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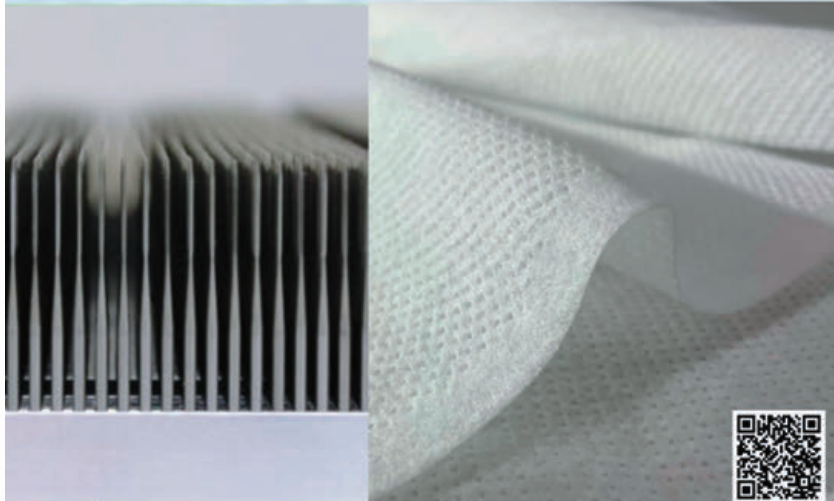
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EDITORIAL

ANTEXASIA
THAILAND 2024

Thailand Leads the Way in Sustainable Nonwoven Innovation

As global demand for nonwoven fabrics continues to rise, Thailand is cementing its position as a leader in Southeast Asia's nonwoven industry. With an impressive 48% market share in the region, Thailand's role in the sector is set to take center stage at the inaugural Asia Nonwovens Technology Expo (ANTEX Asia 2024) from November 13-15, 2024, in Bangkok.

Thailand's nonwoven fabric market is flourishing, driven by innovation and a shift toward sustainable technologies. The country's production capacity of 162,000 tonnes per year makes it a regional powerhouse. ANTEX Asia 2024 will showcase over 100 exhibitors from 10 countries, presenting cutting-edge materials, technologies, and solutions. Industry experts and leaders like Dr. Chanchai Sirikasemlert of the Thailand Textile Institute emphasize the importance of sustainable production and the country's readiness to become a major export hub.

Alongside the Expo, the ANTEX Asia Nonwovens Conference 2024 will explore emerging trends, including healthcare and circular economy applications.

With key players like Teijin and Narula participating, ANTEX Asia 2024 offers a premier networking platform for industry stakeholders. As the nonwoven industry expands into sectors like automotive and healthcare, Thailand's leadership in sustainable innovation continues to gain global recognition.

ETV is looking to the future with Monforts



Pictured during her visit to ETV is Germany's Economics and Climate Protection Minister Mona Neubaur (third left), with members of the ETV and Monforts management teams, including Dirk Tunney (far left) and Gunnar Meyer (far right). Image courtesy ETV.

At a time when European commission finishers are finding it increasingly difficult to operate due to extremely high overheads, ETV, based in Gescher, Germany, is going from strength to strength – and alert to new opportunities going forward.

Founded in 1950, the privately held company is currently installing a third Monforts Montex 8500 finishing range with a working width of 3.2 metres, fully equipped with a Montex®Coat coating unit, an EcoBooster heat recovery unit, crash calender and computer-controlled winders and unwinders.

Longevity

For ETV managing director Dirk Tunney, the company's longevity is in part due to a timely move away from traditional textile applications such as clothing and home textiles 25 years ago, to focus on adding value and functionality to technical textiles, films and membranes.

“The large discounters now dominate the procurement markets, particularly in the home textiles sector,” he says. “Stationary retail hardly exists anymore and the market is characterised by the price structure of cheap imports from non-European countries.”

Since repositioning itself in 1999, ETV has grown into a powerhouse in its selected fields, dyeing and finishing around 1,500 tons of yarn and 1.6 million linear metres of fabric each year. In addition, the company annually prints around 4 million linear metres of fabrics, foils and membranes, along with coating up to 40 million linear metres of fabrics and nonwovens.

ETV was also early in addressing the need for sustainable processes with a thermal exhaust air aftertreatment unit, a printing paste recycling station and the use of 100% recycled industrial water as a result of its own in-house water and sewage treatment plant.

Energy costs

Escalating energy costs in Germany, however, have understandably been a cause for concern for the company.

“Up to and including 2020, our energy expenditure was less than 10% of our total overheads which ensured we were competitive on the market, but at their peak in 2022, gas prices in Germany had increased tenfold and electricity prices increased fivefold,” Tunney says. “Our industry today has to live with electricity prices that are approximately twice as

TECHNOLOGY

high and gas prices that are approximately three-and-a-half times higher than before 2021. In the future, we are assuming a level of 12-13% so we are talking about additional expenditure of up to €400,000 depending on our future product production programme, which as a contract processor we have only a limited influence on.

“Energy is certainly no longer cheap in Germany and we have moved from being an exporter of electricity to an importer and will no longer be able to supply ourselves in the future if we don’t change anything. It’s worrying that without our European neighbours our lights would sometimes go out.”

Industry standard

Monforts Montex stenters are now industry standard for the fabric finishing industry, providing many advantages in terms of production throughput and especially in energy efficiency and savings.

The Monforts Eco Booster, integrated into the chamber design of ETV’s Montex stenter, is a single heat recovery system with automatic cleaning that can further save up to 35% in energy costs. The Eco Booster consumes only minimal amounts of water during the cleaning cycle and the entire process is controlled and monitored automatically.

The Montex® Coat serves a very diverse number of markets and enables full coatings, pigment dyeing or minimal application surface and low penetration treatments to be carried out. Knife coating, roller coating or screen printing can also all be accommodated with this system. In addition, the Montex® Coat provides the ultimate in flexibility and the ability to switch quickly from one fabric run to the next, without compromising on the economical use of energy or raw materials.

“We certainly anticipate energy savings in addition to increased productivity and process reliability with this latest line and in addition, we will be working with Monforts on alternative energy options,” Tunney says.

Green hydrogen

Monforts is currently leading a consortium of industrial partners and universities in the three-year WasserSTOFF project, launched in November 2022, to explore all aspects of this fast-rising new industrial energy option.

The target of the government-funded project is to establish to what extent hydrogen can be used in the future as an alternative heating source for textile finishing processes. This will first involve tests on

laboratory equipment together with associated partners and the results will then be transferred to a stenter frame at the Monforts Advanced Technology Center (ATC) in Germany.

“Green hydrogen’s potential as a clean fuel source is tremendous, but there is much we need to explore when considering its use in the textile finishing processes carried out globally on our stenter dryers and other machines,” says Monforts Managing Director Gunnar Meyer. “Everybody knows that textile finishing is a high energy consuming process and to make the processes more efficient, we already offer several solutions, but as a technology leader we are also rising to the challenge of exploring alternative heating options to be ready for the future.”

ETV’s relative proximity to the Monforts headquarters in Mönchengladbach makes it an ideal site for the WasserSTOFF project.

“The project for a hydrogen-powered coating stenter frame is very suitable for our region,” says Tunney. “Germany’s textile industry has a long tradition and with more than 1,400 companies, is not unimportant to the country, but without support from politics, both ideologically and financially, something like this cannot be done.

“If we want decarbonization, paths must be identified and funds made available. We absolutely have to remain open to technology in order to position ourselves in the best possible way. Otherwise it will result in deindustrialization, which none of us want. We look forward to a closer collaboration with Monforts and its project partners going forward.”

