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TEXDATA INTERNATIONAL

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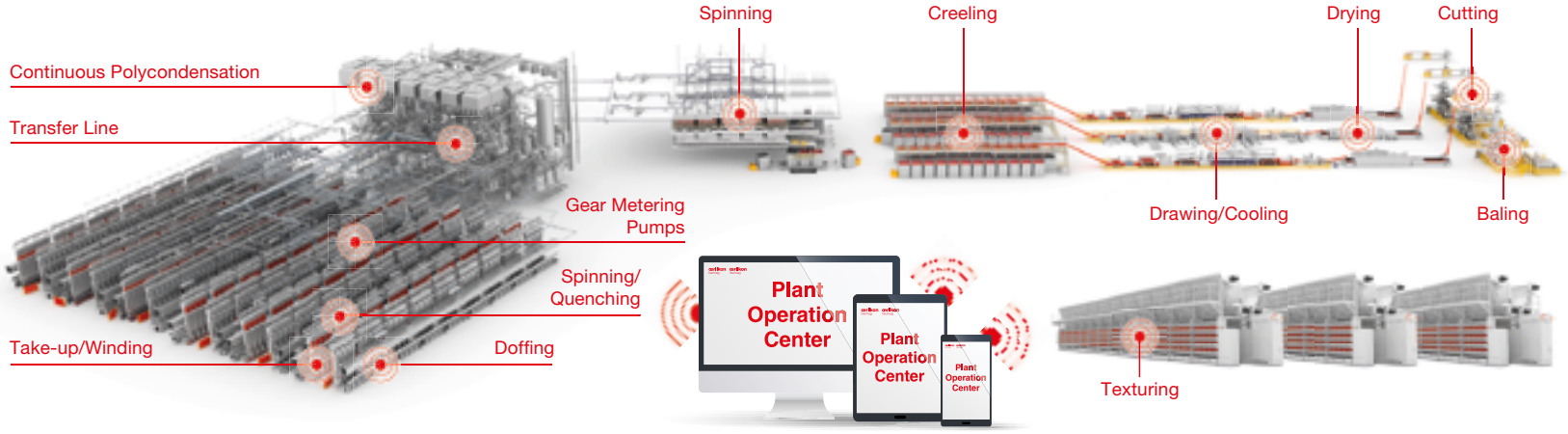
Clean Technology.
Smart Factory.

From Melt to Yarn, Fibers and Nonwovens

Oerlikon Polymer Processing Solutions Division with the competence brands Oerlikon Barmag, Oerlikon Neumag and Oerlikon Nonwoven is one of the leading provider for filament spinning systems, texturing machines and BCF carpet yarn, staple fiber spinning as well as nonwovens solutions. For further information visit us at **www.oerlikon.com/polymer-processing**



oerlikon barmag

oerlikon neumag

oerlikon nonwoven

FROM THE EDITOR

DEAR READER,

I expect that this issue will be the last time I will present myself wearing a mask, because in Europe the pandemic is (hopefully) drawing to a close. More and more people are being vaccinated and the incidence figures are decreasing rapidly. Restrictions are gradually being lifted, and life is steadily returning to the normal way, the benefits of which we really became aware of during the pandemic. Politicians openly state that they expect the pandemic to be over soon.

This is not yet true for the entire (textile) world, and there are still many countries and areas that are in the midst of the third wave and are currently struggling to get out. They still have our sympathy and solidarity. The pandemic affects the whole world and only when it has been defeated in every corner of the world has it been defeated as a whole.

For the international textile industry, this is not a question and it will certainly do everything to ensure that an overall victory is achieved.

Slowly, with this, our eyes must go forward, and we must use the euphoria of surviving the disaster to use energy to rebuild and expand our business. China had overcome the pandemic quite quickly through consistent containment measures and restarted the economic engine in an outstanding manner with economic growth of 18.6%. The textile world will also be looking to China in the next few days. On June 12, one of the top 4 trade fairs (ITMA, ITMA Asia+CITME, ITM, India ITME) of the textile machinery industry, ITMA Asia+CITME 2020, will be held again for a very long time, more precisely since the last ITMA 2019 in Barcelona.

This will give Chinese textile companies the opportunity to finally examine the many innovations on site, and thus also set the technological course for their future success. And although the trade fair will not have the international character of previous years due to the pandemic, it will not lose any of its worldwide importance as an event in itself.

China remains the beacon and yardstick in many areas of the industry, and thus the entire textile world will be looking to this important trade fair for information for its own business and to identify the trends. Therefore, also for us this important fair is in the center of our coverage. We would like to provide you with all the information about the exhibitors and their innovations that will be shown at the fair.

BEST REGARDS
OLIVER SCHMIDT
#Editor-in-chief

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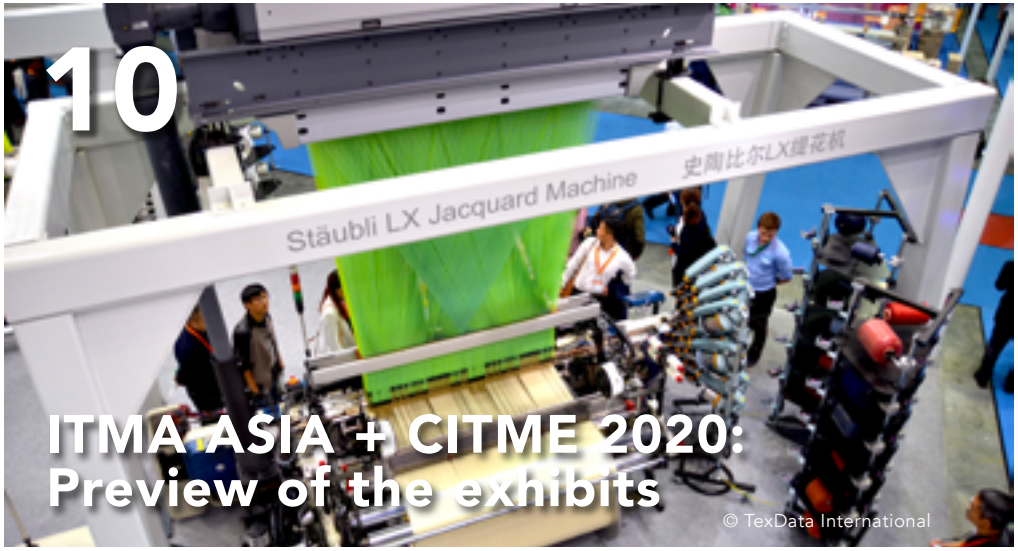

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ITMA ASIA + CITME 2020: Preview of the exhibits

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CONTENT

THE **RESTART** FROM THE **COVID 19 CRISIS**

WILL WE SEE A BOOM YEAR WITH A HIGH REBOUND EFFECT?

Even the boldest optimists will not have believed it possible what China reported for economic growth in April. According to the National Bureau of Statistics in Beijing, the economy grew by 18.3 percent in the first quarter compared with the same period last year.

This was a sign of how a country's economy can successfully emerge from the crisis, although the figure must be seen against the backdrop of the slump in early 2020. In China, the COVID-19 pandemic is considered to have been successfully overcome and the country has returned to a certain normality in many areas at least for life and business in the country itself. In Europe, too, there are growing signs that countries are increasingly coming to grips with the pandemic. While vaccination rates are growing, incidence figures are falling below levels considered critical across the board. As a result, opening strategies are also picking up speed, and citizens and businesses are gradually regaining rights and opportunities to act.

Previously, these were significantly restricted in many areas. Shops are reopening and trading venues, such as trade fairs, can also expect to be able to operate again from Q3 onwards. This raises the question of whether there are already signs that the world as a whole, or at least individual economic regions with major industrialized countries, will be able to unleash a similar momentum from the crisis, as China has done.

Will there be the famous rebound effect and how big will it be? Here, of course, our focus is on the textile industry. Let's take a look at how things are currently looking in various areas along the value chain. Let's start with retail. In the first quarter of 2021, the retail sector as a whole is still suffering badly from the fact that many countries continue to impose severe restrictions, which mean that individual stores can only be opened under strict conditions or, in the worst case, remain closed altogether.

Apparel giant **H&M** reported that for Q1, i.e., the period from Dec. 1, 2020, to Feb. 28, 2021, net sales for the H&M Group fell 21 percent in local currencies compared with Dec. 1, 2019, to Feb. 29, 2020. Sales performance was significantly impacted by the Covid 19 situation, with widespread restrictions and more than 1,800 stores temporarily closed.

Since early February, a number of markets have gradually allowed stores to reopen, and approximately 1,300 stores remained temporarily closed at quarter end. Online sales continued to perform very well. Since Germany, H&M Group's largest market, and other countries were allowed to reopen certain stores, the number of temporarily closed stores in the group was around 900 as of March 13. Sales in the period from March 1 to March 13 this year increased by 10 percent in local currencies compared to the same period in 2020. On its website, H&M provides a graph that gives a good visual representation of the sales development during the pandemic. The sales curve dropped dramatically in Q2 2020 and then recovered to 2019 levels by the middle of Q4. It then dropped again and recovered again by the end of Q1 2021, with online sales increasing 57 percent in local currencies in the first quarter.

H&M has thus managed to compensate for store closures to some extent via a strongly growing online business. Helena Helmersson, H&M CEO says: "When markets have been allowed to open, store sales have picked up while at the same time online sales have continued to develop very well."

Let's move on to brand manufacturers. **Adidas** on May 7 reported a strong start to 2021 and that it had revised its full-year guidance upward. "We are fast out of the gate in the first year of our new strategic cycle, with excellent revenue growth, DTC-led sales increases in all market segments and strong profitability improvements," said adidas CEO Kasper Rorsted. In the first quarter, currency-neutral sales increased 27%. This increase was achieved despite ongoing lockdowns in Europe and industry-wide supply chain bottlenecks, which reduced currency-neutral sales growth by high single digits during the quarter.

By sales channel, the overall sales growth was driven by exceptional sales improvements in the DTC (direct-to-consumer) business. E-commerce sales increased by 43%, compared with 35% in the prior-year quarter, thus almost doubling in the two-year period. The revenue increase in the first quarter was attributable to growth in all market segments. In the three strategic markets of China, North America and EMEA, sales increased in constant currency as follows: while sales in China rose in the triple-digit range (+156%), they increased in the high single-digit range in North America and EMEA, each with an increase of 8%. The high increase in direct-to-consumer business shows that a significant part of the increase is due to higher margins, so this growth is not indicative of sales growth at manufacturing textile companies.

VF Corporation, one of the world's largest apparel, footwear and accessories companies with outdoor, active and workwear brands including Vans®, The North Face®, Timberland® and Dickies®, announced reported financial results for its fourth quarter and full year ended April 3, 2021 in May. While full-year 2021 revenue from continuing operations declined 12 percent to $9.2 billion, the company projects full-year 2022 revenue of approximately $11.8 billion, reflecting growth of approximately 28 percent.

Whether an upturn has already reached manufacturing textile companies, many of which were hit particularly hard by the crisis, remains unclear. The landscape is too heterogeneous, and the mostly medium-sized companies do not report monthly or quarterly figures.

Therefore, let's move on to the other end of the supply chain, to production equipment, and follow the logic that investments in this sector also imply an improvement of the situation at textile companies.

In the textile machinery sector, the signs are now pointing to recovery and growth. While **Rieter** had to accept a significant decline of 25% in sales and as much as 31% in order intake in the 2020 financial year as a result of the COVID 19 pandemic, the company was already able to provide a friendly outlook for the first half of 2021 and also the full year 2021 in an update on May 12.

Rieter announced an order intake in the month of April 2021 of some 300 million CHF and, in addition, an expected order intake in the first half of 2021 of some 800 million CHF. This compares with 640.2 million CHF of orders received in the full year 2020 and 926.1 million CHF for the year 2019. Rieter expects an operating profit for the full year 2021. The figures here show that the growth in order intake is likely to be strong and that a corresponding rebound effect can certainly be called significant.

Things look even better for the Man-Made Fiber Division of the Swiss company **Oerlikon**, which was recently repositioned as Polymer Processing Solutions following the acquisition of INglass. The division achieved a very strong year-on-year increase due to a solid Q1 and the fact that Q1 2020 was heavily impacted by the pandemic.
Order intake increased significantly by 119.0% to CHF 315 million, compared to CHF 144 million in 2020.
Sales increased by 28.7% year-on-year to CHF 263 million, mainly thanks to the development in India and China. If we ignore 2020 as a crisis year and compare this figure with the CHF 254 million in sales from the first quarter of 2019, we can see that Oerlikon is definitely on track in terms of growth. In addition, the company has a very high order backlog of CHF 528 million.

OUTLOOK

So much for our little glimpse of the situation in the textile industry under the question of how it can come out of the crisis. The examples shown allow us to conclude that the return from the crisis will take place at high speed and that many companies will still exceed their pre-crisis level in 2021. This would make the crisis year 2020 indeed a very tight V in a sales chart, as speculated on the world's stock markets some time ago. And this becomes all the more likely as all potentials are far from being exploited and a genuine wave of euphoria fueling further rebound effects is not yet in evidence outside China. Rather, it is true that we will only be able to have the big party when the danger for everyone has passed. But then, perhaps, the real thing.

BIG BOOM IN CHINA

FINALLY A TRADE FAIR AGAIN - ITMA ASIA + CITME 2020 TAKES OFF

China's and Asia's largest textile machinery fair, the ITMA Asia + CITME 2020 will be held from 12 to 16 June 2021 at the new National Exhibition and Convention Centre (NECC) in Shanghai. This marks the 7th edition of the show, after it was first held in 2008 from the combination of the ITMA Brand with the successful CITME show.

If you pay attention to the finer details, you will see that the show is still referred to as the 2020 show. It was originally scheduled to take place in the usual cycle in October 2020 but had been postponed to June 2021 due to the Conora virus and the global pandemic with announcement as early as April 22, 2020.

Around two years after ITMA in Barcelona, Chinese textile companies will thus have their first opportunity to examine the many innovations presented there at 'their in-house trade fair'. Interest in the fair should thus be just as great as the demand for innovations and new ideas, because China has overcome the pandemic quite quickly and China is booming. Economic growth in Q1 2021 was an incredible 18.3%, the largest increase since records have been kept, and is also forecast at a very high 8% for 2021 as a whole.

And this boom naturally also affects the textile sector. Despite the global pandemic, exports of textile goods from China increased by almost 30% in 2020, to over $150 billion. There is now a pent-up demand from the country's textile manufacturers for the latest advanced technologies that can further their progress in a highly competitive market, according to TMAS – the Swedish textile machinery association.

And interest is also high on the other side, among machine builders. Despite the ongoing Covid-19 challenge, the show is expected to feature a gross exhibition space of 170,000 square meters. Until March, it has attracted the participation of 1,500 exhibitors, including many established machinery manufacturers from 24 countries. Around 1650 exhibitors and 100,000 visitors are expected.

"Taking into consideration the needs of the industry, we have decided to continue with the staging of the combined exhibition. Since the certificate of admission and stand details were issued last December, many exhibitors have responded positively to the news that the combined exhibition will be staged as planned," said Mr Wang Shutian, Honorary President of China Textile Machinery Association (CTMA).

And he added, "The pandemic has created pent-up demand for quality machinery for sectors such as nonwovens and technical textiles as there was a lack of sales and marketing opportunities last year. Therefore, our machinery manufacturers are eager to reconnect with the market."

The good situation is also confirmed by exhibitors and associations. For example, from the German world market leader Karl Mayer. They wrote in a press release: 'China has overcome the Corona pandemic relatively quickly. In the first three months of 2021, its economic growth grew to record levels. The boom led to lively investment activities among textile manufacturers, and the KARL MAYER Group is assisting them in this endeavor. Und Arno Gärtner, CEO of the KARL MAYER Group sagte dazu:"We want to help our customers participate in the current economic cycle. We offer them solutions that, above all, exploit the opportunities offered by digitization for highly efficient production," says Arno Gärtner, CEO of the KARL MAYER Group.

ACIMIT, the textile machinery association of Italy, wrote that the fair is a first step towards normality for many companies in the sector, after more than a year in which even the exhibition activity has stopped. Asia represents the main destination for Italian textile machinery manufacturers. In 2020 38% of Italian textile machines exports went to Asia. Moreover, in 2020 Italian machinery exports to China accounted for 14% of Italian exports in the sector (over 190 million euros).

This shows how important the trade show is for the entire industry and there are also more voices on this subject.

Dr Dirk Burger, CEO/CSO of Truetzschler Group, said, "We have never missed any ITMA ASIA + CITME exhibition since its first edition was in Shanghai in 2008. While this has been a difficult year for everyone, we are glad that the exhibition will take place next year so that we can connect with our customers face-to-face. After all, the combined show is the most significant platform in Asia and so we still need to have a consistent presence in this important market."

Impressions from last ITMA Asia 2018 © 2019 TexData

Mr Ernesto Maurer, President of CEMATEX, explained, "The pandemic might have disrupted the world but exhibitors are eager to resume their marketing efforts. Therefore, the show has not suffered a significant change in support. While there have been some concerns about international business travel from some quarters, the combined show is still gearing up for a mega showcase."
This sounds very promising, even if the trade fair will certainly have a more national character overall than was otherwise the case due to the special features of the pandemic and the associated entry regulations with quarantine. In 2018, after all, 20% of the visitors were not from China.

This is a great, great pity, but understandable to a high degree. The danger of a renewed outbreak would have been too great if there had been a generous liberalization. The international visitors will be all the more pleased that it will be a hybrid event, at least to some extent. Many exhibitors offer the possibility to participate in the trade show online and to experience the innovations at least virtually. Information can be found on the respective websites.

And what can visitors expect on site? Visitors who purchase their badge at www.itmaasia.com and www.citme.com.cn will enjoy special online rates. Early-bird rates available till 6 June are RMB 60 for a five-day badge and RMB 30 for a one-day badge. Standard onsite rates cost RMB 100 for a five-day badge and RMB 50 for a one-day badge.

