability and top quality for embroidery.

SoutacheHead is the new Saurer soutache system with application heads. You can embroider one-of-a-kind patterns using the innovative soutache head and keep the areas being embroidered conveniently in view while maintaining full flexibility.

The motor-driven application heads mean that you can achieve production speeds of up to 500 rpm. It is easy for users to position and gain access to the heads, with the results that downtimes during production and retooling are drastically reduced. The multifunctional soutache wheel allows the most diverse materials to be processed: from the finest soutache cord, a huge variety of braid widths, right through to technical yarns.

EmStudio integrates each stage, from drawing, punching and visualisation to optimising production and analysing operational data and archiving designs on one platform.

You will find optimising production and quality simple and efficient with the new iSed – the intelligent Saurer editor. iSed has been reprogrammed from start to finish and now offers every modern option for operation, right through to multitouch.

Saurer Components are represented at the fair through innovations, but also by proven products. Solutions for ring spinning as well filament spinning and processing, quality monitoring are this year's focus. To name some well-established highlights presented on the Saurer booth; the world's most versatile **Texparts® PK 2630 SE** and the **Texparts® PK 2630 SHE** weighting arms designed to fit on all on the market available spinning frames. Accotex® Cots and Aprons vital supplementary elements on drafting systems, whereof Accotex® J-460 stands as one example for process adapted polymeric solutions.

The **Heberlein® TexJet-ATY** range, the breakthrough in matters of cleaning cycle extension in ATY production. Customer's first choice in high speed but still energy-efficient and quality controlled DTY production; **Temco® PU Discs, Temco® Nip Roller Units** and **Fibrevision® Unitens** monitoring system. Saurer Daytex expertise in sanforisation will be represented in hall N5, booth D11. Daytex® Shrinkage belts meet customers demand for gentle material treatment by seamless design and lacking of sharp edges for an extended belt service life. Saurer Pre-Spinning business unit **Saurer Jintan** will be presenting for the first time the new **JSC326 carding machine** with up to 50% productivity increase.

Carding area has been increased with 60% comparing to the traditional machine thanks to a wider and raised cylinder. This results in an increase of the output by 50% under the same carding conditions. A new type of length and short auto-levelling (auto-adapting adjusting) will ensure constant sliver output with easy weight adjustment. The independent frequency converting transmission has now a removable cover plate, which allows easy speed setting and gives technological flexibility.

Consequent feeding; carding length can be adapted to different fibre lengths and causes less damage to fibre. The length of the licker-in waste collecting area outside the machine can now be easily adjusted. Synchronous belt with removable cover plate made out of high accuracy extrusion aluminium alloy, is easy to disassemble. Ergonomics has also been improved with easy operation icon interface.

Will be on stage at ITMA Asia: the new Savio winder POLAR/E PREMIUM
(c) 2014 Savio

Savio (Hall W5 / Stand C01)

Savio introduces for the first time in an international exhibition the new winder **POLAR/E PREMIUM**, after its road show in China and in Turkey in late 2013. This new fully automatic machine is addressed to any spinning mills no matter the type of ring spinning frames, with or without automatic doffing.

The trend to the automation is widely spreading around, also in those textile environments where generally the up-stream process is still managed in a manual way, and consequently the spinning bobbins would not be specifically favorable for an automatic handling. This new Savio winder represents the “universal solution” and the perfect reply to these additional needs.

Consequently these mills can invest in a flexible and highly efficient winder, can reduce the investment cost being the machine provided with high number of positions (max 72) and high feeding capacity, and last can reduce labor cost.

The new POLAR/E PREMIUM fits in total machinery layout freedom, full automation of the feeding process and is geared to process bobbins of any shape and quality with greatest possible efficiency. The machine offers a higher loading rate for feeding up to 72 spindles: the innovative twin sorting delivers two bobbins simultaneously . It has a feeding bobbin capacity up to n° 3000 per hour: a new high-speed optical scanner reads the profile of the bobbin.

An air jet system distributes the bobbins between the two high-speed peg loaders. The system is the fastest available as it rely on minimum number of moving parts. The end finder stations are designed to handle bobbins with yarn reserve at the bottom of the tube (in ring frames without automatic doffing, the presence of bottom reserve is usually erratic). The machine design has been focused on the layout of the end finder stations to optimize the bobbin distribution.

Same stations are distributed along the machine sections, consequently allowing an evenly and balanced bobbins distribution to the whole machine.

Minimum distance between feeding and spindles is important in case of long machines. The machine comes with two end finder stations as standard, but according to the requirement of the process a third station can be added. A great help to ensure the highest efficiency of the winding process is given by the Backup station, which processes all those bobbins rejected by spindles and the end finder stations for different reasons: bad shaped bobbins, bobbins with yarn remnants, technological alarms (off-standard quality yarn values). Its dedicated slow- moving sorting cycle permits to reach a very high efficiency, with the result that manual reprocessing by the operator is no longer required. Whenever a bobbin is rejected, the reason for the rejection is recorded onto a ID tag embedded in each and every peg. Any yarn remnants on tube will be removed by the efficient stripper. Perfectly clean tubes can consequently be returned to spinning room.

In case customer needs to process two different lots on same machine, two hoppers can feed their dedicated winding sections accordingly

Savio will also display the automatic winder model ORION SUPER M, which is already a best seller in the Chinese market. This manual feeding winder is particularly designed for the Far East market in order to meet the high yarn quality demand, together with high production output, reduced energy consumption, maintenance and investment.

The machine, with manual bobbins feeding and manual or automatic packages doffing, completely controls all the parameters of the winding process by the main PC. In addition, the machine has the self-diagnosis monitoring per each winding head.

SSM will present the brand new TG1-FT manual false-twist texturing machine (c) 2014 SSM

High productivity, together with yarn and package quality level, can be obtained thanks to the flexible and intelligent cycle, in addition to the controlled and customized dynamic drum acceleration. The direct drive of the moving parts and the specially designed suction system allow a reduced energy consumption.

SSM Schärer Schweiter Mettler (Hall W2 / Booth H01)

The Swiss based SSM Schärer Schweiter Mettler, the inventor of the electronic yarn traverse system, will continue their tradition of trend-setting with the presentation of breakthrough technologies. With five new market introductions in Asia and a number of innovations & applications for their well-known product range, SSM will exhibit a total of six machines. For the first time in China the **SSM TW2plus-W** is shown. The TW2plus-W is a precision package winder for dye packages and rewinding operations. From SSM GIUDICI comes the brand new TG1-FT manual false-twist texturing machine. It combines a proven texturing path along with a spacing saving machine design. The manual SSM GIUDICI **TG1-AT air texturing machine** is designed for the cost efficient production of high quality air texturized yarns made of POY or FDY Polyester, Polyamide and Polypropylene and ranging from fine to medium final counts. The **SSM TK2-20 CT/KT** will be exhibited for Sewing Thread Finish Winding. It sets new market standards in combining the established performance of the well-known THREAD KING series with the functionality and operational comfort of modern control and drive technology.

The **TK2-20** stands for first-class unwinding properties and fulfils the highest yarn processing requirements.

Additionally SSM will unveil two machines at the fair as a surprise for the visitors.

Trützschler (Booth Hall W2)
On the 600 m_ Trützschler stand, the four business areas SPINNING, NONWOVENS, MAN-MADE FIBER and CARD CLOTHING, as well as the Chinese TRUETSCHLER TEXTILE MACHINERY SHANGHAI (TTMS), are represented.

TTMS exhibits the Truetzschler **Card TC 8**, the currently leading card in China in regards to technology. This card has the longest carding section for optimal fiber protection and high performance.

The combination of Card TC 11 and Integrated Draw Frame IDF 2 increases the rotor yarn quality and lowers production costs.

Developments such as Setting Optimiser **T-Con** and the flats system **MAGNOTOP** are some typical features that make Trützschler cards, like the exhibited TC 8, unique. The **autoleveller Draw Frame TD 8** shown at the stand is equipped with the separately driven SERVO CREEL. The highlights of this machine are the new input sensor **DISC LEVELLER** and the quality monitoring system with sensor **DISC MONITOR**.

Trützschler SPINNING places emphasis on two machines that have not yet been introduced at a trade fair. The first one is the **Truetzschler-Toyota SUPERLAP TSL 12**. This machine for combing preparation delivers laps of the highest quality. Due to the multi-drive system, the speeds of the individual elements can be optimised with utmost sensitivity and precision. The result is a very uniform lap with perfect unwinding behaviour at the comber.

Meanwhile, the **Toyota-Truetzschler Comber TCO 12** has proven successful in practice. The **TWIN-DRIVE System** - the double sided drive of the important combing elements - reduces the torsions and vibrations of the shafts. This allows tighter settings to reduce the noil volume. Due to the design, this is only possible with the TCO 12. Superlap and comber can also be connected with an automatic lap transport system.

The second introduction is the new Integrated **Draw Frame IDF 2**. The revision was based on the experience with thousands of first generation integrated draw frames on the market.

At the very heart is a completely new drafting system. The first installations in rotor spinning mills show that today the use of an IDF system is vital for yarn counts up to Ne 30. Direct spinning of slivers from the machine combination **Card TC11** and IDF 2 saves considerable costs and provides a higher yarn quality. Naturally, the trade fair stand also presents the Trützschler Card TC 11 with the largest cylinder clothing surface. It is currently the most successful card on the world market.

With T-Data, the production system is always under control. T-Data is a web-based central data acquisition system for spinning preparation. All important quality data and error statistics of the machines connected are saved and can be viewed on an internet-capable notebook, Smartphone or tablet also while on the go.

Truetzschler MAN-MADE FIBERS exhibits its system competence in the field of staple fibers and filament. This ranges from texturing units for BCF yarns, compact systems, all the way to highly productive two-stage staple fiber lines. In addition to new systems, the information covers the upgrading of existing systems.

Truetzschler CARD CLOTHING provides all products and services regarding clothing for cards and roller cards. This also includes special clothing for openers or for opening rollers of rotor spinning machines. This year, TTMS has taken over the marketing and service for **opening roller clothing** in China. These wires can be used on all types of opening rollers and for a broad variety of applications.

They are available as **„Standard“** and **„Chemically polished“** versions. The **Novotop 58 flat top** is an invention within the flats product range. It is used in the area of fine combed yarns. The **new Novotop 30 flats top** has been specifically designed for coloured fibers and regenerated fibers for rotor spinning.

By bringing together the expertise in terms of machines and clothings, an optimal coordination is reached. Our experienced service technicians work around the globe to ensure that excellent results are achieved even in special applications. This strategy of „one face to the customer“ means first-hand service.Trützschler is a member of the Blue Competence initiative of the German mechanical engineering. This involves the commitment to responsible use of resources. For the operators of Trützschler machines and systems this results in decreased production costs thanks to low energy consumption and waste reduction.

Weaving

DORNIER (Hall E2, Booth D03)

DORNIER as a family owned German company produces its system family weaving machines, comprising various types of rapier weaving machines and air-jet weaving machines, implementing innovative and sustainable machine concepts for the production of sophisticated fabrics to elimate the pollution of air, water, soil or the like.

Furthermore DORNIER weaving machines are market leaders in producing fabrics to protect against unwanted ultraviolet sunlight, fire and even bullets from fire arms. Under the new motto “The Green Machine” DORNIER sets its focus on sophisticated technical textiles for the protection of men and environment, as, for instance, protective clothing.

DORNIER presents a rapier weaving machine type P1, of model PTS 4/S C, nominal width 220 cm, with a high density filter fabric and an air-jet weaving machine type A1 of model AWS 8/S G, nominal width 190 cm, with a complex awning fabric. In cooperation with Bonas (Hall E1, Booth C01), a DORNIER air-jet weaving machine type A1, of model AWS 6/J G, nominal width 220 cm, with a style for automobile seat covers will be shown. The compact system was developed in cooperation and will be shown for the first time in Asia at the ITMA Asia.

DORNIER Air-Jet Weaving Machine A1, type AWS 6/J G at BONAS booth E1/C01 will be presented for the first time in Asia (c) 2014 Lindauer DORNIER

At STÄUBLI‘s Booth, (Hall E2, Booth E01), a DORNIER rapier weaving machine type P1, of model PTS 16/J G, nominal width 190 cm, will be shown with a high-quality Jacquard fabric for the home textiles sector. Both of the rapier weaving machines and the air-jet weaving machine on the DORNIER Booth are equipped with the innovative FT (Fast-Ethernet-Technology) control system which guarantees high reliability and efficiency in woven fabric production as well as the new, patented, DORNIER drive concept SyncroDrive®. An electrical control line to a separate drive replaces the mechanical connection between weaving machine and shedding device. Realization of the dynamic change of close of shed when the machine is running also meets the requirements of demanding weavers. DORNIER’ s long-standing, Asian customers constantly benefit from these technical continuous developments and are thereby able to establish themselves steadily on the home and apparel textiles market. The success of their demanding customers proves that the customizable weaving machines are a warrant for a prosperous and innovative future. This means DORNIER can be relied upon for special demands.

The many years of experience in development of technical textiles are reflected in the ideal conception of the DORNIER weaving machine, especially for producing protective textiles for people and environment.

Itema (Hall E2 / Booth C01)

Itema will proudly unveil the latest advancements in weaving technology, both in airjet and rapier machines, to allow customers to produce high quality fabrics and achieve higher levels of success.

The leading global provider of advanced weaving solutions, including best-in-class weaving machines, spare parts and services will exhibit 10 weaving machines in total, 6 in their own booth and 4 with Jacquard applications in partners' booths (Stäubli, Bonas, Grosse and Song & Song).

Itema will display the R9500 rapier weaving machine, the 2013 best-seller, which, at just one year from launch, represents one-third of Itema's revenue from weaving machines. The R9500 will be available weaving a Technical style. The newest R9000 rapier, also on display at ITMA ASIA and weaving a Shirting style, is designed for easy use and provides the best balance between cost and perk. Other rapier weaving machines carrying the Itema brand and on show in Shanghai are the R880DT with Jacquard weaving Terry cloth. Itema will show several rapier machines in partners' booths, of which two R9500, one with Bonas Jacquard for the Furnishing and Tapestry segment and another with Stäubli Jacquard for the Fancy Automotive segment. Two other rapier machines on display in partner booths are R9000, one with Grosse Jacquard weaving an Upholstery style, and another with Song & Song Jacquard weaving Furnishing style.

As with the Rapier preview above, Itema says that they are equally excited to demonstrate the innovation and performance of their airjet machine – the A9500. In the words of CEO Carlo Rogora: "We can't wait! Itema has prepared the machines with challenging applications to illustrate unprecedented performance in speed, diversification and energy consumption. Saving the details for the show, Itema will present a brand new concept that leaves the competition behind.

ITMA Asia provides the perfect venue to validate the dedicated efforts of Itema's Research & Development Engineers."

The Italian privately held multinational company closed 2013 with stellar results and a +50% YOY increase in weaving machines turnover and, encouragingly, the growth is still continuing into 2014. Itema is the only manufacturer in the world to provide all three weft insertion technologies: rapier, airjet and projectile, with an ample product portfolio and a strong commitment to continuous innovation. The Company is present in China since 2003 with sales and after-sales teams, assembly and technical support with a mission to ensure the highest possible standard of weaving solutions and a complete product and service offering. China is one of the most important markets for Itema and a country with a strong potential for continued growth, reason for which the Company launched new and improved corporate offices and assembly plant in Shanghai on March 6th, 2014.

Picanol (Hall E1, booth A02)

Picanol will present a wide variety of weaving machines, both airjet and rapier. Besides the OMNIplus Summum, also the **OMNIplus-X** will be on display. This machine is engineered 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. A novelty on this machine is that it is now also available in 280 and 340 cm widths in addition to the existing weaving widths of 190 cm and 220 cm.

Here special attention was given to improved quality output, user friendliness and lower energy costs. As for the rapier machines, the highlight is an **OptiMax** weaving a coating fabric on a 540 cm machine equipped with batching motion. On another OptiMax a fancy denim fabric will be woven.

For the first time the new **GTMax-i rapier machine** will be shown. This new weaving machine is a further development of the existing GT-Max. The main highlights of the GTMax-i are the reinforced gripper system and heavier machine drive, which allows higher production speeds. Also the dobby and undermotion have been completely redesigned.
In total 7 Picanol machines will be on display. Five on its own booth. One Picanol OMNIplus Summum with jacquard will be on display at the Bonas booth and another one on the Staubli booth.

Innovation is a constant at Picanol. An R&D team of over 150 researchers are working day-in-day-out on performance, efficiency, user friendliness and versatility of the Picanol weaving machines, so that the weaving industry can get the most out of its energy, time, material, market and talent. This makes the Picanol machines belong to the most innovative in the world. With more than 150 engineers and strong R&D teams headquartered in Belgium, Picanol invests heavily in R&D activities every year. Picanol's R&D aims not just at development and production of the most advanced weaving machines, but also achieving the most profitable weaving process in the world.

Picanol offers nine types of weaving machines: the OptiMax, GT-Max, GTMax-i and GTXplus with rapier technology, the OMNIplus Summum, OMNIplus 800, TERRYplus 800, OMNIplus 800 TC and the OMNIplus-X with airjet insertion technology.

As one of the world's leading weaving machine manufacturers, Picanol has always had a very close relationship with the Chinese textile industry. This relationship is not a matter of chance or coincidental developments: on the contrary, it is the result of long-term, strategic planning by the Picanol management.

Stäubli (Hall E2 / Booth E01)
Stäubli will be showing a selection of its most modern products from its extensive range of textile machinery. This includes cam motions, dobbies, and electronic Jacquard machines with harnesses as well as weaving preparation systems with automatic warp drawing in, leasing, and warp-tying machines.

SX Jacquard machine (c) 2014 Stäubli

Four complete Jacquard installations on weaving machines will be demonstrated at the large 625 m² two-level Stäubli stand. As a world premier, visitors can see the production of lining fabric on a **Jacquard machine type SX** equipped with a specific harness with 12,600 cords, in conjunction with a water-jet weaving machine operating at a rate of approximately 1,000 weft insertions per minute. The weaving machine and the Jacquard machine are both operated by individual electronically synchronized drives, which is the special feature of this set-up.

The second installation is equipped with a type **LX3202 Jacquard machine** with 12,288 hooks and Stäubli harness weaving tapestry and upholstery fabric on a 180 cm wide rapier weaving machine.

The third installation consists of a **rapier weaving machine and a type SX Jacquard machine** with a Stäubli harness of 13,450 cords producing 220 cm wide car seat fabric.

And the fourth is a type **SX electronic Jacquard machine** with 2,688 hooks and Stäubli harness of 6,000 cords weaving car seat fabric 190 cm in width on an air-jet weaving machine operating at approximately 1,000 weft insertions per minute.

As usual, the Stäubli booth is constructed with two stories. From the upper level, visitors can have a detailed look at the Jacquard units in operation with these four machines.

At a special demonstration stand the full range of Stäubli harness types will be shown with a type DX Jacquard machine including harness for any standard application. At another demonstration stand the LX32 type Jacquard machine for weaving narrow fabrics such as ribbons and labels will be shown with 192 hooks and harness with 4 repeats.

The third generation of Stäubli's rotary dobbies, the **S3060/3260 series**, is to be seen with many application examples at the Stäubli stand and at those of many weaving machine manufacturers. This new generation of rotary dobbies reaches new heights of performance and reliability. To complete the picture of Stäubli shedding systems, the refined **positive cam motion type 1681** and the universal positive **rotary dobby type 2658** are being demonstrated at the booth.

At the same booth Group member Schönherr is presenting exclusive carpet samples from its latest collection, some with the recently developed "**Magic Weft Effect 3**" and others with the"**Magic Shadow Effect**", produced on **ALPHA 400** and **500** carpet-weaving machines.