On September 6th this year, Germany’s Economics and Climate Protection Minister Mona Neubaur visited ETV to get a first-hand view of how the textile industry is rapidly adapting to a changing landscape.

“The future of German industry will be decided in North Rhine-Westphalia,” she said. “This requires courageous companies to move forward. Innovative ideas strengthen our competitiveness and make a significant contribution to becoming the first climate-neutral industrial region in Europe. Green hydrogen will play an important role in this and I am very pleased that through companies like ETV and Monforts and their partners, we are now moving quickly from preparation to action.”

AI in the Textile Industry: Opportunities, Challenges, and the Future of Work

Introduction

Artificial Intelligence (AI) is rapidly transforming industries worldwide, and the textile industry is no exception. In his presentation at the **ITMF & IAF Joint Conference 2024**, **Prof. Thomas Gries** from the **Institut für Textiltechnik (ITA) at RWTH Aachen University** explored the impact of AI on the global textile industry. This report summarizes his insights on how AI can revolutionize the textile sector, address the skills shortage, and shape the future of work.

The Current Skills Shortage: A Global Challenge

One of the most pressing issues across industries is the growing **skills shortage**, which is projected to worsen due to demographic changes and evolving technological demands. The textile industry is particularly vulnerable to this shortage as it relies heavily on both manual labor and technical expertise.

Key factors contributing to the skills gap include:

- **Aging workforce:** As experienced employees retire, they take valuable knowledge with them, creating a gap in expertise.
- **Lack of new talent:** Many industries, including textiles, struggle to attract younger workers, leading to gaps in key areas such as AI and digitalization.

AI as a Solution to the Skills Gap

AI technology offers a solution to mitigate the effects of the skills shortage by automating repetitive tasks and enhancing productivity. Companies that fail to adopt AI technologies are at risk of becoming non-competitive by 2030, as automation becomes increasingly necessary for survival.

AI can:

1. **Automate up to 70% of repetitive tasks** in production, reducing dependency on human labor.
2. **Enhance decision-making** through data analysis, enabling companies to respond faster to market demands.
3. **Support knowledge transfer** by capturing and storing the expertise of retiring workers, ensuring that valuable information is not lost.

AI in Textile Manufacturing: Digitalization and Flexibility

The textile industry has been slow to embrace digitalization, but the integration of AI offers a pathway to improved **flexibility** and **efficiency** in production. By leveraging AI, manufacturers can

speed up **time to market**, reduce waste, and improve product quality.

Key applications of AI in textiles include:

- **Predictive maintenance:** AI systems can monitor machinery performance, predict breakdowns, and optimize maintenance schedules, reducing downtime.
- **Supply chain management:** AI helps optimize inventory, track shipments, and forecast demand, leading to more efficient supply chains.
- **Customization:** AI enables the production of customized textiles on demand, meeting the growing consumer demand for personalized products.

Workforce Transformation: The Role of AI in Training and Development

The integration of AI in the textile industry also has implications for **workforce transformation**. As repetitive tasks become automated, the role of workers will shift toward more strategic and creative tasks. However, this transformation requires investment in **education and training** to equip workers with the necessary AI-related skills.

At **RWTH Aachen University**, the **National Competence Center Digital – Smart Circularity** is working on innovative AI-based training programs. These programs provide workers with real-time simulations of textile production processes, allowing them to develop new skills in a safe, controlled environment.

Conclusion: A Call to Embrace AI for a Sustainable Future

The textile industry is at a crossroads, facing both significant challenges and tremendous opportunities. **AI** offers a solution to many of the industry's current problems, from the skills shortage to the need for increased efficiency and sustainability. However, the successful adoption of AI requires **collaboration** across the supply chain, investment in **education**, and a commitment to **digital transformation**.

Prof. Thomas Gries concluded his presentation by urging industry leaders to embrace AI and invest in the future of their workforce. By doing so, the textile industry can not only survive but thrive in an increasingly competitive and automated world.

RECYCLING

RE&UP: Revolutionizing Textile-to-Textile Recycling for a Sustainable Future



Authors:

- **Andreas Dorner** (General Manager, RE&UP)
- **Ozgur Atsan** (Chief Commercial Officer, RE&UP)

Introduction

The textile industry faces an unprecedented waste crisis, with over 100 million tons of textile waste produced in 2023, most of which is destined for landfills or incineration. Recognizing the need for immediate action, **RE&UP** has introduced a groundbreaking solution to address the textile waste problem by offering high-quality, traceable, recycled raw materials such as cotton fibers and polyester chips. This report outlines RE&UP's technology, processes, and its impact on closing the material gap in the textile recycling sector.

The Textile Waste Challenge

According to the Ellen MacArthur Foundation and the European Environment Agency, over 31 million tons of recycled fiber will be missing by 2030. With increasing regulatory pressures such as Extended

Producer Responsibility (EPR) and eco-design directives, brands are seeking sustainable solutions. **RE&UP** addresses this challenge by providing a fully scalable, circular recycling process that turns textile waste into virgin-quality materials without disrupting existing supply chains.

RE&UP's Circular Recycling Technology

RE&UP is a pioneer in textile-to-textile recycling, offering a one-stop, closed-loop solution that processes various types of textile waste, including pre-consumer and post-consumer waste. Its unique technology separates blended fabrics, enabling the recycling of cotton-heavy, polyester-heavy, and polycotton blends into traceable, ready-to-use fibers and chips.

Key Features:

- **Recycled Cotton Fibers:** With a mean fiber length of 20 mm and dust content of less than 2%, these fibers are suitable for Open-End (OE), Ring spinning, and non-woven manufacturing.
- **Recycled Polyester Chips:** Weighing 2.3-

RECYCLING

2.5g/100 pieces, these chips have a viscosity of 0.66 dl/g and are ideal for continuous filament yarn spinning and staple fiber spinning.

- **Sustainability:** The RE&UP process reduces water use by 90%, climate impact by 28%, and land use by 75% compared to virgin materials.

Fully Circular Recycling System

RE&UP's innovative approach not only provides recycled materials but also ensures minimal waste. Its thermo-mechanical recycling process separates fibers and recycles polyester and cotton, leaving almost no residual waste. For cotton recycling, RE&UP even produces by-products like cellulosic powder, further contributing to zero-waste operations.

Process Overview:

1. **Input:** Textile waste is collected and sorted.
2. **Separation:** Waste is sorted into categories like 100% cotton, 100% polyester, and polycotton blends.
3. **Recycling:** Mechanical and thermo-mechanical processes convert sorted waste into high-quality recycled fibers and chips.
4. **Output:** Recycled cotton fibers and polyester chips are produced, ready for use in conventional spinning and fabric production processes.

Environmental and Social Impact

RE&UP's technology is a game-changer in terms of reducing the textile industry's environmental footprint. The company's closed-loop recycling system significantly reduces resource consumption, saving over 1 billion cubic meters of water annually by 2028 and preventing the release of half a million tons of CO2 emissions.

Quantified Benefits:

- 89% less land use.
- 84% less freshwater eutrophication.
- 57% less fossil resource depletion for polyester chips.
- 75% less land use.
- 80% less water use for cotton fibers.

Certifications and Traceability

To ensure compliance with global sustainability standards, RE&UP's products are certified by the Global Recycle Standard (GRS), Recycled Claim Standard (RCS), and other leading certifications such as Bluesign and FDA/EFSA approvals. All products offer 100% traceability, supported by digital and physical systems that enable brands to make credible green claims and meet regulatory requirements.

