

EU approves new 'ecodesign' rules to promote Sustainable Products



Sustainability Updates

More at... 5

Precision Updates

More at... 18

Automation Updates

More at... 25

Circularity Updates

More at... 30

Energy Updates

More at... 34

Media & Innovation Platform

1

The biggest industry network & communication platform for **branding & promotion**

2

More Than
750,000+
Monthly Website
Page View

3

Paper, PDF & E-Magazine
Reaches To About
300,000+
People Per Month.

4

Newsletter
Circulation About
100,000
Database Per Week

5

More Than
300,000+ Social
Media Engagement

6

Webinar Series
For Technology /
Solutions
Launching

7

Technology
Piloting/ Problem
Solving Through
Innovation Hub

8

Biggest Ever
Academy - Industry
Collaboration

9

PEOPLE Project
For Increasing
Profitability &
Organization Build Up



Find Media Kit

+88 01775 999 748

monir@textiletoday.com.bd

www.textiletoday.com.bd

Editor in Chief

Tareq Amin

Managing Editors

SK Saha

Rahbar Hossain

M A Mohiemen Tanim

Akhi Akter

Executive Editors

Sadman Sakib

Sayed Abdullah

Arif Uz Zaman

Special Editors

Muddassir Rashid

Setara Begum

Head of Business

Amzad Hossain

Design

Easen Miah

Hasan Miah

Cinematographer

Ashraful Alam

A Textile Today Innovation Hub publication.

The views expressed in the magazine are not necessarily those of the publisher or the editor. We have taken every effort to ensure accuracy. TexSPACE Today does not accept any liability for claims made by advertisers or contributors. The publisher reserves the right to edit and publish any editorial material supplied and does not accept responsibility for loss or damages of any unsolicited material or contribution.

Content

May 2024

Sustainability

- 5-7 | Sustainability Updates
- 9 | Polybion’s Celium™ Cultivated Premium Cellulose Now Available Worldwide
- 10-11 | EU approves new ‘ecodesign’ rules to promote sustainable products
- 12-13 | Danish scientists develop a sustainable alternative to ‘Indigo Dye’
- 14-15 | Empa Develops Eco-Friendly Water Repellent Textile Finishing Solution
- 16 | Denmark bans PFAS in clothing (Effective 2026)
- 17 | Hidden Fees vs. Fair Value: Can True Pricing Bridge the Gap?

Precision

- 18-19 | Precision Updates
- 20-21 | NTU develops wearable electronic garments from ultra-thin semiconductor fibers
- 22-23 | Revolutionizing Textile Printing: The R-JET DTF Machine by RH Corporation

Automation

- 25 | Automation Updates
- 26 | HIGHTEX 2024 will showcase the future of TechTex
- 27 | Young engineers awarded at Techtextil for sustainability & automation
- 28 | Picanol unveils innovative TechTex at Techtextil Frankfurt
- 29 | Carbonfact secures \$15mn to automate environmental reporting

Circularity

- 30-31 | Circularity Updates
- 32 | Lenzing partnered with Candiani Denim to protect glaciers & promote circularity
- 33 | Archroma & Cotton Inc. renew collaboration to promote cotton circularity

Energy

- 34 | Energy Updates

Sustainability Updates

Istanbul to host Better Cotton Conference in June 2024



The Better Cotton Initiative is organizing its annual Conference this year in Istanbul. It is an opportunity to convene global community of cotton stakeholders for two days of

working together to address the challenges and opportunities in the future of sustainable cotton. Host country Türkiye is the seventh-largest cotton producer in the world, and home to a large domestic textile industry. The conference will take place 26-27 June in Istanbul, at the Hilton Istanbul Bomonti Hotel & Conference Center.

The first Turkish Better Cotton harvest took place in 2013. By the 2021-22 season, production had reached over 67,000 tonnes, mainly focused in the Aegean Region, Cukurova and south-eastern Anatolia.

<https://bettercotton.org/why-we-are-bringing-the-better-cotton-conference-to-istanbul/>

SAC rebranded as Cascale released its 2024 Policy Priorities.

The SAC recently has entered a new chapter marked by a new name, new look, and more. The Sustainable Apparel Coalition began in 2009 to develop a common approach to measuring sustainability. Spearheaded by Patagonia and Walmart the platform developed revolutionary the Higg Index to drive accountability and action, with tools spanning product, facility, and brand and retailer needs. All the tools in the suite: the Higg Facility Environmental Module (FEM), Higg Facility Social & Labor Module (FSLM), Higg Brand & Retail Module (BRM), Higg Materials Sustainability Index (MSI), and Higg Product Module (PM) – are designed to enhance standardized sustainability pathways for the apparel, footwear, and consumer goods sectors. Under the new name, the organization recently



has declared its policy priorities 2024. As per the platform, In the face of pressing global challenges such as environmental degradation, social injustice, and economic volatility, Cascale’s strategic plan centers around three foundational impact goals: combating climate change, ensuring decent work for all, and shaping a nature-positive future. Cascale’s 2024 Policy Priorities, which directly stem from its strategic plan and impact goals, include eight identified priorities for global policymakers.

<https://cascale.org/resources/press-news/news-updates/cascale-releases-2024-policy-priorities-urging-collective-action-for-industry-wide-change/>

SDC International Conference 2024 to focus on Sustainability & Circularity

Sustainability & Circularity in Coloration – Innovations in sustainably supplying the needs of 8+ billion people

18-19 June, 2024

Manchester Conference Centre,
Pendulum Hotel,
Manchester, UK (International Conference)



‘Sustainability & Circularity in Coloration’ is the theme of upcoming SDC International Conference to be held 18-19 June 2024 in Manchester, UK. Program outlines have been published on the website.