Additionally, Group member DEIMO (Hall E5 / Booth C11) will exhibit state-of-the-art electronic drives, servo motors, input/output devices, related programming tools and control solutions mainly for textile machines.

Van de Wiele - A Cobble tufting machine

Van de Wiele (Hall E1 / Booth C01)

Being the leading manufacturer in carpet weaving machines worldwide, Van de Wiele owes its customers to constantly strive for innovation and quality in its machines and again support their motto: “At Van de Wiele we live and breath carpet”. This drive for innovation has lead to the development of servomotor technology, 5m wide weaving, 3 rapier weft insertion, reed densities of 1000 dents per meter in up to 10 colours, cutloop qualities in density up to 500 dents per meter and other significant changes in carpet weaving technology.

For Axminster and Wire weaving, Van de Wiele provides the **automated Smart Creel** where traditional bobbins are replaced by binsets in which the yarn is stored according to the order size. This automated system reduces labour cost, saves raw material and makes shorter production runs economically beneficial. Van de Wiele names the **SCC75** “the automated carpet creeling solution for Smart Weavers”.

Through the acquisition of Cobble, Van de Wiele wants to put its know how gained from weaving into tufting machines by bringing innovation through creativity from weaving to tufting.

A new area in which Van de Wiele is investing is extrusion. Van de Wiele believes that there are two ways of adding value to the carpet: on the one hand there is the weaving and tufting technique and on the other hand the quality of the yarn.

Van de Wiele is proud to present the next generation of velvet weaving machines: the Velvet Smart innovator. This **new VSi range** is the result of a customer based demand towards high flexibility, faster running speeds and full electronic control of the weave process with the ultimate goal to allow velvet weavers to react immediately to changes in the market and always stay one step ahead. With the VSi, Van de Wiele brings its technological experience gained from carpet weaving machines combined with the needs from the velvet industry to this new velvet weaving machine range where flexibility, reliability and full electronic management is key.

The VSi is available in 3 executions: Smart Frame velvet (VSi22), jacquard velvet (VSi32) and technical fabrics (VSi42) with endless application possibilities in upholstery, automotive, clothing and technical fabrics.

Today, velvet weavers have to combine high design free-dom and a diversified product portfolio with low produc-tion cost and shorter production runs. When combining the VSi32 with the **Smart Creel for Velvet SCV75**, those needs are met.

The **VSi42 i**s a machine specifically designed for weaving technical fabrics. The possibilities are endless and the full potential of technical fabrics is far from reached. Van de Wiele is one key partner to offer and deliver the customer specific state of the art machinery for all kinds of technical applications.

Knitting

Groz-Beckert (Hall E5 / Booth B01)
On more than 1,000 m2 Groz-Beckert presents its new products and service highlights. In the center of Groz-Beckert's show presence stands the **"TexCar" – a Mercedes-Benz E-Class model** that was rebuilt so that nearly all of the textiles used in its manufacture were laid open. This exhibit allows a free view of woven and knitted fabric, nonwovens and seams, and demonstrates the diversity of textile applications.

The use of textiles goes far beyond the "classics" such as seat covers, carpets and car mats. Also in the safety equipment, e.g. airbag and safety belt, textiles and seams are indispensable. Even under the hood and at the wheels textiles fulfill essential functions. In the field of knitting, a **circular knitting machine made of acryl** occupies center stage. The transparent nature of the machine allows deep insights in the interaction of all components – Groz-Beckert needles, system parts, and cylinder. 14 knitting technologies are shown, among others bodysize, single jersey and double jersey including several jacquard techniques, as well as a unique gauge gradient on a segment of a cylinder from E10 to E50.
Another central topic is the improvement of the productivity in the circular knitting process. On-site each exhibition visitor has the chance to have his individual potential in terms of productivity and saving resources calculated. Moreover, the visitor can discover by himself where unused potentials can be found – which can be tapped by the use of precisely fitting high-quality Groz-Beckert products. Under the motto "Fine-tune your productivity" Groz-Beckert developed an app for this purpose, with questions and answers to the production process.

In the field of Sewing, the central theme is **SEWING5**. This term refers to Groz-Beckert's comprehensive service plan by which it supports the sewing industry in mastering the challenges in the market – here not only the outstanding product quality and ever more elaborate designs are requested, but also sustainable productivity and efficiency increases play a significant role.

The five S of SEWING5 stand for Supply, Solutions, Service, Superiority, and Sustainability. “Superiority”, for example, in the view of Groz-Beckert, comprises certified top quality, specialist products, and the application of modern technology.

When it comes to quality, even the product packaging can make a real difference. The Groz-Beckert packaging enables needles to be transported and stored securely. As an additional service for customers the packaging label also bears a data matrix code that serves to verify its original product status. The tool needed for this, the newly developed “label scanner”, is available worldwide and free of charge as part of the the “myGrozBeckert” app.

In the field of felting (nonwovens), the focus at ITMA is on specific needle solutions for the automobile industry. The needled nonwovens, visible in the automotive interior, can be structured or flat needled products. Depending on the requirements of the customers in the automobile industry and the application or the desired quality of the end product, different needle types are suitable. The best possible surface quality of flat needled products is achieved with the **EcoStar felting needle**. If a grainy or velvet-like surface appearance is desired, fork or crown needles are the better choice.

For Weaving, Groz-Beckert is full-range supplier for high quality weaving accessories and machines for weaving preparation. These cover a wide field of application.

At the exhibition, among other things, Groz-Beckert shows its warp-tying machine KnotMaster. This modular system sets new standards in service and maintenance friendliness. Despite the numerous functions – four tying methods, single and double knots, short knot ends, or the yarn break detector – the handling of the machine is especially simple due to its modern touch-screen control. Thanks to its broad range of application, especially the **standard version AS/3** has established itself as a best-seller. It is a warp-tying machine for all fine and medium yarns made from cotton, wool, and synthetic materials as well as for blended and elastic yarns. The highlight at the ITMA Asia is the **warp-tying machine in RS/3 version** – it is perfect for all warp materials with smooth surfaces, for example fiberglass. Fiber warps can be knotted at a rate of up to 400 knots per minute.

Groz-Beckert packaging offers smart advantages

The end products of fiberglass weaving are used as base material for truck canvas, tents, circuit boards or temperature-resistant conveyer belts.

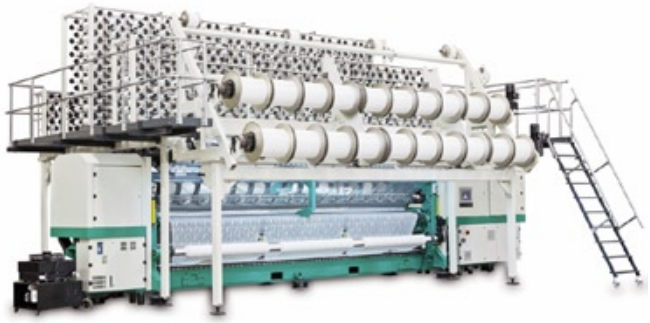
Furthermore the company, for the first time, also presents its fundamentally **redesigned app "myGrozBeckert"**. The previous version of the app was downloaded more than 10,000 times. The "myGrozBeckert" app is available in German, English and Chinese and for iOS and **new** for Android.

Groz-Beckert is the world's leading provider of industrial machine needles, precision parts and fine tools as well as systems and services for the production and joining of textile fabrics. The products and services support the fields of knitting, weaving, felting, tufting and sewing.

KARL MAYER (Hall E3 / Stand D01)

KARL MAYER will be exhibiting lace raschel machines committed to beauty and efficiency as well as denim technology from a single source. An improved Jacquardtronic® lace machine with main focus on patterning diversity belongs to the novelties intended for lace manufacturers. Moreover, a newcomer, namely the **MT 51/1/32**, will be showing its high level of proficiency. KARL MAYER's new **Multibar Textronic® Lace** offers the customers the possibility to succeed against competitors on the market of Textronic® lace by means of high-quality but also cost-efficient and strikingly designed articles.

On the MT 51/1/32 machine it is possible to produce the typically Textronic® fall plate effects in a more complex and elaborate way. With the new MT 51/1/32, KARL MAYER is giving new impetus to the Textronic® lace market, both economically and technically. This machine offers an exceptionally high level of performance for a low investment outlay, thus enabling lace, with its characteristic relief-like designs, to be produced competitively. In this case, the MT 51/1/32 scores highly both in terms of its economic viability and its designs. The machine's special configuration means that the new Multibar Textronic® Lace machine has more than 32 yarns available in front of the fall-plate, thus offering a unique patterning potential in this segment. In particular, this includes the production of more complex and more varied fall-plate effects than ever before – which is particularly interesting for the women's outerwear sector – and the ability to produce larger widths of lace bands.



During ITMA ASIA + CITME (China) the German KARL MAYER will present a Multibar Lace machine with a working width of 210" at an in-house show (c) 2014 KARL MAYER

The new MT 51/1/32 is available in a working width of 134" and a gauge of E 24. Gauges E 18 and E 28 will also be available in future. Details of the technical features of the machine will be available at ITMA ASIA + CITME in hall E 3, stand D 01, where the machine will be exhibited in operation on KARL MAYER's stand. KARL MAYER is expecting the visitors to be extremely interested in this new machine. Just after the launch of the new MT 51/1/32 in December 2013 in China, this textile machinery manufacturer received excellent feedback from the market and was able to make a number of business deals. The first deliveries are scheduled for the third quarter of this year – and they will also be made from KARL MAYER's Chinese subsidiary.

An MT 31/1/16 with fewer fall-plate yarns as a starter machine and an MT 43/1/24 with a reduced number of guide bars are also to be unveiled at the same time as the MT 51/1/32.

In addition, KARL MAYER will also be displaying its new pattern **beam warper PBW 130"/2**. This newcomer can produce pattern beams with laps that combine a long running length with identical diameters. In this way, it is possible to tap the full potential during the subsequent processing on lace raschel machines.

For the tricot machine sector KARL MAYER will be showing a new development of the **HKS series** as well as a **LIBA machine type COP 2 K+E.** Together with the know-how of KARL MAYER's former competitor, it is most likely that the trends of the trade will again come from Germany.

KARL MAYER's Warp Preparation unit will be presented as a competent full-range supplier of the denim technology. Out of its comprehensive product range, this business unit will be showcasing a **Ball Warper** and a **Long Chain Beamer**. The Ball Warper is characterized by a controlled, exact and gentle joining of the yarns to ropes and by a careful lap formation. The laps show an entirely parallel build-up and are of high quality. The Long Chain Beamer joins ropes to warp beams, offering perfect manufacturing quality, high efficiency and easy handling. Along with the two above-mentioned machines, the visitors will also get the chance to have a look at the dye trough Variobox and at the model of the indigo dye-sizing machine **Indig-O-Matic**.

At this innovation show KARL MAYER's high-tech solutions will be surrounded by a textile ambience: Same as during the last ITMA in Europe and at Shanghaitex 2013 KARL MAYER's exhibits will be located on an impressive stand made from warp-knitted textiles.

In addition KARL MAYER will also be exhibiting at an in-house show at its subsidiary in Changzhou City, Jiangsu Province. This customer event will take place on 17, 18 and 19 June.

By holding this event, KARL MAYER is reacting to the great interest being shown by the Asian market in its **ML series** of machines, which is now available with a working width of 210".

A representative of these successful Multibar Lace machines, with the news working width, will be demonstrating its features in the Technical Centre of KARL MAYER (China) Ltd. Included in the successful repertoire of this machine are patterns for the Indian clothing market, where the version with a width of 210" is setting completely new standards in terms of efficiency.

SHIMA SEIKI (Hall E4/ Booth D01)

Leading Japanese flat knitting technologist SHIMA SEIKI will show its latest lineup in Shanghai. Through its exhibition theme "Breakthrough Technology" it will propose solutions for current needs of the knitting industries in China and Asia and beyond, while emphasizing the importance of sustaining those industries for the future. SHIMA SEIKI is confident in its ability to live up to such a challenging proposal, by presenting its ITMA ASIA + CITME 2014 exhibition lineup in 3 zones, catering to current needs (Breakthrough Zone), upgraded needs (WHOLEGARMENT® Zone) and diversified needs (Expansion Zone). These will be met by distinctive technology that is unavailable elsewhere.

While the Breakthrough Zone caters to conventional shaped knitting, it nevertheless provides unprecedented proposals that break with flat knitting tradition. With its new workhorse SVR machine, SHIMA SEIKI proposes new applications in shaping and integral knitting through higher production efficiency and flexibility, resetting the industry benchmark once again in the tradition of its legendary SES and SSG machines.

Also on display are the specialty intarsia machine MACH2SIR with 40 intarsia carriers being the highest number of carriers currently available, and the coarse gauge **SCG122SN** featuring SHIMA SEIKI's original **SlideNeedle** known for its wider range of knitting techniques, greater flexibility, higher efficiency and optimum loop formation and fabric quality.

Because of their capability to produce an entire garment without the need for sewing or linking, WHOLEGARMENT® knitting machines realize quick response production with on-demand capability thanks to reduced lead times, and offer reduced dependence on labor as well as associated cost reductions. WHOLEGARMENT® knitting is no longer proposed as a "future" manufacturing method for China, as its market is steadily becoming ripe for WHOLEGARMENT® applications due to rising wages and a diminishing post-production workforce.

Add to that the rapid growth of the domestic fashion industry along with increased demand for more fashionable, higher quality items, and WHOLEGARMENT® becomes a viable alternative to conventional knitting methods. In other words, WHOLEGARMENT® can now be considered an optional upgrade to current production. In that respect, the planning, design and virtual sampling capability of SHIMA SEIKI's **SDS-ONE APEX3 3D design system** make it an essential partner to WHOLEGARMENT® knitting.

In addition to APEX3, SHIMA SEIKI will have on display its flagship MACH2X with four needle beds and SlideNeedle that realize full WHOLEGARMENT® knitting capability, as well as its **brand new SWG-N2 series** suited to the production of small WHOLEGARMENT® items and accessories, as well as technical textile applications.

The Expansion Zone consists of two new machines that cater to diversified market needs, both with great potential for growth in Asia. One is a knitting machine that borrows heavily on SHIMA SEIKI's unique experience with four-bed knitting, featuring a pair of loop presser beds mounted above a conventional V-shaped needle bed. The **new SRY machine** offers full control over pressdown of individual loops for unprecedented capability in flechage and inlay patterns, opening doors to new possibilities in knit fashion as well as technical textiles. A new **updated version of SHIMA SEIKI's SIP flatbed inkjet printing machine** will also be on display to demonstrate the effectiveness of added-value to knitwear.

True to the original ITMA tradition of launching brand-new technology, and in true SHIMA SEIKI fashion, half the number of machines exhibited will be new technology. It continues to offer the cutting-edge in computerized knitting technology that is a must-see for all visitors keen to discover what is in store for knitting, now and in the future.

Drying, Dyeing, Finishing

Benninger (Hall E6 / Booth A22)
Benninger will exhibit a TRIKOFLEX drum washer and a Benninger-Küsters DyePad Basic, one of the key components of its customized continuous processing solutions. Despite the tremendous efforts of machine designers to reduce the liquor ratio, finishing of knitwear in jet dyeing machines still requires large amounts of water and therefore also a great deal of energy. Benninger has developed and implemented a continuous open width finishing process that – in addition to quality benefits – also offer savings, particularly in terms of water and energy. This process makes it possible to lower CO_2 emissions by nearly two thirds in comparison to exhaust dyeing processes. Washing on Benninger's high efficiency **TRIKOFLEX** drum washer with mechanically-assisted front and back washing reduces the water consumption by more than 40 percent in comparison to conventional washers. At the same time the energy required to heat up the washing water is reduced. Additionally Benninger's Trikoflex has been specifically developed for tension sensitive textiles.

The **DyePad Basic** has been especially designed to suit the needs of the Asian markets, and focuses on easy handling. Two swimming rollers ensure a maximum deflection potential and allow dyeing of knit and woven fabrics without any restrictions. This is the reason why the DyePad has a market share that exceeds 80 percent if CPB dyeing is applied.

With the **CPB dyeing process** the reactive dye is fixed at room temperature. With controlled dyeing conditions plus the latest developments in the dye itself, this modern CPB dyeing system can be used on cellulose fibers for woven fabrics as well as knitwear anywhere in the world without any restrictions.

China Hi-Tech Group Corporation (CHTC)
(Hall W1 / Booth A01)

The largest textile machinery manufacturer China Hi-Tech Group Corporation (CHTC) will showcase the latest new technology together with its subsidiaries as well as one of the predominant dyeing and finishing machinery supplier - CHTC FONG'S. CHTC group will have a half hall booth space with total area of 3,750 sqm. and CHTC FONG'S will share the booth space of 940 sqm.

The THEN AIRFLOW® SYNERGY 8 extends up to 12 tubes with individual control, suitable for various kinds of fabrics with better flexibility, quality and ergonomics.

CHTC sees globally a tremendously high demand of technology upgradation on existing processing house to meet both the sustainability requirement of their end buyer as well as the environmental standard of their local authorities. CHTC strongly believes that the sustainable solution for textiles processing is by having the processing machineries to consume the lowest amount of utilities, and then recycling the same as well.

Their flagship products namely THEN AIRFLOW® Synergy 8 aerodynamic dyeing machine, FONG'S TEC series dyeing machine, MONFORTS MONTEX Allround® new patented modular, interchangeable coating head for Technical Textiles, MONFORTS FONG'S MONTEX 6500 Stenter Frame Range, MONFORTS FONG'S MONFORTEX 8000 New Generation Shrinking Range, GOLLER Cold Pad Batch Dyeing Station, XORELLA'S XO-SERIES Vacuum Conditioning and Heat Setting Machines and FWT water treatment recycling system are taking a leading benchmarking level of utilities consumption aspects. All the above mentioned products will be showcased upcoming ITMA Asia.

The latest generation of the **THEN AIRFLOW® SYNERGY 8** is the best example of how to make good things even better. It is well known that the liquor ratio achieved with the THEN AIRFLOW principle up to date has not been beaten. The same counts for the versatility of this superior machine. With the latest development the energy consumption is further reduced. Every tube now has an individual frequency controlled blower with less installed power.

FONG'S TEC Series High Temperature Dyeing Machine, with its premium quality and focus on "Lower Cost, Higher Quality and More Eco-friendly", injects infinite vitality to the textile industry. It is suitable for different dyeing process with various types of natural, synthetic and blended fibers, aiming to provide complete solutions: "Efficiency, Energy Saving, Environmental Friendly". Efficiency (Versatile Application): TEC series is specially designed for fabric which is having tight and crease marks sensitive structure, such as 40S/2, 26S/1, 20S/1, tightly knitted fabric, and sensitive shade (E.g. Turquose) Energy Saving: With various new functions, cotton reactive dyeing process takes about approximately 248 minutes for light color Capacity: The new TEC Series is offered various capacities per chamber: 300kg (JUMBOTEC), 250kg (MIDITEC) and 200kg (MINITEC).

Customer can choose in range of 1-12 tube. FC30 color multi-function controller: By the Fuzzy Logic temperature control function, the dye liquid temperature deviation can be minimized at + / -0.3 ° C. Patented design - "Lint Collector": Specially designed for loose structure type such as terry towel and fleece; the collector can accumulate lint at the bottom and discharge it during draining. With technology support by A. MONFORTS in Germany and high production efficiency in China, there are almost 2,000 sets of **MONFONGS** stenter frame range as well as other ranges in service for customers since its establishment in China from the Year 1999.