Market Potential and Strategic Partnerships

RE&UP is spearheading the textile industry's shift toward circularity by offering competitive prices for recycled fibers and chips. The company is actively expanding its operations and aims to handle more than 1 million tons of textile waste annually by 2030. RE&UP's partnerships with global fashion brands, supply chain players, and sustainability organizations, such as Textile Exchange and Global Fashion Agenda, position it as a leader in the recycled textile market.

Conclusion

As the textile industry moves towards sustainability, RE&UP provides a scalable, high-impact solution to one of its biggest challenges—waste. By converting textile waste into ready-to-use, high-quality recycled fibers and polyester chips, RE&UP is closing the loop and helping brands meet both environmental and economic goals. The company's technology and vision for zero waste are paving the way for a future where the textile industry operates in a truly circular economy.

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This report illustrates how RE&UP is transforming the textile industry by making textile-to-textile recycling a scalable, cost-effective, and sustainable solution for global brands.

Innovative Hemp-Based Cellulosic Filaments: Sustainability and High-Performance Textile Solutions



Authors:

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- **Frank Hermanutz** (German Institutes of Textile and Fiber Research, DITF)
- **Charles Reboux** (RBX Créations, Co-founder/President & CTO)

Introduction

As sustainability takes center stage in the global textile industry, innovation is leading the charge toward more eco-friendly materials. A key development in this domain is the partnership between the **German Institutes of Textile and Fiber Research (DITF)** and **RBX Créations**, which has pioneered the production of technical cellulose filaments from hemp using the **HighPerCell®** technology. This report delves into the advancements, processes, and market potential of these hemp-based filaments, with a focus on their application in sustainable textile production.

HighPerCell® Technology: A Sustainable Filament Production Method

Developed by **DITF**, **HighPerCell®** is a cutting-edge spinning technology that enables the eco-friendly production of filaments from renewable biopolymers like hemp cellulose. The process uses ionic liquids (IL), which are non-toxic, stable, and recyclable, leading to minimal environmental impact. **HighPerCell®** distinguishes itself by its low-temperature, closed-loop process, ensuring resource efficiency and versatility in feedstocks.

Key Features:

- Direct dissolution of biopolymers, using non-inflammable, non-toxic solvents.
- Low-temperature process requiring no stabilizers, ensuring minimal environmental impact.
- High adaptability to various raw materials, including hemp, for both textile and technical applications.

Hemp as a Renewable Resource

Hemp offers a highly sustainable feedstock for textile production, requiring no pesticides or irrigation while significantly contributing to carbon sequestration, absorbing approximately 15 tons of CO₂ per hectare. **RBX Créations** partners with large agricultural cooperatives and small farming groups to source hemp, ensuring 100% traceability and sustainability. France is the leading European producer of hemp, with over 22,000 hectares under cultivation, making it an ideal resource for sustainable cellulose production.

The Iroony® Project: Advancing Hemp Filaments

The collaboration between **DITF** and **RBX Créations** led to the creation of the **Iroony® Project**, which produces high-purity cellulose pulp from hemp using a patented process. This pulp is then transformed into cellulose filaments using the **HighPerCell®** technology. The resulting technical filaments exhibit properties suitable for a wide range of applications, from high-end fashion to industrial uses.

Technical Properties of Hemp-Based Filaments:

- **Hemp Pulp:** High α -cellulose content (>91%) with <0.3% ash content.
- **Filament Properties:** Tenacity between 25-45 cN/tex, titer of 2.0-3.3 dtex, with excellent strength and elongation properties.
- **Sustainable Processing:** 100% dissolvable in IL, ensuring minimal environmental impact during production.

Environmental Impact and Market Viability

The **Iroony®** hemp filaments offer a significantly more sustainable alternative to conventional fibers like cotton, viscose, and oil-based fibers. Initial life cycle assessments (LCA) indicate a

much lower environmental footprint, while the filaments retain high quality and durability. The closed-loop processing system further enhances the sustainability of these filaments, aligning with the growing market demand for eco-friendly textiles.

Applications of Hemp-Based Filaments

The versatility of **Iroony®** hemp filaments makes them suitable for multiple applications across the textile and technical sectors:

- **Fashion and Apparel:** High-end clothing, casual wear, underwear, and footwear.
- **Home Textiles:** Bedding, curtains, and upholstery.
- **Technical Textiles:** Filtration, wipes, and industrial non-wovens.

Conclusion

The partnership between **DITF** and **RBX Créations** in the development of hemp-based cellulosic filaments marks a significant milestone in sustainable textile production. The **HighPerCell®** technology, combined with the environmentally responsible cultivation of hemp, offers a scalable solution for producing high-performance, eco-friendly materials. The success of the **Iroony® Project** underscores the potential of hemp filaments in meeting the textile industry's dual need for sustainability and quality.

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This report showcases the promise of hemp-based cellulose as a cornerstone of the future of textiles, driving the industry towards more responsible, sustainable manufacturing practices.

Low-Carbon and Sustainable Innovation in the PET Fiber Industry



Author:

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cycle assessments reveal that fiber production alone accounts for 12% of the textile industry's carbon emissions, largely due to synthetic fiber production.

Introduction

As environmental conservation becomes a critical concern for industries worldwide, the textile and apparel industry, which contributes approximately 10% of global industrial carbon emissions, faces an urgent need for transformation. **Jiangsu Guowang High-Technique Fiber Co. Ltd.** and the **Beijing Institute of Fashion Technology** have pioneered low-carbon and sustainable innovations within the **PET fiber** sector. This report highlights their achievements in developing green technologies, focusing on carbon recycling and sustainable production processes.

China's Role in the Fiber Industry

China dominates global chemical fiber production, with an impressive 70% share of the market. In 2023 alone, China produced 68.72 million tons of chemical fibers, 57.02 million tons of which were **PET fibers**. This production accounts for 85% of global PET fiber output, positioning China as a pivotal player in the global fiber industry. However, this large-scale production also highlights China's responsibility in transitioning toward a low-carbon, sustainable fiber industry.

The Environmental Challenge

The textile industry is one of the largest contributors to global carbon emissions, trailing only behind the oil industry. With the increasing global population, the industry's carbon output is expected to rise, potentially surpassing other sectors in its environmental impact. Current life

The Shift Toward a Circular Economy

In response to the Chinese government's "Dual Carbon" vision—aiming to peak carbon emissions by 2030 and achieve carbon neutrality by 2060—the fiber and textile industries are embracing the **circular economy**. This approach promotes resource efficiency, environmental protection, and economic growth through

technological innovation. The goal is to establish a modern fiber industry that is **high-end, intelligent, and green.**

The Carbon Recycling Project

At the heart of **Jiangsu Guowang High-Technique Fiber Co. Ltd.**'s efforts is a pioneering carbon recycling project, which captures and converts **CO2 emissions into PET fibers.** Collaborating with the **Beijing Institute of Fashion Technology,** the project focuses on the sustainable transformation of industrial waste into valuable resources.

Key Technological Innovations:

1. **CO2 Capture and Purification:** Industrial emissions are captured and purified to food-grade levels for further processing.
2. **Chemical Conversion to Ethylene Glycol (EG):** The purified CO2 is converted into high-purity ethylene glycol (EG), a key raw material in PET fiber production.
3. **Melt Direct Spinning:** A novel production technique is employed, where EG is polymerized with purified terephthalic acid (PTA) and directly spun into PET fibers, reducing energy consumption and environmental impact compared to traditional pellet spinning.

Quantified Benefits of Carbon Recycling

For every 1,000 kilograms of polyester fiber produced, the process requires 335 kilograms of high-purity ethylene glycol and consumes approximately 840 kilograms of CO2. Moreover, the melt direct spinning technology employed in this process reduces energy consumption by 37.4%, resulting in a 100-kilogram reduction in CO2 emissions per ton of fiber produced. This system not only creates a pathway for sustainable fiber production but also significantly cuts down the carbon footprint of the textile industry.