Visitors who register online will be also given access to the exhibition e-catalogue. The show owners and organisers are committed to working closely with the authorities, such as the Joint Prevention and Control Mechanism of the State Council and the Shanghai Convention and Exhibition Industries Association (SCEIA), to implement preventive and social distancing measures to enable the combined exhibition to be held safely.

"We would like to assure that the safety of our participants, partners and staff during the exhibition is of utmost importance to us. Strict safety measures will be implemented onsite. Visitors should purchase their badge online to avoid onsite queues and allow better and smooth entry process," urged Mr Ernesto Maurer, President of CEMATEX.

Good organization and a high level of protection are thus ensured and, in addition, visitors can certainly look forward to the many innovations as well as good discussions with the exhibitors. Much of this can be found on the following pages in the exhibitor preview of the fair.

In the end, we are looking forward to the current show and hope that the pandemic will end soon. Then hopefully everyone will be able to participate again. Considering that the show is still called ITMA Asia + CITME 2020 and the rotation has not been officially changed yet, the next show could even be upon us as early as 2022. By then at the latest, everything would be back on the right (textile) path.
www.itmaasia.com **www.citme.com.cn**

HYBRID TRADE SHOW CONCEPT WITH VARIOUS INNOVATIONS FOR THE ENTIRE MANMADE FIBERS INDUSTRY

This year's trade fair appearance of Oerlikon's Manmade Fibers Division at ITMA ASIA + CITME will focus on the latest machine and plant developments as well as customer services around the motto "Clean Technology. Smart Factory." In Hall 7 of the China National Exhibition and Convention Center (NECC), Shanghai, Oerlikon will present as one of the leading suppliers for high-end technology solutions for the entire manmade fibers industry its innovations from 12 to 16 June 2021 at its hybrid booth A48 on more than 225 m².

Oerlikon offers its customers solutions along the textile value production chain. The division with the competence brands Oerlikon Barmag, Oerlikon Neumag and Oerlikon Nonwoven thus supplies technology "From Melt to Yarn, Fibers and Nonwovens" for PET, PP, PA6 and other materials. Accordingly, the offers at the ITMA ASIA + CITME booth will be.

HYBRID BOOTH CONCEPT

Due to the travel restrictions in the context of the Corona pandemic, Oerlikon relies on a hybrid booth concept. In addition to various new component exhibits from the fields of continuous polycondensation including gear metering pumps, filament (POY, FDY, IDY, BCF) and staple fiber spinning, texturing as well as nonwovens production, the dialog with customers will now more than ever after such a long time without a fair be at the center of the trade show activities.

All Oerlikon experts from outside China will be able to be connected online in order to provide comprehensive support for the trade fair visitors together with the Chinese sales staff, technologists and engineers onsite. Especially in the field of digitalization and new solutions for the "Smart Factory", the intercontinental dialog at the whole time of the exhibition is a mandatory prerequisite for a successful trade fair.

SAFE AND SOUND – DATA SECURITY IN SMART FACTORIES

Digitalization has a very good chance of becoming one of the words of the year. Digital solutions are enjoying a boom – particularly in the age of mobile working, travel restrictions and limited personal contact. Here, we all transmit a considera-ble amount of data through the web that we need to know is absolutely secure. When it comes to digitalization, Oerlikon Manmade Fibers Solutions pays particular attention to one thing – data security in smart factories.

From Melt to Yarn, Fibers and Nonwovens – Oerlikon will be presenting its latest machine and plant solutions at the ITMA ASIA + CITME © 2021 Oerlikon

The IT experts within the Oerlikon Manmade Fibers Solutions business unit are also busy ensuring the data of its customers are secure. Digital solutions such as Remote Service, AIM4DTY, Smart Maintenance Workshops, Plant Operation Center and the fully networked 'smart' factory necessitate a secure infrastructure.

How this can be achieved is explained by Sebastian Helmer, responsible for Information Security at Oerlikon Manmade Fibers Solutions:„'Secure by Design' is currently standard practice for establishing the necessary IT security in the product from the outset. With our textile market expertise, intensive interaction with customers and our company-internal international experience, we have developed a picture of our customers' requirements, which we are constantly expanding. We also deploy common standards in the development of solutions – including ISO27001 and IEC62443, among others. Building on this, we develop our own smart factory security solutions, all the way through to customized solutions. We test new solutions by means of so-called pen tests – here, tests are carried out to hack the system in order to close potential security gaps in a targeted manner – in order to further improve them and check our environments with security architecture reviews."

THE SMART FACTORY

Ceasing to be a mere vision long ago: the smart factory. Of critical importance here is the close relationship between IT and innovation. "With the smart factory concept, we have developed from an operator into a consultant. On the one hand, IT enables innovation.

At the same time, innovation is, however, also taking place in IT – culminating in new-generation digital products. Hence, both cross-fertilize each other", explains Chief Technology Officer at Oerlikon Manmade Fibers Solutions Jochen Adler, talking about the interaction between the two disciplines.

Operating a yarn manufacturing system requires various components and solutions: everything is present – from the control level, the Human Machine Interface (HMI), the automation systems, the Plant Operation Center all the way through to cloud solutions. All this requires smart infrastructure, which – in addition to a reliable network – includes a high-performance edge computing solution that, coupled with a modern software platform (CSP) and a correspondingly high security level, safeguards the security and the quality of the end product.

By nature, data security is also deci-sive for all downstream processes within the textile value chain that build on the collated data or for merchandise management systems that are directly connected to the smart factory.

SECURE DATA EXCHANGE

Services such as Remote Support and tools including the AIM4DTY training center necessitate data exchange. "Here, we draw on high standards for the purpose of encryption, customer sepa-ration and also minimizing data", states Sebastian Helmer.

"We basically distinguish between three categories of threat scenario: firstly, we have the unconscious actions of employees who unintentionally load malware onto a system without realizing this themselves. Then there are the attacks that have no concrete objective; here, perpetrators attempt to attack a company by means of SPAM or phishing. And, finally, there are attacks that focus concretely on a specific company. Here, perpetrators try to plant malware using targeted methods. This can extend all the way through to social engineering in order to exert influence over the relevant persons."

The Oerlikon Manmade Fibers Solutions business unit is superbly equipped for the task with its smart factory solutions: "We have been supplying our customers with secure, certified hardware for decades now. And we also apply these standards to our software solutions: our digital products work with a safety net and a false bottom – hence ensuring secure and reliable operation at the customer site", promises Jochen Adler.

Jochen Adler, CTO Oerlikon Manmade Fibers Solutions
© 2021 Oerlikon

Sebastian Helmer, Teamlead Infrastructure Services and Information Security Officer Business Processes & IT at Oerlikon Manmade Fibers Solutions © 2021 Oerlikon

GLOBAL LEADER IN HIGH PRECISION POLYMER FLOW CONTROL EQUIPMENT

In April Oerlikon announced that it has signed an agreement to acquire Italy-headquartered INglass S.p.A. and its innovative hot runner systems technology operating under its market-leading HRSflow business. The strategic acquisition is a significant step in expanding Oerlikon's current manmade fibers business into the larger polymer processing market. The acquisition accelerates and enhances existing organic initiatives to diversify and strengthen the company's core high-precision polymer flow control capabilities, products and services. The completion of the transaction is subject to customary regulatory approvals and is expected by the second quarter of 2021. To reflect Oerlikon's expansion into a larger high-growth market, the Manmade Fibers Division will be renamed as Polymer Processing Solutions Division. This division will have two business units: Flow Control Solutions and Manmade Fibers Solutions.

EXHIBITS

Oerlikon will present a new DTY eAFK Evo generation with up to 25 % energy saving and up to 30 % higher production speed, easy maintenance and best yarn quality: EvoCooler will be shown as an exhibit in combination with digital solutions like AIM4DTY . Another exhibits are new Aramid and Spandex gear metering pumps. Last but not least the company invites to their Open House at their Oerlikon plant in Suzhou.

www.oerlikon.com/polymer-processing/en

SAVIO SHOWS SOLUTIONS-ORIENTED PORTFOLIO TO MAXIMIZE MACHINERY RETURN ON INVESTMENT

Savio presents latest technology © 2019 SAVIO

For Savio it is very important be back to physical events in the biggest textile market like China and meet in person their customers again. In Shanghai Savio is exhibiting solutions-oriented portfolio to maximize machinery return on investment, both for machinery and for technical service.

Savio will have on display at ITMA ASIA the winding solutions especially studied for processing cotton/spandex, modal and lyocell yarns. Savio offers numerous machinery solutions to support the quality of the final yarn product: winding, winding for continuous shrinkage, bulking and heat setting; TFO twisting; Open-End rotor spinning.

Another main exhibit is the "Savio 4.0" digital solutions for data exchange in manufacturing technologies. The new possibilities offered by the connection of the machines translates into the different levels of Savio Industrial IoT, with the possibility of progressive sophistication.

Different option levels, each corresponding to a different dose of Industry 4.0 applied to Savio textile winding machinery, from simple connectivity and machinery data downloading, to remote machine setup, to operator real-time interactivity. Automation and digital solutions have been two big drives for Savio in the last years. The requirement for integrated automation in the spinning process is increasing, because of yarn quality and productivity advantages that such solution offers. This integrated automation drive has led Savio to offer customers new bespoke solutions, to increase flexibility to/fro winder.

The latest automated solution from Savio is the Multi-Link, that connects multiple ring spinning frames (RSF) to one Savio winder, becoming a tailor-made circuit to link up to four RSFs to one winding machine. This solution optimizes space, reduces energy-consumption and production costs. This automatic bobbin transport shortens servicing paths for the operators and allows an ergonomic material flow. The costs for production, space and energy are reduced, while keeping the quality consistent even with long and multi-connected machines.

Savio After-Sales service has also a new and innovative Augmented Reality tool to fast trouble shoot, improve processes and increase machine utilization time. Due to the current travel restrictions, in order to ensure machinery effectiveness, Savio is offering remote assistance powered by TeamViewer Pilot, an application that allows interaction in augmented reality. Thanks to this application, Savio experts from their Italian headquarters can support field technicians at the customer site, in real time, through video sessions for faster troubleshooting.

www.saviotechnologies.com

LOEPFE WANTS TO OPEN UP NEW WORLDS

Loepfe showcases the market-leading YarnMaster® PRISMA along with its well-established counterpart YarnMaster® ZENIT+. With this dual offering, Loepfe uniquely leads both on technology and performance as well as on the proven reliability and price dimensions. YarnMaster® PRISMA dazzles with its innovative use of four distinct sensor technologies – a unique blend that for the first time combines infrared optical, RGB optical, capacitive and triboelectric sensors and collaborating in perfect harmony, along with connectivity for the digital age. These elements not only allow the detection of previously invisible yarn faults and irregularities, but also the collection and analysis of data for effective online quality management through Loepfe's MillMaster® TOP management cockpit. Due to the prevailing Covid-19 travel restrictions, Loepfe will be represented by its partners C.N.T. - CIMACO Ltd. and Point Hope (Textile Machinery) Ltd., while Loepfe representatives will be available for ad-hoc conference calls at any time.

www.loepfe.com

YarnMaster PRISMA – Open up new worlds © Loepfe

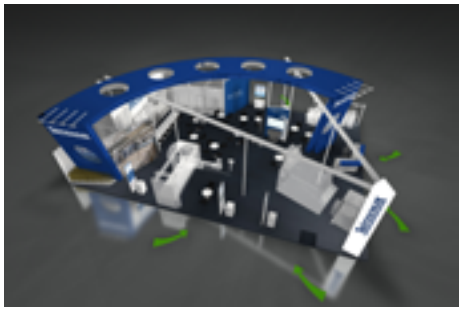
TRUETZSCHLER PRESENTS
A SELECTION OF EXCITING INNOVATIONS

At this year's ITMA Asia, the Trützschler Group presents a selection of exciting innovations from its business units Spinning, Card Clothing, Man-Made Fibers and Nonwovens.

ALWAYS INNOVATING FOR SPINNING

Building on the success of the industry benchmark TC 10 card, Trützschler introduces its TC 15 card for the Chinese market. This 1.28-meter-wide card offers 30 to 50 % higher output than the 1-meter-wide TC 10 card, depending on the specific spinning process and material involved.

In 2011, Trützschler introduced the 1.28-meter ideal width carding machine to the global market for the first time.



Trützschler ITMA Booth © 2021 Truetzschler

The TC 15 was created based on vast experience accumulated by Trützschler in wide carding machine technologies, and offers significantly improved production capacity, quality and equipment handling. For these reasons, the company is confident that the TC 15 will become the benchmark for high-performance carding in China.

A RANGE OF IMPROVED FEATURES FOR BLOW ROOM EQUIPMENT

Since it was launched in 2019, the Trützschler portal bale opener BO-P has received a great response from the market. To expand this positive development in the blow room section, Trützschler has developed a new pre-cleaning machine called the CL-X – with its introduction at the exhibition in June.

Significantly improved production capacity, quality and equipment handling: TC 15 © 2021 Truetzschler

Compared to its predecessor model CL-P, it cuts energy consumption by up to 30 percent, offers up to 100 percent capacity improvement and even better cleaning capabilities.

A PROVEN DRAW FRAME SOLUTION

Since the TD 10 was launched at the ITMA Asia in 2018, it has been embraced by the market. The company's presence at the ITMA Asia in 2021 marks another opportunity for potential customers to find out more about this proven machine.

EQUIPMENT FOR NONWOVENS AND MAN-MADE FIBERS THAT MEET A VARIETY OF NEEDS

With environmental protection becoming an increasingly important topic, Trützschler Nonwovens' focus is on technologies for producing biodegradable, lightweight webs from renewable raw materials. In collaboration with Voith, Trützschler Nonwovens developed alternative technologies, such as wetlaid/spunlace (WLS) processes and carded-pulp (CP) processes. Both solutions already have been successfully applied at customer sites. Another focus is on high-speed spunlacing lines for disinfectant wipe materials.

TD 10 – This year's ITMA Asia gives customers the opportunity to find out more about this proven machine © 2021 Truetzschler

With two or even three cards in line, highest production capacities can be achieved that answer the unbroken demand in the hygienic wipes segment.

The Man-Made Fibers division offers a new four-end BCF process for spinning tri-color carpet yarns. The TO-40 system is based on the successful OPTIMA platform. Other four-end OPTIMA solutions are the MO40-C extrusion system for standard BCF yarns and the flexible MO40-E system for both standard and high-count qualities.

In addition to highlights from its Spinning, Nonwovens and Man-Made Fibers business units, the Trützschler Group also presents its comprehensive services and high-performance clothings for cards, as well as digital solutions and parts for machines.

www.truetzschler.com

RIETER WILL SHOW MANY INNOVATIONS - SSM WILL UNVEIL NEW WINDER NEO-YW

ENSURING COMPETITIVENESS THROUGH TECHNOLOGY

Rieter has doubled down on its R&D efforts since the onset of the pandemic to accelerate the development of its suite of intelligent and automated machines and systems so customers can manufacture yarns more profitably, efficiently and sustainably. This also empowers mill owners to respond flexibly to fast-changing markets.

RING SPINNING WITH G 38 AND ROBOSPIN SETS NEW STANDARDS IN AUTOMATION

Rieter's proven ring spinning machine G 38 with up to 1 824 spindles, equipped with the fully electronic drafting system and the industry's first fully automated piecing robot ROBOspin sets new standards in terms of automation and flexibility. This powerful combination makes it easy to produce standard, special, and compact yarns thanks to the best-in-class compacting devices COMPACTdrum and COMPACTeasy. COMPACTapron completes Rieter's family of compacting devices, taking yarn strengths to new heights thanks to its unique 3D technology that guides the fibers smartly through the compacting zone. Novibra's HPS 22 spindle, which is available for ring and compact spinning, offers the best price performance across all applications with spindle speeds reaching up to 22 000 rpm. It caters to a pressing need on the Chinese and other markets.

ESSENTIAL OFFERS NEW FEATURES WITH SMARTER INSIGHTS FOR BETTER DECISIONS

Rieter's ESSENTIALmonitor, one of the modules of its all-in-one digital monitoring system, has new features that offer smarter insights into the mill's operations so owners can fully unlock the mill's potential.

ROBODOFF AUTOMATES DOFFING TO SAVE TIME AND MONEY

Manual doffing is cumbersome, time consuming and costly. Available on the rotor spinning machine R 37 as an option and on R 35 and R 36 as an upgrade, ROBOdoff automates the changing of packages, replacing full packages with an empty tube that is prepared along each side of the machine so that the spinning process can continue seamlessly. ROBOdoff significantly helps to save time and money.

NEW SPINNING ROTOR AND CHANNELINSERT BOOST PRODUCTION

The new rotor 31-XT-BD and the CHANNELInsert 28 can boost rotor yarn production by up to 6% for both knitted and woven applications. It is even possible to use lower quality raw materials while achieving constant production output.

SSM'S NEW WINDER NEO-YW DELIVERS MORE EFFICIENCY AND SUSTAINABILITY

The NEO-YW offers clear benefits for dye package winding and rewinding of filament yarns and features the brand-new online backpressure system for low and high package densities. Together with the firmly established thread laying system fastflex and tension control technology digitens it guarantees the best dyeing results and unwinding properties.

GRAF'S NEW CYLINDER WIRE AND FLATS ENHANCE LIFETIME AND QUALITY

The latest innovations from Graf include the new card cylinder wire P-1940S and the flexible card flat resist-O-top C-60. The cylinder wire delivers consistent sliver quality irrespective of the incoming cotton fibers' trash content and extends the lifetime by more than 10% thanks to the robust design with increased blade width. In addition, the flexible flat resist-O-top C-60 reduces imperfections by up to 15% for fine count yarn spinners.

Rieter's family of components which spans Bräcker, Graf, Novibra, and Suessen, helps extend service life while enhancing quality and consistency.