Since launch of the cutting-edge stenter frame range **MONTEX 6500** in 2010, the new model machine has attracted wide attention of the textile industry and sold to the main textile base worldwide, such as India, Bangladesh, Turkey and South-east Asia, which led to a substantial market share and first-class reputation for Monforts Fong's expansion in the overseas market. The MONTEX 6500 machine applies PLC control system with Qualitex 750 software, which allows long-distance technical support, production process control becomes more automatic and stable. Ergonomic design makes the design more humanization; TwinAir system and heat recovery system are equipped to further reduce energy consumption, superior production capacityproduction capacity realized. Optional nozzle types give wide adaptability to textile technology, which conform to the environmental-protection concept of energy conservation and consumption reduction.

Monforts Fong's represents the new generation shrinking range **MONFORTS FONG'S MONFORTEX 8000** in 2014 and will display the machine in the coming ITMA Asia exhibition. The completely redesigned machine is built on the experience of making Sanfor® machines for the past few decades and integrated present customer requirements in terms of performance, technology and service.

Goller Cold Pad Batch Dyeing Station was designed by Fong's Europe GmbH team of engineers. Dyeing Padder, which is a heart of CPB system, incorporates rollers with deflection control ensuring even dye liquor pick up across the full fabric width.

This is achieved thanks to double pressure system; hydraulic build up inside rollers and pneumatic applied on the shafts' ends. Dyeing Padder will find its application not only in CPB system but also in continuous pad dry and pad steam dyeing ranges.

XORELLA's XO-Series energy saving vacuum conditioning and heat setting machines has been well used in improving the quality of yarn and also heat setting of garment. The Xorella XO-Steaming treatment could even penetrate the textile products for humidification, twist setting, preshrinking the synthetic filament, anti static, colour fixation of digital printed fabric and heat setting of garment. The latest saturated steam generating system could reduce 30% of connected power loading and save between 15% to 25% energy consumption. In order to satisfy the requirement of different users, Xorella provides both round and cubical machine and also variety of loading and door opening systems for customer selection. Nowadays, XO-Series machines were used in more than 50 countries in the world.

The Group's subsidiary, **Fong's Water Technology (FWT),** has developed the wastewater treatment technology, to achieve the full biochemical no sludge dyeing sewage treatment and water recycling system with double membrane technology applications, providing one-stop sustainable solutions of dyeing wastewater treatment especially for the dyeing and finishing industries. FWT provides the full biological wastewater treatment system with the advantages of no sludge, no pharmacy, low power consumption and simple operation.

Icomatex (HALL E6 / STAND G02)

The Spanish machinery manufacturer Icomatex will show their products and new developments in the field of stenters for knits and woven fabrics, dryers, Washing ranges for woven and for knits fabrics, coating machines and rotary coating screen machines.

The newly developed **ICOMATEX-RELAX DRYER**, achieves the maximum quality for all kinds of fabrics. Prepared for open width or tubular fabrics. An overfeeding unit allows to feed fabric in a relaxed way to achieve a good handling and shrinkage. Extra units such as pad mangle for chemical or pin frame for fabric control can also be installed. The nozzles play the main important roles in the dryers and the **ICORELAX** uses special nozzles with a controlled "wave", according to the specific need of each type of fabric. All nozzles have a "click-Cleaning" system to split the nozzles and do the cleaning without using any tools. Nozzles can be cleaned in just a few minutes. The high power fans have an airflow regulation and a very compact design in order to save the energy as much as possible.

The **ICOMATEX STENTER** gives a wide range of options to let people be able to process the fabric the way they like it. It is fully produced in Europe, and features the latest in technology. The highly efficient chambers are 3mts long with individual control of the airflow, to ensure even temperature in the processing chamber. With the IC-PROD production management system operators can control the whole machine from the touchscreen, located at the operator platform.

The stenter is available with the different heating-systems. With **IC-REMOTE** customers are able to get on-line assistance with your machine. ICOWASH is a special washing box designed to upgrade existing washing and bleaching ranges. This is a great offer for existing lines which are not washing enough or are running too slow. With **ICOWASH ICOMATEX** can upgrade the performance of the System.

The **ICOVAC VACUUM UNIT** is designed to save energy and can improve different processes. In the field of stenters the ICOVAC VACUUM UNIT is reducing the humidity before the stenter which leads to better padder pickup and higher speed. It also reduces the humidity before the drying process for higher speed. In the field of winding at the exit of jiggers, pad batch **ICOVAC** can reduce the excess moisture and between washing tanks it is improving the efficiency and allowing better pickup.

A. Monforts Textilmaschinen (Hall W1 / Booth A01)

A new modular, interchangeable, coating system for technical textiles, the Montex-Allround, will be unveiled by A. Monforts Textilmaschinen. The new modular coating system ensures ease of adapting to the coating method required. The new patented concept provides the solution to integrate a wide variety of coating, printing and other innovative application techniques. The position of the coating head, for example, directly within the fabric infeed of the stenter ensures the shortest distance between the infeed and the coating head; essential for high quality coating processes.

The Montex-Allround also features individual modules for knife and slot die coating as well as modules suitable for flexo, gravure and rotary screen printing.

Integration of special modules such as powder scattering and spraying is also possible. The modules are carried, cleaned and moved with a specially-designed trolley which provides easy access to the side of the stenter infeed with the minimum downtime.

An explosion proof cabinet for treating certain solvents is also available for the new modular unit ensuring safe operation with the operator standing outside the enclosure.

The new Montex-Allround coating system for technical textiles comes with several individual modules (c) 2014 Monforts

Santex (Hall E7 / Booth E14)

The Swiss and Italian Santex will show the Santex ESC Chamber during the exhibition. The Santex ESC, Energy Saving Chamber stands for higher productivity and as a result a better ROY. Santex focused on the finishing of quality knitted fabrics and comprehensive systems of individual machines for pre-treatment of tubular and open-width knitted fabrics.

Santex will particulary inform about the following products: Santashrink – for tensionless shrinking and relax drying of tubular and open width knitted fabrics. Santacompact; width control and equalization of open-width knitted fabric through distortion-free, controlled pinning management. NOVA - Dry to dry continuous water-free cleaning ranges. A solution for scouring of finished fabrics to remove unfixed dye-stuff to eliminate residues.

SperottoRimar is specialized in finishing of machinery for wool & wool like fabrics (cotton, silk, Viscose and synthetic fabrics). Cavitec stands for hotmelt coating and laminating with Hotmelt adhesives. Cavitec combines the Hotmelt machine with laminating calender, low tension drive and web guiding systems. Final end products are for clothing, protective and sports textiles. And Isotex are experts for complete lines for coating, resin finishing, impregnation & laminating plants wet and dry application.

Thies Textilmaschinen (Hall E6 / Stand A02)
After the successful implementation of the latest fabric dyeing machines **iMaster H2O** and **soft-TRD SIII**, Thies Textilmaschinen will introduce its newest yarn dyeing machine in Shanghai: **iCone**. The new development consolidates highest ecological standards with technological intelligence to achieve tremendous savings in water and electricity consumption.

The construction of the iCone is based upon the worldwide established eco-bloc series of Thies, but involves innovative new technologies. Its newly designed 'pump block' system allows dyeing with an ultra short liquor ratio. Depending on the carry-over of the material, liquor ratios of 1:3.6 in partially flooded vessels are performable in practice.

Thies iCone will debut at ITMA Asia + CITME 2014 in Shanghai (c) 2014 Thies

Improved rinsing functions allow the reduction of the after-treatment time by almost one hour. Moreover, the new 'suction pipe' design enables the adjustment of the flow reversal, namely from inside to outside and from outside to inside. iCone has been specifically developed to meet the requirements of stringent international and local environmental protection regulations with simultaneous consideration of its economic Efficiency.

Nonwovens

ANDRITZ (Hall W3 / Booth A07)
International technology Group ANDRITZ will present its wide range of products and services in delivery of complete turnkey and individual solutions for wetlaid, spunlace, and needlepunch production as well as its newest technologies for the textile industry.

With the new site in Wuxi, China, ANDRITZ Nonwoven has strengthened its nonwovens manufacturing capabilities and service range throughout Asia. The location has a technical center and hosts both an industrial scale needlepunch pilot line and a roll service center.

Fibers are the major cost factor in nonwovens production, and all market applications require a low average fabric weight combined with consistent mechanical performance and weight uniformity. This is why ANDRITZ has integrated the **ProDyn system** into needlepunch lines to achieve a significant reduction in fiber consumption and thus enabling a better ROI.

The new line concept comprises the **double eXcelle card** with innovative feeding system, the **dynamic crosslapper** with integrated web control device, **A50 needlelooms** with versatile needle patterns, and a new range of **Zeta drafters**. The ProDyn technology creates constant interaction between the dynamic card and the dynamic crosslapper.

The **ANDRITZ calender** concept for technical textiles ensures highest product quality and performance and meets international environmental protection requirements. The patented teXcal trike, a 3-roll calender with two separately controlled system rolls, provides outstanding productivity and flexibility. The **teXmaster** concept offers closed-loop operation for inline quality measurements on the product, for example air permeability measurements. Direct analysis of data obtained at the calender outlet is used to control the system rolls. This concept is also suitable for African damask finishing.

ANDRITZ also provides complete offline finishing solutions for medical applications. Spunbond nonwovens have to meet high quality criteria, with hydrophobic, alcohol-repellent, air-permeable, anti-static, and breathable properties. The **ANDRITZ offline finishing** technology includes unwinding, impregnating, dosing, drying, curing, and winding/slitting.

The **neXline spunlace** is a proven solution with highly efficient use of resources and is available over a wide range of capacity and product applications. For disposable products like wipes, the ANDRITZ neXline spunlace eXcelle combines the **Isoweb TT card** and **JetlaceEssentiel**.

This concept is designed for lightweight products with low MD/CD ratio and for high-speed production.

Autefa Solutions (Hall W1/ Booth C01)
Autefa Solutions is represented with the business areas Nonwovens Technology, Fiber Logistic Technology, Automation Technology and Woollen/Worsted Technology.

Autefa Solutions Nonwovens Technology delivers **turn-key lines** as well as **individual machines** for nonwovens manufacturing. The field of nonwovens technology was expanded by the newly founded company Autefa Solutions Switzerland. Autefa Solutions Switzerland delivers equipment for thermobonding, drying as well as cutting-, winding- and festooning- technology. Autefa Solutions is certified as a VDMA- Blue Competence member. With **EnRec** the company offers a 6-level energy saving concept which substantially reduces the energy consumption of new or existing lines.

AUTEFA Solutions Crosslapper Uniliner CL 88 (c) 2014 AUTEFA Solutions

Autefa Solutions area **Fiber Logistics Technology** delivers fully automatic baling presses for polyester and viscose staple fibers. Together with market-leading fiber producers Autefa Solutions has developed a new generation of fiber baling presses. The **Nonstop-Ultra baling press** fulfils all requirements regarding capacity and quality for the production of polyester and viscose staple fibers.

The considerable decreases in personnel costs as well as the high availability of the installation and the short period of amortization are the main features of the new fiber baling press. The baling press in combination with the wrapping machine **AD-WRAP** produces 60 bales/h.

In Autefa Solutions business area Automation Technology solutions for transport processes in textile industry are realized. In filament production the requirements of the customers for an individual automation of the bobbin handling are focused. **New concepts for inclusion of creeling** into the transport automation are presented during ITMA Asia.

Woollen and Worsted Technology from Autefa Solutions delivers complete lines and **Woollen Carding Sets** to process fine and extra fine wool, cashmere and silk, for high quality weaving and knitting yarns.

Autefa Solutions is part of China Hi-Tech Group Corporation (CHTC). The company headquarters are located in Friedberg, Germany. With Autefa Solutions Wuxi the company owns a production location, where machines for the Chinese market are manufactured.

Autefa Solutions Wuxi combines Chinese and European technologies for the application purposes of the local Chinese market. With the Crosslapper UNILINER CL 88 and needle looms, type NL two machines have already been successfully established in the market.

DiloGroup (Booth No. C01 / Hall W3)
DiloGroup will present its portfolio of equipment and services to the nonwovens industry. DiloGroup will provide extensive information about production lines made in Germany and recent machine concepts from the DiloGroup companies **DiloTemafa**, **DiloSpinnbau** and **DiloMachines**.

A major focus of the new equipment is to improve operation efficiency, web quality and uniformity with positive effects on all staple fibre bonding processes. All these elements are part of the "Dilo – Isomation Process" and aim at an even web mass for reduced fibre consumption as raw material is the biggest cost factor in textile production. One machine contributing to this process is the **dosing opener DON** manufactured by DiloTemafa which includes a fine opening stage. It delivers the fibrous material continuously and homogeneously to the card feeder.

Another step to improve evenness is the **card feeder MultiFeed** designed by DiloSpinnbau which is available in working widths up to 5 m. This machine using the "Twinflow" infeed system offers a capacity of over 400 kg/hour/m of working width when processing 1.7 dtex fibres. It thus represents a state-of-the-art feeding solution for direct cards.

The use of a "Twinflow" infeed applies the doubling effect for a more homogeneous flock mass flow. The Spinnbau **MultiCard** provides high production availability due to its easy and fast accessibility for cleaning and maintenance work. It handles the full range of fibre fineness and length with a web speed potential of up to 200 m/min and thus represents an economic solution for cross laid nonwoven production.

Dilo crosslappers provide infeed speeds up to ca. 200 m/min (HL series) and over 160 m/min (DL series). The **DL series** may be equipped with the **Webguide** from DiloMachines which also provides web homogeneity at high speeds and therefore results in significant fibre savings. DiloMachines offers a complete range of vertical and horizontal crosslappers, which ensure high layering precision based on excellent web control up to working widths of 16 m.

The sales program of DiloMachines includes the entire range of needlelooms, from single board needling on one side to two boards from each side, plus structuring and patterning specialty looms. Endless felt tubes can be needled and also wide working width belts for papermachine clothing applications.

The further development of needlelooms continues.
Elliptical and circular needlebeam movements are used to control drafts in the needling zone and to provide high speed felt production especially in the low weight range.

DiloGroup is the premier builder and supplier of complete nonwovens lines made in Germany for staple fibre nonwoven production. Each line is specifically engineered to customer needs.

A Dilo needling line (c) 2014 Dilo

Trützschler NONWOVENS (Trützschler Booth Hall W2)
Trützschler NONWOVENS puts emphasis on the variety of products for nonwovens production. Complete systems ranging from fiber opening to winding of the web are offered from a single source for the four web bonding processes (hydroentangling, needling, thermobonding and chemical bonding). A wet-in-wet process represents a brand new development for such end products as flushable wipes. The technology and design of the production plant was developed with the German company Voith Paper.

Trützschler Nonwovens and Voith Paper developed systems for wet-laid and hydroentangled nonwovens with a high level of wet strength. They consist only of fibers of natural origin that quickly disperse in water and that are 100% biodegradable (c) 2014 Trützschler

Furthermore, information on various tailor-made components will be presented: The **new Streamliner dryer** realises maximum evaporation rates for hydroentangled webs at minimum energy consumption. Concerning winders, the focus is also on the variety of available inline and offline solutions. An example is the **new, energy-efficient automatic surface winder** for spunlace materials.

Testing

Uster Technologies (Main: Hall W5/ Booth G01)
(Sub: Hall W4 / G09)
Uster Technologies will exhibit at ITMA Asia & CITME in two locations. At the main booth, the company will present the full range of established USTER® instruments for laboratory and in-process testing of fibers and yarns, over a display area of 200 square meters, including a special USTER® JOSSI focus.

Jossi Systems instruments are now fully-integrated into the USTER product family, and will be seen at the show for the first time in a new livery, matching the familiar red and grey USTER color scheme. Re-branded under the name **USTER® JOSSI**, these instruments maintain their key characteristics of high performance and great reliability in eliminating cotton contamination at the early stages of spinning mill processing.

The USTER personnel will also present visitors with the first detailed insight into the way USTER® JOSSI instruments complement existing USTER® systems to create a complete solution to the long-time challenge of contamination in cotton mills. The key is interaction between the **USTER® JOSSI VISION SHIELD** and the world-leading **USTER® QUANTUM 3 yarn cleare**r to enable spinners to specify and meet precise yarn quality standards consistently and reliably. Exhibition visitors will see how this partnership can provide **TOTAL CONTAMINATION CONTROL** in a specially-dedicated section of the booth.

USTER® CLASSIMAT 5 – The Yarn Classification System (mounted on a winding position) (c) 2014 Uster

The complete USTER® instrument ranges for both fiber and yarn quality control will be shown here – a particular eye-catcher being the latest **USTER® CLASSIMAT 5 yarn classification system**, marked out on the booth by a large red 'U'. The 'Think Quality' slogan will be exemplified by booth staff as they present the best-selling **USTER® TESTER 5** offering extensive information on all the key yarn parameters for spun-staple or filament, and specialized laboratory instruments such as the **USTER® TENSORAPID 4** and **TENSOJET 4** strength testers and the **USTER® ZWEIGLE HL400 yarn hairiness length measuring system**.

For testing of raw fiber, the main booth will feature a comprehensive quality control family, including the **USTER® HVI1000, USTER® AFIS PRO 2 and the USTER® SLIVERGUARD PRO**.

The second booth will also offer visitors detailed information on TOTAL CONTAMINATION CONTROL with special reference to the **USTER® JOSSI VISION SHIELD** for detection and removal of all kinds of contaminants from raw cotton in the early stages of mill processing. Expert staff will be on hand to explain the system and its benefits for spinners.

Other machinery

Erhardt+Leimer

The web guiding specialist Erhardt+Leimer will present their bestselling cutting system **ELCUT BTA 80**. E+L has launched the BTA 80 in the second quarter of 2011. After selling very successfully 86 systems in 2011 and nearly 200 systems in 2012, the experience gained in the market triggered further improvement and lead to the development of the second edition of the cutting system. In 2013 sales figures doubled to nearly 400 systems and in 2014, Klaus Baumann, head of the textile division at Erhardt+Leimer, expects to sell as many as 500 systems.

Combined with the **FR 60 wide band sensor** with a measuring range of +/- 80 mm and a resolution of 0.1 mm, the BTA 80 offers unrivalled cutting accuracy. And even if a web with a different width is inserted the operator doesn't have to change any settings (as long as the web edge is still within the field of view of the sensor). The system runs automatically with the adjustment used before.

Compared to other cutting systems using simple photocells and "black/white" edge control the BTA 80 with FR 60 works with a 5 mm higher accuracy on both sides. If only the savings of 5 mm are taken into account, the return on investment for a new BTA 80 is around 8 months. Normally, payback is achieved after less than 3 months - and it doesn't make a big difference whether it is calculated under Asian or European conditions. This means edge cutting with the BTA 80 is like printing money after the first 3 months, stated E+L.

Associations

ACIMIT

The Italian associaction ACIMIT wants Italy's textile machinery leadership to be featured among the suppliers of textile manufacturing technology, with a high number of Italian machinery manufacturers exhibiting at the event. About 110 Italian exhibitors are on hand at ITMA ASIA + CITME 2014, occupying an overall exhibition space of 4,750 sq. meters. 57 Italian companies are presenting their products as part of the National Sector Group, organized by ACIMIT (the Association of Italian Textile Machinery Manufacturers) and ICE (Italian Trade Agency). The four Italian clusters are situated in the spinning (Hall W5), non-wovens (Hall W3), weaving (Hall E1) and finishing machinery halls (Hall E7). The total surface area, occupied by Italian National Sector Group, amounts to roughly 1,400 sq. meters. ACIMIT is present at ITMA ASIA + CITME at the OWNER'S VILLAGE (T1 A02).

"The high number of Italian exhibitors in Shanghai," comments Raffaella Carabelli, President of ACIMIT, "shows that our companies are confident in the growth of the Asian markets, and China in particular. Compared to two years ago, the exhibition space booked by Italian manufacturers has grown 2%."