Future Expansion and Social Impact

Currently, the project converts **120,000 tons of CO2 annually** into **48,000 tons of ethylene glycol.** Future plans include expanding this capacity to convert **300,000 tons of CO2** into **120,000 tons of ethylene glycol.** The project not only demonstrates significant energy savings and emission reductions but also sets a leading example for sustainable development within the textile industry.

The success of this initiative serves as a model for establishing sustainable supply chains and promoting low-carbon systems in textile production. By leveraging technological innovations, **Jiangsu Guowang High-Technique Fiber Co. Ltd.** and **BIFT** are contributing to the development of industry standards and accelerating the transformation toward a greener future.

Conclusion: The New Textile Road

The future of the textile industry lies in **low-carbon innovation** and **sustainability.** These advancements represent a new path for the industry, one that is driven by environmental responsibility and technological progress. The collaboration between **Jiangsu Guowang High-Technique Fiber Co. Ltd.** and **Beijing Institute of Fashion Technology** sets a powerful example for the entire sector. Together, they aim to reduce carbon emissions, recycle industrial CO2, and build a better, more sustainable world.

Contact Information:

- **Rui Wang** (Jiangsu Guowang High-Technique Fiber Co. Ltd.)
- **Beijing Institute of Fashion Technology, China**

This report showcases the significant advancements in low-carbon PET fiber production, highlighting the role of innovative technologies in driving sustainability in the global textile industry.

Samsara Eco: Pioneering Infinite Plastic Recycling for a Sustainable Future



Author:

- **Matthew Spence** (Samsara Eco)

Introduction

In a world grappling with the environmental challenges posed by plastic waste, **Samsara Eco** has emerged as a groundbreaking enviro-tech company with a mission to create **infinite plastic recycling** and produce green chemicals from plastic waste. Samsara Eco envisions a future where the exploitation of Earth's resources to produce new plastics becomes unnecessary. This report provides an overview of Samsara Eco's innovative technology, the path to commercializing plastic recycling, and the company's ambitious goals for 2030.

Samsara Eco's Vision: Infinite Plastic Recycling

Plastic waste is one of the most pressing environmental issues today, with an estimated 9

billion tons of plastic waste already produced. The majority of this waste is either incinerated or ends up in landfills. **Samsara Eco** aims to reverse this trend by developing a revolutionary plastic recycling technology that enables infinite reuse of plastic materials without degradation in quality.

Samsara's Recycling Technology

At the core of Samsara Eco's operations is its **enzymatic hydrolysis technology**, which breaks down plastic waste into monomers that can be repurposed to create virgin-like products. The entire process involves four key steps:

1. **Plastic Waste Collection:** Gathering various forms of plastic waste, including polyester and nylon products.
2. **Enzymatic Hydrolysis:** Using specialized enzymes to break down the polymer chains of plastic waste into monomers.

SUSTAINABILITY

3. **Monomer Purification and Dye Removal:** Purifying the resulting monomers to remove impurities and dyes, ensuring a clean output.
4. **Repolymerization:** Repurposing the purified monomers to create virgin-quality polymers for new products.

The final output includes **nylon 6,6** and **polyester**, which are reused in producing threads and garments in collaboration with industry partners.

Path to Commercialization

Samsara Eco's technology has progressed from lab-scale testing to the development of commercial facilities. The timeline for commercialization is as follows:

- **2021:** Initial lab-scale pilot lines for PET and Nylon 6,6 were developed.
- **2022-2023:** Samsara launched its first batch lines with a capacity of <2kt per annum.
- **2024-2025:** The company plans to scale its operations to a commercial plant with an annual capacity of 20kt.
- **2030:** Samsara's goal is to recycle 1.5 million tons of plastic per year, saving approximately 2.5 million tons of CO₂ equivalent emissions annually.

Industry Impact and Partnerships

Samsara Eco is proud to be backed by **leading industry players and investors** who share its commitment to sustainable innovation. The company collaborates with partners across the textile and manufacturing industries to create closed-loop systems where plastic waste is continuously recycled into new, high-quality products.

2030 Ambition

By 2030, Samsara Eco aims to:

- Recycle 1.5 million tons of plastic waste annually.
- Prevent 2.5 million tons of CO₂ equivalent emissions from entering the atmosphere.
- Further develop its **green chemical production** capabilities, providing alternatives to fossil fuel-derived chemicals.

Certified B Corporation

Samsara Eco is committed to environmental and social responsibility, and it is proud to be a **Certified B Corporation**. This certification underscores the company's dedication to transparency, sustainability, and creating positive environmental impacts through its innovative recycling processes.

Conclusion

Samsara Eco is leading the charge in infinite plastic recycling, utilizing cutting-edge technology to tackle one of the world's most significant environmental challenges. By enabling the production of virgin-quality plastics from waste, Samsara is poised to transform the plastic industry, contributing to a future where plastic waste is a thing of the past. With ambitious goals for 2030 and beyond, Samsara Eco is set to play a pivotal role in achieving a truly circular economy for plastics.

Contact Information:

- **Matthew Spence** (Samsara Eco)
- **Website:** samsaraeco.com

This report illustrates the potential of Samsara Eco's innovative recycling technology to revolutionize plastic recycling and contribute to a more sustainable future.

TECHNOLOGY

Syre: Revolutionizing Textile-to-Textile Recycling for a Greener Future



Author:

- **Dennis Nobelius** (CEO, Syre)

Introduction

As the world grapples with the growing need for sustainable solutions, **Syre**, under the leadership of **Dennis Nobelius**, emerges as a pioneer in textile-to-textile recycling at hyperscale. With a mission to decarbonize and minimize waste in the textile industry, Syre is set to reshape the sector by creating regional circular loops and green value chains that offer consistent quality materials comparable to virgin fibers.

Syre's Vision and Mission

Syre is not just a recycling company; it is a **textile impact company** with a bold vision to decarbonize the textile industry and reduce waste

through innovative recycling technologies. By focusing on circular polyester recycling and leveraging cutting-edge research and development, Syre aims to deliver superior sustainability performance on a global scale.

Backed by Industry Leaders and Innovators

Syre's journey is supported by industry leaders and disruptors across various verticals. These strategic partnerships enhance its capabilities in developing sustainable technologies and scaling them globally. With a clear ambition to lead in cost, quality, and sustainability, Syre's continuous recycling process is protected by trade secrets and intellectual property (IP), ensuring competitive advantages.

TECHNOLOGY

Technology and Innovation

At the core of Syre's operations is a **continuous textile-to-textile recycling process**. This groundbreaking technology transforms textile waste into high-quality materials that rival virgin fibers in performance. Syre's unique IP and trade secrets underpin this innovation, positioning the company as a future leader in cost-effective and environmentally sustainable textile production.

Key Features:

- Continuous recycling process designed for scalability.
- Technology that ensures consistent quality and performance, comparable to virgin materials.
- Innovations that support regional circular loops, reducing the need for long-distance material transportation.

Global Rollout and Expansion Plans

Syre is actively expanding its operations, with Vietnam shortlisted for the first gigaplant rollout. Following this, the European Union (EU) is slated for the next phase of expansion. Syre's global growth strategy is focused on establishing regional circular loops, which will contribute to reducing the carbon footprint associated with textile recycling and supply chains.

Impact at Scale

Syre's vision extends beyond small-scale sustainability efforts. The company aims to create **impact at scale**, reshaping the global textile industry through large-scale recycling plants that process waste efficiently and at low cost. By establishing green value chains and regional recycling hubs, Syre is helping to create a circular economy within the textile sector.