TECHNOLOGY COMPETENCE – SUPPORTING THE INDUSTRY'S CIRCULARITY JOURNEY

With a mere 1% of used garments being recycled and 73% going to landfill, the textile industry faces mounting pressure to become more circular. Rieter is leveraging its expertise to support the industry's ambitions, with a recent study showing it is possible to spin not only rotor but also ring yarns of varying quality out of recycled clothes on a Rieter system. The semi-automated rotor spinning machine R 37 for example delivers promising yarn qualities thanks to improved waste extraction, closing the loop faster.

Experience the Rieter virtual booth from anywhere, anytime via www.rieter.com on June 11, 2021. www.rieter.com

Rieter's ring spinning machine G 38 equipped with the fully automated piecing robot ROBOspin sets new standards in automation © 2021 RIETER

MAJOR INNOVATIONS READY TO GO LIVE

EXHIBITION WILL SEE USTER PRODUCT LAUNCHES

The Uster 2021 product launch season is well under way: the new Quantum 4.0 yarn clearer introduced in March, followed in April by the Q-Bar 2. Alongside these innovations came new Quality Expert software, with the latest Mill Dashboard feature. Now, these major developments are ready to go live for the first time. Uster will present a showcase of the latest innovations.

CAPACITIVE AND OPTICAL SENSORS IN ONE

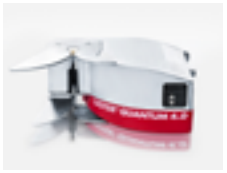
The brand-new Uster Quantum 4.0 is sure to be an attention-grabber: a demonstration of Quantum Expert will illustrate how customers can benefit from Quantum 4.0 and its related systems. The Quantum 4.0 yarn clearer offers the best of both sensor technologies – capacitive and optical – for intelligent yarn quality control and optimized profitability. Mills can now focus on meeting the fast-moving market challenges, instead of pondering technical options.

FABRIC INSPECTION: THE RIGHT POSITION

The stylish design and the defect catalogue will trigger initial interest for Q-Bar 2 – what's likely to be even more memorable is the demonstration of how well the smart indicator lights work to show up the positions of detected defects. Q-Bar 2 is best described as a formation monitoring system, because of its ingenious positioning on the loom, directly at the interface of warp and weft threads. The impact on weaving is amazing: monitoring at the earliest possible stage allows rapid response as soon as a defect appears, avoiding long-running or repeating faults. Alarm and stop signals alert the operator to correct problems immediately. Early detection reduces second quality and material loss, as well as minimizing the need for post-production checks.

Also on view will be a Mill Dashboard screen, along with the Value Modules and other features of Uster Quality Expert. The new version of the Mill Dashboard presents key data directly to key individuals in the spinning mill, so they can react rapidly to any quality deviations. It also ensures greater transparency on the shop floor. Clever animations will provide a deep understanding of databased quality during yarn production. Final insider tip: the twist measurement feature of Uster Tester 6 will be shown for the first time in Asia.

www.uster.com



Uster Quantum 4.0 and Uster Q-Bar 2 © 2021 Uster

SAURER TO SHOWCASE

AUTOMATION INNOVATIONS

Saurer invites customers to learn about its newest automation solutions, both within its machines and extending across entire textile mills. The company is meeting the growing demand for cost-effective automation both in spinning and twisting/cabling mills. The well-known E3 attributes of the Saurer design philosophy – energy, economics and ergonomics – are enhanced with intelligent technologies, which address pressing issues related to labour and ergonomics.

HIGHLIGHTS IN STAPLE FIBRE PROCESSING

The new Autocard was developed to create further value in the fibre preparation chain. The machine's higher carding area means 18% higher output and even cleaner sliver. It also features LED lights for intelligent operator guidance. Can changes are carried out during full production without slowing down the speed of sliver delivery. The new generation ring-spinning machine from Zinser Systems, the Z 72XL, is a benchmark for intelligent spinning. It offers low energy consumption, optimal user-friendliness and flexible automation solutions. It now also comes with a new compact device, the new Impact FX pro system, designed especially for the medium and fine yarn-count range for yarns with lower hairiness and greater strength, making it ideal for weaving and knitting applications.

With the Autoconer X6 winder, Saurer is on track towards customised automation in package winding. State-of-the-art RFID technology, sensor-controlled functions and smart control systems make continuous automation progress possible. Introducing the new open prism technology that offers improved splice quality, handling and maintenance.

At Schlafhorst Systems for open-end spinning, clever automation solutions are what unites the Autocoro 10, Autoairo and AutoBD. While Autocoro has seen the sale of 1 million spindles worldwide, Autoairo and AutoBD are being shown in Asia for the first time. The Autoairo air-spinning machine with its unique automation is characterised by high yarn quality and productivity, coupled with low spinning costs. The well-proven innovations SynchroPiecing and Multilot enable seamless lot changes. The AutoBD gives spinning mills the freedom to choose the degree of automation and productivity potential of the rotor-spinning machine.

All automation modules can also be easily retrofitted. SynchroPiecing minimises the need for operators and offers high productivity even with challenging raw materials. Customers can also fully automate the removal of packages and the insertion of empty tubes.

DISCOVER MACHINES IN THE SAURER TWISTING AND CABLING PORTFOLIO

The latest generation of CompactTwister, the series 8 from Volkmann Systems, once again sets new standards for the quality of twisted yarn, flexibility and energy consumption. Millions of supplied spindles demonstrate its leading position on the market.

The CableCorder CC5 from Allma Systems is the 5th generation of the successful direct cabling machine for tire cord and industrial yarns. Customers benefit from lower energy consumption, a smart spindle concept, modern quality monitoring, improved ergonomics and innovative data management. With up to 200 spindles, the CC5 with the new spindle gauge 400 is a true space saver.

SAURER AUTOMATION SOLUTIONS INTRODUCES THE NEW PALLETISER

The company provides intelligent and individual automation solutions for twisting and spinning mills that increase the efficiency of machine loading and package transportation, allowing for substantial time and cost savings along the entire textile value chain.

DIGITAL – TWO NEW ELEMENTS FOR SENSES

The new Shop Floor Senses Element for the mill management system Senses enables customers to optimise processes in their production plants by reducing the walking distances of machine operators. Using the Recipe Senses Element, customers can import all the machines' production settings into Senses and ensure that they are configured in such a way that results in optimal production and quality. This guarantees fast and reliable lot changes.

LABORATORY EQUIPMENT

The Autolab ET measures yarn hairiness completely automatically by means of a modern, integrated laser sensor. In addition to determining the overall hairiness, the hair length is also classified automatically.
All relevant parameters for slivers, rovings and yarns can be determined with a single testing device, thus ensuring optimal running behaviour for the spinning machines.

Equipped with SynchroPiecing, each AutoBD rotor-spinning machine can run up to 1 500 piecings per hour fully automatically, which means that there is hardly any dependency on staff availability © 2021 Saurer

COMPONENTS FOR STAPLE FIBRE PROCESSING

The Accotex product line introduces the new apron for air-spinning. Higher delivery speeds in air-jet spinning have led to higher demands on the elastomer components in the drafting system. Saurer has developed the NO-6270 KN, a new state-of-the-art compound for air-jet spinning.

The new high-performance spindle from the Texparts product line, with a reduced wharve diameter of 17.5 mm, is based on the well-proven CS1 S silent spindle-bearing unit and offers a long service life and operational reliability. Outstanding running properties up to 30 000 rpm and an energy saving are the key performance factors of this new spindle. Combined with zero underwinding system Spinnfinity, they are the perfect match for automated and efficient ring spinning.

COMPONENTS FOR FILAMENT PROCESSING

The powerful motor-driven texturing units FTS525M from the Temco product line are suitable for yarn running up to 1 000 m/min.

With the direct cabling machine CableCorder CC5 for tire cord and industrial yarns, custom-ers benefit from lower energy consumption, a smart spindle concept, modern quality moni-toring, improved ergonomics and innovative data management. © 2021 Saurer

Despite the wide speed range, the FTS unit impresses with a lower noise level and energy consumption. Thanks to its high flexibility, direction of the yarn twist is easily changed and no adjustment of the cooling plate is required for S/Z production.

CoolFlow Texturing Discs from the Temco product line optimise the air stream and demonstrably improve heat transfer due to the special design of the discs. This results in less swelling as well as a significant reduction in disc load at process speeds of up to 1 000 m/min, thus extending the service life.

In the Fibrevision product line, Saurer will show an upgrade option for tension monitoring with the market-leading Fraytec FV1 and FV2 systems for broken filament monitoring for technical and industrial yarns. The upgrade is straightforward with available sensor ranges of 0-500g or 0-1 000g depending on the application.

SUN – SERVICE UNLIMITED OFFERS LIFE CYCLE PARTNERSHIPS FOR ALL SAURER MACHINES

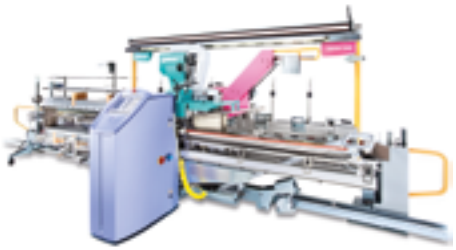
Visit the Sun area at the booth to discover the company's offers of updates and upgrades, original parts and clever preventive services. The Saurer Academy provides digital training. Visitors to the exhibition can also learn more about the new features on the Secos – Saurer Customer Portal.

www.saurer.com

STÄUBLI PRESENTS

NEW AND EXPANDED BENEFITS TO TEXTILE MILLS

Stäubli will present its wide range of machinery equipped with state-of-the-art, high-end technologies and software solutions that offer new and expanded benefits to textile mills. Visitors will learn how Stäubli solutions can boost weaving or sock-knitting performance and their overall mill efficiency. The optimal course of a weaving process depends on many various prerequisites resulting as well from upstream processes, including yarn processing and warp preparation. With its SAFIR series of drawing-in systems, Stäubli offers unique advantages, such as the preparation of top-quality warps with perfectly aligned yarns. The secret is AWC (Active Warp Control), Stäubli's exclusive yarn sorting technology, which handles both single and multiple yarn types. Visitors will experience how the precision and ingenious technology of the SAFIR S40 automatic drawing-in machine leads to more first-quality output and supports on-time delivery.



SAFIR S40 automatic drawing-in machine: Featuring Active Warp Control technology for yarn sorting © Stäubli

FRAME WEAVING – NEW STÄUBLI DEVELOPMENTS EXPAND THE RANGE OF SOLUTIONS

Thanks to its continual R&D activities, Stäubli delivers machinery that perfectly meets evolving market demands and the associated customer requirements. Stäubli frame-weaving solutions are renowned for reliable high-speed weaving and adaptability to any kind of plain or patterned fabric and any kind of weaving machine. Robustness and high quality have made the broad range of 1600/1700 series of cam motions and the S3000/S3200 series of electronic rotary dobbies well known as extremely reliable workhorses with a very long service life. These machines form a perfect system in combination with dedicated maintenance-free Stäubli transmissions, which are built to the highest quality standards.

JACQUARD WEAVING – STÄUBLI COVERS THE SPECTRUM

From large-format machines (up to 25,600 hooks) to name selvedge Jacquard machines, weavers can choose from a wide range of Stäubli electronic Jacquard weaving solutions. The LXM Jacquard machine will be presented at ITMA Asia. It is available in two formats (2,688 and 5,376 hooks) and thus meets the requirements of a wide range of applications and assures reliable operation at high weaving speeds. Stäubli's convincing answer to the growing need to protect premium proprietary fabrics with brand-name selvedges is the N4L name Jacquard machine, which is being shown for the first time in Asia at ITMA. This machine boasts easy handling, high availability, and reduced maintenance needs. It stands for quality brand-name weaving.

LXM electronic Jacquard machine
Available in formats up to 5,376 hooks © Stäubli

CARPET WEAVING – ALPHA 500 SERIES OF SCHÖNHERR CARPET SYSTEMS

Area rugs or wall-to-wall carpeting. Low pile, lightweight loops, flat, cut pile, or high density – whatever the next carpet-weaving challenge may be, the ALPHA 500 carpet weaving system adds immense flexibility to any carpet-weaving mill. It weaves the highest-quality applications and enables swift response to rapidly changing market demands.

SOCK KNITTING – D4S TOE-CLOSING DEVICE INCREASES PRODUCTIVITY

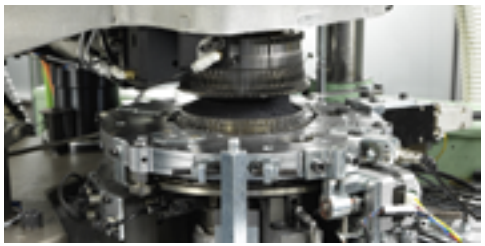
Sock manufacturers face tough challenges. They must be able to rapidly adjust to market demands and meet tight delivery schedules.

In sock knitting, toe closing is the critical step. It is very time consuming and helps determine the quality. This is where the D4S toe-closing device comes into play. Installed directly on the circular knitting machine, it closes one sock whilst the machine is already knitting the next one. Visitors to the Stäubli booth will see the impressive efficiency of this device in action.

N4L name selvedge Jacquard machine:
Available in formats of 80 and 128 hooks © Stäubli

Besides offering many decisive functional advantages, Stäubli machines promise a very long lifespan, especially when original replacement parts are used. Stäubli keeps these in stock for many years after the sale. This is in keeping with the company's mission: offering advantages and benefits to customers and providing genuine partnership for successful and sustainable business.

www.staubli.com



D4S toe-closing device: Automated knitting solution by Stäubli © 2021 Stäubl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ITEMA GROUP

EXHIBITING INNOVATIVE WEAVING SOLUTIONS

Itema, the global leading provider of advanced weaving solutions showcasing dedicated weaving machines for denim and technical fabrics and, for the first time, in a unique booth for all the Group's companies: Itema®, Itematech®, Lamiflex® and Schoch®. Featuring a top-notch organization in China – that counts 145 employees, Itema assembles the latest generation machinery in the world-class manufacturing sites both in Europe, as well as in China, with the same attention to detail and quality, reliability and performance guarantee that Itema Customers look for when they purchase Itema machines. Based in Shanghai, Itema Weaving Machinery China offers to the Chinese market a full package of services, encompassing European manufacturing quality standards, timely and accurate commercial, administration and after-sales, a fully equipped show room, an OEM spare parts warehouse and logistics hub and the ItemaCampus training center. With the goal to establish and reaffirm once again its technological leadership in the industry, Itema Group brings on stage a wide range of solutions, spanning from advanced weaving machines – a total of ten in Hall 3 - to spare parts and key components for textile industry which will amaze weavers and industry experts.

Visitors will have multiple chances to appreciate and study the Itema weaving technology, with a total of 10 Itema weaving machines on display, of which 2 in Itema booth specifically selected for the Chinese market and the rest in Partner booths across Hall 3. Furthermore, the company spare parts and after-sales support advanced solutions can't be missed on show.

R9500-2DENIM IN A NEW WEAVING WIDTH AT ITMA ASIA 2021

The Itema denim dedicated rapier machine R9500-2denim comes to ITMA Asia featuring a brand-new exclusive weaving width -2400mm- that reflects the most recent trends and the evolution of the denim market worldwide, more and more characterized by super stretch and comfortable fabrics. The Itema denim dedicated rapier machine, figures in hand, in real weaving conditions is the most efficient on the market and can be equipped with the one-of-a-kind iSAVER® that represents nowadays the unique real sustainable weaving tool. Moreover, the machines can be also equipped with innovative IOT solutions. The iBOOSTER package featuring iCARE, indeed, implements the most modern principles to provide unparalleled performances and predictive maintenance.

ITEMATECH® HERCULES, ON SHOW THE SUPERHERO OF TECHNICAL FABRICS

ITMA Asia is the official stage for the Itematech Hercules, on display in wide weaving width 3400mm and fine-tuned to weave heavy filter fabrics. Offering both negative and positive rapier transfer systems, Hercules represents the perfect combination of mechanical sturdiness and textile efficiency ensuring the greater profitability in the market. Another key advantage lies in the perfect warp yarns control. In fact, the back-rest roller perfectly couples sturdiness with responsiveness ensuring the perfect warp yarns compensation. Hercules is the ideal weaving machine to easily produce any kind of technical fabric thanks to its superior ease of use and flexibility.

ITEMA® WEAVING MACHINES ON SHOW IN PARTNERS BOOTHS

Itema weaving technology is traditional recognized to be the preferred choice of textile machinery producers due to its superior versatility and textile mastery. 8 Itema weaving machines will be exhibited in partners booths, encompassing Jacquard shedding machines manufacturers and label looms providers. Particularly:

Itematech Hercules © ITEMA GROUP

- Itema R9500terry, 2800 mm, Jacquard Bonas Ji in the Bonas (Hall 3 – D01)
- Itema R9500-2, 1900mm, for Satin Label and two Itema R9000, 1900mm for Taffeta Label and Sport Shoes at Huzhou Hyundai (Julibao) (Hall 3 - C11)
- Itema R9000, 1900mm, to produce Label fabrics will be featured at Shanghai TongXiang (Hall 3 – C22)
- Itema R9000-2, 3400mm and 3800mm for Window Screening and Blind Curtains fabrics are on display in Song&Song (Hall 3 – Stand D05)
- Itema R9000-2, 3400mm, fine-tuned to weave Window Screening will be running at Changfang (Hall 3 – D09)

LAMIFLEX®

The leading supplier of technical composite products which entered Itema Group in 2017 – will be present with its ample catalogue of key rapier weft transfer components such as flexible rapier tapes and sprocket wheels.

SCHOCH®

Schoch Reeds will present for the very first time in China its product portfolio made up by high-quality reeds and accessories for textile looms.