Asia constitutes a constant benchmark for Italy's textile machinery industry, absorbing fully 44% of sales abroad. The main destinations of the area for Italian companies are China, India, Pakistan, Bangladesh and Indonesia. The Chinese market by itself accounts for 20% of Italian machinery sold abroad, for a value of 327 million euros in 2013. It is the primary destination for Italian exports.

"For many years," continues Carabelli, "our machinery manufacturers have had a stable presence in China. Knowledge of the market is essential to satisfy new local textile demand. Today, in particular, Italian machinery producers are capable of offering sustainable technology that is attentive to water and energy consumption, chemical products, while simultaneously respecting the environment, as evidenced by the strong commitment to the Sustainable Technologies project by our associated manufacturers. In today's marketplace, for Chinese textile manufacturers to have an innovative and sustainable technology partner, such as the Italian textile machinery sector, represents an essential competitive edge."

UCMTF

The ITMA ASIA+CITME will be another opportunity to connect with the French Textile Machinery manufacturers. The French offer is very large as France is the 6th textile machinery exporter worldwide with an annual turnover of more than 1 billion Euros (USD 1.3 billion). For the long fibre spinning industry French companies offer 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 they give their customers the opportunity to develop high-tech yarns for traditional and technical applications including the carpet industry. Jacquard machines and dobbies developments make feasible spectacular increases in the speed of the production processes together with higher quality and more reliability.

In the field of dyeing there are consistency improvements together with energy and water savings. In new sectors of the textile industry like the nonwoven processes the French machinery is also at the pinpoint of innovation. Recycling the textile materials at the end of their life cycle and transform them into new products, being environmentally friendly, is also an issue on which the French machinery manufacturers are among world leaders.

Evelyne Cholet, the Secretary General of the manufacturers' association, is very optimistic on the outcome of the next ITMA ASIA 2014 as the companies which will exhibit have already many customers in Asia and are well organized to offer them the best solutions, thanks to their tailor made approach to address in depth customers' needs and the best service to enable a very high reliability of the production processes of the customers. She adds that this year a very important issue will be on energy savings.

The French manufacturers have worked very hard on energy savings. In many examples, the energy saving is in the 30-40 % range, same or even more for the water consumption in dyeing and finishing.

For apparel, home textiles and technical textiles, The Jacquard fabrics are very much in demand. Joseph - Marie Jacquard, born in Lyons (France) in 1792 revolutionized the technology. His focus on innovations and customer service are still the DNA of his distant successors, the French textile machinery manufacturers.

Evelyne Cholet cordially invites all textile producers to visit the booths as personal contacts are the best way to understand even better the customers' needs to help these customers to introduce new products with high added value and compete successfully on their markets.

The following French companies will exhibit: **NSC fibre to yarn** (Booth W4 - Hall C06), **LAROCHE** (Booth W3 - Hall A08), **VERDOL** (Booth W2 - Hall B22), **FIl CONTROL** (Booth W2 – Hall B23), **PETIT** (Booth W2 – Hall B24), **AESA** (Booth W4 – Hall B13), **SUPERBA** (Booth W3 – Hall G01), **DOLLFUS & MULLER** (Booth E7 - Hall C34) and **STÄUBLI** (Booth E2 - Hall E01).

VDMA (Association Village Tent: Booth T1A01)

Efficient textile production in terms of energy and resources will be the main topic of German exhibitors at ITMA ASIA + CITME 2014, mid of June in Shanghai. Volatile prices and sporadic shortages for energy as well as commodities and stricter environmental legislation put textiles producers in Asia under pressure to adjust. Member companies of the VDMA Textile Machinery Association demonstrate at ITMA ASIA + CITME 2014 that latest German technology increases profits by higher energy efficiency.

The first point of contact for trade professionals interested in German technology will be the VDMA information booth in the Association Village Tent: Booth T1A01. The tent will be located in the open air area between the E and W halls.

VDMA experts examined the energy saving effects over the entire production chain of three textile products. Major results of this in-depth analysis of German Technology will be summarized in a brochure that can be obtained at the VDMA booth and the booths of numerous VDMA member companies at ITMA ASIA. VDMA's approach of the analysis is to cover the complete value chains from the raw material to the finished product, e.g. a functional T-Shirt. To manufacture this type of product, the process starts with spinning and texturizing of polyester yarn followed by the warp preparation.

To produce the textile fabrics, warp-knitting technology is used, e.g. an automatic warp knitting machine. In the following process step of textile "finishing", this material is washed, dyed black and finished (i.e. functionalized by applying special properties such as dirt repellent, waterproof and water vapor permeable layers), dried and finally completed by setting. For all these steps, from filament production to finishing not only the electrical energy consumed - including compressed air and air-conditioning - but also the thermal energies like gas, oil, or steam have been taken into account.

From June, 6 2014 onwards trade professionals have the chance to read the full stories of three product specific examples and witness the huge energy saving potential that can be realised with the help of German textile machines on two Websites. And visitors to the websites have the chance to prove their know-how in energy efficiency in a competition featuring attractive prizes.

http://machines-for-textiles.com/blue-competence (in English)
http://china.vdma.org (in Chinese).

115 German companies have registered for ITMA ASIA + CITME 2014. All renowned German manufacturers will be present at the leading trade fair for the Asian market. The German exhibitors will cover almost all different machinery chapters with a strong focus on spinning, finishing, knitting, nonwovens, weaving and winding technology. For visitors it will be easy and convenient to find and visit German exhibitors as most of them will use the "German Technology" logo. Furthermore, VDMA has initiated German sector groups in hall E1 (weaving), E6 (finishing) and W1 (spinning).

So much on the leading exhibitors.

If you are interested in further information please visit the ITMA Asia 2014 category on our website where you will find the detailed news of the exhibitors:

http://www.texdata.com/74.itma-asia-citme-2014.html

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 impressions from the fair on our website www.texdata.com and the ITMA Asia + CITME review in the next issue.

INDEX™ 14 was again global nonwovens industry meeting place

INDEX award for Lenzing - TENCEL ®Skin promotion campaign (f.l.t.r.) Dieter EICHINGER, head of the Hytec market segment (hygiene, home and technical textiles) at Lenzing, Elisabeth STANGER, Head of Hygiene at Lenzing and Peter UNTERSPERGER, Lenzing CEO

On Friday 11th April, INDEX™ 14 closed its doors on one of the most successful ever global nonwovens exhibitions. With representation from across the nonwovens and related industries, displaying a diverse range of products and services, INDEX™ has again delivered on its promise to be the 'global meeting point' for the industry.

More than 12,500 visitors made their way through the doors of the Geneva Palexpo exhibition centre, keen to see the 586 exhibitors (an increase from the previous edition in 2011 of 10%), from 41 countries, in more than 22,000 m2 of stand space.

Visitors attending the show from the 8th to the 11th April 2014 were able to engage with a larger portion of the industry than ever before, as well as take advantage of the special events organised during the exhibition. Automotive nonwovens, packaging, product presentations, geotextiles, and innovation events delivered value to the most diverse population of the industry since the exhibition began. Additionally, the introductory lunchtime tutorials on nonwoven production and absorbent hygiene products, first introduced in 2011 were continued, with an additional course on filtration added to the sessions available to attend. These courses, which provide an overview of the world-famous EDANA training courses, were popular throughout the exhibition, with several editions offering standing room only.

"Celebrating the 30th anniversary of INDEX™ in Geneva, INDEX™ stands as the most representative exhibition of the nonwovens industry. With more exhibitors than ever, we see this as a sign that points to not only a recovery in the global economies, but to a healthy and diverse industry." said Pierre Wiertz, general manager of EDANA.

"Since INDEX™ first appeared in Geneva, our industry has evolved. Nonwovens and related materials are replacing traditional fabrics or plastic composites in vehicles, and in building and construction projects, showing that nonwovens offer high-tech fluid management solutions for not only hygiene and medical purposes, but with cross fertilisation – in many other applications as well." continued Wiertz. "Looking ahead to INDEX™ 17, we are reminded of how both resilient and innovative the nonwovens industry really is."

Exhibitors shared their delight with the quality of the attendees visiting the show, alongside feedback from visitors who were pleased with the breadth and depth of the exhibitors on offer, covering the entire chain from machinery and raw materials producers to converters and providers of added-value treatments and processes.

An exhibitor stated that they were "very pleased with everything to do with INDEX™ 14" and that it had been good for their business, a sentiment echoed by a visitor who commented that "INDEX really is where the global nonwovens industry meets.

This edition I came for a few days, but I plan to visit for the full show next time, so that I can take advantage to see and meet with everyone". Several exhibitors also reported that the quality of visitor had significantly increased from previous editions, with efforts to engage visitors from broad industry sectors clearly attracting the right people for exhibiting businesses.

Leading technology suppliers used the Index 2014 exhibition to introduce new machinery to the market and customers. For example **Oerlikon Neumag** unveiled a specially designed production line. Staple FORCE S 1000 (FORCE stands for „Fibers on Request and Compact Engineering") is addressing the growing need of manufacturers of polyester and polypropylene staple fibers to also be able to make small production units in a cost-effective manner. The line achieves this with an exceptionally high production speed of 1 000 meters per minute along with simple and fast handling, which shortens changing times and significantly reduces surplus quantities. With a production capacity of 15 tons per day, the system appeals not only to manufacturers of manmade fibers as it enables them to deliver on demand and expand to markets for special applications. Manufacturers of nonwovens can also directly profit from Staple FORCE S 1000. The system facilitates the cost-effective integration of fiber production into in-house production. „Moving forward, we intend to apply our broad technological expertise in manmade fibers to achieve further growth with machine and system solutions for special applications," explained Stefan Kross, CEO of the Oerlikon Manmade Fibers Segment.

The key to cost-effective, flexible operation is the system's compact design. The Staple Force S 1000 is designed for simple, fast handling. It offers significantly faster changing times compared with conventional production lines. This in turn markedly reduces waste. Another central component of the system's cost efficiency is its production speed. At 1 000 meters per minute, it achieves speeds not seen before in one-step processes. Oerlikon Neumag announced a high visitor resonance during Index and in addition to nonwoven technologies for industrial applications visitors were particularly interested in the new Staple FORCE S 1000 staple fiber plant. "Efficient, flexible and compact – these are extremely attractive factors for our customers, opening up diverse, new market potentials for them", sums up Oerlikon Manmade Fibers Sales Director Michael Korobczuk.

Another world market leader, the **Dilo Group - DiloTemafa, DiloSpinnbau and DiloMachines** – have also been very comfortable with the Index and named the exhibition a success for the only supplier of complete nonwoven lines . Dilo provided widespread information about numerous applications of nonwovens showing various products and the staff in Geneva enjoyed meeting customers and interested parties for discussions about new applications and production methods of nonwovens. Dilo engineers lines for the production of different nonwovens in all application areas and offer them as turnkey installations. Either domestic or technical textiles can be produced. Possible application areas are floor coverings, automotive linings, geotextiles, filter media, synthetic leather or natural fibre felts. Furthermore, they offer installations for the production of disposables, which are used in cosmetics, medicine and hygiene.

DiloGroup has already delivered more than 260 complete production lines to the nonwovens industry and thus has the necessary know-how to design the optimum installation for the desired final product. Continuous product development and application research work in their textile centres support and ensure sustainable production lines. Being a strong partner for the nonwovens industry, Dilo achieves maximum throughput of the projected installations with highest machine efficiency and product quality.

And it was not a surprise that there were also some companies with positive news about contracts and orders they have closed during Index. For example **Albaad Corp.** invests in the flushable nonwovens technology by **Voith Paper** and **Trützschler Nonwovens**. Following a three year product development process and successful feasibility proofs for a range of flushable materials, Albaad specified its requirements for commercialisation and considered the most advanced solutions offered by the leading equipment supplier groups. A thorough technological assessment lead to Albaad's decision to choose both Voith Paper and Trützschler Nonwovens as technology partners for the new project. The project was driven by the increasing demand for environmental friendly products. By this investment Albaad aspires to secure its position as the leading Moist Toilet Paper producer globally.

Celebrating Albaad' s investment at Index 2014: (f.l.t.r.) Marc Wolpers (Sales Director of Trützschler Nonwovens & Man-Made Fibers GmbH), Boaz Roseman, CEO of Albaad Corp. and Dr. Klaus Afflerbach (Senior Sales Manager Wet Laying). (c) 2014 Trützschler Nonwovens & Man-Made Fibers

The line will be established in Dimona, Israel, and will start operating next year. The new production line will open a door into the high potential field of wetlaid and spunlaced nonwovens. The fast growing segment of flushable materials is an ideal field to bring both technologies nearer together.
Both the HydroFormer, Voith Paper's wet laying machine, and Trützschler Nonwovens' spunlacing unit, the AquaJet, are highly productive as well as highly efficient solutions that have proven themselves in dozens of installations all over the world. Moreover, the energy-conscious Streamliner drying system makes it's entry into a wet-in-wet production line and further reduces production costs.

International technology Group **ANDRITZ** has received an order from **DDN Beijing Dongfang Dayuan Nonwoven-Fabric**, China, to supply a new spunlace line for the production of wipes from viscose/PES (30-80 g/m_). Start-up is scheduled for the second quarter of 2015. DDN is one of the leading Chinese nonwovens producers and has already had two ANDRITZ lines in operation for many years now. The new ANDRITZ neXline spunlace (annual capacity of 8,000 tons) is equipped with an eXcelle VarioWeb card with three doffers, a Jetlace Essentiel hydroentanglement unit, and a Perfodry Avantage through-air dryer.

On the other hand it has been little surprising tht ITMA and EDANA signed a memorandum of understanding during the Index. Among the proposed joint efforts outlined in the MOU is collaboration on a nonwovens conference to be held at ITMA 2015 in Milan. Mr Pierre Wiertz, General Manager of EDANA, said: “We share a common objective of helping the textile and, in our case, nonwoven industries reach out to a wider audience through greater innovations and education.” Mr Charles Beauduin, President of CEMATEX, lauded the collaboration and said: “As the owner of ITMA, we warmly welcome EDANA to co-organise the nonwovens conference.

Many of our CEMATEX national association members who produce machinery and related solutions for the nonwovens sector will look forward to this joint initiative.” And Ms Eileen Ng, Executive Director of MP Expositions (organiser of ITMA 2015) added: “Visitors are able to witness the interaction of the materials and chemicals with the machines on the spot during live demonstrations. The cooperation with EDANA is synergistic and beneficial for the industry.”

Furthermore there were interesting new ideas at the exhibition. For the first time at INDEX, a special forum has been dedicated to automotive nonwovens, highlighting the benefits and applications of nonwovens in the automotive industry, including their contribution to performance, comfort, and the efficient use of our planet’s resources.

Speakers at the forum covered a range of topics, including:

- How Europe is retaining its lead in automotive innovation and the contribution nonwovens are making to it
- Nonwovens applications in the area of sound insulation, interior trim and car seats
- Nonwovens; making your drive comfortable and safe
- Automotive nonwoven components from recycled diaper materials
- The sustainability benefits of nonwovens in automotive applications

Additional details about the applications and advantages of automotive nonwovens and webcasts of the forum speeches can be found at http://www.klewel.com/conferences/index14/automotive-nonwovens-forum-0-2652.htm.

The T J Beall Company Booth at INDEX 14

The winners of the INDEX™ 14 Awards

Of cause the award ceremony of INDEX™ 14 Awards was one of the highlights for the awarded companies and the participants. EDANA's INDEX™ Awards are the highest accolade for excellence in Nonwovens industry and highlight some of the innovations from businesses of all sizes, and from all parts of the nonwovens supply chain.

The winners are:

Sandler AG from Schwarzenbach/Saale, Germany, received the award in the „nonwoven rollgoods" section for its latest development for the construction industry: **sandler fibercomfort® tread- and waterproof roof insulation**. Without any additional finishes, these textile materials are permanently hydrophobic, withstanding even harsh weather. The durable nonwovens reliably insulate heat and sound; they are permeable, allowing the building to breathe and preventing an accumulation of moisture. Being tread-proof and flame-resistant, the nonwovens contribute to safety. And the single-polymer, recyclable nonwovens also help conserve valuable resources. Applied directly on top of the rafters as an all-in-one solution for roof insulation, or in combination with insulation between the rafters—sandler fibercomfort® is the textile alternative for effective roof insulation.

The INDEX Awards awaiting presentation

The jury said: "This product expands the market for nonwovens in the construction sector, effectively and efficiently replaces wood by enabling a single solution for roof insulation based only on nonwovens, and is a product which is lighter than alternatives and potentially recyclable".

Imeco received the award in the 'finished products made from, or incorporating nonwovens' section for their new development **NOCEMI®-MED** disinfection wipes. The innovation of this new product is the development of non-woven wipes in combination with the latest generation of disinfectants. The NOCEMI®-MED liquid itself is unique in its effectiveness (it acts bactericide, yeasticidal, tuberculocidal an in addition virucidal „high level" (DVV guideline)) and consists exclusively of natural and synthesized natural ingredients – without any alcohol and quarternary ammonium compounds.

The effectiveness of the disinfectant wipes is proven among others in the so called 4-field-test by independent institutions. NOCEMI®-MED is available in can dispenser or as ready- to-use bags for pail dispensers with removal opening.

The jury said: "A virucidal, bactericidal, alcohol free and disinfectant which offers a timely answer to help prevent Healthcare Associated Infections, and which will help reduce healthcare costs through more efficient cleaning of potentially contaminated areas."

Lenzing received the award in the 'most original marketing campaign for a product made from, or incorporating nonwovens' section with the **TENCEL ®Skin promotion campaign.**

On April 8, Eastman Chemical Company received the EDANA INDEX14 Innovation in Raw Material Award for its Eastman Cyphrex™ microfibers. At the ceremony in Geneva, Switzerland, (from left) Eastman's Todd Williams, Tim Dell, Jeanette McQueeney and Paul Dulick were present to receive the award.

TENCEL® Skin is specifically developed for the use in facial masks. The smooth fiber surface creates a silky feeling. The unique structure provides optimum absorbance and compatibility with lotion. The Fiber is of botanic origin, since it is extracted from the raw material wood.
The jury said: "This is a highly aesthetic and artistic video which lends life to the fibre and connects it to people, and effectively conveys the main properties of the fibre."

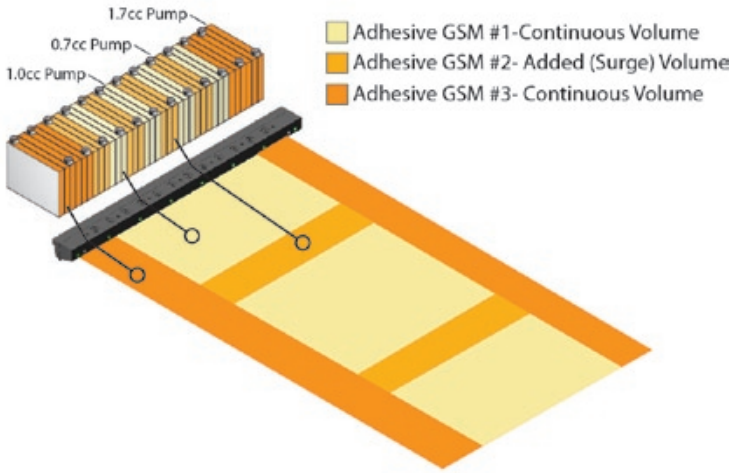
Eastman received the award in the 'Innovation in a raw material of special relevance to the nonwovens industry' section for their **Cyphrex™ microfibers**.