Syre's Pillars of Impact:

1. **Textile-to-Textile Recycling:** Directly transforming textile waste into usable materials.

2. **Regional Circular Loops:** Reducing transportation emissions by establishing localized recycling facilities.

3. **Green Value Chains:** Implementing sustainable practices throughout the production process.

4. **High-Quality Recycled Materials:** Delivering materials on par with virgin fibers to ensure no compromise on quality.

A Team of Scalers

Syre prides itself on being led by a team of **scalers**—individuals with the expertise and drive to bring large-scale impact through sustainability. This team is dedicated to propelling the textile industry into a new era of recycling and responsible production, with the aim of addressing both environmental and economic challenges at scale.

Conclusion

Under the leadership of **Dennis Nobelius**, Syre is positioned to revolutionize the textile industry by integrating large-scale recycling processes with sustainable production. By focusing on creating regional circular loops, green value chains, and high-quality recycled materials, Syre is addressing the industry's most pressing environmental concerns. As the global expansion continues, Syre is set to lead the charge in creating a circular economy within the textile sector.

Contact Information:

- **Dennis Nobelius** (CEO, Syre)
- **Website:** syre.com

This report highlights Syre's commitment to transforming the textile industry through scalable, innovative, and sustainable recycling solutions that are set to create a lasting impact on a global scale.

TECHNOLOGY

Driving Innovation and Growth: ITTA's 14th AGM Highlights the Future of Technical Textiles in India



The **Indian Technical Textile Association (ITTA)** successfully held its 14th Annual General Meeting (AGM) on **13th September 2024** at the Orchid Hotel, Mumbai. The meeting was chaired by **Shri Avinash Misar**, with the participation of ITTA members, special invitees, and media representatives. **Dr. Anup Rakshit**, Executive Director of ITTA, welcomed the distinguished guests and media representatives to the event. The business session was conducted by **Shri Mahesh Kudav**, Vice Chairman of ITTA.

The AGM was graced by the presence of **Shri Rajeev Saxena**, Joint Secretary (Textiles), Ministry of Textiles, Government of India, as the

Chief Guest, and **Shri Virendra Singh (I.A.S.)**, Secretary (Textiles), Government of Maharashtra, as the Guest of Honour.

Key Highlights from Shri Rajeev Saxena's Address

Shri Saxena emphasized the pivotal role ITTA has played in advancing the technical textile sector and fostering innovation, sustainability, and growth. He highlighted ITTA's involvement in key government committees such as the Mission Steering Group and the Empowered Programme Committee under the **National Technical Textiles Mission (NTTM)**.



Shri Saxena mentioned that **two-thirds of the investments under the Production Linked Incentive (PLI) scheme** are dedicated to technical textiles. Of the **Rs. 60 crores allocated, Rs. 40 crores** are earmarked specifically for this sector. He stressed the importance of innovation in securing the future of the industry and encouraged companies to engage in **market-focused R&D initiatives**, with the government covering 90% of the costs and allowing companies to retain Intellectual Property Rights (IPR) for 3 to 4 years. He also announced the upcoming introduction of **Quality Control Orders (QCOs)** for 11 key technical textile products, aimed at preventing the dumping of cheap foreign products and strengthening domestic supply chains.

Shri Saxena urged conventional textile manufacturers to diversify into technical textiles,

leveraging their spare capacities for enhanced productivity and profitability. He also suggested that ITTA conduct **training and skill development programs** in Tier-2 cities to further the industry's technical knowledge.

Maharashtra's Textile Policy - Key Points from Shri Virendra Singh's Presentation

Shri Virendra Singh shared insights on Maharashtra's **State Textile Policy**, which prioritizes the development of **six technical textile parks**—one in each revenue division of the state. The policy includes substantial support in the form of:

- Infrastructure support
- Capital subsidies
- Support for solar power plants
- Zero Liquid Discharge initiatives
- Effluent Treatment Plants



An **Expression of Interest (EoI)** for these parks will soon be released, and the **Maharashtra Technical Textile Mission** will be launched within two months. A **Memorandum of**

Understanding (MoU) between the Government of Maharashtra and ITTA is set to be signed to ensure the effective implementation of state policies.



Shri Avinash Misar, Chairman of ITTA, extended his gratitude to the Ministry of Textiles for its continued support of the technical textile sector. He also urged the government to address the availability of specialty raw materials, such as fibers, yarns, chemicals, and polymers, that

are crucial for manufacturing high-end technical textiles but are not produced in India. He highlighted that the QCOs should not be imposed on upstream sectors reliant on imported raw materials, as this could hinder the growth of the industry.



Dr. Anup Rakshit, Executive Director of ITTA, introduced two new membership categories—**Associate** and **Student Membership**—to cater to individual entrepreneurs and startups entering the technical textile industry. Additionally, ITTA has taken a focused initiative to collaborate with **Academic Institutions** to organize **Education and Training Programs** on technical textiles. This initiative will support the **NTTM's** goal of creating a skilled workforce for academic institutions and the industry.

ITTA's **Entrepreneurial Development Programs (EDPs)** have successfully trained over 200 candidates, contributing to the growth of the technical textile sector.

As the industry evolves with cutting-edge innovations, sustainability practices, and emerging technologies, Technical Textiles Innovation Magazine, Publish by Times International is set to provide the latest insights, trends, and breakthroughs, serving as an indispensable resource for global stakeholders.



A significant highlight of the AGM was the presentation of the “**Lifetime Achievement Award**” to **Shri Pramod Khosla**, Chairman of Khosla Profil Pvt. Ltd., for his exceptional contributions to the technical textile industry. Shri Khosla was also inducted into the 'ITTA Hall of Fame', alongside **Shri Yogesh Kusumgar** of Kusumgar Corporates and **Shri Mohan Kavrie** of Supreme Nonwovens.

Innovation Awards

The **Innovation Awards** were presented to five companies for their outstanding contributions to the technical textile industry:

1. **Garware Technical Fibres Ltd.** – *Shri Neeraj Shrivastava & Shri Apurv Gadekar* for **Advancing Sustainability**: Development of ropes from recycled materials – Renew Ropes.
2. **SRFLtd.** – *Ms. Angeline Divya*, Associate Vice President, for the **Development and Commercialization of Food-Grade Tank Liners** made from coated fabric for water storage in rural areas.
3. **High Performance Textiles Pvt. Ltd.** – *Dr. Nandan Kumar*, Managing Director,

for **Innovative Inherent Flame-Retardant (IFR) Fabric** for arc-flash protection.

4. **Fibriltex Pvt. Ltd.** – *Shri Ishaan Sharma*, Director of Business Development, for the **Flushable Biodegradable Sanitary Pads**.
5. **Indo German Yarn & Fibres LLP** – *Shri Rajiv Sajdeh*, Partner, for the **PROMYDE KARANW-2 WR 480 GSM Fabric** – Personal Protection Sustainable.

A Game-Changer for the Global Textile Industry

Technical Textiles Innovation Magazine, published by *Times International*. The magazine has been identified as a game-changer for the global textile industry. As the industry evolves with cutting-edge innovations, sustainability practices, and emerging technologies, **Technical Textiles Innovation** is set to provide the latest insights, trends, and breakthroughs, serving as an indispensable resource for global stakeholders.

TECHNOLOGY

INDA and EDANA Forge Path Towards Strategic Alliance to Advance the Global Nonwovens Industry



In a significant move for the global nonwovens industry, INDA (Association of the Nonwovens Industry), based in Cary, North Carolina, and EDANA (the Voice of Nonwovens), headquartered in Brussels, Belgium, have signed a Letter of Intent (LOI) in Rome. This agreement marks a major step toward the exploration of a strategic alliance aimed at combining their expertise and resources to address global challenges and unlock new opportunities in the nonwovens sector.