In the company's advanced design booth, visitors will have the opportunity to live a real experience thanks to the multiple digital tools available. In order to overcome the pandemic limitations, real-time updates will be daily provided to weavers and textile experts through the Itema Group social media channels and website, thus enabling virtual presence.

www.itemagroup.com

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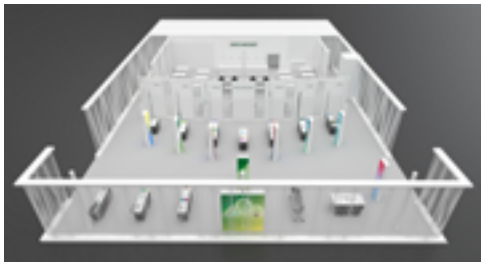
EXPERIENCE GROZ-BECKERT

IN PERSON AND VIRTUALLY AT THE FAIR

Groz-Beckert presents the new products from all six product areas. The products are presented both physically as exhibits and in extended form via augmented reality. In addition to the face-to-face event, the company is inviting industry visitors to its virtual booth. It matches the original booth and has a three-dimensional design. The company has developed the digital service especially for the trade fair. Visitors can move through the virtual space alone or together with a Groz-Beckert employee and view all exhibits in 3D. Free registration is required to attend the digital trade fair, which is possible approximately two weeks before the start of the trade fair. Further information can be found on the Groz-Beckert website and in the newsletter.



Groz-Beckert Booth in Shanghai © 2021 Groz-Beckert

The Knitting product area will be presenting several product innovations at ITMA Asia: The SANTM SF staple fiber needle and the SNK SF staple fiber sinker, which is specially designed for use on large diameter circular knitting machines.

The durTM needle, which is particularly suitable for high loads on sock machines thanks to its optimized geometries. The SANTM TT for application-specific use in the field of technical textiles for flat knitting machines and a needle that enables new dimensions of fineness to be achieved in the flat knitting area. Groz-Beckert will also be demonstrating its relevance as a system provider in the area of warp knitting at ITMA Asia. The warp knitting machine needles and system parts from Groz-Beckert are precisely matched to each other and achieve an even and error-free warp knitting process. Augmented reality provides deeper insights into the interaction of the individual system components.

With the new WarpMasterPlus, the Weaving product area will be presenting an optimal solution for every weaving mill. All properties of the proven WarpMaster concept are illustrated in detail using a 3D model and augmented reality. The miniature weaving mill illustrates the interaction of all products in the area: from cleaning machines and weaving accessories to the KnotMaster.

The patented GEBECON® felting needle is one of the highlights of the Felting product area, which can be viewed in detail thanks to augmented reality.

SAN 5.2 © 2021 Groz-Beckert

It offers an improved surface quality and optimized bending resistance. Know-how protection and improved needle logistics are just two of the numerous advantages of the customer product that the area will be highlighting for customers at the booth.

Visitors to the Tufting product area, will discover the measurable advantages achieved during the production of tufted floor coverings using the Groz-Beckert Tufting Gauge Part Systems. Coordinated combination of materials and the functional interaction of all tools ensure the quality and economic results of the tufting process.

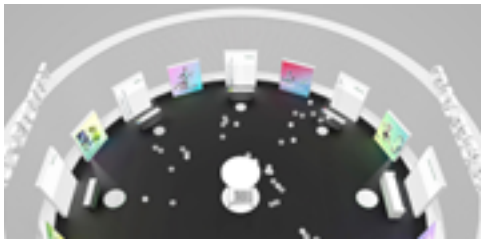
The Carding product area will be presenting its further developments for the spinning industry. These include the new stationary flat series, the TV56 revolving top and the cylinder card clothing with special tooth geometry. The new stationary flat series is distinguished by an innovative tooth geometry and a new kind of tooth distribution. The new TV56 revolving top features a new setting pattern and 560 points per square inch, making it particularly easy to clean. The improved cylinder card clothing impresses with its special and patented tooth shape, which has a positive effect on maintenance.

WarpMasterPlus © 2021 Groz-Beckert

This makes it particularly well suited for quality-oriented cotton spinning companies that produce high-quality yarns.

In the Sewing exhibition area, the focus is on technical textiles – especially in the manufacture of car seats. The SAN® 5.2 special application needle from Groz-Beckert is the answer to high demands when sewing car seats. The special geometry gives it sufficient stability. The double groove in the point area improves thread guidance and leads to an even seam pattern, especially in multi-directional sewing processes. The scarf chamfers on both sides of the needle prevent skipped stitches and optimize loop formation. The GEBEDUR® titanium nitride coating increases wear protection. The Sewing customer portal is another digital service on offer. The specialist area is presenting its functions and content.

www.groz-beckert.com



Groz-Beckert Virtual Booth © 2021 Groz-Beckert

TWO BRAND NEW PICANOL RAPIER MACHINES WILL BE PREMIERED!

Following the highly successful ITMA Europe in 2019, ITMA ASIA + CITME will be the textile machinery industry's first major exhibition in two years. Understandably, everyone at Picanol is really looking forward to this event, especially given that the close cooperation between CTMA and Cematex has transformed ITMA ASIA + CITME into the most important biennial meeting point not only for the Asian but also for the global textile industry.

"Everyone at Picanol is eager to help our customers by providing the best technologies available on the market for airjet and rapier machines, as well as an outstanding local service and support team. The four development principles of Picanol - Smart Performance, Sustainability Inside, Driven by Data, and Intuitive Control - guide us in all our ventures. Inspired by these four principles, our R&D team has been developing some really exciting innovations that will be displayed at ITMA ASIA + CITME. These include two airjet weaving machines, four rapier weaving machines for flat fabrics, as well as one rapier machine for weaving terry towel. Furthermore, there will be an additional rapier machine in jacquard execution at the Bonas booth," comments Johan Verstraete, Vice President Weaving Machines.

In addition to displaying the many innovations made to its range of both airjet and rapier machines, Picanol will also be premiering two new rapier machines: the brand new GTMax-i 3.0S will be shown in a 4 color dobby execution, weaving a denim style, whereas the new GTMax-S on display will be an 8 color dobby machine in 380 cm reed width weaving a silk fabric.

OptiMax-i 4R 460 coating fabric © 2021 Picanol

Picanol will also be demonstrating an OptiMax-i gripper machine in free flight execution of 540 cm width at the exhibition. This represents a significant innovation breakthrough for specific technical segments.

www.picanol.be

OmniPlus-i 4P 190 bottom weight © 2021 Picanol

MASTERING THE CHALLENGES OF OUR TIME WITH DIGITAL SOLUTIONS
KARL MAYER GROUP IS FOCUSING ON DIGITIZATION

The textile industry is used to flexibility, but the Corona pandemic has once again increased the dynamics of change enormously. KARL MAYER, the innovative world market leader, has reacted quickly to the challenges of the crisis and has considerably accelerated its development activities, especially in the field of digitization. The result is digital pioneering solutions for machines, technical services and data that make textile production faster, more self-sufficient and more diverse.

More about the benefits can be seen at KARL MAYER's stand, A 35 in Hall 4. Here, the latest digital products, mainly offered under the KMO.ON brand, will play the main role - especially among the high-performance, high-price machines on display. The repertoire of high-tech models will be completed by a show of trendy textile developments, and will include representatives of the STOLL brand for the first time. Visitors will thus find solutions for effective optimization, and above all for expanding their businesses. The renowned global player is looking forward to exchanging information about its innovations and market trends directly vis-a-vis with its guests, for the first time since the beginning of the pandemic and in its most important sales region.

There will be further innovations and opportunities to talk during the main trade fair days at an in-house show at KARL MAYER (CHINA) in Changzhou. Even the customers without the possibility to travel can learn more about the market-effective solutions for the current and future business. Following ITMA ASIA + CITMA, there will be a hybrid exhibition with a tour of the virtually displayed KARL MAYER exhibition stand, including a wide range of digital information materials such as videos and interviews from the live exhibition with experts.

WARP KNITTING

The HKS 3-M ON, 280", sets new standards in warp knitting in terms of output and flexibility. At 2,500 min-1, the innovative HKS model is around 15% faster than its predecessor and even more productive than the narrower 210" version. Despite its high speed, the HKS 3-M ON offers the diverse patterning possibilities of the EL pattern drives. The basis is the new electromechanical guide bar control and the secure networking of the machine via the k.ey industrial computer with a cloud. From here, pattern data is loaded directly onto the machine, without production delays and handling effort. The patterning potential can be easily adapted to current market needs through different business models.

Among them one variant for pattern repeats over 36 stitch courses which uses KM.ON's web-based k.innovation CORE software. The newly launched k.management dashboard from KM.ON can also be used to call up all important machine key figures independently of time and on the move. The overview creates transparency for quick decisions and efficient planning. The digital solutions can be tried out at the HKS 3-M ON or at the KM.ON flagship store on the KARL MAYER trade fair stand. Other highlights include k.innovation STYLE for the collaborative creation of designs in cross-divisional teams and the new Paperless Solutions, which digitally document machine runs and fabric quality. The digital reports are stored securely in the cloud. This replaces paper management with often illegible data and enables fast, authorized access to values that are always up to date.

A representative of the HKS 3-M ON, which loads the data for patterning directly from a cloud © 2021 KARL MAYER

FLAT KNITTING

The STOLL flat knitting machines ensure maximum efficiency and productivity in flat knitting production with the knitelligence® Industry 4.0 platform. The modular system with its software solutions ensures a high degree of automation throughout the value chain. For the creative process, the new design software k.innovation CREATE will be launched in Shanghai. STOLL and KM.ON - two successful brands of the KARL MAYER Group - have combined their expertise and creativity to significantly simplify design development and speed up programming. Further modules of knitelligence® are k.innovation CREATE PLUS, which combines an innovative programming system with an easy-to-learn user interface for optimum utilization of knitting potential, and a production planning system (PPS) for rational management of all processes.

Two ADF models and a new BMS for the commodity market will be demonstrating the performance of the platform. The new BMS 52 ki impresses with the proven quality of STOLL, extremely high performance and minimal costs. Using digital solutions from knitelligence®, the newcomer will be producing individualized front parts for a children's sweater in a completely automated process during the trade show. The designs and knitting program are created with the k.innovation CREATE PLUS.

The new BMS 52 ki for the commodity market
© 2021 KARL MAYER

New is the ADF 830-24 ki knit & wear in the unique gauge of E 10.2. With the high needle pitch, the model exhibited in Shanghai produces fine STOLL-knit and wear® products with intarsia, inverse plating and STOLL-ikat plating® and woven looks with STOLL-weave-in® Technology. The gauge of E 10.2 will now be available for almost all STOLL machines. In addition, the ADF portfolio has been expanded to include a variant with a 36" working width. An ADF 330 ki will be presented in Shanghai for this purpose. It is available with 24 or 32 yarn guides and with STOLL-weave-in® device. It will be producing a customizable footwear article in a multi-gauge of E9.2. The seamless knitted 3D shoe upper is optimally prepared for a low-confection downstream process.

WARP PREPARATION

In the warp preparation weaving sector, the ISODIRECT presents itself as an efficient beam warping machine for the mid-range segment with an excellent price/performance ratio. The innovative model processes all spun yarns, reaches a warping speed of up to 1,000 m/min and can be operated with simple hand movements. With the high-quality ISODIRECT beams, the machines in the weaving mill can fully develop their efficiency potential.

CARE SOLUTIONS - AFTER SALES OF THE DIGITAL GENERATION

In the Care Solutions sector, KARL MAYER is using the possibilities offered by digitization to provide after-sales support at a completely new level. A newly developed dashboard now makes it possible to book and use support services individually in the simplest way, in a targeted manner, and without any ambiguous communication.

The efficient beam warping machine ISODIRECT warper for the mid-range segment © 2021 KARL MAYER

Support from experts, tools for spare parts management and online service offers can be used. Specific products of the Care Solutions dashboard for this are the proven WEBSHOP for easy spare parts ordering, a health check for inspecting the machine, as well as online after-sales tools for immediate troubleshooting of the machine remotely and for expert support. There is also a button to access videos that provide machine and technological know-how. Assistance videos and e-learnings will follow in this area.

The k.ey box from KM.ON for secure networking of machines with a cloud © 2021 KARL MAYER

CHIC KNITTED GOODS WITH FUNCTION AND SUSTAINABILITY

For comfortable fashion and loungewear, KARL MAYER presents trendy textile patterns and chic garments with important product attributes of our time: smart, casual and environmentally friendly. For more sustainability, recycled PES and PA yarns can be processed on all KARL MAYER's current machines, without compromising on speed and product quality. In addition, warp knitting can do without sizing. With less water, chemicals and energy than generally used in weaving, woven-fabric-like articles can be produced, as demonstrated by a chic denim-style dress. The textile for this was created on a WEFT.FASHION TM 3 and consists of 73% yarn-dyed, coarse natural fiber flame yarn. Fine woven-fabric-like materials, e.g. for men's shirts, can also be produced on warp knitting machines. One example is a lightweight article completely made from polyester for full recycling, which offers natural comfort-stretch, breathability and wear without wrinkling. Less waste and more comfort is also the goal of close-to-contour manufacturing. What is possible in this regard is demonstrated by a sporty fully fashion top from a RDPJ 6/2 EL that was made with seamless technology and free-cut fabrication, thus managing without seams. For the first time, a super-soft terry article made of absorbent bamboo fibers on the inside and ultra-soft microfiber polyester on the outside has been processed on a TM 4-TS EL to create a casual loungewear. The fabrics produced on a HKS 4-M EL were created using a

Chic set made on a fashionable 3D crinkle fabrics from an HKS 4-M EL © 2021 KARL MAYER

yarn mix of polyamide and only partially drawn-in wrapping yarn. More eye-catchers are likely to be the extravagant fashion items from the current STOLL collection "FASTER: From(CONCEPT)–To(STORE ".

SUSTAINABLE PRODUCTION IN INDIGO BLUE WITH GREENDYE

In the denim sector, a collection of trendy jeans articles demonstrates the performance of KARL MAYER's environmentally friendly nitrogen technology for indigo dyeing. The dye content of the deep blue GREENDYE textiles is 1.5 to 2.7%.

KNITTED GEOTEXTILES AND CONSTRUCTION TEXTILES

The exhibits of KARL MAYER Technische Textilien will focus on infrastructure and construction and is also looking forward to many discussions about the new BIAXTRONIC® II.

www.karlmayer.com

BRÜCKNER PRESENTS "FULL-SERVICE PACKAGE"

IN THE CONTEXT OF INDUSTRY 4.0

For more than 70 years, the German family-owned company BRÜCKNER has been the worldwide partner for all companies which are drying, coating and finishing web-shaped materials: whether clothing fabrics, nonwovens, carpet, glass or coatings - the variety of materials to be processed has never been limited. The focus of Brückner's trade fair presentation in Shanghai is not only on the innovative and extremely reliable machines, but also on the automation and control of the systems. The topics of digitalization and Industry 4.0 open up completely new possibilities for increasing productivity, reducing the use of resources and improving quality. Here, the Brückner company has invested, developed and implemented a lot in recent years to live up to its role as market leader and to be able to offer the same outstanding technology for this topic, which is so important for competitiveness, that customers know from the machines.

At the show, Brückner will present a variety of these Industry 4.0 solutions that will help customers meet the major challenges posed by the increasing shortage of skilled workers and the need for automation and digitalization. The Brückner idea is to offer the machine operator an "all-round carefree package" with interlocking, coordinated systems.

For example, a newly developed simulation tool helps to optimize existing recipes. The many machine parameters to be set have been reduced to the essentials and can in future be calculated automatically on the basis of the textile key data.

Brückner CTO Axel Pieper says: "Textiles have a wide range of different properties that have a major impact on the setting of recipes and machine parameters. Examples of these are: Fiber type, fiber blend, weave type, basis weight, surface properties, hydrophobicity. At the same time, it is becoming increasingly difficult to find qualified textile finishers who are capable of keeping track of the complexity of the textile workpiece and the diverse machine parameters of modern finishing systems in order to produce the desired quality in the end.

Brückner CTO Axel Pieper © 2021 Brückner

Small and medium-sized companies in the textile industry in particular want simpler solutions from textile machinery manufacturers in order to be able to handle the increasing complexity. Here it is a good idea to apply methods and tools of digitalization. BRÜCKNER has taken up this challenge and implemented different systems in its line software."

Another solution for Industry 4.0 are the intelligent Brückner assistance systems which monitor the machine settings in the background and provide the machine operator with information on how to run the system even more productively and consuming less resources. Studies have shown that optimizing production parameters can increase production speed by up to 40% and/or reduce energy consumption by up to 30%.

Furthermore, it will be demonstrated that in the latest generation of Brückner textile machines, maintenance and cleaning intervals are stored in the machine. These are displayed to the operator in good time, together with an indication of any wear parts that may need to be ordered.

However, there will not only be presentations on the topic of Industry 4.0 at the Brückner booth, but also an opportunity for booth visitors to actively participate. For this purpose, Brückner will provide a system that can be used for "self" testing.

"This will certainly be very exciting for our booth visitors, that they can try out for themselves how they can produce more efficiently with the new Brückner Industrie 4.0 solutions," says Head of Marketing Verena Ruckh. "We think this is a good form of presentation and also want to underline that we offer market-ready solutions that can help immediately" she adds.

In addition to presenting technology, Brückner also wants to use Asia's most important textile machinery fair to introduce customers to the Brückner office in Shanghai with all the colleagues who work for Brückner there. Brückner Shanghai stands for speed and flexibility and offers the highest level of service to customers from Asia and especially China. Assemblies and service calls are coordinated directly on site and Brückner technicians can handle service calls within 24 hours, if travel times within China allow this. The special service is rounded off by a large spare parts warehouse in Shanghai, which enables ultra-fast supply to Chinese customers in the case of a malfunction.