Launched in 2013, the new and groundbreaking Eastman Cyphrex™ microfibers platform, enables nonwovens solutions unlike anything else on the market. It has become a novel resource for media and downstream component manufacturers. "We are honored to receive this recognition from a leading international association such as EDANA," said Tim N. Dell, vice president, innovation, marketing, sales and pricing, Eastman Chemical Company. "We are continuously investing in growing our application development expertise to address customer needs with market-changing products that offer an entirely new level of performance."

Eastman Cyphrex™ microfibers offer a unique combination of capability in variation of size, shape and material, a high level of uniformity and consistency, and ease of wetlaid processing. This combination opens new possibilities to nonwovens formulators and their customers in achieving an expanded reach of desired properties with a high degree of precision and consistency. **The jury said:** "A useful way to provide custom microfiber blends, which enables a new level of flexibility in wetlaid nonwovens."

ITW Dynatec received the award in the 'Innovation in machinery of special relevance to the nonwovens industry' section for the **VectorTM Surge Applicator**. Vector Surge is an advanced add-on technology to the company's original Vector metered platform (which won **„Most Innovative Equipment Technology"** at IDEA 2010), and is the only applicator on the market with the ability to provide precise variable volume capability in line machine direction and cross machine direction.Surge is a patented application method that can apply heavier volumes of adhesive exactly where needed and lighter volumes everywhere else - all with only one system, one hose, and one applicator. **The jury said:** "This simple and compact piece of hardware enables the customised application of adhesives, while minimising waste. Highly versatile, the device can be integrated into any line."

Vector Surge Configuration Example:



Ahlstrom received the award in the 'sustainable product' section for the **Flow2Save™ filter media.** The award-winning Ahlstrom Flow2Save(TM) is a patent-pending filter media for high efficiency air applications in indoor air and cleanroom environments, designed to lower energy consumption and costs. „EDANA's INDEX 14 Awards recognize excellence in fiber-based products, and related industries. Ahlstrom's award-winning product is a result of our long-term development work and part of our offering for a clean and healthy environment. We are proud to have our product presented with this prestigious award," says Paul Stenson, EVP, Technology and Strategy Development. **The jury said:** "An innovative filter media which saves energy (compared to conventional microglass media), and offers a low pressure drop at all efficiency levels, providing significant cost savings over the life time of the filter."

Lawson Gary, Chief Operating Officer of the T J Beall Company with the INDEX Award

TJ Beall received the award in the 'sustainable process or management practice' section for their **True Cotton Greige Cotton Nonwoven for Wound Healing and Hygienic Product Applications.**

The jury said: "This is a paradigm change compared to cotton currently available for nonwovens, which efficiently exploits the natural properties of cotton fibre, and is an effective alternative to bleached cotton. A smart way to use 'waste' cotton."

In congratulating the winners, and recognising the outstanding efforts of the nominees, Pierre Wiertz, general manager of EDANA said "If you're looking for clues about how our industry will change and develop, look no further than the products and services of those winners and runners-up recognised here today. It is products such as these which are helping to drive our industry forward, and create a stronger industry, with solutions in so many different product categories and sectors."

The winners were presented with their specially commissioned bronze sculpture and a diploma at the Awards Ceremony, which was attended by the media, exhibitors and visitors to the show.

The INDEX™ 14 Awards jury, which was comprised of an official from the European Commission, a former senior nonwovens company business development and marketing manager, a representative of the nonwovens industry trade press, and top academic nonwovens R&D experts, met in February in order to select the nominees, and to choose, from this group.

In order to be considered, companies could submit only one application per category, and products must have been commercially available by the 31st January 2014. Additionally, products or campaigns must not have been commercially launched before April 2011.

INDEX™ 17 will again be held at the Geneva Palexpo, from the 4th to the 7th April, 2017. Previous exhibitors will have priority booking privilege when booking opens in the summer of 2015. Until then, any questions can be directed to **index@palexpo.ch**.

“Promote demand of Cotton!“

José Sette, Executive Director of ICAC

„Cotton for People - Needs and Solutions” – it was with this motto that the 32. International Cotton Conference took place from March 19 – 21, 2014 in Bremen’s town hall. More than 500 participants from 40 nations came to Bremen, including among others large delegations from Egypt, Brazil, China, and Pakistan, to discuss various topics related to cotton in the Hanseatic city’s town hall. This makes the Bremen Cotton Conference, which takes place every two years and is organized by the Bremen Cotton Exchange and the Faserinstitut Bremen e.V., one of the global cotton industry’s most important events, turning the tranquil Bremen into “the center of the world of cotton” for a few days.

Fritz Grobien during his opening speech

"The Bremen Conference has an excellent international reputation thanks to the Bremen Cotton Exchange and the Faserinstitut", says Fritz Grobien, President of the Bremen Cotton Exchange. "When someone travels regularly to Bremen every two years from Australia or China or another country, for example, it fills us with pride. The Bremen Cotton Conference belongs to a small, exclusive group of high-quality events in the cotton industry."

This is an event that, while boasting a wealth of tradition, also kept up with the times and inventively mixed the tried and true with the new. The spectrum ranged from a scientific lecture about fashion shows to a panel discussion about water consumption.

„Over the past few years, we have clearly expanded this very special scientific conference to also include current topics", said President Fritz Grobien. "This was a necessary step in order to adapt to changes in the textile industry. We've seen that this was also the right step to take, as we now attract the most important people from the cotton industry to Bremen and include more and more players from the textile chain."

Parallel to the official conference in Bremen's town hall, numerous work groups also met in Bremen, including the European Association of Cotton Dealers ACME, the globally active SEEP Panel (Panel on Social, Economic, and Ecological Performance on Cotton Production), and the International Forum for Cotton Promotion IFCP; furthermore, the board of directors of the International Cotton Association also met in Bremen.

Prior to the Cotton Conference, the work groups of the ITMF (International Textile Manufacturers Association) also met to discuss cotton testing methods and the harmonization of testing methods.

Now, let's get down to business: the contents of the conference. Three days of the Cotton Conference makes 29 lectures in 8 sessions.

Session 1, Key note, started off with speeches by **Folker Hellmeyer,** Chief Analyst at the Bremer Landesbank; **José Sette**, Executive Director of the International Cotton Advisory Committee, Washington, DC (USA); and **Ray Butler** from Cotlook Limited, Merseyside, UK.

Folker Hellmeyer presented basic economic information regarding growth, opportunities, and risks in his lecture "Crises receding, world economy to surprise positively". His forecast for economic growth was quite optimistic, predicting a global economic growth of 4%, including 2.5 – 3 % for the USA; 1.5-2 % for the Euro zone and 2 – 2.5% for Germany and the UK; 1.5 – 2% for Japan; 7.5 – 8% for China; 2.5 – 3% for Brazil; only 1.5 – 2% for Russia; and 5 – 6 % for India. This was also the overarching theme of his lecture: "Optimism is warranted!" He sees the growth of the global population as a long ball for sustainable growth. Most of the delegates were pleased with this assessment; only India asked why the GDP was expected to "only" grow so modestly, to which Hellmeyer replied by naming infrastructural reasons, mostly in the area of energy supply.

As the second keynote "ICAC: Serving the World Cotton Community" José Sette presents the overall mission of the International Cotton Advisory Committee (ICAC), which is to serve as an intergovernmental knowledge-based organization to help create an enabling environment for the sustainability of the world cotton sector, and shows the various ways in which ICAC carries out its mission and supports cotton worldwide, by serving as a forum for the development of policies and solutions to strengthen the global cotton sector, enhancing transparency, encouraging the development and dissemination of knowledge, and promoting the sustainability of the world cotton sector. He said, that ICAC's overall mission is to serve as an intergovernmental knowledge-based organization to help create an enabling environment for the sustainability of the world cotton sector. In order to fulfill the mission statement, the ICAC has the four strategic objectives to serve as a forum for the development of policies and solutions to strengthen the global cotton sector; to enhance transparency; to encourage the development and dissemination of knowledge; and to promote the sustainability of the world cotton sector. And he also said what ICAC is not. It is not a market regulator, a standard-setting body like ISO or a forum for international trade negotiations like WTO.

Next he introduced the entity's governance structure: "The ICAC is an intergovernmental organization, i.e. its members are national governments. The supreme decision-making body is the plenary, composed of high-ranking representatives from all member countries and which meets once a year.

Short-term decision-making is vested in the Standing Committee, comprised of delegates from member countries who are based in Washington. The Standing Committee meets about six times every year. In addition, the work of the ICAC is supported by various working groups, some of which have an ongoing existence while others are formed to examine specific questions and subsequently disbanded after fulfilling their mandate."

Mr. Sette went on in his speech by addressing the four strategic tasks in great detail. For the attainment of transparency, he named the World Cotton Database, ICAC's Cotton Price Forecasting Model, which forecasts season-average cotton prices and other publications. He gave a short summary of the Cotton Development Projects and mentioned a total of 26 funded projects worth a total of 63 million US dollars. In the area of research, he pointed out the World Cotton Research Conference in June 2016 in Goiana, Brazil, as well as other activities like the ICAC Researcher of the Year Award – which, by the way, was awarded for 2014 just a few days ago to Dr. Mehboob-ur-Rahman of the National Institute for Biotechnology and Genetic Engineering (NIBGE), Pakistan. Dr. Mehboob-ur-Rahman specializes in molecular breeding and has been involved in basic as well as applied research on cotton. In addition to local and international registration of germplasm, Dr. Rahman released a number of cotton varieties that directly benefit cotton growers in Pakistan. He has won several national and international prices for instance the Third World Academy of Sciences honored him by an Award in Applied Science-Technology in Agriculture (under 40 in Agriculture) in 2011.

A further topic of importance for Mr. Sette was sustainability. He said, that "awareness of the need for sustainable practices throughout agricultural value chains has been growing in the past two decades. As a result, the Expert Panel on the Social Environmental and Economic Performance of Cotton Production (SEEP) was formally established by ICAC in 2006." During the 2013 ICAC Plenary Meeting, the SEEP released the executive summary of a forthcoming report on "Measuring sustainability in cotton farming systems: Towards a guidance framework", which provides an overview of sustainability issues in cotton and takes stock of indicators used to measure sustainability.

The latter are then rated to arrive at a set of common indicators that can serve as a basis for discussion within the industry on the development of a framework to further enhance sustainability. The key issues were organized into three pillars of sustainability: environmental, social and economic. He named pest and pesticide management as challenges in the environmental segment, as well as water management, soil management, and climate change. Topics of discussion in the economic segment included economic viability, poverty reduction, food security, and risk management; the social labor rights and standards segment revolved around occupational health and safety, equity and gender, and farmer organization. Despite not being directly involved in the certification of sustainability, ICAC provides important guidance to the world cotton sector on how to measure this elusive subject. Furthermore, ICAC seeks to improve the economic sustainability of the sector by reducing trade "friction".

"The most important example of this," said Mr. Sette, "is in Instrument Testing, a response to growing industry demands for objective and reliable test results. Instrument testing helps enhance demand by providing relevant technical information to spinners on a cost-effective basis to enable them to optimize the use of cotton, and to provide rational incentives to the production and marketing pipeline to supply cotton with the characteristics desired by spinners. Only a worldwide harmonised control and testing system can favour a frictionless business environment for all participants in the whole commercial chain. The CSITC programme, which relies heavily on the cooperation of the Bremen Cotton Exchange, has been an outstanding success."

The lecture then went on to address institutional challenges. The entry of the EU into ICAC as a single member is currently being negotiated. Since it is the largest market in the world, EU participation in ICAC is a welcome development. However, the practical details of EU accession are complicated and unprecedented. Mr Sette explained the kind of problem as follows: "One of the biggest concerns of ICAC members is that we do not lose the multiplicity of voices from within the EU that currently contribute so much to the success of our organization." The second major challenge confronting ICAC is that of project finance. Mr. Sette said: "As we have seen, projects are an important facet of ICAC's work. In the past, the Common Fund for Commodities has played a major role in project finance. However, the CFC is undergoing a process of change and shifting to much less attractive conditions for financing projects, relying more on loans and less on grants.

These changes make the CFC much less attractive than previously. The search for new sources of project finance must therefore receive a high priority."

To conclude his lecture, Mr. Sette addressed the challenges more concretely: „ On a wider level, cotton, as with agriculture as a whole, faces tremendous challenges, including the need to:

- Strengthen research in areas such as biodiversity conservation, development of new varieties, carbon sequestration;
- Strengthen support services and capacity-building, ensuring that gains in research are effectively passed on to farmers;
- Implement adaptation and mitigation strategies to offset climate change and other adverse effects of weather;
- Increase yields, thereby reducing the negative impact of competition for land with other crops;
- Improve access to financial services (credit & risk management), so as to diminish the vulnerability of farmers to volatile markets;
- Enhance social sustainability by empower women and attracting youth to agriculture; and
- Find ways to escape commoditization and add value."

Mr. Sette waited until the very end of his lecture before naming the largest challenge for the entire industry, probably in an effort to really send his message home. On the last slide of his presentation, the audience saw this final sentence in capital letters: "PROMOTE DEMAND."

To which he explained: "Most alarming is that cotton also faces weak demand growth. While consumption of most other crops grows steadily in line with increases in population and income, one cannot take this for granted in the case of cotton. Cotton is not only losing market share relative to competing fibres, absolute growth in demand for cotton has been anemic. "

Mr. Sette had to address a large number of tasks and topics in his lecture, a wealth of issues which he mastered with great success. One could have perhaps wished for a keynote with a stronger focus on the conference's motto, but the "needs and solutions" in the area of cotton are the daily work and foundation of the ICAC, so that an introduction of their activities could always relate to the theme of the conference in some way.

Such a comprehensive account of cotton's individual state of affairs could have resulted in a certain level of saturation, but the following topic from Ray Butler, "Impact of China's Policies on World Cotton Consumption", was too important to not pay him our undivided attention. Every manager in a spinning mill who has seen statistics about China's rapidly growing cotton stocks over the past few years has surely asked themselves what impact this will have on their business and where it's all going. Mr. Butler took it upon himself to answer these questions.
First, he started with a brief introduction of this topic: "In 2010/11, as world prices ran up to unprecedented levels, China's state-held stocks were rapidly depleted as the government sought to maintain price stability.

Subsequently, Beijing adopted a temporary state reserve policy to rebuild those stocks and restore what it considered to be a vital, macro-control lever in the cotton market.

The consequences, some of them perhaps unintended, have included a sharp decline in China's cotton consumption, a build-up of state reserves to perhaps 1.5 times the amount used annually by Chinese mills and an increase in China's cotton yarn imports. Furthermore, China's textile industry has turned increasingly to more competitively-priced man-made fibres."

He then made the explosiveness of this topic once again crystal clear: " The current policy is regarded as unsustainable, and a policy change in the near future is being widely trumpeted. The nature of that change could have a far reaching impact on cotton consumption rates both within China and in those countries that have recently enjoyed increased cotton yarn export sales."

He then introduced the historical development in China's cotton policy since they joined the WTO. He spoke about the standard import duty was set of 40 percent but a provision was included for an amount to be imported annually subject to a tariff of one percent. That amount has for several years been set annually at a maximum level of 894,000 tonnes and in addition, China has exercised the right to allocate specific cotton import quotas.

These arrangements have remained in place in combination with a government state reserve policy, hence in principle lending the government two levers for exercising macro control of the cotton market. The stated purpose of such control has been primarily to protect the cotton farmer and rural incomes. In general the system appeared to be working satisfactorily prior to the sea change that occurred in the world cotton market in 2010/11.

In that season, as prices ran up to unprecedentedly high levels, the Chinese government rapidly exhausted the reserve stocks to hand, thus removing one of the two key macro controls at its disposal. The imperative became to rebuild stocks, almost at whatever cost.

The state reserve policy went hand-in-hand with a more liberal quota allocation policy, and state reserve purchasing also extended to imports, partly to take advantage of lower prices, and thereby reduce the average cost of the reserves, and partly, one assumes, in an effort to shore up international values, in an attempt to lessen the price divide.

The effect of the policy in the 2011/12 season was for government stocks to rise from an estimated 320,000 tonnes to almost 4.6 million. A year later the figure was close to 7.3 million and Cotton Outlook's estimate of the current (December 30, 2013) figure was over 11.8 million tonnes.

Mr Butler said that the state reserve policy has had substantial consequences, both internally and externally.

His view has been that many of these were unintended by the policymakers and that their result leaves the government in an invidious position.

“Firstly, there has been, and remains, a huge financial cost, not merely in financing the purchases but also in carrying the cotton (2,000 yuan per tonne per year for 10 million tonnes would be 20 billion yuan – substantially in excess of US$3 billion) and in disposing of the reserve at a lower price when selling to mills. Secondly, internal commercial markets have been rendered ineffective. Zhengzhou cotton futures, which reached a peak open interest of 887,158 contracts, each of 5 tonnes, on July 28, 2011, saw that dwindle to as little as 76,844 contracts by September 30 last year, since when the figure had been only briefly above 100,000 until late December. At that point, a revival of activity and open interest was witnessed, presumably as signals of an impending change in government policy grew stronger. Thirdly, imports of cotton yarn, which are not under quota control and subject to various rates of import duty, ranging from zero to a few percent, depending on the country of origin, have skyrocketed as textile enterprises look to remain competitive in their production of textiles. Import volume increased by an impressive 87 percent in 2012, and growth has continued in 2013. “

In closing, he compared the Cotlook A Index with the China Cotton Index and emphasized, with the help of a chart, that the CC Index has been markedly higher than the Cotlook A ever since September 2011.

He also highlighted the fact that the CC Index was also substantially higher than the prices for manmade fibers. „The average ratio of polyester staple to cotton prices over the last three years has been 50 percent.“

Mr. Butler boiled this down into two dominant effects: the increased import of cotton yarn and the conversion of the domestic industry to manmade fibers. Although it sounds less than understandable initially, Mr. Butler doesn’t see these effects necessarily as unintentional. He explains that China lost their independence with cotton a few years ago and therefore wanted to gain, at the very least, self-determination for the domestic market. This was achieved through polyester.

He then compared the increased consumption of polyester to the consumption of cotton. Up until 2007, cotton consumption in China grew rapidly with growth rates of up to 20%. It experienced a slight decline in the following years and once again reached the almost 11-million-ton mark in the 2009/2010 season. The following year resulted in 10 million tons, and remained consistent at 8 million tons for the following three seasons between 2011 and 2014 – a decrease of 25% from peak consumption.

However, Mr. Butler had already mentioned the increase in cotton yarn imports, which he then expanded upon and referred to the export countries. „The beneficiaries of China’s appetite for yarn have been spinners in numerous countries.

Everyone has shared in the gain to some extent, though top of the list is undoubtedly India, from where imports more than doubled in 2012 and were more than two-thirds above the previous calendar year's total by the end of October, 2013. India's volume in the first ten months of last year almost matched the amount shipped from Pakistan – traditionally the leading supplier of China's cotton yarn imports. However, Pakistan's volume has also recorded successive periods of double-digit growth. Other suppliers to record strong increases have included Vietnam, Indonesia, Thailand, Uzbekistan, and even the United States."

Mr. Butler then came to the thesis that companies were founded in countries outside of China where they could produce cotton yarn more cheaply. The cotton consumption in India has clearly increased over the past 4 seasons, whereas it has clearly fallen in China. The global consumption has also decreased, to which Mr. Butler said:„World cotton consumption has thus shown a partial recovery from the losses that occurred in 2010/11 and 2011/12 but these have been insufficient to close the gap with world cotton production, which has been in surplus now, by our reckoning, for four seasons."

At the end of his speech, Mr. Butler spoke about a possibly changed Chinese policy:„Recent policy statements have alluded to the Chinese government's intention to allow market forces to play a more prominent role in setting market prices for soya beans and cotton, and for there to be a reduction in the government's interference in the market.