As the nonwovens industry continues to evolve, both organizations recognize the importance of collaboration and a unified approach to navigating complex international markets. The

potential alliance between INDA and EDANA promises to bring about a wide range of benefits, focusing on enhancing member services, joint advocacy, operational synergies, and fostering innovation.

Key Objectives of the Strategic Alliance:

Enhancing Member Value:

The alliance will allow both INDA and EDANA to provide greater value to their members by pooling resources. This integration will enable expanded educational programs, improved networking opportunities, and access to a more diverse set of industry insights that will better serve members across the globe.

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Unified Advocacy and Representation:

Together, the two organizations will amplify their collective voice, strengthening their ability to advocate for their members at local, regional, and global levels. This unified approach will ensure that industry concerns and needs are addressed more effectively.

commitment to exploring how we can better serve the nonwovens community and tackle the industry's evolving challenges. Our goal is to ensure that our members are positioned to thrive in a dynamic global environment. The signing of this LOI in Rome, echoing the significance of the Treaty of Rome, symbolizes the beginning of even greater achievements for our industry."

Operational Synergies:

By aligning resources and talents, the strategic alliance is set to create operational efficiencies, optimize financial resources, and enhance support for industry initiatives. This move will help both organizations strengthen their collective impact on the industry.

INDA President & CEO Tony Fragnito echoed this sentiment, adding, "This potential alliance represents an opportunity to combine our strengths and address global issues more effectively. By coordinating our efforts, we can better serve the industry while maintaining a regionally focused approach to support and representation."

Driving Innovation and Growth:

The alliance aims to drive collaborative projects and initiatives that promote innovation, industry leadership, and sustainable growth in the nonwovens sector. By working together, both INDA and EDANA will help position the industry for future success.

Next Steps:

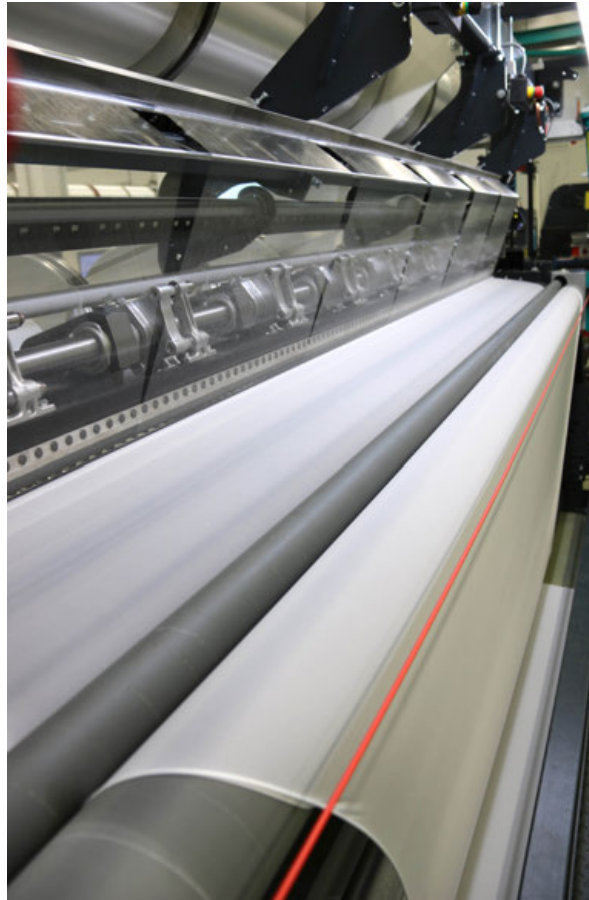
Over the coming months, INDA and EDANA will conduct a thorough due diligence process to evaluate the strategic benefits and operational efficiencies of this potential alliance. Both associations remain committed to advancing their members' interests and identifying new avenues for growth within the nonwovens industry.

Leadership Perspectives:

Murat Dogru, General Manager of EDANA, emphasized the importance of the alliance, saying, "This Letter of Intent underscores our

As discussions progress, both organizations will provide further updates on the developments of this exciting initiative.

KARL MAYER GROUP to Showcase Cutting-Edge Warp Knitting Solutions at ITMA ASIA + CITME 2024



At ITMA ASIA + CITME 2024, the KARL MAYER GROUP will focus on its innovative warp knitting solutions, designed to meet the challenges of a rapidly evolving market. Under the theme "Master the Change," KARL MAYER will demonstrate how its high-tech machines and digital platforms can help customers adapt to volatile markets, reduce labor needs, and enhance profitability.

A key highlight will be the unveiling of the HKS 2-S in the new gauge E 44, a high-performance tricot machine capable of producing up to 200 kg of fabric daily, ideal for the growing outdoor wear market. Alongside this, visitors can explore a range of warp knitting innovations, including stylish yoga wear, sustainable casual fabrics, and sun protection clothing.

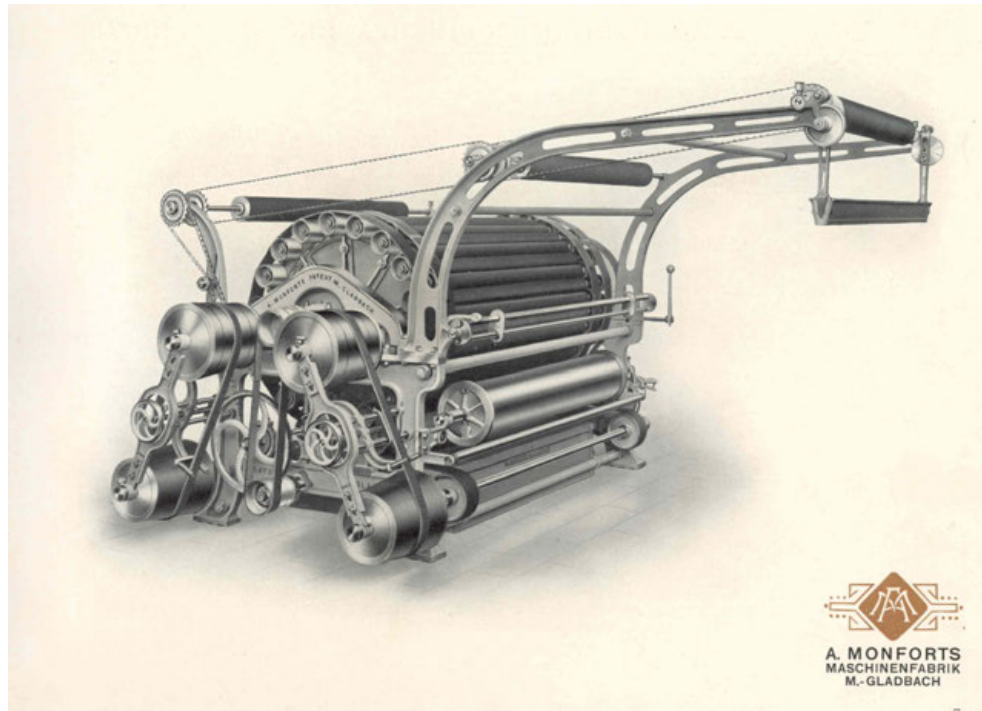
In addition to the advanced machinery, KARL MAYER will present its digital solutions, including the myKM.ON Customer Portal and the AI-driven Quality Monitoring System (QMS), which offer real-time production insights. A special in-house show in Changzhou will further showcase seven warp knitting machines, emphasizing the company's technological leadership.