Last but not least, Brückner also demonstrates the great diversity of its experience and product portfolio, reports on new findings for optimum productivity and, as usual, provides advice on new application requests and special challenges in textile finishing and coating.

www.brueckner-textile.com

FINISHING Hall H6 / Booth D13

ERHARDT+LEIMER AT ITMA ASIA

A NEW METAL DETECTOR WITH EVEN HIGHER ACCURACY

E+L will showcase the new ELMETA MDA1005 / MDA1006 metal detector with increased accuracy: It reliably detects even very small metal particles across the entire width of the web. Signal LEDs on the sensor indicate the position of the metal particle in the web. The integrated segment-wise evaluation as well as the gain setting and a reset button ensure straightforward commissioning. The device detects metal particles at production speeds from 2 to 500 m/min (depending on the size and material of the particles). The special scanning surface and the aluminum housing prevent damp webs or electromagnetic interference affecting the detection result. The device can be used for dry and damp textiles and for non-woven fabrics. It can be installed in any orientation in any production machine. Furthermore, E+L will exhibit the ELCUT cutting systems, the ELSMART web guiding and spreading system, the ELSTRAIGHT weft straightening system, the ELFEED tenter guider, ELTENS equipment for web tension measurement and control and the camera-based ELCOUNT pick and course counter.

www.erhardt-leimer.com

The new metal detector ELMETA MDA1005
© 2021 Erhardt+Leimer

FINISHING Hall H6 / Booth A08

SMART SOLUTIONS FOR TEXTILE FINISHING

MAHLO SHOWCASES AT ITMA ASIA

Mahlo together with Shanghai Kuantex will present the latest systems and solutions for efficient and high-quality textile production and finishing. Mahlo stands for high-quality automatic straightening and process control systems. The recipe for success of the experts from Germany is over 75 years of experience paired with the latest technological developments. At ITMA Asia 2020, the company will remain true to this strategy and present the latest developments in the field of straightening and process control. The latest generation of the Orthopac RVMC-15 weft straightening system or the Qualiscan QMS-12 quality measuring system will show why they strengthen every textile production line. Also contributing to high-quality textile production and finishing is the Famacont PMC for controlling weft and stitch course density, which will also be on show. The knowledgeable audience at ITMA Asia can also immerse themselves in Mahlo's digital world and get to know the new mPilot control room software and the mLog data analysis tool.

www.mahlo.com

Mahlo Qualiscan QMS-12 © 2021 Mahlo

FAMILY COMPANY THIES IS LOOKING FORWARD TO

PERSONAL EXCHANGE

After such a long time, the team of the German textile machine manufacturer is looking forward to the fair in Shanghai and, above all, to the personal exchange with customers and business partners.

The portfolio of machinery is quite extensive in terms of fibre-, yarn- and fabric-dyeing. Offering sustainable solutions for its worldwide customer base, each machine type is from the outset designed to minimize the inputs and respectively the outputs. However, Thies does not only concentrate on the machine design but also on developing intelligent software solutions to control the actual dyeing process. With the help of these so called 'energy efficient functions' its customers achieve enormous reductions of their water-, energy-, dyestuff-, chemicals- and utilities- consumption.

soft-TRD SIII © 2021 Thies

iMaster H_2O © 2021 Thies

Modern dye houses further implement dye kitchens, as well as dosing and dispensing systems from Thies in their facilities. The fully automatic weighing, dissolving and provision of dyes and chemicals leads to exact dyeing results, maximum reproducibility, significantly increased occupational safety and tremendous time savings. In times of rising energy costs, efficient energy management is of ever increasing importance. Thies has made it a priority to develop sustainable, energysaving systems. Innovative machine designs with minimal water and energy consumption as well as the recovery and use of the heat energy produced in the processes represent valuable potential savings for any modern finishing company.

The core element of the heat recovery system is a counterflow tubular heat exchanger with control unit for ex changing energy between warm waste water and cold fresh water. A central controller monitors and regulates the temperatures and rates of flow, auto matically adapting them to the warm water consumption of the operations.

All machines, including the dispensing systems, the dye kitchen, the beam winding machines and/ or the heat recovery systems can be connected to MES systems and deliver important data which customers can use to improve their performances.

MPS-Colourmatic © 2021 Thies

Thies heat recovery system © 2021 Thies

A unique selling point is, that Thies has already been open to connect systems from various control manufacturers – for the past centuries. Against this background, customers have nearly no technical limitations while choosing control systems or expanding existing networks.

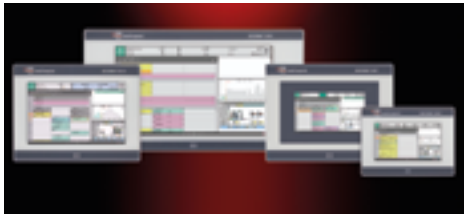
Further requirements, like the semi- to fully- automated loading and unloading of the yarn dyeing machines are also possible.

To sum it up, Thies is offering best-practice solutions with the highest degree of digitalisation and automation.

www.thiestextilmaschinen.de

SEDO TREEPOINT SHOWS SOLUTIONS FOR IMPROVING **SUSTAINABILITY AND DIGITALIZATION**

Sedo Treepoint is again presenting its latest innovations in Shanghai. The focus is on the Sedomat 6007/8000 controller series and its latest member – Sedomat 6007. This new development is a cost-effective solution for high degree automation which offers many flexible internal I/O options. The 8000 series comes now in four different sizes to match customer`s needs exactly. The Sedomat 8007 has a 7" touch user interface and is the perfect solution for lab machines and data acquisition. Sedomat 8010 comes with a 10,1" touch display which can be adapted to every dyeing and finishing machine. The biggest user interface with 15,4" is offered by Sedo-mat 8015. In addition to the well proven benefits of the Sedomat controllers, the new series is more flexible and offers different interfaces options like CANopen, Profibus DP and MODBUS RTU. To improve the communication between different systems, OPC UA and MQTT interface will enhance data communication.



New Sedomat 6007/8000 series © 2021 Sedo Treepoint

Using a Sedo SmartBracelet the machine operator will get every notice directly on his wrist. He can act immediately when a machine requires his attention.

SedoMaster is the core of the production shop floor: Intelligent central production planning, control, monitoring, and reporting becomes available. It is a useful tool for all key operators and the management due to the connection of all dyeing and finishing machines. Powerful reporting gives information on productivity, resource costs and OEE. SedoMaster also links all periphery systems like dispensers, dissolvers, or ERP systems. With the new SedoAPP all production data can also be displayed on mobile devices.

SedoExpert is a PPS system which offers a management platform for textile plants and connects the ERP to MES. The Textile Manufacturing Simulation system (TMS) is developed to create the most effi-cient production schedule for all active production orders (SFOs). EnergyMaster calculates the energy consumption in production and gives the required information to optimize energy use. ColorMaster is the most expert system for recipe management and color measurement. The perfect tool to optimize/automate washand rinsing process is Ecomat.

www.sedo-treepoint.com

ONE-STOP SUPPLIER OF TOP TECHNOLOGY

SANTEX RIMAR SHOWS FABRIC MANUFACTURERS' FAVORITES AT ITMA ASIA + CITME 2021

For fabric manufacturers, Santex Rimar Group is the favored one-stop supplier of machinery, meeting many production needs. The Group unites leading players in the world of textile machinery for weaving, finishing, technical textiles, and green technologies for water treatment and drying processes.

Three of these well-known brands will show their novelties and flagship ranges with an impressive technology presentation at ITMA Asia + CITME 2021. The exhibition in Shanghai is not only a great opportunity for the Group to present its innovations – but also to spread the news about the recently opened production site in Qingpu District, Shanghai on the 50th anniversary of Santex Rimar Shanghai, in November 2020.

SANTAFRAME – high-quality processing
© 2021 SANTEXRIMAR

The modern and highly automated plant comprises three production halls, employing nearly 100 people. All the machines to be shown at ITMA Asia + CITME will be newly produced in China.

INGENIOUS SOLUTIONS

The famous Santex brand in textile finishing has developed a novel air-flow technique for high-quality processing. The fabric is carried on a cushion of air, giving a softer handle and better shrinkage values.

The new Santaframe stenter features ingenious solutions for heated air distribution and exhaust. Its heating element is uniquely positioned, after the circulating air turbine (on the pressure side), in a sealed chamber above the fabric track. This avoids the risk of condensation dropping onto the fabric. Improved loading of the circulating and exhaust air with humidity results in less exhaust air than conventional stenter frames. Further highlights of the new Santaframe include a built-in exhaust ducting device, an emergency standstill system and the choice of heating devices. The renowned Aero-Surf Nozzle System is still a key element, promoting softest handle, excellent shrinkage and uniform heat-setting.

At its original launch in the late 1990s, the Santaframe offered already unmatched performance and ground-breaking technology, which was widely appreciated by finishers.

BEST INVESTMENT CHOICE FOR WEAVERS

SMIT is a renowned producer of weaving machines, known for developing the world's first flexible-ribbon weaving machine in 1958. Today, the Free Flight Ribbons System works without ribbon guide hooks, to ensure the 'cleanest shed, and the 2FAST compact weaving machine offers many more technical innovations for competitive performance.

Top weavers fully appreciate the new patented grippers, with a reduced cross-section which guarantees top efficiency for every yarn type. Optimized shed geometry ensures perfect fabric construction and high efficiency at the greatest production rates.

2FAST – compact design for competitive performance
© 2021 SANTEXRIMAR

Further advantages come from the short mechanical transmission, ensuring highest running regularity, and low energy consumption.

The high-efficiency brushless motor with permanent magnets delivers the highest power factor with lowest heat generation. 2FAST is a long-term investment that is built to last, with its 'Robust Design' methodology assuring long service life and minimum spare parts use.

Its solid construction is based on a 20% increase in frame stiffness. Like all SMIT machines, its overall investment appeal combines innovation, productivity and versatility, for maximum competitiveness across a wide variety of applications.

PERFECT FOR LAMINATING

Cavitec gives fabric the final touch, with sophisticated machinery for coating, laminating, impregnation and prepreg. Finest laminating is provided by Cavimelt's rotogravure system – actually a printing technique. Using the hot-melt process this textile laminating machine applies adhesive as dots or in predefined patterns, using an engraved roller, on film, web and textile substrates. Hot-melt technology offers many advantages over conventional coating and laminating processes. Its wide application range, flexibility and high production reliability means producers can choose from a large selection of adhesives and substrates.

The Cavimelt process is user-friendly, as well as sustainable, since it's free of solvents and water and doesn't need auxiliary equipment to evaporate exhaust air and any questionable emissions.

Cavimelt is gentle to the environment, laminating with a soft touch and performing surface treatments to suit many application-specific requirements.

CAVIMELT – The rotogravure system for fabric lamination © 2021 SANTEXRIMAR

WELCOME BACK: ITMA ASIA + CITME

It will be the textile industry's first face-to-face reunion in a very long time, so Santex Rimar Group is eagerly looking forward to welcoming visitors at ITMA Asia + CITME 2021. Santaframe, 2FAST and Cavimelt will be three of several highlights on the Santex Rimar display, located in hall 5 booth C34 in the finishing section, while SMIT will exhibit in the weaving zone in hall 3 booth D08. Visitors can expect to enter a world of fascinating technology at both booths, and interested parties may be able to arrange a visit to the Qingpu production site for even deeper insights.

www.santexrimar.com

DILO PRESENTS DILOLINE 4.0
AND MANY MORE INNOVATIONS

As a machine manufacturer DiloSystems provides production lines for any nonwoven process and all types of staple fibre products. Looking back on a difficult year 2020, positive developments and a recovery in many industry sectors are now underway.

DiloGroup with DiloSpinnbau, DiloTemafa, DiloMachines and DiloSystems as the general contractor delivers the complete range of machinery needed to produce needled nonwovens, and together with partners, thermobonded and hydroentangled nonwovens. All over the world, Dilo lines produce nonwovens for a wide range of applications including geotextiles, housing and roofing, automotive products, filtration, acoustics, artificial leather and medical or hygiene products.

DiloGroup lines can be supplied turnkey from the general contractor DiloSystems as your partner for a coordinated, professionally managed investment with a single responsibility to fulfil all needs technically and commercially. The complete staple fibre process equipment, starting at fibre preparation (DiloTemafa), continuing with webforming by carding (DiloSpinnbau), up to crosslapping and needling (DiloMachines) is built in-house by Dilo's highly specialized departments.

These complete line projects are developed in close contact with our customers and on the basis of textile technological research and studies carried out in our technical centre in Eberbach, Germany.

Recently Dilo added water entanglement lines to its portfolio by cooperating with SICAM S.r.l., a well-known producer of high- quality machinery for the nonwovens industry. Apart from state of the art spunlace lines, DiloGroup is able to fulfill demands and requirements for products having improved tensile strength ratios with Dilo high-speed carding and layering technology.

In 119 years of history, the company has always set new standards regarding machine performance and efficiency. Innovative technologies like DI-LOUR, DI-LOOP and Hyperpunch-needling have created

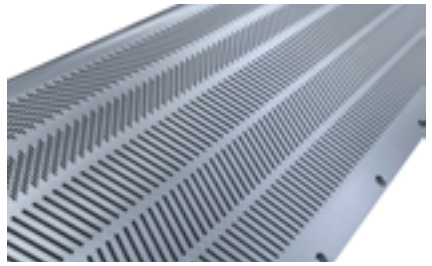
DiloGroup production line © 2021 Dilo

new markets for the nonwovens industry and pushed needlepunch technology to be one of the most important and versatile entanglement processes. New approaches promise higher productivity, quality and ground breaking possibilities for nonwoven textiles. "diloline 4.0" smart manufacturing is available to be used on every line. Numerous information modules can be recalled via mobile apps and cloud data (mindSpheres). These methods allow the user to improve control of the machines and to generate production data to further secure the complex functions within the production system independently of personnel and shift. Standstill times are decreased.

The 3D-Lofter technology is adding numerous possibilities to nonwovens. It works like a 3Dprinter whose ink consist of fibres and the addition of adjustable amounts of fibre in a specific pattern on top of fibre mats or needled felts enables applications like decorative features, precise reinforcement or improved fibre mat quality. Furthermore, nearly all fibres like PES, carbon or natural fibres are usable.

DiloGroup 3D-Lofter 2021 Dilo

Also in the classical needling process Dilo achieves steady improvements. The recently developed needle pattern 8000X generates a new level of homogenous surface based on even distribution of stitches. At the same time, this needleboard allows a high stitching density at high line speeds, due to the high number of needles. Furthermore, related patterns like 6000X are ready to be used in Hyperpunch needlelooms.



DiloGroup needle pattern 8000X © 2021 Dilo

"Microneedling" has been developed as an alternative to water entanglement. Optimized kinematics and maxed out stitch density generate intense but gentle needling at a high line speed. These fabrics can match water jet products regarding quality and productivity at a weight of 60 g/m² and more. The main advantage here is the low energy consumption, since no high pressure and water processing is needed, which will gain importance in upcoming challenges to the industry for a low CO2 footprint.

These and other fibre processing and nonwoven fabric related topics can be discussed in detail with DiloGroup during ITMA Asia.

REPEAT ORDER FOR A WEB-FORMING AND NEEDLING LINE

Due to recovery progress in the automotive sector, investments in nonwoven production lines for the manufacture of glass fibre-reinforced thermobonded structural parts for automotive interiors are being considered. DiloGroup has received a repeat order from Zhejiang Huajiang Science and Technology Co., Ltd. for a complete web-forming and needling line to process blends of glass and polypropylene fibre through a state-of-the-art fibre preparation system, web-forming, carding and crosslapping and needling units. The fibre preparation system from DiloTemafa is adapted to the special requirements for processing glass fibre in the most efficient way and to provide homogeneous blends with PP.

The component-dependent "Baltromix" blending system using highly precise weighing pans provides accurately dosed fibre material on the collecting apron, which is further opened and blended in a carding willow. This carding willow is used in most of DiloGroup complete line installations as a successful tool for further opening and blending tasks, in many cases together with a smaller chamber for final blending. In many installations DiloTemafa also provides the recycling of quality fibre derived from the whole process which is sucked off at many stations in the fibre preparation and web-forming system in order to save fibre material.

Installations for fibre transport and for fibre recycling within a line together with reopened edge trim material from a needling station and for dedusting the machines by a drum filter or bag filter station can be specifically engineered and designed by DiloGroup air system engineering department.

The efficiency of a whole line processing mineral fibre largely depends on the efficiency in dedusting all machine components from bale opening through needling. Solutions for this demanding task are part of the expertise of DiloSystems as general contractor. At the card, the so-called "fancy roller" is part of the system to provide the means to build the web on this double-doffer system without leaving too much fibre within the card clothing wire. Dilo works closely together with a range of customers and card wire suppliers to provide an optimum wire system for processing the demanding range of mineral fibres successfully.

In the needleloom this expertise to prolong the intervals for cleaning stops is vital to efficiency. Therefore, blowing nozzles to clean the perforated plates, stripper and bed plates, are installed within the needleloom. The dust exhaust is separated at a filter station. The majority of Dilo lines today include an elaborate air system and the necessary components for fibre transport, dust transport and the transport of recycled fibres which are introduced a the beginning of the line.

www.dilo.de

AUTEFA WITH SOLUTIONS FOR THE TEXTILE INDUSTRY
NEW IDEAS AND CONCEPTS FOR GROWING MARKETS

AUTEFA comes with solutions for the textile industry from their business units Nonwovens Technology, Woollen Carding Technology and Baling Technology during the June 2021 ITMA Asia+ CITME in Shanghai Hall 7, Stand A 24.

Visitors will experience the economic and technical advantages of AUTEFA Solutions as a full line supplier for carded-crosslapped needlepunch lines, aerodynamic web forming technology, spunlace, and thermobonding nonwovens lines. The company monitors and improves the product quality in their needle punching lines with the patented 3- level Closed Loop Control System. A scanner determines the weight distribution of the final product while the control system corrects the profile in the crosslapper and the feeding section of the card. The Web Profile Control WebMax is also integrated into the 3- level Closed Loop Control System which ensures that the fabric is profiled equally in both material direction and cross direction. This results in an excellent uniformity in the fabric and, thanks to a considerable saving of materials, a reduction in material costs.