For cotton, trials of direct subsidy systems have been put in place in Xinjiang, the main cotton producing area." He then posed the question of what could actually happen if China's cotton prices were to sink. Unfortunately, he left the question just as unanswered as the question of whether or not that would change the cotton trade and global cotton consumption. We also would have liked for him to have addressed the question of why China even began and continued this policy. Is the immense warehouse volume not also a huge trump that could be used against speculation on cotton prices? Perhaps one has to be a financial expert to be able to answer this question correctly, but according to healthy common sense, China could combat every rapid price increase for cotton by selling their stores. Too bad that the answers were missing, but looking into a crystal ball based on statistical data would have apparently been too daring and pure speculation, which is nothing for a fact-person, as Mr. Butler proved himself to be, who also definitely enriched the conference with his impressive expert knowledge.

That's all to keynotes, which we decided to present to you in somewhat greater detail because of their importance to the industry. We will now move on to session 2, which dealt with "Consumer Expectations" in two lectures. The session was opened by **Mark Messura** from Cotton Incorporated. His lecture ‚Trends in Consumer Demand Driving the Apparel Market' was based on various customer surveys and divided into four parts. In the first part 'The basic drivers of apparel demand', Mr. Messura named quality, color, and price as the three main factors.

Brand name, country of origin, and environmental friendliness were less important in comparison. He also said that fiber content, cleaning requirements, and performance features are equally important for the purchasing decision. Mr. Messura then looked to the current use of cotton in apparel. In 2011, cotton was used in over 80% of men's clothing; in 2012, the usage dropped to 75%, only to increase again slightly to ca. 78% in 2014. In the same time frame, the use of polyester grew from 30% to 35% and 37% respectively. The numbers were similar with women's clothing, although the percentage started lower at 65% and decreased to ca. 57% and 55% respectively, whereas polyester rose from 32% to 40% and 42%.

Mr. Messura said the reason for this was the increase of cotton prices in 2011, which in turn influenced retailers in particular to replace cotton with other fibers and blends in clothing production.

He sees the returned increase in cotton use as a result of consumers not going along with the change and not fully accepting the replacement fibers, which in turn led retailers to once again rethink their approach. Examples of this are jeans or underwear, for which 66% of consumers were against the replacement of fibers. The disturbance of replacement fibers was substantiated with a second survey regarding the German market. In this survey, 44% of consumers stated that they noticed the replacement of fibers and an impressive 63% valued such replacement as a plague.

An especially interesting result for the cotton industry is surely the fact that at least 24% of those questioned in Germany indicated they would be happy to pay more for pure cotton. The same goes for 25% in the UK and even 42% in Italy.

In his second part ‚Technology and performance features in clothing' Mr. Messura first told us, that there are more features available in the market. However, the willingness to pay remains a challenge. The table shows various attributes and consumer attitude. "Easy Care" and "Wrinkle Resistance" received the maximum value. Mr. Messura then let the cat out of the bag by revealing consumers' biggest issues with cotton and how they react to them.

First place went to shrinkage, which they react to by purchasing larger sizes. Second place went to wrinkling, which blends can resolve, and third place went to fading, which leads them to choose other products and brands. In contrast, Mr. Messura held onto the 65% of consumers who would be willing to pay more for better quality.

While this all sounds great, we all know it's a speculative value. On the one hand, agreeing to pay more is very different from actually paying more; on the other hand, these differences in quality and price definitely exist on the market, as the author knows from personal experience. A no-name polo shirt for 25 euros will shrink, but a brand-name shirt for 100 euros is still like new even after 6 or 7 years.

The third part ‚Sustainability and environment as drivers of demand'essentially provided the insight that consumers are definitely concerned with the topic of environmental protection and resource economics, but this only plays a subordinate role in their purchasing decisions. Only 14% would protest clothes that were produced in an environmentally harmful way, whereas a further 49% would at least take negative notice of the fact.

They survey failed to ask whether the consumer would purchase clothes from the manufacturer again or if they would pay closer attention next time. Both values here could add up to 63%. Although it feels like cotton comes off badly in trade discussions and discussions with environmental associations, 90% of consumers see cotton as environmentally friendly, according to Mr. Messura. That is the top value and miles ahead of polyester, with a mere 48%. This can of course be explained. Cotton is a natural product; polyester is artificial. The public discourse usually revolves around pollutants in clothing caused by the finishing process, which leads the consumer to see the natural product more favorably. However, the selection of organic cotton is admittedly missing here, which surely would have switched on other thought processes within the consumer.
The fourth point ‚Beyond apparel: Reaching consumers in other markets', in which Mr. Messura touched on nonwovens, was somewhat brief. Nonwovens sound appealing, as this market is quickly growing, but it's also very price-sensitive and, as long as polyester remains dramatically cheaper, it will be difficult to nearly impossible for it to take strong root. Cotton must offer drastically higher added values compared to polyester, which would be possible for example through medical products with long-term delivery of substances. However, the current major growth markets are in the areas of Techtextil Classification, Mobiletech, and Buildtech.

In his summary, Mr. Messura gave the audience a few more points to remember. He mentioned that cotton is recovering in all main products; that polyester is the main competitor; that performance features in particular can maintain cotton's competitiveness; that the industry has to promote sustainability because, in his opinion, this push won't come from the consumers; and that product diversification is essential for the use of cotton long-term. This was all far from bad news and the audience received both the lecture and the message that cotton is recovering and firmly rooted among consumers with enthusiasm.

We would like to add that it's apparently extremely important to strongly anchor cotton among the young designers and that sustainability will also play an important role in this endeavor. This is because material decisions may also be made based on these criteria in the near future, if it were up to the Sustainable Apparel Coalition, for example. The next lecture focused exactly on this special topic.

The designer **Magdalena Schaffrin** spoke about "Cotton from a Designer‘s Point of View". She first introduced several of her tasks and operational activities.

For example, she is responsible for the conception, development, and coordination of the Ethical Fashion Show Berlin on behalf of the Messe Frankfurt. This show celebrated its premier in January 2012 in Berlin's ewerk and, since then, has been hosted twice a year as a forward-looking and quality-oriented trade fair during the Berlin Fashion Week. Sustainably produced street fashion and casual wear are presented, while the face of the trade fair is characterized by an understanding of the modern, urban lifestyle, a keen sense for good design, and the high quality standards of the showing green labels.

This definitely makes Mrs. Schaffrin a unique designer who is sure to assign a greater significance to sustainability than some of her colleagues. This is what makes her workmanship so unique, which was made immediately clear through her first statement. In preparation of the lecture, Mrs. Schaffrin performed a study to find out what share each fiber had with the Ethical Fashion Show exhibitors. The result was that cotton was ahead of all other fibers with 42%. The remaining 58% was divided between wool, silk, linen, hemp, recycled material, viscose, and leather. Cotton's main competitor mentioned by Mr. Messura, polyester, also made the list with the recycled materials. This surprised us, as polyester doesn't seem to comply per se with the ethical beliefs.

The lecture continued with statements about the significance designers place on cotton.

Designers like that cotton is multifunctional and has a high wearing comfort. In addition, cotton is robust and easy to wash, is popular with clients, and has a high price-performance ratio. Designers also value the environmental aspect of organic cotton, and that it's a fair trade product that has a transparent supply chain.

According to designers, the drawback to cotton is the low heat regulation and low water repellency. Cotton is also a sensitive fiber that is easily contaminated. They also don't like the high water consumption, nor the high pesticide use and that fact that cotton often produced unfairly for the farmer. While organic cotton doesn't have all of these disadvantages, it's not always readily available and carries a high price.

Mrs. Schaffrin moved on to address the individual fiber lengths of cotton. In the long staple fiber segment, she values the high quality with low pilling and even coloring. The fiber is also soft und precious. In the medium staple fiber segment, she sees the value for money as especially positive. A positive characteristic in the short staple fiber segment is, in her opinion, easy care, rough and a natural finish.

In her conclusion, Mrs. Schaffrin focused on organic cotton in even greater detail and presented advantages and disadvantages in design and marketing. Let's begin with the disadvantages, which she listed as being a limited selection, limited options in various finishings, and a more complex effort in procurement and processing.

Furthermore, there isn't enough training on the market for organic cotton and there's a lack of willingness from many retailers and distributing agencies to offer organic cotton. We'd like to note that C&A, for example, strongly focuses on organic cotton and recently reported that there isn't enough organic cotton available. The advantages she listed for organic cotton included the attractiveness and the market growth as a market niche, as well as uniqueness, wearing comfort, good conscience, and value for money.

This provided a very interesting view of cotton from the perspective of a designer who has also grappled with the topic of sustainability. The message and lively presentation style resonated well with the audience, although the differentiation of cotton in the lecture also illustrated one of the cotton industry's dilemmas: the competitor is not only polyester, but also organic cotton within their own industry.

And with that we'd like to wrap up the first part of our report on the 32. Bremen Cotton Conference. As an interim summary, we'd like to conclude that there are many challenges within the cotton industry, but that many intelligent minds are already working on solutions and that the future, while it may not be completely rosy, is also not completely black. We believe that what the industry desperately needs is optimism and charisma. The consumers want cotton. The world's total fiber consumption will rise rapidly in years to come, whereas cotton production is close to its limit. One reason for this is the huge growth of technical textiles and nonwovens; another is the increasing world population.

Therefore, there shouldn't be any more surpluses in cotton capacity in the future; instead, assuming demand remains the same, cotton should become a scarce commodity – and the future of scarce but in-demand commodities can't be all that bad.

In the next edition of the TexData Magazine, we will continue with the second part of our report on the 32. International Bremen Cotton Conference with interesting lectures on the areas of "New Technologies in Textile Processing", "Developments in Cotton Production", "Cotton Measurement", and "New Products and New Properties".

And we are very proud to announce an exclusive interview with **Dr. Terry P. Townsend** for the next edition. Dr. Townsend was executive director of the International Cotton Advisory Committee (ICAC) until he retired at the end of 2013 and is one of the most brilliant experts in cotton business.

Some impressions from 32. International Cotton Conference

Fritz Grobien, President of the Bremen Cotton Exchange, talked to a few protesters

About 500 participants found the way to Bremen

Fashion show in the Bremer Rathaus including catwalk.

The keynote speakers

José Sette, Executive Director of ICAC

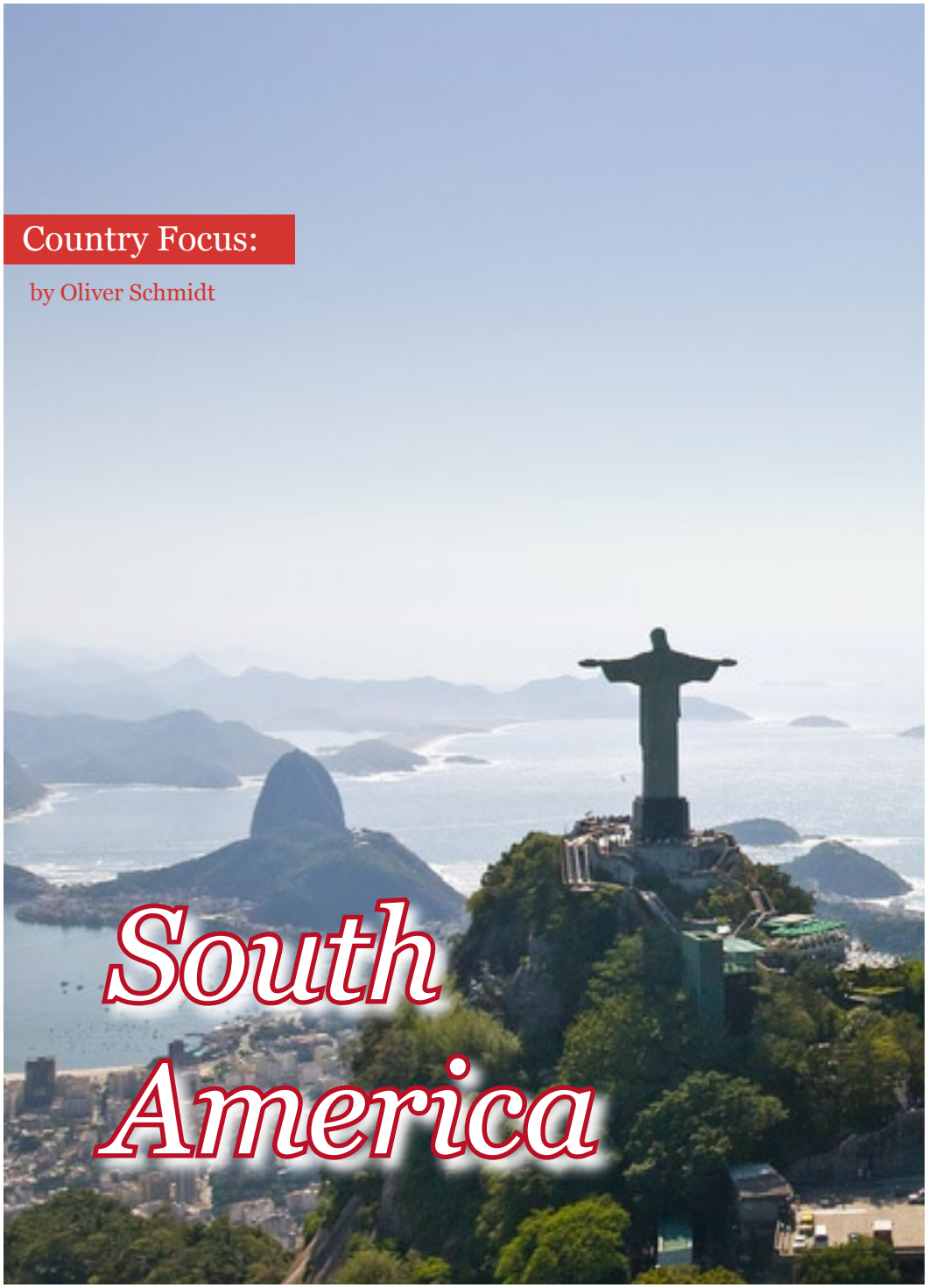
Designer Magdalena Schaffrin talked about 'Cotton from a Designer's Point of View'

The speakers of the session V are preparing themselves during a break

The delegates listened to the multitude of interesting information

Country Focus:

by Oliver Schmidt



The country focus series in this issue is about a whole continent which we would like to look at more closely with regard to the textile industry.
South America is the southern part of the double continent with a population of almost 400 million, and with a surface area of 17,843,000 km² it is the fourth largest continental landmass and slightly bigger than Russia at 17,075,400 km².

The sub-continent is bordered to the east by the Atlantic ocean and to the west by the Pacific ocean. Cape Horn is at the southern tip where the Atlantic and Pacific meet. In the northerly direction there is the connection via the Isthmus of Panama to North America.

The individual countries/states of South America in alphabetical order are Argentina, Aruba (NL), Bolivia, Bonaire (NL), Brazil, Chile, Curaçao (NL), Ecuador, Falkland Islands (UK), French - Guyana (F), Guyana, Columbia, Paraguay, Peru, South Georgia and the southern Sandwich Islands (UK), Surinam, Trinidad and Tobago, Uruguay and Venezuela. South America was divided between Spain and Portugal in 1494 and as a result today a Brazilian variation of Portuguese is spoken in Brazil while Spanish is the national language in almost all other South American states.

Brazil accounts for half of the round 400 million inhabitants resulting in Spanish and Portuguese languages being of approximately equal measure. In order of population size after Columbia with 47,130,000 million and Argentina with 41,350,000 million there are Peru and Venezuela with around 30 million and Chile and Ecuador with slightly more than 15 million. Bolivia comes next with nearly 11, followed by Paraguay with nearly 7 and then Uruguay with 3.3 million inhabitants. Both Surinam and Guyana have under 1 million each.

The twelve independent states of South America founded the Union of South American States on the 23rd of May 2008 in Brasilia (Brazil). The founding treaty was signed by: The members of the Andean Community (Bolivia, Columbia, Ecuador, Peru), the members of Mercosur (Argentina, Brazil, Paraguay, Uruguay, Venezuela), two members of the Caribbean Community (Guyana und Suriname) and Chile, which had not previously been a member of any of the above mentioned communities. Mercosur or in full Mercado Común del Sur (common market of the south) had already been founded in 1991to establish a common single market.

Let's take a look at the economy. The economy of South America primarily consists of the mining of natural resources and agriculture. The Andes of South America are particularly rich in mineral resources and fossil fuel resources are substantial. Venezuela is today already numbered among the largest resource-rich countries worldwide and in Brazil in 2007 an oil field was discovered estimated to be one of the largest in the world.

The export of natural resources is therefore also the most important source of foreign currency for the countries of South America.

South American GDP for the year 2012 was 4th among the continents with a value of xxx and as a result is placed between Japan and Germany. Brazil has the greatest share of GDP and therefore the largest GDP with US$ 2,252,664 million. According to the World Bank Brazil is in 7th place in the country list behind Great Britain and ahead of Russia and Italy. The other countries are Argentina in 26th place with US$ 475,502 million, Venezuela and Colombia almost equal with US$ 381,286 million in 31st place and US$ 369,606 million in 32nd place. Chile follows in 37th place with US$ 269,869 million and Peru 48th with US$ 203,790 million.

GDP per capita shows distribution somewhat differently. According to the International Monetary Fund in 2013 Chile (54th) leads US$ 19,067 , followed by Argentina (55th) with US$ 18,749 and Uruguay (60th) with US$ 16,723. Brazil follows only in 5th place with US$ 12,221 after Venezuela with US$ 13,605.

While Brazil was considered to be the model South American country in the last few years mainly due to being categorized as one of the BRIC group of emerging countries others are also beginning to attract attention. Chile for instance is viewed as the Switzerland of South America on account of its stability and Colombia was recently included in the group of six top export markets of 2014 by the German government.

Germany Trade & Invest, together with the German Economic Ministry responsible for the classification reported on Colombia: ‘ A sense of optimism currently grips the Andean state of Colombia’ According to economic experts the country possesses the greatest development potential of all markets worldwide. Long-term prospects have improved as the level of security has risen steadily over the years, GDP growth rates are stabile at over 4%, there is an affluent middle class, a wealth of natural resources and various major projects are intended to remedy a backlog of infrastructure investment.

Let’s take a look at economic growth in general. According to the World Bank Latin American and Caribbean Area GDP growth was between 4-6% in the years before the crisis. It then fell to -1.9% in the crisis year 2009 but was able to recover immediately reaching 5.8% in 2010. It declined to 4.3% in 2011 then to 3% in 2012. The IMF forecasts 2.6% in 2013 and for the coming years 3% in 2014 and 3.3% even for 2015. These are good if not very good current growth rates. The decline is due to the largest economy on the continent. In 2012 the Brazilian economy grew only 1.0% after many years of high growth, while last year it moved up moderately to 2.3% and also the prognoses for 2014 and 2015 trended upwards. However, in April 2014 the IMF said in its quarterly report that despite it playing host to the World Cup, Brazilian growth will continue at a slow pace in 2014. The international lender lowered its annual growth forecast to 1.8%, compared to 2.3% in January. It will be slower than expected because of weak infrastructure and low private investment reflecting a lack of confidence in industry.

And how is economic growth in the other countries? There are winners and losers. After a very strong 8.9% in 2011 Argentina fell back to 1.9 % in 2012. After recovering to 4.3% in 2013, the prognosis is for 0.5% in 2014 and 1.% in 2015. The outlook is worse for Venezuela. The 5.6% achieved in 2012 was followed by a meager 1.0% in 2013 and the prognosis expects negative growth of -0.5% and even possibly -1.0% 2015. In contrast, economic growth in the other South American states appears quite gratifying. 2011 – 2015 shows Columbia always over 4%, along with Chile with the exception of 2013, which even so still reached 3.6%, Bolivia actually achieved over 5% in all the years reaching a peak in 2013 with 6.8% while Peru produced the best prognosis of 5.5% for the current year and 5.8% for the coming year. The table lists all the values for the years 2011-2015.