From cutting-edge textiles to digital efficiency, KARL MAYER's exhibit promises to be a must-see for anyone in the warp knitting industry.

COMPANY REPORT

Monforts is 140 and looking to the future

Monforts recently celebrated its 140th anniversary at a special event for staff and their families at its headquarters in Mönchengladbach, Germany. Building on a very rich history since its foundation by August Monforts in 1884, the company remains 100% dedicated to the development of technologies that will ensure the future success of its textile industry customers.



The first Monforts machines were mechanical napping units for raising the surfaces of cotton fabrics.

Under the motto, '140 Years of Performance, Innovation and Partners', Monforts is looking forward to further celebrating this milestone with its representatives and customers at the forthcoming ITMA Asia + CITME exhibition in Shanghai from October 14-18, in Hall 5 at stand C09.

“We have moved over the many decades through mechanical and steam-powered technologies to the first mass production lines, electronic drives, special machine construction and highly modular machines,” observes Monforts Managing Director Gunnar Meyer. “Now we are truly in the digital age, and we are committed to investing in the digitalization of our technology, with concepts which assure an overall quality control and energy monitoring.”

International outlook

The first Monforts machines were mechanical napping units for raising the surfaces of cotton fabrics, providing softness and warmth and adding value. By 1893, Monforts 24-roller napping machines were drawing appreciative crowds at the World Fair in Chicago – establishing international trade networks was paramount to the company from the outset.

In 1897, August Monforts established an iron foundry equipped with hydraulic casting machines, by which time the company employed 1,200 people. This was followed by the introduction of semi-automatic manufacturing tools – an area in which Monforts achieved a number of firsts, such as the single-spindle lathe which became a big export hit in the late 1930s due to its unique and unmatched precision.



The company's range of textile machines has been significantly expanded based on decades of accumulated know-how and a dominant position in fabric finishing technologies has been established

Overseen by successive four generations of the Monforts family, the company's range of textile machines has been significantly expanded based on decades of accumulated know-how and a dominant position in fabric finishing technologies has been established.

Since 2013, Monforts has been a member of the CHTC Fong's Group, today one of the world's largest textile machinery manufacturers.

Industry standard

Monforts Montex stenters – for processes such as drying, stretching, heat-setting and coating – are now the industry standard for the fabric finishing industry, not only in the sectors of denim and home textiles, but also in the field of technical textiles, with numerous patents registered over the course of the decades for premium quality and a number of advantages in terms of production throughput and especially in energy efficiency

and savings. The other key technologies in the Monforts range include DynAir relaxation dryers, Thermex continuous dyeing ranges, Monfortex compressive shrinking ranges and Montex®Coat and coaTText coating units.

ATC

Since its opening in 2013, the €2.5 million Monforts Advanced Technology Centre (ATC) in Mönchengladbach has proved an invaluable resource to customers for achieving new standards in fabric finishing.

Over an area of 1,200 square metres, it houses two full finishing lines, engineered to accommodate an extremely diverse range of processes, in addition to a Thermex range for the continuous dyeing of denim and other woven fabrics, a full colour kitchen and a number of lab-scale systems for smaller batch trials.



Monforts Montex stenters and coating units are the industry standard for the fabric finishing industry.

“The ATC allows our customers to test their own textiles and technical fabrics on Monforts dyeing and finishing machines under fully confidential, real production conditions,” says Monforts Technologist Saskia Kuhlen. “Using the results from these trials, we are also able to make recommendations for improving many fabric finishes.”

Montex Austria

For over 40 years, Monforts finishing machines have been manufactured at Montex Maschinenfabrik based in St. Stefan, Austria.

“From the outset, we have specialised in all aspects of machine production, including high-precision sheet metal working, laser cutting and welding, and the pre-assembly of machines and components, along with a well-organised quality management and spare parts service,” says Montex plant manager Gert Hanzl. “We work very closely with the Monforts research and development team in Mönchengladbach to take the latest new ideas through testing and prototyping, in readiness for future series production. We are fully exploiting the many new possibilities in the continuous development of design and manufacturing methods.”

While there is standardisation in series-produced Monforts machines, Montex Maschinenfabrik is also increasingly called upon to construct bespoke machines with unique designs, according to the special needs of customers in technical textile or special textiles.

Made to last

“Our machines are built to last and known for their robustness and long service life,” concludes Gunnar Meyer. “Textile companies making major capital investments in new manufacturing lines rely on durability from our production ranges, and it's for this reason that there are currently an estimated 2,000 Monforts machines in operation worldwide – some of which were first installed over 30 years ago.

“It would not have been possible for Monforts to have thrived for 140 years without successfully and rapidly responding to industry changes and this continues today. I would like to thank all of our dedicated staff in Germany and Austria and our many colleagues and partners around the world for their continuous contributions to ensuring our further longevity.”

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AWARDS

DILO receives award for the new development “MicroPunch”



At this year's Cinte Techtextil fair in Shanghai, DILO received the innovation award for its intensive needling technology “MicroPunch”. Recent developments in energy costs, particularly for electricity and gas, and given the increasing shortage of water resources, have led to a shift in thinking over the past few years. Together with economic efficiency, the evaluation of the environmental impact of production has become increasingly important.

For DILO, this meant focusing once again on needling technology for the fine and lightweight nonwoven sector over the last years. The individual elements of the intensive needling technology were re-examined and underwent a complete revision. It became clear that the high production rates could only be achieved using the two-dimensional kinematics of the needle beam of "HyperPunch" or "CycloPunch." The necessary high feed rates of around 50 mm per stroke, coupled with the highest stitching densities to achieve good abrasion resistance, led to a need of a significant increase of the number of needles and needle density—almost doubling from approximately 20,000 needles/meter/board to around 45,000 needles/meter/board. It also became obvious that ensuring a high efficiency rate in production also required the careful

attention to a quick assembly of the needle boards with needle modules. A completely new approach was needed in the design and construction of the needle boards to enable rapid module exchange and achieve a very high mechanical precision.

Previously, needling technology was primarily used for a surface weight range starting at 100 g/m² up to several kilograms per m². The expansion into the range below 100 g/m², and potentially down to 30 g/m², now completes the applicability of needling technology. The intensive needling technology "MicroPunch" opens up an economical field for a wide variety of lightweight nonwoven fabrics that can be produced by a pure mechanical processes. The product characteristics achieved, such as abrasion resistance, are comparable to those of hydroentangled nonwovens. Needled fabrics tend to have more volume and more stretch while offering similar tensile strength values. These special quality characteristics are particularly interesting for applications in hygiene, medicine, cosmetics, and for technical products.

With this new development, the energy required to produce lightweight nonwoven fabrics has been reduced up to approximately 75% compared to other bonding technologies of this segment.

Emtec Electronic to Unveil Groundbreaking Haptic Testing Technology at TITAS 2024



Emtec Electronic, a leader in innovative textile testing solutions, is set to showcase its revolutionary TSA Tactile Sensation Analyzer at the Taipei Innovative Textile Application Show (TITAS) 2024 from October 15-17. In partnership with GO-IN International Co., Ltd., emtec will demonstrate how the TSA is reshaping the way textile haptics are measured.

Recognized with the Techtexsil North America Innovation Award 2024, the TSA offers precise, objective measurements of key haptic parameters, such as surface softness, smoothness, stretch, and recovery behavior, all within just 90 seconds. This is a major leap from traditional hand-panel testing, providing unmatched accuracy and efficiency.

The latest enhancements to the TSA include thermal property measurements, advanced springback behavior assessments, and an

integrated high-resolution camera for detailed imaging. These upgrades push the boundaries of haptic evaluation for textiles and nonwovens.