AUTEFA SOLUTIONS INCREASES THE POTENTIAL IN THE SUPPLY CHAIN OF FIBERS

As a global market leader in the field of fully automatic bale packing systems for staple fiber and tow the company offers the entire range from fiber transport to the baler, as well as bale transport and storage of the pressed, wrapped and strapped bales in bale warehouses.

AUTEFA Solutions "Uni-Fork System" eliminates the bottleneck in the fiber production logistic. With its flexible baling concept, AUTEFA Solutions sets a benchmark in terms of fast growing fiber line capacities.

Autefa Solutions UNI-FORK System with 3 pre-presses and 6 main-presses © 2021 Autefa Solutions

A PREFERRED OPTION FOR CASHMERE WOOLLEN SPINNING, AUTEFA SOLUTIONS MACHINERY INSTALLATIONS

Today there is an increasing focus on the use of natural fibres in manufacturing leisure, sportswear, and next-to-skin clothing. This focus on finer micron wools corresponds with a demand on the spinning sector to manufacture yarn using finer fibre and to precise specifications.

AUTEFA Solutions machines deliver excellent quality outcomes in wool, alpaca, and cashmere. They can run at a precise speed, guaranteeing consistency and evenness in top and yarn production. Tops will be some 2-3mm longer the best yarn quality achievable. AUTEFA Solutions OCTIR-Dragon Multitrave Worsted and Semi-worsted Cards guarantee high productivity without compromising the quality of the top. The result is fibre fineness from 14.5 - 32 microns and fiber length from 20 – 150 mm.

Of course, Autefa Solutions will also provide information on the advantages of all machines from the extensive portfolio and report on new findings of a further increase in productivity. This naturally also includes the topics of sustainability and Industry 4.0.

www.autefa.com

VDMA
OFFERS A VIRTUAL TRIP TO ASIA

Asia's leading textile machinery fair will open its doors in Shanghai mainly for Chinese trade visitors due to Covid-19. Only few smaller and medium-sized companies from outside China will be able to visit the fair. They do not have a branch office or suitable representation to attend the show. They face the same problem like visitors from outside China. Nevertheless, around 50 VDMA member companies will exhibit at ITMA ASIA and showcase their solutions for the Asian textile and nonwoven industries. Instead of visiting the show personally, VDMA offers a virtual trip to Asia. The established "Textile Machinery Webtalk" series via the newsroom IndustryArena will focus on ITMA ASIA in the run-up to the fair: VDMA Webtalks meet ITMA ASIA (from June 1 – 11).

VDMA WEBTALKS MEET ITMA ASIA

9th June, 2021, 9:00 am - 10:00 am CEST
Erema: "Innovation solutions on Polymer Fiber & Composites Recycling"
10th June, 2021, 9:00 am - 10:00 am CEST
Thies: "IoT-Solutions for fully automatic weighing, provision, dispensing and dosing in modern finishing plants"
11th June, 2021, 9:00 am - 10:00 am CEST
Lenze: "Digital Engineering with acceleration of process in Textile Machinery"

en.industryarena.com/vdma-textile-machinery

BELGIAN TEXTILE TECHNOLOGY INDUSTRY

GEARS UP FOR STRONG SHOWCASE

Among the major Belgian exhibitors are Picanol, Vandewiele, BMSvision, Bonas and Hammer-IMS. Luc Tack, CEO of Picanol and President of Symatex commented: "ITMA ASIA + CITME is, without doubt, the most important trade show for the textile industry in Asia. As China is one of the most important markets for textile machines, it gives us the ideal opportunity to be closer to our customers. Missing the show is simply not an option for the Symatex members, and we are extremely confident that our presence will have a positive impact in terms of realizing our ambitious commercial goals for 2021!" Stijn Pauwels, Secretary General of Symatex agrees: "Our Belgian exhibitors are certainly gearing up for a strong showcase in Shanghai!" As offering the most performing technology is the key to customer success, the Belgian machinery industry is strongly R&D driven. It invests 8% of its added value in R&D and employs over 11% of the total Belgian manufacturing industry research head count. The industry accelerated its research efforts on energy efficiency in the last decade and achieved an average energy consumption reduction for its products of 18%. The long term strategy directs the Belgian machinery industry towards continuous strategic and open innovation to accelerate its product development pace and to provide its customers with cutting edge technology.

symatex.be

NEW NEED FOR SPEED AND SIMPLICITY

TMAS AUTOMATION CONCEPTS

Optimised production and full resource efficiency are of paramount importance to TMAS member customers in China," says TMAS Secretary General Therese Premler-Andersson. "As a result we anticipate heightened interest in the innovations that will be showcased. Our member companies have been forced into testing new working methods, looking at what it's possible to do remotely and how to exploit automation to the full during the Covid-19 pandemic, in order to become more flexible. The situation has not only resulted in further transparency and openness, but more than ever before, a need for both speed and simplicity." A specialist in automated concepts is **ES Automatex**, the provider of bespoke cutting, sewing and folding equipment solutions for the production of bedding, towels, curtains and table linen. **Eltex** is meanwhile achieving considerable success with its yarn fault detection and tension monitoring systems across a range of sectors, including the creeling of woven materials and advanced systems for the sewn products sector. The company's UPG-Stitch thread break sensor is based on the piezoelectric principle and is suitable for all types of yarns while being insensitive to dust, dirt, and humidity variations. The **ZTF** Zero Twist Feeder can accommodate tapes in widths up to 10mm and weights up to 7kg, with an insertion length of up to 3.4 metres.

www.tmas.se

HIGH LEVEL OF INNOVATION ACHIEVED BY THE MADE IN ITALY OFFER

66 Italian textile machinery manufacturers will participate in the upcoming ITMA ASIA + CITME 2020. Of these, 21 manufacturers will be presenting their technology offerings within National Sector Groups organized by ACIMIT and the Italian Trade Agency. With an occupied area of about 3,200 square meters, Italy is among the main exhibiting countries attending the event, as it has been the case in the previous editions. China is an absolutely important market for Italian companies: the first in Asia and the second worldwide behind only Turkey. In 2020 Italian machinery exports to China accounted for 14% of Italian exports in the sector (over 190 million euros). The main destinations in the area also include Pakistan, India and Bangladesh.

"The outlook for the Asian market remains positive, despite the fact that demand for machinery slowed considerably during 2020 due to the pandemic", says ACIMIT President Alessandro Zucchi.

"China, before many other Countries, has resumed its path of economic growth. In the textile sector, investments have never stopped. On the Chinese market, therefore, there is no lack of opportunities and I believe that ITMA ASIA + CITME will confirm expectations of a recovery in demand".

Zucchi concludes: "Waiting for a return to a situation of normality with a more numerous collective attendance at the trade fairs, I am convinced that the Italian manufacturers exhibiting in Shanghai will be able to testify to the high level of innovation achieved by the Made in Italy offer, proposing some technological innovations, especially in terms of sustainability and digitalization of the textile production process".

Mr. Massimiliano Tremiterra, Trade Commissioner of Italian Trade Agency Shanghai Office, commented that Italian cutting-edge technology can contribute greatly in terms of innovation and development of the flourishing Chinese textile industry: for cleaning, dyeing and finishing machines, knitting, stitch-bond, lace and auxiliary machinery. The Italian textile machinery industry focus on sustainability and innovation, in line with the keystones of the Chinese 14th five-years plan and the Made in China 2025 plan. It is the right time for the two countries to start a new round of trade and speed up the joint construction of the Silk Road Economic Belt and the 21st Century Maritime Silk Road.

www.acimit.it

Big billboards for textile machines from Italy at the last fair © 2021 TexData International

YOU CAN FEEL IT'S BENNINGER

MACHINES AND SYSTEMS FOR TEXTILE FINISHING DEVELOPED AND PRODUCED TO MAKE A DIFFERENCE

Benninger FabricMaster

The Swiss company Benninger develops and produces machines and systems for textile finishing and tire cord production and has many years of experience in the automation of these machines. The machines and systems are an important link in the textile value chain and run as complete system solutions.

In 2019 Benninger had its 160 years anniversary. This anniversary stands primarily for 160 years of commitment to textiles, but also for 160 years of responsibility towards sustainable textile production. Thanks to consistent innovation and the continuous improvement and further development of their products, processes and services, for the past 160 years the name Benninger has stood for textile finishing plants that are particularly resource-efficient.

Typical consumer products such as clothing, home textiles, bed linen and car tires are very often produced with Benninger technology. Benninger machines and systems are also used whenever textiles have to satisfy the highest technical demands, such as those required for airbags, medical textiles or sails.Benninger offers complete solutions for all major textile finishing processes, with a special expertise in the field of continuous open width processing of woven, knitted and technical textiles with minimum resource consumption. The product range covers the whole textile finishing processes – from Bleaching to Washing, Mercerizing and Dyeing.

EXPANDED PRODUCT PORTFOLIO IN GROWING MARKETS

In January 2020 Benninger took over LAB-PRO GmbH, a Swiss company, that succeeded in building up a complete range of world-leading technological products for discontinuous wet finishing. Thus the Benninger portfolio has been extended by technologically advanced discontinuous dyeing machines such as Jet and Jigger dyeing machines as well as Beam dyeing and laboratory dyeing apparatus.

Fully automatic chemical, salt, soda or dye dosing systems, which ensure the highest accuracy and reproducibility, complete the portfolio. By combining the know-how and experience of both companies, Benninger is the leading system supplier in the field of continuous and now also discontinuous dyeing and finishing technology.

The product range is constantly optimized and extended, and they draw on their tremendous innovative strength, comprehensive technical and process expertise as well as knowledge gained from a large number of projects.

New findings are always incorporated into the development of solutions, always with the aim of boosting the success of their customers.

Textile Finishing Process solutions offered by Benninger are extremely innovative and provide customers with significant competitive advantages such as increased productivity and optimized quality, lowest water and energy consumption and highest reproducibility.

SMART TECHNOLOGY INCORPORATED

All Benninger plants are equipped with their innovative automation solutions. True to the principle „trust is good, control is better", the important operating parameters of the Benninger systems are continuously monitored in a closed control circuit.

Particularly quality-critical parameters are forwarded to those responsible by means of modern IoT technologies and an alarm is sounded in the event of limit value violations. A newly revised maintenance manager provides information about the maintenance status of the system at any time and generates a recommendation as well as a schedule for the next maintenance cycle. The well established management information system BEN-iDATA allows the customer to query all important machine data, the maintenance status and the ecological footprint of the current production batch at any time and from any place.

Benninger's bleaching range
© 2021 Benninger

Last but not least the newly-developed online measurement of the degree of contamination of the washing water helps the customers with the optimisation of water consumption. Benninger is renowned by its comprehensive process knowledge both in application consulting and project planning as well as its close relationship with the customers in the entire life cycle of installed plants.

Benninger's clients are looking for solutions and not products! High quality delivery, throughout process knowledge, the history of Benninger and number of years of experience and flexibility makes them a very reliable solution provider of the textile industry resulting in premier quality clothing and textiles as an end product when they say to the world "You can feel it's Benninger!"

www.benningergroup.com

HEAT RECOVERY FROM HOT DYEING WASTE WATER

by Hermann Freericks

Various wet treatment processes are used in textile finishing. The processes are energy-intensive, so reducing energy use is of great importance both economically and ecologically. In almost all treatments the treatment temperatures are also significant in addition to the textile auxiliaries, dyes and mechanics. It is therefore essential that the equipment and machines ensure accurate temperature control throughout the treatment period. The objective is efficient, clean and energy-saving production.

In the practice, the treatment baths for the respective procedures are heated by heat exchangers. At the end of the treatment, these baths must then partially cool down again - before they can be drained. The discharge temperature depends on the process, the material to be treated and the type of dyeing machine. Since cooling consumes both time and cooling water, it is drained as hot as possible. Operations differ due to the wide variety of materials, processes and chemicals used.This means that the waste water from different kinds of textile finishing plants cannot be compared with each other in terms of quality and quantity, or only to a limited extent.

In addition, there are large fluctuations in the quantity of waste water during the course of a production day. However, years of practical experience and analyses of various dye houses have shown that many treatments offer potential savings. For example, the illustrated example of cotton dyeing shows such savings opportunities in 8 of 12 treatment baths. (Fig. 1)

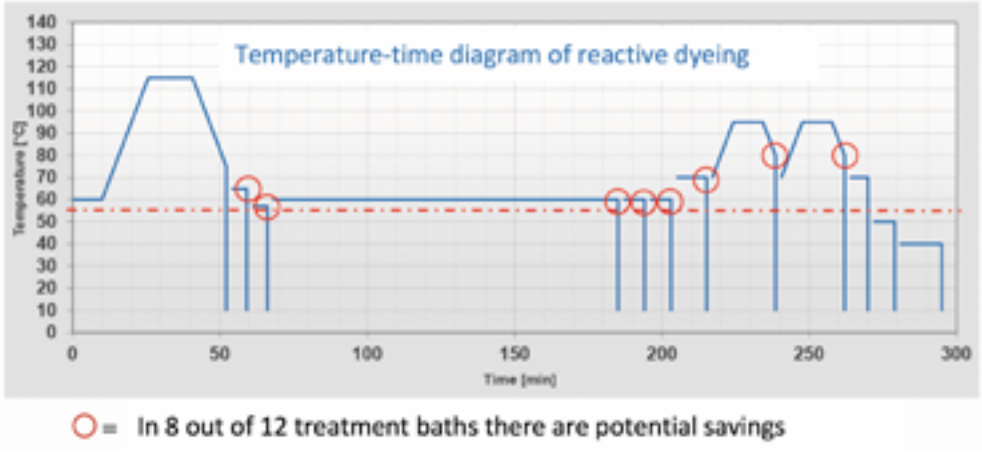


Fig. 1: Temperature-time diagram of a reactive dyeing - 8 treatment baths with potential savings © 2021 Thies

SHORT AMORTIZATION PERIOD

The level of benefit from the heat recovery increases with the temperature difference [Δt] between the waste water and the fresh water to be heated, the size of the heat exchanger surface and the correct flow rate of the media. With a machine capacity of 500 kg and 3 batches per day and the consistent use of the heat recovery system, up to 80% of the steam quantity used can be saved. This means a significant reduction in production costs. In addition, a significant reduction in CO2 emissions is achieved. The payback period for a system for heat recovery from waste water is less than one year in a 3-shift operation. (cf: Report on Best Available Techniques and Equipment in the Textile Industry, UBA-FB 000325, from August 20, 2002)

After draining from the dye vessel, the hot waste water is collected in a storage tank. From a preset level, it is then fed from there through the heat exchanger by means of a special waste-water pump. The intelligent process control of the heat recovery (Fig. 2) ensures that the energy in the waste water is optimally transferred to the fresh water. Cold fresh water is heated in the counterflow (Fig. 3) and collected in a fresh water storage tank. This heated fresh water is now available for new treatment processes. The hot water tank should be sized so that its capacity covers 3 hours of production time.

Fig. 2: Thies heat recovery system
© 2021 Thies

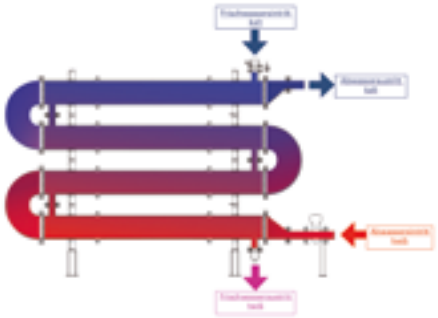


Fig. 3: Schematic diagram of a heat recovery system
© 2021 Thies

MONITORING OF RELEVANT MEASUREMENTS

The hot water storage tank can also be used to store cooling water. A process controller monitors all relevant measurements and controls the equipment automatically (Fig. 4). The savings are clearly displayed in a diagram. In addition, the data can be transferred to MES and ERP systems (Fig. 5). Another advantage is that the cooler waste water may meet the temperature specification directly and can be sent to the treatment plant.

In addition to the core module - the heat exchanger - Thies provides an integrated concept for planning the complete recovery system. This includes the design of the size of the heat recovery system and the volume of the collecting tanks for hot wastewater and heated fresh water, as well as the planning of the entire pipe routing. The heat recovery system has very compact dimensions and is available in different sizes from 8 m³/h to 65m³/h. The pipe bundle heat exchangers used, which are manufactured in a robust design from high-quality stainless steel, are particularly suitable for charging with textile waste water.

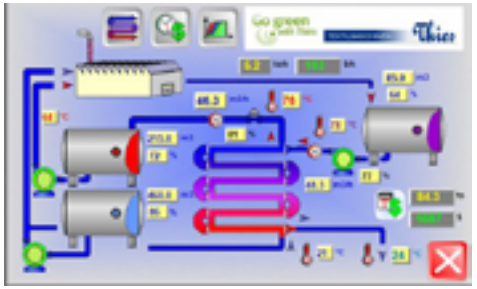


Fig. 4: Monitoring of relevant measurements
© 2021 Thies

Fig. 5: Presentation of savings
© 2021 Thies

Mr. Hermann Freericks © 2021 Thies

Electronic water flowmeters monitor the flow rate of fresh water and waste water, ensuring a high level of operational reliability.

CONCLUSION

The use of intelligent heat recovery enables a significant reduction in production costs and makes a major contribution to efficient, clean and energy-saving production. Textile waste water is a regenerative energy source. Using their energy reduces primary energy consumption as well as CO2 emissions.

www.thiestextilmaschinen.de

"Mittelstand 4.0 Kompetenzzentrum Textil vernetzt" in Aachen - continuation and expansion with new formats

AUTHORS: FREDERIK CLOPPENBURG, THOMAS GRIES

The "Mittelstand 4.0-Kompetenzzentrum Textil vernetzt" was founded to support small and medium-sized enterprises (SMEs) from the textile industry and textile machinery manufacturing, as well as related areas, in the field of digitalisation. The declared goal: to expand the „digital fitness" (BMWi, 2021) of the companies. Since SMEs in this sector in particular are challenged by „small batch sizes and a constantly varying production character" (BMWi, 2021), the "Mittelstand 4.0-Kompetenzzentrum Textil vernetzt" provides assistance in integrating digital processes into everyday operations. This is achieved through various aspects of digitalised production, such as with the implementation of assistance systems or smart sensor technology in the production line. However, the training and qualification of employees is also an important component in achieving individual and networked production in the long term.