This brings us to the textile industry beginning once again with Brazil. Brazil has emerged as one of the leading producers of cotton over the last 10 years. It currently occupies 5th place after producing almost 2 million tons in the 2010/2011 season even overtaking Pakistan in 4th place this season. The large areas under cultivation cover 500,000 hectares in the Mato Grosso and 300,000 in Bahia. The yield is around twice the average at 1500kg/hectare.

As the country only processes ca. half of the cotton produced itself, a large part is exported. Brazil produced 1.87 million tons in the 2011/2012 season on 1.4 million hectares under cultivation. This year 888,000 tons were processed and 1,043 million tons were exported. An increase of 239% on the 435,000 tons of the previous year.

The Bremer Cotton Exchange forecasts a marked decline in the cotton production for the 2012/2013 season and the following one as the area under cultivation has been reduced by ca. 30%.

Other crops were more attractive for the farmer. Cotton processing is expected to remain constant at 0.9 million tons in the coming year so exports of cotton will remain at a high level despite the decline. Consequently, Brazil primarily supplies China, Indonesia, Korea and Turkey as the fourth largest cotton exporter in the world.

Let' s have a look at the Brazil textile and apparel industry. Texbrasil, the Brazilian Fashion Industry Internationalization Program, which was founded in 2000 by ABIT (Brazilian Textile and Apparel Industry Association) in partnership with Apex-Brasil (Brazilian Trade and Investment Promotion Agency) with the mission of supporting and preparing textile and apparel companies interested in selling their products abroad, announced on thier website: "Brazil's textile and apparel industry has significant growth numbers. In 2012, the country invoiced US$ 56,7 billion and the export value without cotton fiber was US$ 1.28 billion. It is Brazil's second largest employer among the manufacturing industries, with 32,600 companies and 1.658 million workers, 75% of which are women."

The view 'The importance of the textile industry in the Brazilian Economy' presented by Denise Barbosa, Business Development Specialist at U.S. Commercial Service, also sees a strong Brazilian textile industry.

It states: "The textile and apparel industry participates with equivalent amounts to 4.1% of the total Brazilian GNP, and 17.2% showing that this is an industry of great relevance for the Brazilian economy, and has strong social impact."

And furthermore: "Brazil ranking among the eight largest world producers of yarns, fabric, and knitwear, and ranks seven in the production of apparel, behind only China, India, USA, Mexico, Turkey and South Korea."

Latest IMF projections
(real GDP growth, annual percent change)

			Projections	
	2012	2013	2014	2015
South America				
Argentina	1.9	4.3	0.5	1.0
Bolivia	5.2	6.8	5.1	5.0
Brazil	1.0	2.3	1.8	2.7
Chile	5.4	4.2	3.6	4.1
Colombia	4.2	4.3	4.5	4.5
Ecuador	5.1	4.2	4.2	3.5
Guyana	4.8	4.8	4.3	4.5
Paraguay	-1.2	13.0	4.8	4.5
Peru	6.3	5.0	5.5	5.8
Suriname	4.8	4.7	4.0	4.0
Uruguay	3.9	4.2	2.8	3.0
Venezuela	5.6	1.0	-0.5	-1.0

Source: IMF staff calculations and projections.
Note: Regional aggregates are purchasing-power-parity GDP weighted averages, unless otherwise noted.

Although the figures are impressive, growth in the textile industry is rather modest. Cotton processing declined as reported and could not recover even though the polyester industry was growing. In contrast figures released by ABIT showed clear growth in the retail clothing trade attributable to increasing imports of finished products.

Ms. Barbosa also shares the view that Brazil is primarily a market. She sees a growing middle-class in Brazil and examines the development of the luxury segment as well as the increased number of clothing shops and comes to the following conclusion: best prospects are luxury & branded products, children's wear, mid-high casual wear-denim, work wear for men and women and home line.

In an unprecedented initiative for the textile industry, Abit (Brazilian Textile and Apparel Industry Association), ABRAFAS (Brazilian Association of Producers of Artificial and Synthetic Fibers), ABVTEX (Brazilian Association of Textile Retail) and IDV (Institute for Retail Development) – associations which represent the industry and the textile retailing – signed on April 27, at the headquarters of Abit, a Memorandum of Understanding to deepen the dialogue that has been going on between the associations and to join forces to work on converging agendas aiming to strengthen relations and mainly to increase the competitiveness of the companies. The signing of the MoU took place during a ceremony at Abit, with the presence of representatives of the associations. The MoU identifies important issues of common interest that should be part of a Program of actions to be defined by a working group.

"It is not healthy for a country to have retail growth, and that its industry, which should supply the retail, does not participate in this growth. We can strengthen the whole chain working together, as it is a relationship of interdependence, since retailers also need local manufacturers. This understanding is common for both parties and, therefore, we could enter into this partnership", explains Rafael Cervone, president of Abit.

A significant start has been made in strengthening at least the textile and clothing industry in the domestic market. Brazil has though has potential of an entirely different nature. Reference to the WTO list of the 10 largest export countries for textiles and clothing shows that Brazil is not even mentioned while other cotton producing countries like China, the USA, India and Pakistan are naturally included. Ms. Barbosa says: "In terms of international Commerce, the participation is very slow. In world exports, Brasil ranks 26st and imports 34rd."

The textile industry has neglected the processing of raw cotton for their own account leaving the value generated in the processing chain to other countries. There is perhaps already evidence here of a turnaround. Brazil could use its good trade relations with China and learn from the world leader.

At a Forum on China and Brazil Name-brand Textiles and Apparel Opened at November 4th, 2013 Mr. Wang Yu, vice President of China Textile Import & Export Chamber of Commerce, said in his keynote speech, that the textile industry of Brazil has relatively complete industrial chains.

The raw material, textile industry and finished products industry all have unique advantages and develop side by side. Among the three parts, finished products processing industry such as clothing and textile prove to be the main body, whether regarding from the total number of its enterprises, employees or its output value. Therefore, we organize China's enterprises to attend St. Paul GoTex International Textile and Apparel Sourcing Exhibition here to make perfect contact meeting with Brazil's textile and apparel industry. And Mr. Roberto Chadad, President of ABRAVEST, answered that textile industry is one of Brazil's traditional industries and takes a high percentage among the national economy and labor employment industry. Trade deficit of Brazil's textile & apparel has been increasing and the international competitiveness of textile industry has been in decline in recent years. He hopes that Brazil's enterprises could make self-reflection to upgrade and adjust the industrial structures. Brazil attaches great importance to the communication and cooperation with peers from other countries and warmly welcomes China's textile industry to hold exhibitions and exchange activities in Brazil.

Brazil needs direct investment explicitly for growth in the textile and clothing industry. The largest fair of technologies for the textile industry in Latin America is the "Textnotêxtil Brasil" which opened its doors at the 15th April last year. Fourteen textile machinery companies from Germany had presented their latest solutions. German companies were for example AUTEFA Solutions, Lindauer DORNIER, INTERSPARE, Textechno Herbert Stein and KARL MAYER.

AUTEFA Solutions delivers opening machines, carding machines, as well as random carding machines, needle punching machines and cross lappers. DORNIER is a leading manufacturer of rapier and air-jet weaving machine for all applications. INTERSPARE offers services, original spare parts, modifications for machines of brands Artos (Babcock, Famatex), Krantz, Stentex (Textima) as well new stenter frames and shrink/tumbler dryers. TEXTECHNO is one of the leading manufacturers of testing instruments for the textile and man made fibre industry. One of KARL MAYER's highlights at the exhibition was the third generation of HKS 3-M machines. This high-speed tricot machine belongs to the most versatile and most efficient models out of the wide-ranging portfolio of the world market leader in the field of warp-knitting machines.

The German exports of textile machinery to Brazil amounted to roundabout 90 million Euros in 2012. Many German companies can proudly point to decades of close customer relationships. This success is no surprise. Textile manufacturers in Brasil and other Latin American countries relying on German technology are aware of the long-term advantages Made in Germany offers: Due to low maintenance charges and reliability in production, the initial investment for a German textile machine pays off after a few years.

At this point our report can already summarize Brazil as possessing the greatest (unused) potential by far for a successful expansion of the Brazilian textile and clothing industry.

The country can in addition use all the knowledge gained in the last 10 years regarding increases in productivity in the textile value chain, while at the same time expanding in the area of sustainability as it is a very large cotton producer with strongly growing domestic demand.

Argentina is the second largest cotton producer in South America with around 210,000 tons in the 2011/2012 season and third largest in the southern hemisphere. The area under cultivation is in the north of the country producing about 90% of the cotton in the Chaco, Santiago del Estero and Formosa regions. Production has though also fallen sharply in Argentina. The ICAC had to revise its estimate for the 2012/2013 season downwards from 212 to 170,000 tons. This is approximately the same amount processed by Argentina since 2009 and this amount should be increased to 178,000 tons for 2014 according to estimates by the ICAC. That would be growth of 2.3% on the previous year.

Argentina exports its surplus crop. The peak was 61,000 tons in the 2010/2011 season, when admittedly a lofty 295,000 tons were also produced. In contrast ca. 8000 tons have recently been imported.

The Argentinian textile industry reflects the problems that apply to a great extent to the Argentinian economy. Wages are very high in international comparison for a skilled textile worker at about US$ 1500, and although the export of textiles and clothing has risen it is of no relevance in comparison, and in addition the domestic industry needs to be protected by high import duties in the domestic market.

Whether that will achieve the intended result is open to doubt. This is associated in the first instance with the biggest problem, that of inflation. The Argentinian Peso fell against the US$ between 2011 and 2012 from 1US$ = 4.131 Arg$ to 1US$ = 4.552 Arg$ (-10.3%). And from 2012 to 2013 it fell by as much as 20.4% to 1US$=5.480 Arg$. Currently the Argentinean Peso is at 1US Dollar = 8.074 Arg$. That is another 47.3%.

This continual devaluation of the peso makes imported goods competitive especially from China as the main importer despite the duties meaning that the protection of the domestic industry is only partially achieved. International trade relations worsen in addition as a result of the import restrictions. Textile businessman Marco Meloni, President of the Textile Association Fundación Pro Tejer, summarizes the situation succinctly in an interview with Inter Press Service (IPS): “What we have in Argentina today is a war to protect employment, which is why trade has to be managed.” Argentina’s efforts to maintain the balance between exports and imports have drawn complaints from the EU. In September 2013 the European Commission issued a report putting Argentina in first place among emerging economies in terms of protectionist policies. And their have been also protests from Argentina’s partners in the Mercosur (Southern Common Market) trade bloc, especially Uruguay and Brazil and the United States.
Textile production itself rose slightly in 2011 by 1.3 % and fell in 2012 by 1.8 % . Then a reduction of 0.8% in 2013 was followed by an increase of 5.5% in December 2013. Artificial fibers recorded a decline of 13.2% for 2013 as a whole which was slightly offset by an increase of 3.9% in cotton yarns.

At first glance the figures do not look at all good but after widening the angle of perspective they improve as between 2002 and 2010 textile production grew by 146% in Argentina which is 5% per year. In addition over 40,000 new jobs have been created in the last 10 years spread in general equally across the textile and clothing industry. There are officially ca. 120,000 jobs currently registered in the industry.

How does the future of textiles look for Argentina? Industry Minister Debora Giorgi has a simple and entirely correct approach. She said:"The importance of manufacturing in industrial chain lies in added value as the price of the final garment is 44 times the value of the raw material."

Implementing this simple solution seems to be rather complicated though. Establishing the value added process requires an increase in the production of cotton. The farmer is however no economist and does not see the resulting added value of the harvest. The focus is on the attainable price. In theory 300,000 tons of cotton is attainable with a good harvest and use of all available area. There would be an additional 120,000 tons available. In order to raise the potential added value of this amount a nationally and in the best case scenario an internationally competitive textile and clothing industry needs to be established. That consists of large investment in the most modern factories and would require a marked expansion of the current incentive programs such as the Argentine Technology Fund (FONTAR). High wages force other steps to be taken. Such a step could be to set up and develop national brands just as China also intends to promote.

For example Signia. Signia is an Argentine sportswear brand which manufactures footwear and clothing. Signia has signed an agreement with the Argentine Olympic Committee to provide equipment to its athletes during the Summer Olympics and Pan American Games, ending in 2016. It is a start but whether it would be sufficient to enhance the appeal of the brand worldwide remains to be seen. The Argentine national football team, without doubt one of the best in the world with fans all around the globe and with the world-renowned football star Lionel Messe in their ranks would be another matter indeed. The team's outfitter is however adidas.

There are possibilities at hand. Domestic demand also provides grounds for optimism. Local consumption of fibers increased from 8 to more than 13 kg per capita between 2003 and 2011. This vale should continue to grow considering 25% of the young population are under 14 years of age.

So much on Argentina.

Other cotton-growing countries in South America are Peru, Columbia and Paraguay. Peru produced 42,000 tons in the 2011/2012 season. The estimates for 2012/2013 and 2013/2014 indicate a slight decline to 40,000 tons and 38,000 tons respectively. A similar trend is seen in Paraguay. 28,000 tons in the 2011/2012 season are to be followed by 26,000 and 25,000 tons. Paraguay would have overtaken Colombia which was still at 41,000 tons in the 2011/2012 season but is expected to markedly weaken to 23,000 tons for the next two seasons.

Peru and Colombia process more cotton than they produce. In the 2011/2012 season it was 94,000 tons for Peru and 75,000 tons for Colombia. Both countries have imported cotton for many years to cover their needs. In the 2011/2012 season it was 47,000 tons for Peru and 18,000 tons for Colombia and for 2012/2013 it was 54,000 tons for Peru and 51,000 tons for Columbia. Cotton processing in both countries has fallen overall. Peak production for Peru in the last few years was 110,000 tons in 2011 and 89,000 tons for Colombia in 2010.

Population growth rates of 1.1% for Peru and 1.0% for Colombia should ensure that demand for clothing does not decrease. The young population has a lot of promise for both countries. The textile industry Colombia grew 13.1% in 2013 in spun and woven cloths and 11.7%in other textiles whereas in Peru textile production declined 2.9%.

In Colombia in 2012 the production of textiles, clothing and leather products reached a volume of about USD 3.6 bn, representing an increase of 2.9% over 2011. This brings the textile industry to a share of 7,5% of the industrial production of the country and 0.8% of the overall gross domestic product (GDP) and makes the textile and garment production an important industry for the country. Colombia‘s textile and clothing industry generates 17 percent of the country‘s industrial employment opportunities. Additionally, clothing purchases made by Colombian households in January 2014 alone amounted to US$572.6 million. Both facts confirm the importance of the sector in the country.

The main regions in Colombia where textile production takes place are Bogotá with 45.2% of total textile production, Antioquia with 41.6% and Atlántico with 4.7%. Bogotá and Antioquia accounted for 86.8% of the total production. Apparel production facilities are located are Antioquia with 56.5% of total apparel and clothing production, Bogotá with 23.7% and Valle with 9.0%.

Colombia has more than 450 textile manufacturers and around 10,000 garment production units and is considered to have the third largest textile industry in Latin America. Colombian companies and designers produce raw textiles, equipment and finished products, from couture lines and lingerie to school uniforms and accessories. The country‘s 13 international free trade agreements have contributed to a growing demand for textiles over the past 10 years, with major foreign companies from the U.K. to the U.S. investing in the sector. In the last decade, the Colombian textile industry has grown at a rate of 8.4 percent per year.

To promote textile business Colombia has two main organisations. The first is Proexport, the Colombian Ministry of Commerce, Industry and Tourism entity in charge of promoting Direct Foreign Investment (DFI) and international tourism toward Colombia and promoting the non–mining energy exports of the country. And the second Inexmoda, is the Colombian institute that generates tools in research, marketing, innovation, training, internationalization and competitiveness for the textile – apparel – distribution channels sectors and others sensitive to design and fashion.

Colombiatex and Colombiamoda two annual, major fashion events organized by Inexmoda. The 26th annual Colombiatex trade show in Medellin, January 21-23, 2014 attracted more than 32,000 international fashion professionals.

„The Colombian apparel industry not only offers high quality products, but is also a business-friendly environment that is ideal for international companies," said Maria Claudia Lacouture, president of Proexport. „Events such as Colombiatex allow our products to gain more international visibility, leading to more business with trade partners and the countries of the Pacific Alliance."

Proexport works closely with the Pacific Alliance, a political, economic and cooperative agreement established to foster growth, development and competitiveness for its member nations of Chile, Colombia, Peru and Mexico. The goals of Proexport and the Pacific Alliance fit in with this year's Colombiatex theme of „Transcending boundaries." With this in mind, Colombian exporters – from fiber distributors to designers, textile manufacturers to leather suppliers – will connect with companies from around the world to promote their products.

„The world economy is making great strides, in recent years focusing investor attention on new markets such as Latin America. This is continued proof of the region's growth," said Carlos Eduardo Botero, President of Inexmoda.

In her speech 'Colombia: The Next Sourcing Destination' at Texworld USA in 2013 Sylvia Reyes, Apparel and Textiles Sourcing Director at PROEXPORT USA, The Colombian Government Trade Bureau, stated that Colombia has great potential for becoming an important near show supplier for the US market. A good reason to believe her is for example the growing demand for 'fast fashion' linked with the shorter lead times for transport, particullary the lead time to the US east coast (New York: 7 days, Port Everglades: 3 days).

The United States are the top importer of Colombian textiles. In 2013, Colombia exported US$256,807,091 worth of fashion-related goods to the U.S., including more than US$5.4 million of yarn, more than US$14.7million of fabric and more than US$236 million of apparel.

On the other hand Colombia has big problems with competition from South Asia, particullary China, like Argentina has and in January 2014 the Government announced the two-year-extension of mixed tariff in place since March 2013, in order to protect the domestic industry against imports and unfair prices below normal market levels.

As in Colombia also in Peru the textile and clothing industry is an important part in the manufacturing sector. It contributed 10 percent to the nation's manufacturing Gross Domestic Product (GDP) in the year 2013. The clothing exports in 2013 amounted to US$1,368 millions. Peru has 2,113 clothing companies and 940 of them are SMEs.

Their exports go around US$ 100 thousand and US$ 10 million and they represent 44% of all companies. In Q1 2014 Peru‘s GDP industrial sector jumped to 2.9% and the ouput of textile products increased by 12.1 percent on the quarter. Garment production rose 10.2 percent. This seems like a turnaround and the National Society of Industries’ (SNI) President Luis Salazar stressed the Peruvian manufacturing sector is forecast to witness stable growth by around 3.5 percent to 4 percent this year.

Peru has two important textile exhibitions: Perú MODA and Expotextil Peru. In its 17th edition, Perú MODA asserted itself as the second best export platform of the textile, clothing and design industry across South America. 300 exhibitors from the clothing, footwear and jewelry business attracted 2,000 buyers from 60 countries and 4 continents. The international buyers were able to see the millenary textile and design culture that is based on luxury fabrics such as alpaca and cotton. Both are Peru’ s considered flagship products and generate decentralized employment, even in their production chain.

Expotextil Peru Fair brings together the manufacturers and suppliers offer for textile and apparel industry. The 8th edition will take place in Jockey Exhibition Center in Lima from October 23th to 26th 2014. The last counted 250 exhibitors from 20 countries and 24,000 visitors.

Let us take a look at the textile balance of trade for the South American countries once more.