A standout feature is the TSA's integration with the cloud-based Virtual Haptic Library, developed with Black Swan Textiles. This online database enables real-time access to digital haptic data, streamlining supply chains and reducing the need for physical samples.

“The TSA Tactile Sensation Analyzer is setting new benchmarks in the textile industry,” said Eric Haagen, Global Business Development at emtec. “At TITAS 2024, we look forward to showcasing how our cutting-edge technology elevates precision in quality assurance while improving supply chain efficiency.”

Visit emtec at booth N3-709 to explore this innovative solution.

Digital solutions for the challenges of warp knitting and knitting mills



Interview with Stefan Lux, Managing Director of KM.ON, about his company's presentation at ITMA ASIA + CITME 2024

KM.ON will also be presenting exciting digital solutions for more customer benefits in the warp knitting and flat knitting industry at the upcoming ITMA ASIA + CITME. Anyone who wants to get to know them will have two opportunities to do so: at the KARL MAYER GROUP stand in Hall 4/C27 at the Shanghai National Exhibition and Convention Centre and at an in-house show at KARL MAYER (CHINA) in Changzhou to accompany the trade fair.

Stefan Lux, the new Managing Director of KM.ON, and his team are looking forward to welcoming their guests. ITMA ASIA + CITME 2024 is the first trade fair that the IT specialist will be in charge of in his new position. Katrin Fromm, Marketing Manager at KM.ON, spoke to Stefan

Lux about his expectations and the digital exhibits.

KF: What is the motto of KM.ON's presentation at the upcoming ITMA ASIA + CITME?

SL: We share the KARL MAYER GROUP's motto 'Master the Change' with our exhibition. At KM.ON, we understand the challenges that many in the textile industry are facing right now. Rising costs, rapidly changing market demands, and the increasing need for sustainable practices are putting a lot of pressure on businesses. We're excited to be at ITMA ASIA this year because it's the perfect opportunity to show how our digital solutions can make a real difference in our customers' operations. We're all about helping

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them get more out of their current setup by enhancing efficiency, boosting productivity, and reducing costs.

KF: Let's look at warp knitting first. What solutions do you provide to help customers become more efficient, more profitable and more sustainable?

SL: We have the Digital Production Management (DPM) and the Quality Monitoring System (QMS) in our trade fair baggage for our warp knitting customers. The DPM gives real-time insights into production processes. With this tool, our customers can monitor their operations live, make quick decisions, identify and fix issues faster, and minimize downtime. It's about keeping production smooth and efficient.

The QMS helps maintain quality at the highest level as a key factor for success. The system works with an AI-powered camera system that inspects every inch of fabric during production. If it detects various production anomalies like defects, it stops the process and alerts the team immediately. On top of that, we provide unmatched robustness against anything that could cause a false stop.

KF: These solutions therefore offer concrete support in day-to-day production. Are such tools and systems also available for flat knitting?

SL: With our PPS powered by STOLL, we help our flat knitting customers to plan and adjust their production quickly. This is crucial given the dynamic nature of today's markets. PPS is a production planning tool that enables the

customer to control and optimize operations. It helps reduce lead times and respond to market changes swiftly, all accessible from any device, anytime, anywhere.

CREATE PLUS & CREATE DESIGN is also about speed: accelerating the design and development process for flat knitwear. CREATE PLUS is our programming software with advanced and faster project management, while CREATE DESIGN digitalizes the design process, allowing for realistic simulations and quicker time to market.

KF: **KM.ON is therefore well prepared for its trade fair guests. What do you expect from ITMAASIA+CITME?**

SL: I expect fruitful discussions about new ideas and innovative solutions at ITMA ASIA. The textile industry is facing major challenges and we, KM.ON as a member of the KARL MAYER GROUP, want to be part of the solution. The digital landscape is developing rapidly and offers new opportunities. **As software specialists, we always have our finger on the pulse. We don't just want to present our innovative solutions; we want to have real discussions with our customers and partners about how we can support them today and tomorrow with our digital solutions. Together, we want to find practical ways to drive growth, optimize existing systems and remain competitive in a rapidly evolving market.**

I invite everyone to visit us at our booth and to join our digital journey to master the challenges of textile industry together.

TECHNOLOGY

BW Converting's Baldwin Unveils TexCoat™ G4 at ITMA Asia 2024: Leading the Way in Sustainable Textile Finishing with Monforts and Archroma



TexCoat™ G4

Building on its groundbreaking partnership with Monforts and Archroma, Baldwin Technology, a brand of BW Converting, will empower textile manufacturers to take the lead in sustainable finishing with its TexCoat™ G4 precision spray system at ITMA Asia 2024, Stand H5A29, October 14-18, at the National Exhibition and Convention Center in Shanghai, China.

Given the current global economy's cost sensitivity and the rising emphasis on sustainability from brands, consumers and regulatory bodies, there is a growing demand for eco-friendly textile production methods. Baldwin's team will be on hand at ITMA Asia to discuss how its technology aligns with the sustainability and carbon footprint objectives of the textile supply chain, all while enhancing performance and reducing costs.

Baldwin's TexCoat G4 non-contact spray technology presents multiple advantages over traditional finishing methods. It revolutionizes the traditional water- and energy-intensive pad-dry-cure finishing process by precisely applying chemistry including softeners, antimicrobials, durable water repellents, flame retardants, resins and most other water-based chemicals across the textile surface only where it is required, on one or both sides of the fabric. The system can therefore reduce water, chemistry and energy consumption by up to 50% compared to traditional pad application processes. It utilizes the same chemicals as conventional pad baths without needing special additives.

At ITMA Asia, visitors will have the opportunity to see the technology up-close and experience a diverse selection of fabric samples with finishes that were applied with TexCoat G4, sourced from textile mills worldwide.

“In 2024, Baldwin has enjoyed amazing success in Asia with the adoption of TexCoat G4 with multiple new installations in Bangladesh, China, India and Pakistan just to name a few,” said Rick Stanford, Vice President of Global Business Development, Textiles, BW Converting. “Factory owners are investing in TexCoat G4 because it is the right thing to do for the planet and it pays for itself in short order through water, chemical and energy savings. Everybody wins with TexCoat G4.”

Baldwin's recently announced collaboration with Monforts and Archroma further amplifies its commitment to sustainable textile finishing. This partnership merges Monforts' state-of-the-art finishing equipment, Archroma's leading-edge chemistries, and Baldwin's TexCoat G4 spray technology to deliver next-generation sustainable solutions. Together, the three companies will support dyeing and finishing manufacturers, a critical part of the textile supply chain, in their development projects, boosting the quality and performance of their finished products, while at the same time maximizing the productivity and resource utilization of the finishing application process.

For more information, visit bwconverting.com.



Confederation of Indian Industry

16th Edition Texcon '24

Advancing India's Strategic Pursuit for Global Leadership in Textiles and Apparel with a Focus on Sustainability

21 November 2024
New Delhi

AREAS OF FOCUS



Strengthening Raw Material Competitiveness



Governing Sustainability and Circularity in Textiles



Foster Plug and Play Infrastructure



Market Access



Promoting Indian Brands

KEY HIGHLIGHTS

- Explore strategies to enhance domestic manufacturing capabilities
- Position India as a leading destination for the global textile and apparel value chain
- Gain insights into current market trends and consumer preferences in the textile industry
- Explore branding opportunities in emerging global market
- Approach towards building raw material ecosystem
- Eminent textiles and apparel players on one platform

TARGET AUDIENCE

- Policymakers
- Textile and Apparel Manufacturers
- Academic and Research Institutes
- Textile and Apparel Sourcing Agents and Buying Houses
- Startup and MSMEs

For more information on the conference, contact:

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