"Textil vernetzt" is present at several locations in Germany in order to always be available as a competent contact for companies as local as possible. This is also the case at the location in Aachen. The showcase in Aachen is located at the Institut für Textiltechnik (ITA) of RWTH Aachen University. With the focus on „Work 4.0", the Aachen location can map the textile manufacturing process on a fully networked process chain. The economic benefits of digitalised manufacturing can be experienced and experienced on this fully integrated production line, from the yarn to the finished, digital end product.

Beside the larger projects, the competence center in Aachen was also active in the direct communication. In total, the competence center in Aachen was able to inform more than 90 SMEs with around 120 participants about the advantages of an intelligent process chain during more than 70 guided tours of its own digitized production by 2021 and thus educate them about its benefits. In total, however, more than 350 people were reached through the tours. However, a broad audience was also reached at 10 information events, which were attended by over 80 SMEs and almost 320 people. However, the dialogue between industry and the competence center was not neglected. In over 80 discussions with 194 participants, modern and digital solutions for textile production were exchanged with 54 SMEs. In the following workshops, more than 60 employees of 40 SMEs were trained in digitalisation.

The competence center project will be continued and expanded so that companies will also have the opportunity to turn to a competent partner in matters of digitisation in the textile industry in the future. On one hand, the project will be extended for another two years and can thus serve as a sustainable contact for companies.

In addition, the Aachen competence center will also be able to support companies in the future with the implementation of applied artificial intelligence in everyday work, as the location has been included in the AI Trainer measure. The first implementation projects in this new thematic field are already being planned. In order to keep the entry hurdle for companies as low as possible, the competence center has developed a five-step strategy for digitising the company.

This strategy consists of informing, demonstrating, qualifying, designing and implementing. In order to integrate the individual companies into this strategy in the best possible way, the competence center in Aachen has developed eight starter formats to optimally cover the needs of each company.

Figure 1: Industry dialogues and workshops are offered and conducted on a client-specific basis. Since the beginning of the corona pandemic, mainly in online formats © ITA

On other hand, the Aachen showcase will be extended to include ITA's main location. The technical center located there offers an even larger collection of production machines and will be extensively digitally retrofitted in the course of the extension.

The „4.0 maturity level" format is designed to determine the status quo of the Industry 4.0 maturity level of the respective company. In doing so, our digitalisation experts take a close look at both the data collection and the use of the data. By looking at the company's structure, processes and development, the various areas of the company can be classified in terms of their Industry 4.0 maturity level. On this basis, the most important fields of action for the organisation can be derived.

Figure 2: Augmented reality-based assistance system for maintenance and servicing © ITA

In order to be able to determine the modelling capability and thus the monetary usability of a company's data, the Aachen location has developed the „Readiness Assessment" starter format. In the course of the format, data collection and use is assessed along the entire value creation process. From the raw material supplier to customer feedback. At the end of the assessment, the company receives a classification of the modelling capability and an overview of the most important fields of action for increasing data quality.

ITA has already developed the „Guide for the Implementation of Smart Factory Concepts" in completed projects. The aim of the guide is to increase effectiveness and efficiency by avoiding quality-relevant errors. The guideline is intended to support companies in determining the requirements for digital solution approaches. In the corresponding starter format, the guide is applied in the company and digital solutions for increasing the quality rate are identified. To give companies an understanding of electrical measurement chains and their signal processing, the competence center in Aachen offers the „Measurement Technology Workshop". In this interactive workshop, companies can acquire the right know-how on how sensor technology can be used profitably, but also how to select the right sensor technology for the corresponding measurement task. In addition, ITA experts teach how the company can get from a physical observation to a usable measured value.

With the format „Potential Check Measurement Technology", the competence center offers a tool with which a company's measurement ideas can be validated in the production environment. The measurement and digitisation technicians of ITA check whether the desired effects can be recorded with a measurement value acquisition. For this purpose, the technicians install a self-sufficient measuring case in the production of the company in order to record measured values from the sensors and interfaces independently of the in-house control system. The company receives the recorded data after the measurement.

Thus, in cooperation with the experts from Aachen, it can be analysed whether the targeted measurement concept works.

For the identification of profitable digitalisation approaches, companies can undergo the „Digital Waste Walk". This format of ITA consists of an introductory workshop in which the individual value drivers of production are identified. Afterwards, experts for digitalisation examine the company's production in presence for one day. In the process, digitalisation opportunities are sought that increase the company's value creation. Afterwards, the companies receive a list of useful digitalisation technologies that can be implemented in the short, medium and long term.

To get an overview of the possible applications of Work 4.0 technologies, companies can take part in ITA's „Work 4.0 Workshop". The aim of this format is to discover the potential of using digital assistance systems in production. After the companies have received information about the current situation of the labour market in the textile sector, an introduction to digital assistance systems follows. The different levels of assistance functions will be shown to the companies in order to ultimately be able to present an approach for the methodical development and introduction of such systems. The topic of artificial intelligence is becoming increasingly important for the manufacturing textile industry. In order to optimally prepare the companies for this task, ITA was included in the „AI Trainer" measure and has developed the „AI Starter" format in the course of this.

The Aachen location supports the companies so that they can use their data profitably. The technical or non-technical requirements of AI-supported systems are determined on a needs-oriented basis so that they can be optimally used in production. To this end, ITA supports companies in the analysis, conception and implementation of suitable methods.

Interested companies can obtain further information on the website of the "Mittelstandskompetenzzentrum Textil vernetzt" (www.kompetenzzentrum-textil-vernetzt.digital) or contact us via e-mail (aachen@textil-vernetzt.de) contact the Aachen experts from the "Mittelstand 4.0 Kompetenzzentrum Textil vernetzt" directly.

References

BMWi (2021): "Mittelstand 4.0-Kompetenzzentrum Textil vernetzt", online via: https://www.mittelstand-digital.de/MD/Redaktion/DE/Karte/Kompetenzzentren-Projekte/mittelstand-4-0-kompetenzzentrum-textil-vernetzt.html, 2021 [accessed on: 05.01.2021].

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Textile to textile recycling in outdoor industry

AUTHOR: LUKASZ DEBICKI

WORLD'S FIRST DYNAMIC ROPE MADE OF RECYCLED MATERIAL

Recycling in the textile industry is still in its infancy. Of an annual production of 53 million tonnes of clothing, 73 % ends up in landfills or is incinerated. 12 % are recycled into insulation or cleaning rags and another 12 % are unsaleable offcuts in production and are destroyed. Generally speaking, only less than 1% of textiles produced worldwide are currently recycled, whereas more than 95% of textiles have the potential to be recycled (Figure 1). [1]

If the currently booming outdoor market is focused, it can be seen that the necessary outdoor equipment, such as functional jackets, trousers, backpacks, tents..., are products of a textile nature. 60 % of these textiles are made of plastics such as polyamide or polyester and end up as hazardous waste in landfills after use. But why is the outdoor market interesting for recycling? The market volume is comparatively large with approx. 6 billion € in Europe and an annual growth of 6 - 7 %. [2] On the one hand, outdoor products have to meet high technical requirements such as strength, waterproofness and UV resistance; on the other hand, the proportion of plastics in these products is particularly high, and at the same time the market is open to sustainability. The idea of sustainability is the reason why there are already various approaches to produce environmentally friendly products, e.g. swimsuits from fishing nets, shoes from ocean waste or fleece jackets from PET bottles. But in the end, this kind of recycling is only a linear economy, because at the end of its useful life, the recycled product is landfilled again and only a small part is recycled. The goal, in order to be truly sustainable, is to introduce the circular economy, meaning to recycle synthetic fibres again and again, in other words to carry out product-to-product recycling. The important thing here is to produce an equivalent product while retaining the material properties.

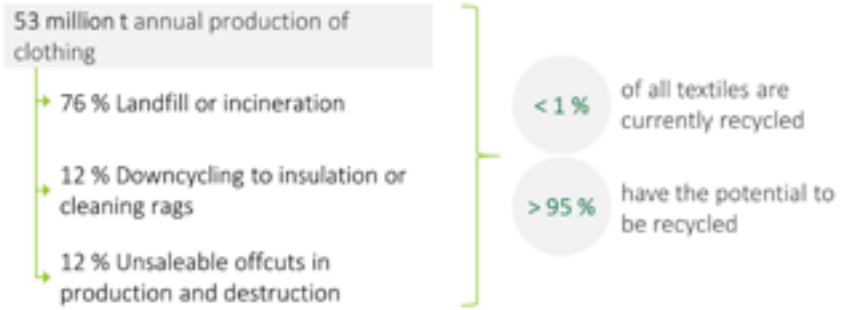

Figure 1: Recycling in textile industry © ITA

In outdoor industry there are numerous highly technical products that could be recycled. However, jackets, tents and shoes, for example, currently pose a great challenge for recycling due to their material heterogeneity. In terms of weight, climbing is the third largest segment of the outdoor market with a high share of textiles such as ropes, harnesses or lines. The product dynamic climbing rope from this segment is particularly suitable for recycling because it is mostly homogeneous in terms of material. Climbing ropes are not only suitable as a flagship for textile recycling for technical reasons, but also from a marketing perspective. Because climbing ropes, as a safety-relevant product, are subject to the highest technical requirements. After all, human lives are at stake. If the recycling of such a complex product is successful, a solid argumentation basis for further products is created.

According to the German Recycling Management Act, recycling is defined as „any recovery process by which waste is reprocessed into products, materials or substances either for the original purpose or for other purposes". A distinction is made between reuse, where the material is cleaned and used repeatedly; mechanical recycling, where a new product is formed by sorting, cleaning, shredding and melting the material; and chemical recycling, where raw materials such as monomers and hydrocarbons are recovered (Figure 2). [3]

Reuse is out of the question for recycling of technical products because the product properties are no longer given at the end of the product's life. In mechanical recycling, there is a process-related deterioration of material properties. These changes lead to the fact that in a recycled technical textile the high requirements could not be fulfilled so far. Chemical recycling, on the other hand, enables the production of material with properties of new goods. Based only on the resulting material properties, chemical recycling would be the process of choice for recycling a technical product. However, mechanical recycling is selected here as the process of choice for

Figure 2: Possibilities for recycling polymers; © ITA

product-to-product recycling because of its high material availability and low cost.

The companies EDELRID and Hoffmann + Voss, together with the Institut für Textiltechnik of RWTH Aachen University, have set themselves the goal of product-to-product recycling using the example of a climbing rope, and within the last few years have developed a fully certified rope made from 50 % reused pre-consumer ropes.

The construction of a climbing rope is produced in the following process chain, starting from new polymer material: the polymer raw material is first produced, followed by melt spinning for yarn production, the yarn is then twisted, shrunk and finished before the rope core and sheath are joined together by braiding. If production is now not started from new polymer material, but climbing rope waste is used to carry out product-to-product recycling, the first step in the value chain changes. Instead of raw material production, material processing takes place. The recycling value chain is shown in Figure 3. In a first step, the raw material is organised.

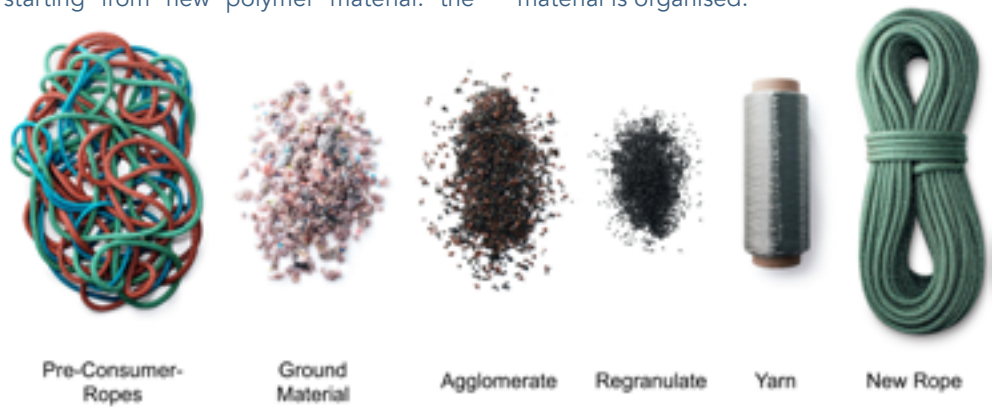

Figure 3: Value chain of climbing rope recycling; © Edelrid GmbH & Co. KG

This can consist of either production waste or end-of-use waste. Here, production waste from starting material was chosen because it is less affected by the environment. In a second step, the raw material is crushed in a shredder to grist. Then agglomeration takes place by melting the material between two rotating discs. In a fourth step, the agglomerate is melted in an extruder. The melt is cooled in a water bath and the strands are cut into granulate. This can then be processed in the melt spinning process into filament yarn and subsequently into a new rope. This process chain was pursued in the joint research project and the necessary machine settings were found so that a full-fledged climbing rope could be produced. Since spring 2021, the world's first dynamic recycled rope is available in stores.

A first important step for the textile to textile recycling has been mastered. The long-term goal should now be to only manufacture products that can be recycled so that they no longer have an end of use. For this, the transfer of the here developed technology must be looked at for the entire textile industry: In a first step, material recycling should be extended to other homogeneous textiles, such as awnings or airbags. Here, too, a first simple approach would be to use production waste. Next, end-of-use waste should be used instead of production waste. The contamination of end-of-use materials will certainly pose further challenges in terms of process technology.

In the procurement of the material, there are also issues such as the collection and sorting as well as the transport of the materials to the production sites. If product-to-product recycling enables the drastic minimisation of waste, work should also be done on the product design. So products like tents, backpacks, tarpaulins should be redesigned to be material homogeneous or easily separated. In order to be sustainable in the long term, the issue of multiple recycling and its influence on product requirements should be investigated. Business models must be developed for all steps in order to convince the market of the idea on the one hand and to build up an economic production on the other.

References

[1] Herrmann, S.: A New Textiles Economy: Redesigning Fashion's Future; Ellen macarthur Foundation; Circular Fibres Initiative; 2017; URL: https://www.ellenmacarthurfoundation.org/assets/downloads/publications-/A-New-Textiles-Economy_Summary-of-Findings_Updated_1-12-17.pdf

[2] Jans, G.: Europas Outdoor-Markt mit guter Bilanz: 7,2 Prozent Wachstum; Messe München GmbH; 2017; URL: https://www.ispo.com/maerkte/europas-outdoor-markt-mit-guter-bilanz-72-prozent-wachstum

[3] Feess, E.; Günther, E.: Recycling; Definition: Was ist Recycling; Gabler Wirtschaftslexikon; Springer Gabler; 2018; URL: https://wirtschaftslexikon.gabler.de/definition/recycling-44989/version-268290

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NEWS

#Apparel #Brand #Software #Seal

SAC AND HIGG LAUNCH NEW PROGRAM FOR PUBLICLY SHARING DATA

Sustainable Apparel Coalition (SAC), a global multi-stakeholder nonprofit alliance for the consumer goods industry, along with its technology partner Higg, launched the first phase of a transparency program for publicly sharing data on a product's environmental impact, starting with its materials content. The program provides a consistent way for brands, retailers, and manufacturers to share sustainability information on apparel and footwear products, across impact categories such as water use, greenhouse gas emissions, and use of fossil fuels. Built on a decade's worth of tool development, consumer testing, and contributed environmental impact data, this first phase of the Higg Index transparency program is an important step toward a unified approach for industry-wide transparency – in order to provide shoppers with unprecedented visibility into a product's real impact. SAC members Amazon, Boozt, C&A, Calvin Klein and Tommy Hilfiger (owned by PVH Corp.), Columbia Sportswear, H&M, Helly Hansen, JustWears, Lenzing AG, Norrona, PUMA, Salomon, and Zalando announced their commitment to implement the first phase of the program.

apparelcoalition.org

SUSTAINABILITY / RECYCLING

#Organic Cotton #Seal #Certification

GOTS RELEASED ANNUAL REPORT 2020

© 2021 GOTS

The 2020 Annual Report highlights the 4,22 million workers benefitting from the high social standards required of GOTS certified facilities, a remarkable increase of 32% over last year. Despite the severe restrictions caused by the COVID-19 pandemic the number of certified GOTS facilities grew by 34% to over ten thousand serving both environment and workers.

global-standard.org

#rPET #Apparel

TEXTILE EXCHANGE AND FASHION INDUSTRY CHARTER FOR CLIMATE ACTION LAUNCH THE 2025 RECYCLED POLYESTER CHALLENGE

Textile and apparel brands are invited to take climate action by joining the 85 brands and suppliers committed to replace their use of virgin polyester with recycled polyester to ultimately shift global volume from an average of 14% to 45% by 2025. Textile Exchange and the Fashion Industry Charter for Climate Action, convened by UN Climate Change, have launched a joint initiative to spur further a shift in the market towards the uptake of recycled polyester (rPET) and the associated reduction in greenhouse gases (GHGs).

textileexchange.org

#Apparel #New Material

PRIMALOFT INTRODUCES FULLY RECYCLED ETHICAL DOWN ALTERNATIVE

PrimaLoft, Inc., a global leader in advanced material technology, has launched a new version of his best-selling down alternative, PrimaLoft® Insulation ThermoPlume®. This synthetic fill is now made entirely out of post-consumer recycled materials. It looks like down, feels like down, and delivers comparable thermal performance, but it is 100% synthetic – and now 100% recycled. Four years after the introduction of the first blowable synthetic insulation, the technology has built a strong reputation in the outdoor apparel & fashion markets, with more than 70 brands using the loose-fill microfiber insulation in their product lines for the Fall/Winter '21/'22 season.

www.primaloft.com

#Polyester #rPET #License business

JOINT AGREEMENT ON POLYESTER CHEMICAL RECYCLING

Teijin Limited, JGC Holdings Corporation and ITOCHU Corporation have signed a joint agreement on the license business of polyester chemical recycling technology from discarded polyester textile products. This agreement will bring together Teijin's proprietary chemical recycling technology deployed in the manufacture of polyester, the expertise of the JGC derived from its global engineering business, and ITOCHU's extensive network of textile industry players. The three companies intend to establish a system for collecting discarded polyester fiber products and cost-effective chemical recycling technology for using such products as raw materials. Going forward, Teijin, the JGC and ITOCHU aim to expand the range of effective solutions for the mass disposal of used textile products.

www.teijin.com

#Cotton #Fiber #New factory

INFINITED FIBER COMPANY PLANS TO BUILD EUR 220 MLN FLAGSHIP FACTORY IN FINLAND

© 2021 Infinited Fiber Company

Circular fashion and textile technology group Infinited Fiber Company is looking for a location in Finland to build a flagship factory to produce its unique, regenerated textile fibers for the global market. Infinited Fiber Company will decide on the location by September. Infinited Fiber Company's technology turns cellulose-based raw materials, like cotton-rich textiles, used cardboard, or rice or wheat straw, into Infinna, a unique, premium textile fiber with the natural, soft look and feel of cotton. Infinited Fiber Company currently operates pilot facilities in the cities of Espoo and Valkeakoski, Finland, with a combined nominal capacity of 150 metric tons/annum. The planned flagship factory will have an annual capacity of 30,000 metric tons/annum and will use post-consumer textile waste as feedstock. International technology group ANDRITZ will be a key supplier of the process equipment for the new plant.

infinitedfiber.com

#Tires

100% SUSTAINABLE TIRES?