According to WTO statistics the cumulative share of South America and Central America in textiles amounts to 3.5 % in imports and 2.1 % in exports. Exports of clothing at 7.8% outperforms imports at 3.2% This figure however includes Mexico which exports clothing worth US$ 4 bn as well as the exports of other countries of Central America like El Salvador and Honduras. The USA imports textiles valued at US$ 94 million from Brazil, US$ 33 million from Peru and US$ 10 million from Chile. In contrast they import for example textiles valued at US$ 1615 million from Mexico.

In the WTO list of leading exporters and importers of clothing is Chile in the list of importers with a value of 3 bn. The share is risen by 17% in average during the period of 2005 to 2012.

That concludes our Country Focus report on South America. We have paid more attention to the countries that cultivate cotton as their textile industry is stronger. Textile industries that differentiate in some features and which are faced with some challenges. What they all have in common is their great potential. South America is and will remain a growth market for the textile and clothing industry as a product of its population structure and development. Whether demand is covered by domestic production or through trade within the continent itself among the Union of South American nations or through imports from Asia will depend to what extent the textile producing countries manage to create a value added process for their natural resources and how they position themselves in relation to world trade in the future. You almost want to advise them not to do things by half measures but to go for it in a big way.

Perfecting the fit – how it's done

Interview with:
Stephanie Müller
Division Manager Clothing Technology at Hohenstein Institute BÖNNIGHEIM (sh)

Under the „SizeGERMANY“ project in 2007/2008 representative serial measurements were taken from over 13,000 men, women and children between the ages of six and 87 years using cutting-edge 3D-body scanner technology. Since then we have been in possession of up-to-date information about the vital statistics of Germany‘s inhabitants - data that is more detailed than ever before.

A major step forwards, particularly given that most manufacturers of ready-made fashion have now adjusted their body measurement tables in line with the new figures. Problems with fit are nevertheless common in over-the-counter trading and above all with mail-order- and online sales, with the latter bemoaning returns rates of 20 percent and more due to fit. How can this be? Is buying a brand „unseen“ from top to toe doomed to remain a dream for consumers (and commerce)?

*In this interview **Stephanie Müller**, Division Manager Clothing Technology at the Hohenstein Institute, looks into the background and possibilities for optimisation available here.*

How can we explain the continuing problems with fit?

Stephanie Müller: Correct measurements alone are no guarantee of a good fit. Whether a garment is considered to fit properly depends on how it looks and feels on the wearer‘s body. Key factors here are the cut, the fabrics used and their mass per unit area and weight per piece. This is why, when testing fit, our motto is ‚People rather than dummies‘. How does an item behave when the wearer sits down or bends over? You can only judge this on a person, not on a dummy, especially where the wearer can also say at once if the garment is too tight or cuts in somewhere. Thanks to their awareness of the critical points, our experienced clothing technicians are able to ask searching questions and assess the fit of the item in typical body positions.

With this in mind, some manufacturers work with their own house models – so how does fit testing at the Hohenstein Institute still offer added value?

Stephanie Müller: We don‘t just have one or two test subjects. Our database contains some 250 people of all shapes and sizes and of all ages who pretty much match the SizeGERMANY measurements. During testing we can call on „fitting“ persons from this pool. This lets us, for example, not only check whether an item in size 10 fits as it is meant to but also find out whether it has an identical cut throughout all sizes of the available range. And we don‘t just test the fit when the garment is new, but also following care treatments.

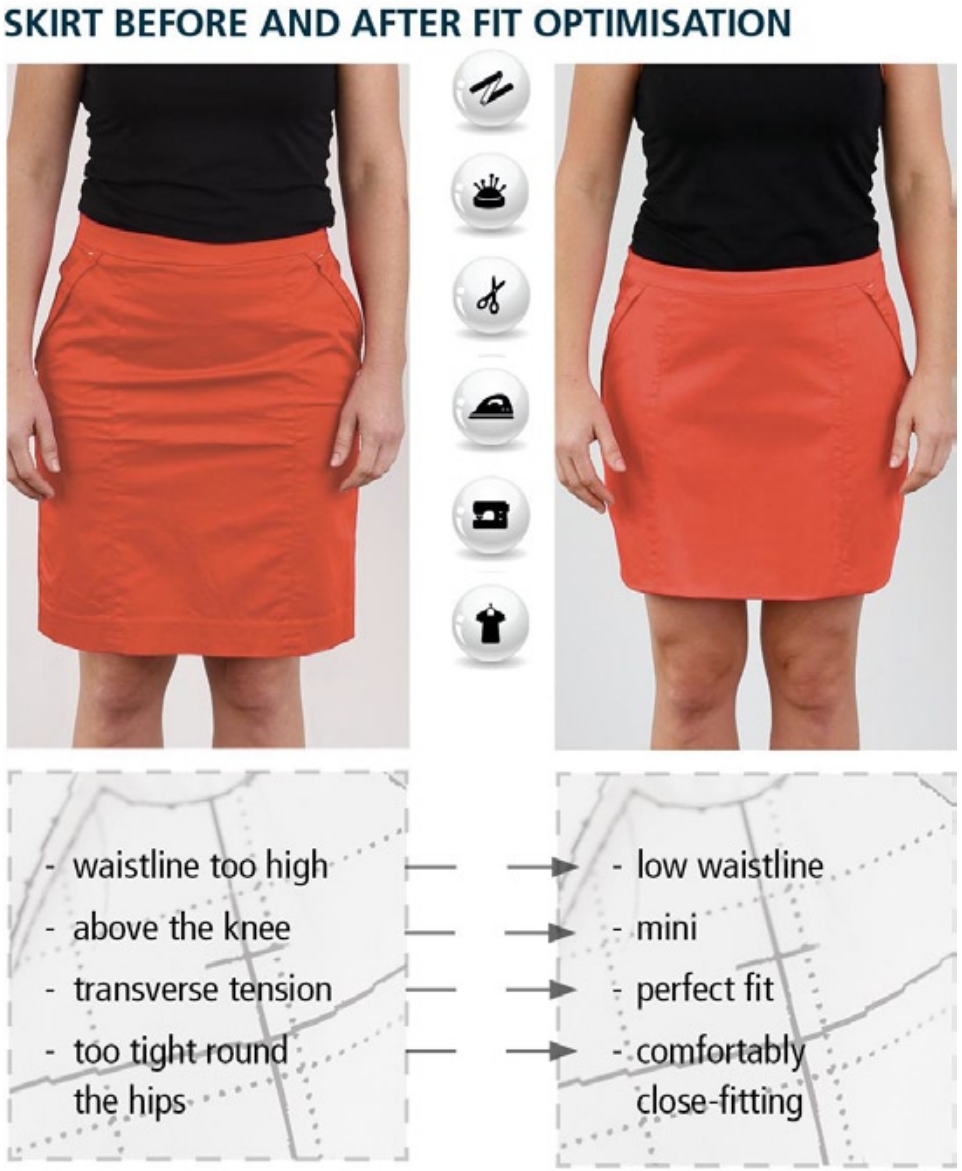
Our feedback allows manufacturers to adjust the fit to the relevant target group on a long-term basis.

And where we're talking about target groups – many producers now no longer define these groups by age but according to lifestyle ...

Stephanie Müller: A mistake where fit is concerned! Even when our measurements remain the same, our body proportions, posture and personal clothing preferences undergo major changes in the course of life. Such age-related changes need to be taken into account in terms of cut. A wearer's style may remain the same but not the cut!

If the fabric affects the fit, doesn't the cut have to be tried out in relation to the fabric and possibly adjusted?

Stephanie Müller: That's right. The same pattern can turn out quite differently with another material, depending on whether it is for example a stiff fabric or one that is more flowing. Our fit testing programmes therefore particularly pay off for basic items that are produced from one fabric in high volumes. We have already managed to significantly reduce the level of complaints for a number of clients. The costs of these tests paid off very quickly – and the controllers at the companies were delighted about such return on investment (ROI). Incidentally, on 28 May we are staging a free 30-minute webinar about fit optimisation. Anyone in the fashion trade and manufacturing is welcome to register at www.hohenstein.com/fit-webinar if they are interested.



Skirt before and after optimisation of the fit. ©Hohenstein Institute

Can manufacturers or companies with their own brands indicate that their products have undergone fit testing?

Stephanie Müller: Yes. If they satisfy the requirements, they are entitled to use the Hohenstein Quality Label for Fit. This enjoys a high level of credibility in both the retail sector and among consumers.

Do you have any idea how much clothing remains on the shelves of the shops every year because they simply do not fit?

Stephanie Müller: We have unfortunately no reliable figures on this. I can only provide my personal impression that considerable problems are caused for the textile retail sector by poor fitting clothes that need to be counteracted by a change of collection or through discount and sales campaigns. This naturally affects the margin of the retail trader negatively.

How much clothing in Germany is offered in your estimation that is already based on the latest 'SizeGermany' measurement?

Stephanie Müller: Around 50 companies are taking part in SizeGermany including some of the leading brand names and manufacturers. Most of these in the meantime have accepted the adjustments in accordance with the latest series measurements in their collections and as a result provide broad market coverage.

XL is mostly to short and XXL to wide for my height of 1.95 meters. There are interim sizes for suits and business shirts with extra long sleeves. This is ignored for leisure wear. Tall and thin men forming ca. 3% of the German population representing around 1.2 million potential customers are still considered exotic and therefore are not a target group, or are broad sections of the textile industry simply not doing their homework in this area?

I should say from the outset that the size specifications XL and XXL covering two clothes sizes respectively is naturally problematic in relation to the fit. XL covers for example the clothes sizes 56 and 58 while XXL covers 60 and 62. These standard clothes sizes however differ in size by several centimeters in the finished product. This explains why this size system makes sense if at all for very casual clothing where only limited value is placed on a proper fit. I can only advise you to focus on manufacturers that offer individual sizes. Ideally those that differentiate between normal, short and long sizes as well as ensuring consistency in the fit throughout the whole collection - where you can purchase 'blindly' so to speak. We support the manufacturers by reviewing the fit without taking the material and finish into account. This is the absolute best customer retention measure a manufacturer can adopt.

Successful premiere for new "composite" of SIT, mtex, LiMA & IT Users' Forum

mtex
Textiles and Lightweight Design in Transportation

The 1st Chemnitz Specialist Exhibitions finished with a clear signal that the new cluster of industrial exhibitions was a success. Almost 5,000 visitors examined the products and services provided by more than 300 exhibitors in the vehicle and mechanical engineering, mobile textiles, metal and polymer engineering and IT sectors, service providers related to these industries and the world of research.

Exhibitors and visitors clearly showed their appreciation for the idea of combining the Saxon Industry and Technology Fair (SIT), the “mtex” International Mobile Textiles Exhibition, the LiMA Exhibition for Lightweight Design in Engineering and Plant Construction and the IT Users’ Forum. “There has been clear confirmation that the idea of merging the exhibitions was correct. We’ve managed to present an attractive exhibition, which has provided answers to current challenges in business by means of many innovations for material and resource efficiency and the event has attracted many trade visitors,” said Michael Kynast, Managing Director of C_ Chemnitzer Veranstaltungszentren GmbH, giving his initial summary.

Managing Director Andreas Ludwig from Thorey Gera Textilveredelung GmbH said: “ Attending the “mtex” paid off for us in every respect. We were able to welcome our regular customers and make new contacts. The combined exhibition quartet enabled us to get to know companies from other sectors too.

For example, we held positive discussions with representatives from the mechanical engineering and paper industries. Something like this helps you to overcome a certain degree of tunnel vision when it comes to business operations.”

And also Ronald Gerbeth, Sales Manager of Zwickauer Kammgarn GmbH, was comfortable with the show: „We were pleasantly surprised by the quality of the contacts made at this year’s “mtex” exhibition. Among other things, we were able to welcome guests from southern Germany and Austria. And pupils and students showed interest in our company on the specialist workers’ day. As the exhibition took place close to our company headquarters, we were able to achieve excellent results with relatively little outlay. We’d like to express our appreciation for the professional organisation of the specialist exhibitions overall. Next time we hope that more automobile suppliers will attend.”

The “Blue Train” project was one of the outstanding innovative highlights at the Chemnitz Specialist Exhibitions; it is a lightweight design and production concept for a high-speed train, which the developers at Voith Engineering Services Chemnitz and the IWU Fraunhofer Institute in Chemnitz presented to the public for the very first time. The power car is made of aluminium foam composite material and enables weight savings of up to 30 percent compared to traditional vehicle concepts.

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New kinds of conveyor systems from Chemnitz University of Technology also attracted huge interest; wooden composite materials reduce the weight and lower energy requirements, but are able to cope with similar loads. The same was true of a new knitwear technology presented by Dresden University of Technology; this enables operators to manufacture e-vehicles more efficiently using textile heating elements, for example. This development attracted the “mtex Innovation Prize”, which was presented for the first time.

While it was mainly trade visitors who attended the exhibition and the specialist supporting programme on the first two days, the final day (16 May 2014) focused on career prospects for the future. Pupils and students gained admission free of charge on this day and were able to obtain more information about jobs, training places, placements and writing university dissertations.

The weft yarn device in detail

Pupils and students had already shown interest in more than 100 offers made available in advance on the Internet portals of Chemnitz Trade Fair Centre, Chemnitz Economic Development Corporation (CWE) and the Chemnitz Technology Centre (TCC).

A symposium with top-class speakers accompanied both events. Meinhard Behrens from Faurecia Autositze GmbH, Prof. Dr. Lothar Kroll from Chemnitz University of Technology, Dr. Maurizio Mantovani from Autoneum Management AG and Frank M. Rinderknecht from Rinspeed AG gave the introductory lectures. Experts from the worlds of research and practice lectured on “Seats & Interiors” and “Integrating Lightweight Design & Functions” on the second day.

For the first time this year the “mtex” offered an Innovation Prize for special achievements in developing products or processes within the mobile textile sector.

The award was presented to Christian Franz of the Institut für Textilmaschinen und Textile Hochleistungswerkstofftechnik (ITM) of the TU Dresden. The 28 year old engineer was honored for his contribution to the research project ‘Kettengewirkestrukturen mit Funktionsintegration’.

Under the direction of Dr.-Ing. Gerald Hoffmann, leader of the research group ‘Flächenbildungstechnik’ at ITM Christian Franz developed the technology for lightweight textile heating elements required for example in electric cars which is much more efficient than those manufactured up to now.

‘That is another step towards generally affordable electro mobility’, said the chairman of the panel, Prof. Dr.-Ing. Markus Michael and holder of the professorship of the foundation for Technische Textilien & Textile Maschinenelemente at the TU Chemnitz, when explaining the price committee’s decision: ‘The choice was not an easy one for us. In all there were seven strong applications submitted for the award endowed by our professorship which is not associated with monetary consideration. We would like to thank the faculty of textile design of the Westsächsischen Hochschule Zwickau in Schneeberg for the design of our first ‘mtex cup’ award. It was created by Denise Benzing as part of a student competition.’

The award-winning new insertion system from Dresden allows electrically conductive threads to be integrated into the weaving process in the manufacture of technical knitted fabrics. Textile producers using the corresponding auxiliary equipment on their warp knitting loom will be able to achieve a cost reduction of at least 80% in the future. Germany has around 50 medium-sized textile companies which use the appropriate warp technology.

‘We have manufactures an integrated heating structure for a car seat at the ITM as a practical example of its use in a warp-knit spacer fabric’ reported Prof. Dr.-Ing. Chokri Cherif, director of the institute: ‘We would like to thank our industry partner Karl Mayer LIBA Textilmaschinenfabrik, Naila, of Audi AG, Ingolstadt, and B&R Industrie-Elektronik GmbH, Ismaning, for their support.

Above all we would like to thank the Arbeitsgemeinschaft industrieller Forschungsvereinigungen and the Forschungskuratorium Textil for providing the development funding on this multi-year research project.

The new insertion technology developed by Christian Franz and the ITM team can be used both for warp knitting as well in the manufacture of composites based on aramid, carbon and glass fiber yarns.

Christian Franz of ITM of University of Dresden was honored with an Innovation Prize

Best Practice Guide for SMEs to Use CFK-Materials

Two-country project "DeMaCo" also determines expenses

Aachen. Carbon-fibre-reinforced plastics (CFRP) are on the rise: The first mass-produced car with a carbon-fibre-reinforced plastic bodywork has been rolling out of from the BMW assembly line for the last few months; Carbon concrete composite as well as lightweight composites for different purposes are likewise making a name for themselves. Nevertheless, the material of the future is viewed with skepticism by the small and medium-sized enterprises (SMEs) in their own product development. A guide from Aachen is supposed to help softening the prejudices.

In SMEs, composite solutions are still scarce goods. There is a lack of know-how concerning the application of fibre-based materials, which demand almost the same requirements on design and manufacture components as for example plastic or metal. The Aachen textile researchers Christoph Greb and Mesut Cetin, who head the project of the "Federal Ministry of Economics and Technology" together with Belgian experts, are convinced that the mental barrier concerning the fibre-based materials can be reduced by using the composite structures with a new guide, DeMaCo (Design for Manufacture of Composites).

Also the head of the textile research council, Dr. Klaus Jansen, wants to accelerate the transfer process: “Germany has ideal conditions for the development and application of the CFRP technologies. Meanwhile, the rather small medium-sized enterprises must not be overlooked.”

The guide includes the first steps of previously unknown material worlds and provides guidelines and tools for the production of fibre-based materials (with a focus on the liquid impregnation process) that support the SMEs in the development of composite products.

The manual was developed by the Institut für Textiltechnik of RWTH Aachen University in cooperation with the Institute of Polymer Materials and Polymer Technology at the TU Clausthal. The manual ensures a transparency in the complex interplay of the product geometry (design), the material selection and the individual production steps: it also illustrates the preforming as well as the finishing processes.

The best practice guide, which is directed primarily to the designers and production managers, is a practical guide that deals with the entire production chain. Through literature research, consultations with industry partners, laboratory research and case studies, a “strategic guidance tool” was developed for selecting the right materials with the use of resins and fibres, individual technologies (including the vacuum infusion) and tools (mold material such as rigid foam, form type), as well as the appropriate process steps for the post-processing such as surface treatment or joining.

While the document covers a variety of manufacturing methods and complex manufacturing processes, the “cost tool” also in DeMaCo is developed to calculate the financial expenses.

It considers on the one hand the product costs (all resources that are required for the product/component, such as textile reinforcing layers, gel-coat, vacuum bag sealant tape, release agents), but also project (all resources involved in the project such as infusion tools) and investment costs (all resources, plants and machinery such as tempering ovens, injection systems, presses, portal milling machine). The costs of production for the fibre-reinforced plastic components as well as the required cycle time will be displayed as output values for the developed cost tool. The costs of production are divided between the processes injection, preforming and finishing into product, project and investment costs.

The decision-making and cost tools can be requested via E-Mail under the subject “DeMaCo”: Mesut.Cetin@ita.rwth-aachen.de.

Topics of the next issue 3 /2014

TOP STORY:

Textile Machinery Industry

Interview

Yarn & Fiber trends
Textile Processing: PLM Cloud software

Country focus: *USA & Mexico*

Nonwovens & Technical Textiles:

"glass fibres and new applications"

Textile Machinery:

"Dyeing, Drying, Finishing, Digital Printing"

Review ITMA ASIA + CITME 2014
Preview CINTE Techtextil China

Fashion retail market

TexData is the smart and inexpensive way to reach your customers.

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Website:
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Visits:
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Page Impressions:
>1.845.780 /month (May 2013)

Infoletter & Magazine:
no fee, registration required

Best magazine downloads:
53.175 (issue 2/2013)

New Subscribers in 2013:
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