Michelin has successfully validated the use of Carbios' enzymatic recycling technology for PET plastic waste in its tires. The validation of Carbios' technology in Michelin's tests, marks a new step towards 100% sustainable tires. Michelin is committed to achieving 40% sustainable materials (of renewable or recycled origin) by 2030 and 100% by 2050.

www.carbios.com

#Sorting #Circularity

FASHION FOR GOOD LAUNCHED NEW PROJECT TO DRIVE TEXTILE RECYCLING

Fashion for Good has launched the Sorting for Circularity Project to address this challenge on a scale greater than ever before. Bringing together key brands and industry leaders from across Europe, the project will conduct a comprehensive textile waste analysis using more accurate, innovative Near Infrared (NIR) technology, while also mapping textile recycler's capabilities. This research will lead to an open digital platform to match textile waste from sorters with recyclers, enabling their alignment and building an infrastructure towards greater circularity in the years to come. The Sorting for Circularity Project is driven by Fashion for Good with catalytic funding provided by Laudes Foundation and facilitated by brand partners, adidas, BESTSELLER, and Zalando, as well as Inditex as an external partner. Fashion for Good partners Arvind Limited, Birla Cellulose, Levi Strauss & Co., Otto and PVH Corp. are participating as part of the wider working group. Circle Economy leads the creation and implementation of the methodology, with support from Refashion, to assess textile waste composition. Both organisations build on their extensive experience from similar projects, such as the Interreg Fibersort Project and previous textile composition analyses. The project brings together the largest industrial textile sorters in the North-West European region; including the Boer Group, I:CO (a part of SOEX Group), JMP Wilcox (a part of Textile Recycling International) and TEXAID, placing key industry players firmly at the heart of the project and driving the industry towards greater circularity.

fashionforgood.com

LEGAL NOTE

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#Industry 4.0 #Digitisation #Automation

APEX VENTURES, BAYERN KAPITAL AND HTGF INVEST IN ROBOTICS START-UP SEWTS

Robotics start-up sewts has closed a single-digit million seed financing round. sewts is developing a software-as-a-service (SaaS) solution that helps industrial companies automate processes in which easily deformable materials are processed, for example textiles or films. Initially, the technology will be used in industrial laundry lines; in the long term, cross-sector applications are planned in the textile industry as well as in the high-tech sector. The Munich-based sewts GmbH, founded in 2019, and its approximately 20 employees have developed innovative control and image processing software that enables robots to predict the behaviour of shape-unstable materials during gripping in real time based on intelligent algorithms developed in-house. At the core of the technology is a unique approach to generating artificial training data for the AI, which is based on high-precision, so-called finite element method (FEM) simulations. With the help of this novel approach, sewts can automate a wide range of industrial processes that were previously technically impossible - such as the handling of textiles or carbon fibre and semi-finished products.

www.sewts.de

#Apparel #Brand

VF CORPORATION LAUNCHES NEW INNOVATION PILLAR

VF Corporation (NYSE: VFC), a global leader in branded lifestyle apparel, footwear and accessories, today announced its launch of Venture Platforms, an innovation pillar that will focus on identifying and investing in new, future-focused opportunities. Venture Platforms will enable VF to develop new growth opportunities for its brands and invest in new ideas outside of its current portfolio. **baselayer.vc**

#Apparel #Brand

ESQUEL OPENS NEW SHOWROOM IN TURKEY

Esquel opens a brand-new showroom in Istanbul, Turkey as part of the group's plan to expand its product and service offering to the region's market. This move solidifies Esquel's support to brands looking at expanding into Middle Eastern and European markets. The showroom is open to visitors by appointment starting May 24, 2021. **www.esquel.com**

#Dyeing #Polyester #Digitisation

TWINE SOLUTIONS RAISES $28 MILLION IN INVESTMENT ROUND

Twine Solutions announced that it has raised $28 million in an investment round, led by Menora, Meitav Dash, and Analyst. Existing shareholders New Era Capital, Landa Ventures, Gefen Capital, and others also participated in this investment round which will support the company's acceleration of global installations of its newly released TS-1800 Gen2. Twine Solutions has created the first technology of its kind for digitally dyeing thread on-demand. Launched in 2015 by twin brothers, Alon and Erez Moshe, Twine digitally dyes raw or off-the-shelf, white polyester thread in any color and length for immediate use in sewing, knitting, and embroidery. **twine-s.com**

TS-1800 © 2021 Twine Solutions

#Industry 4.0 #Software #Cutting

LECTRA COMPLETES ACQUISITION OF GERBER TECHNOLOGY

On 1st June Lectra finalized the acquisition of all outstanding shares of Gerber Technology, on a cash-free debt-free basis, for 175 million euros – financed through a 140 million euro loan and the Group's available cash – plus 5 million newly issued Lectra shares to AIPCF VI LG, Gerber Technology's sole shareholder.
This strategic combination, of which all stages have now been successfully completed, has led to the creation of a leading global Industry 4.0 player for the fashion, automotive and furniture markets.
"The union of our respective innovative expertise, our state-of-the-art offers and our talented resources will enable us to bring long-term value to our customers. We will now be in an even better position to support our customers throughout the world in accelerating the digital transformation of their operations," says Daniel Harari, Chairman and CEO of Lectra. This acquisition, which was announced on February 8, was approved by Lectra's Board of Directors on March 25 and by Lectra's shareholders on June 1st.

www.lectra.com
www.gerbertechnology.com

#Fiber #Viscose #Yarn

HEIQ ACQUIRES GERMAN MATERIALS INNOVATOR RAS AG

HeiQ has strengthened its antimicrobial ingredients technology platform and expanded its product line to include coating technologies through the acquisition of RAS AG, Regensburg, Germany.

heiq.com

PEOPLE

#Fiber #Yarn

DOMINIC KÖFNER NEW VP CORPORATE COMMUNICATIONS AT LENZING

Dominic Köfner © 2021 Lenzing

Dominic Köfner (46) has taken over as Head of Corporate Communications & Public Affairs at Lenzing AG. As Vice President, he will report directly to the CEO, Dr. Stefan Doboczky. Among other things, Köfner will play a key role in shaping the internationalization of the Lenzing Group and contribute to the implementation of the corporate strategy sCore TEN. Mr. Köfner has gained national and international experience over the past two decades at renowned consulting firms, communications agencies and on the corporate side. Before joining the Lenzing Group, he was Managing Director of the communications agency Serviceplan Austria.

www.lenzing.com

#Textile Machinery #Nonwovens

ETTORE PAOLINI: NEW VICE PRESIDENT OF SERVICE AT ANDRITZ NONWOVEN

© 2020 Andritz

Ettore Paolini, born in Italy, can now look back on more than 20 years' experience in the hygiene machinery sector, holding various commercial management positions. His profound knowledge perfectly complements the current ANDRITZ Nonwoven organization. His focus will be to provide excellent service to customers and to further develop the service offerings of ANDRITZ Nonwoven to create value-added for its customers. The service department offers a complete service portfolio. This includes local and on-site support, specific training, line audits and troubleshooting, upgrades and modernization, genuine spare and wear parts, digital service solutions, and service and roll repair centers in Europe, North America, and China.

www.andritz.com

#Textile Chemistry

THOMAS GANGL NEW BOREALIS CEO

© 2021 Borealis

The Borealis Supervisory Board has announced the appointment of Thomas Gangl (49) as new CEO of Borealis AG, effective 1 April 2021. Thomas Gangl succeeds Alfred Stern (56), who assumes the role of OMV's Executive Board member for Chemicals & Materials. With Thomas Gangl, Borealis gains an exceptional manager and expert from among OMV's ranks. With over 20 years of experience in OMV, Thomas Gangl has not only played a significant part in shaping the refining and petrochemicals business in the OMV Group but more recently was also responsible for establishing chemical recycling and thereby laying the foundation for OMV's circular economy strategy.

www.borealisgroup.com

#Textile Machinery #Finishing

MONFORTS SAYS GOODBYE TO KLAUS HEINRICHS

© 2021 Monforts

After almost 30 years with the company, Monforts Vice-President Klaus Heinrichs has retired at the end of May. A very well-known and respected figure in the industry, Klaus began working in marketing for the company in 1992. "From the very beginning until today Klaus used his great flair and networking skills to secure and improve the company's international presence and public relations, especially at seven successive ITMA textile machinery exhibitions, beginning with the show in Milan in 1995," said Monforts Marketing Manager Nicole Croonenbroek. "Later, he also took care of customer service, sales administration and exports in his uniquely calm and quietly-spoken style."

www.monforts.com

#Industry 4.0 #Software #Cutting

CÉLINE ABECASSIS-MOEDAS JOINS LECTRA'S BOARD OF DIRECTORS

© 2021 Lectra

At Lectra's Extraordinary Shareholders' Meeting held on April 30, members voted to appoint Céline Abecassis-Moedas as a new independent director. Nominated for a period of four years, she becomes a member of the Audit Committee, the Compensation Committee and the Strategic Committee. The appointment of Céline Abecassis-Moedas to Lectra's Board of Directors will notably strengthen the Strategic Committee, which will be called upon to examine an increasing number of investment projects in innovative companies and the continued development of our offers for Industry 4.0. "I am delighted to announce the appointment of Céline Abecassis-Moedas as a Director of Lectra," says Daniel Harari, Chairman and CEO of Lectra.

www.lectra.com

#Industry 4.0 #Education #Learning

JOACHIM HENSCH CONSULTING UNVEILS PROGRAM TO ENABLE SMART FACTORY APPLICATIONS

Joachim Hensch © JHC

After two decades with Hugo Boss Group Joachim Hensch is ready for an all new challenge. He turned to new tasks, driven by the spirit of his knowledge and experience on the way to support brands, organizations, start-ups or single players to define their own individual digital strategy. Now Joachim Hensch Consulting (JHC) launches the Inverted Online Class Room program, staggered with three degrees. The application protagonist's framework for the Digital Lean Factory builds the foundation of the training, where everyone determines their individual learning pace for working. Big picture learning objective: Successfully implement Industry 4.0 - in daily interactions, digital and analog. "One aim is to enable attendees to re-consider the way how to look to their structures, the processes, their assets and also workforce", Hensch rolles out.

www.joachimhensch.com

#Fiber

DITF AND TECHNIKUM LAUBHOLZ STRENGTHEN COOPERATION

Versatile raw material hardwood from sustainably managed forests in the region. Photo: pixabay © DITF

The cooperation between Technikum Laubholz GmbH and DITF aims to develop novel and technical applications for hardwood and to transfer them into marketable products. A far-reaching technology transfer now creates the basis for a sound and knowledge-based cooperation. As a basis for the technology transfer, extensive patent families could be sold from the DITF to the Technikum Laubholz . This has created the prerequisites for incorporating results from basic research into the development of new products. The industrial implementation of sustainable processes for the production of technical regenerated cellulose fibers and carbon fibers based on lignin and cellulose form the research focus of the cooperation between the two partners. With the sale of the patents, the cooperation partners are following a strategic guideline that will promote their cooperation and enable professional marketing of the new technologies. **www.ditf.de**

#Biomaterials

STFI IS A PARTNER IN THE EU PROJECT BIONANOPOLYS

On February 9 and 10, 2021, the kick-off meeting of the HORIZON2020 project Bionanopolys (Open Innovation Test Bed for developing safe nano-enabled bio-based materials and polymer bio-nanocomposites for multi-functional and new advanced applications) took place. The collaborative research project is coordinated by the Spanish technology institute ITENE and 27 partners from 12 European countries are working together in an interdisciplinary way. The project duration is 4 years (January 2021 to December 2024). Equipping biomaterials with desired functional properties and making them more interesting for industrial use is the content of the EU project. The consortium brings together European experts from research and industry who are working together to develop these materials and also to establish an Open Innovation Test Bed (OITB) environment. To this end, 14 existing pilot plants across Europe are being adapted and optimized for the processing of biobased nanomaterials. STFI is joining them with a meltblown nonwoven plant and a fiber nonwoven plant. The aim is to produce innovative nano-products from sustainably sourced raw materials for packaging and textiles as well as for the agricultural, cosmetics, pharmaceutical or food sectors. **www.stfi.de**

#Cotton #Fiber

WORLD COTTON RESEARCH CONFERENCE HAS BEEN DELAYED

The seventh World Cotton Research Conference (WCRC-7) was cancelled last year due to theCOVID-19 pandemic. Now, the WCRC has been rescheduled for 2022 in the same place and at the same time as the 2021 conference was supposed to be held: 3-7 October in Sharm el-Sheikh, Egypt.

www.icac.org

Apparel #Smart textiles

NIRI EXPANDED FACILITIES

Nonwoven Innovation & Research Institute (NIRI) has recently completed an upgrade to their existing meltblown system, installing new equipment and expanding their extensive facilities to further help clients across a whole host of applications. The state-of-the-art meltblown system will be of particular relevance for R&D; pilot projects; sampling and prototyping; proof of concept testing, as well as designing cost-effective products.

nonwovens-innovation.com

NIRI's new pilot-scale meltblown machine © NIRI

#New materials

HEIMTEXTIL LAUNCHES DIGITAL MATERIALS LIBRARY

Progressive material innovations presented digitally: Heimtextil is now showing a selection of innovative materials from all over the world in the digital 'Future Materials Library'. At the last physical Heimtextil in 2020, visitors had the opportunity to explore the 'Future Materials Library' with all their senses. Now, in the online version of the library, visitors can discover the potential of previously unknown textiles at any time. The 'Future Materials Library' invites visitors to open their minds to experimental approaches and revolutionary ideas. Imaginative designers and environmentally-aware manufacturers: the Future Materials Library 2021 offers materials pioneers a platform and presents a first-class mix of economically proven and revolutionary developments. FranklinTill has organised the materials in four themes: REGENERATIVE CROPS, REMADE FIBRES, HARVESTING WASTE STREAMS and SUSTAINABLE COLOUR.

heimtextil.messefrankfurt.com

© Messe Frankfurt

ITA Institute Director Prof. Dr Thomas Gries and Dr Mohit Raina in front of a textile-reinforced concrete facade

#Fiber #Composites

ITA SPIN-OFF RAINA INDUSTRIES WINS PRESTIGIOUS FOUNDER'S AWARD NATIONAL AWARD 2021 IN INDIA

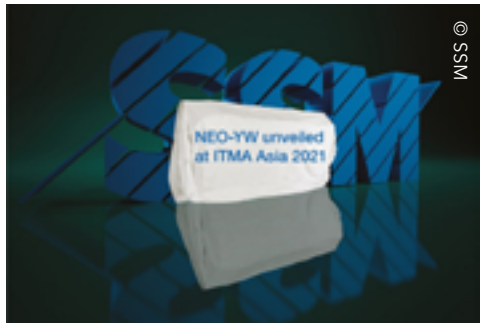
Raina Industries Private Limited, Mumbai, has won the prestigious Founder's Award in the category 1 „National Award for the Successful Commercialisation of an Indigenous Technology" on 11 May 2021. The company produces and sells textile-reinforced precast concrete elements for the construction sector. These are eminently resource-saving, because they reduce the concrete consumption, the production energy and the end-of-life-waste by 80 percent. The environmentally friendly material textile-reinforced concrete is suitable for both new construction and renovations. The textile reinforcement structures must be specially designed to absorb the tensile stresses that arise in the component.

Applications of textile-reinforced concrete include façade elements, design structures for smart cities as well as marine and coastal infrastructure.

Every year, on the occasion of National Technology Day on 11 May, the Technology Development Board (TVB), a statutory body of the Department of Science & Technology, short DST, awards a series of prizes to industrial companies that successfully commercialise an indigenous technology in India. They each receive prize money of around 28,000 euros and a trophy presented by the President of India. Dr.-Ing. Mohit Raina, the Managing Director of Raina Industries, has been managing the ITA spin-off Raina Industries Private Limited in Mumbai, India, since 2014 after he completed his doctorate at the Institut für Textiltechnik of RWTH Aachen University, short ITA, in Aachen. During his time at ITA, Dr Raina already became enthusiastic about the building material textile-reinforced concrete, short TRC, and is now working successfully to make the advantages of the innovative material public in his home country India.

www.raina-industries.com.

Facade structure made of TRC © Raina Industries Pvt. Ltd



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