“The concepts of Sustainability & Circularity are not new but there are innovative ways of addressing them.” said Prof Chris Carr,

SDC President 2023-24 & Professor in Textile Technology, University of Leeds, Leeds, England

“This conference will take place not long after I am officially appointed SDC President, but I am very aware its’ development has spanned the terms of office of two previous SDC Presidents. This input makes the conference a fabulous opportunity to hear from the best-of-the-best and adopt innovations that arise at the interfaces of textiles, colour history, natural colorants and other developments such as Artificial Intelligence” said Dr Susan Kay-Williams, SDC President 2024-25 & Chief Executive at Royal School of Needlework, Kingston upon Thames, England



<https://www.eventsforce.net/hg3/frontend/reg/thome.csp?pageID=103289&eventID=266&traceRedir=2>

Global Fashion Summit 2024 is ‘Unlocking The Next Level’



Global Fashion Summit 2024 is underway in Copenhagen from 21-23 May 2024. The organizer

mentions fashion finds itself at a critical juncture. With years of impressive progress already unlocked, it is time to double down to accelerate impact. Activating this vital next level relies on new depths of collaborative action and evidence-based progress: it is the only way to move forward towards net positive.

The theme is ‘Unlocking The Next Level’. Inspired by a significant milestone, 2024 marks 15 years since the inaugural Global Fashion Summit (formerly, Copenhagen Fashion Summit). This pivotal anniversary offers a special moment to acknowledge fashion’s evolution while keeping firm focus on near-term goals. The foundations we have established since 2009 will prove invaluable as we forge the pathway to net positive.



<https://globalfashionsummit.com/>

Archroma's new water repellent makes clothes eco-friendly and comfortable

Archroma, a global leader in specialty chemicals towards sustainable solutions, has introduced a new bio-based durable water repellent (DWR) finish that helps mills and brands produce apparel that is soft to the touch and yet offers robust rain and stain protection and an improved sustainability profile.

PHOBOTEX® NTR-50 LIQ is designed to provide excellent water repellence on all kinds of fibers while achieving a very soft handle and avoiding undesired effects like yellowing and chalk marking. It performs especially well on synthetic fibers and their blends, making it ideal for apparel, outdoor wear and home textiles.

The new DWR is based on 50% renewable carbon content based on ASTM D6866 and is free of per- and polyfluoroalkyl substances (PFAS) and



formaldehyde. It is also crosslinker-free, which makes it more flexible in use. While offering good wash durability on its own, PHOBOTEX® NTR-50 LIQ can be combined with a crosslinker like ARKOPHOB® NTR-40, which has a biocarbon content of 40%, to further boost wash and/or dry-cleaning resistance.

<https://www.textiletoday.com.bd/archroma-introduces-highly-sustainable-durable-water-repellent-for-outerwear-and-apparel-fabrics>

Egypt in talks with China for \$300mn textile city

China has expressed strong interest in establishing a major textile industry center in Egypt, with a proposed investment of \$300 million.

A delegation from the Chinese Council for Textiles and Readymade Garments recently met with Hossam Heiba, CEO of Egypt's General Authority for Investment and Free Zones (GAFI), to discuss the ambitious project.

The proposed integrated textile city would encompass all stages of textile production, from raw materials to finished goods. This comprehensive approach could position Egypt as a significant player in the global textile market.

Heiba, recognizing the textile sector's potential for propelling economic growth, enthusiastically welcomed the Chinese proposal. He highlighted

Egypt's commitment to attracting Chinese companies, particularly in textiles.

To further entice investment, Heiba presented potential locations for the textile city, including Damietta, Sadat, and New Alamein. These areas are slated for the development of new free and industrial zones, offering attractive incentives for foreign investors.

While details are still emerging, this initial interest from China presents a promising opportunity for Egypt's textile industry. The potential \$300 million investment could significantly boost the sector's capabilities and create new jobs. The development of an integrated textile city could also attract other international businesses, further strengthening Egypt's position as a textile hub.

<https://www.texspacetoday.com/egypt-in-talks-with-china-for-300mn-textile-city/>



ITMA ASIA + CITME

SINGAPORE 2025

28 – 31 October 2025
Singapore Expo

www.itmaasiasingapore.com



THE LEADING
**TEXTILE
TECHNOLOGY
EXHIBITION**
DRIVING REGIONAL
GROWTH

APPLY FOR
STAND SPACE
NOW

info@itma.com



Find Out More

Owners



Organiser



Co-Organiser



Supported by



Held in



Connect With Us





Polybion's Celium™ Cultivated Premium Cellulose Now Available Worldwide

■ Akhi Akter

Polybion™ unveils the worldwide market debut of Celium™, marking a significant milestone for the company and bringing biomaterials a step closer to becoming a widely accessible choice for large-scale consumer applications. With the operational success of its pioneering bacterial cellulose manufacturing facility in Central Mexico, Polybion sets a new standard in the production of Celium™ Premium Cultivated Cellulose. The solar-powered plant is a testament to years of dedicated iteration, research, and development, with a production capability poised to meet the increasing demand for next-generation materials.

Celium is grown by feeding bacteria with agroindustrial fruit waste. It is a unique fabric that offers a sustainable approach, and forward-thinking aesthetics to designers and material engineers. It can be dyed, embossed and tanned with chromium-free formulations using existing infrastructure, which allows for a lower negative impact to the environment than traditional fabrics. Due to its inherent biological composition, Celium™ possesses a character of its own, it refuses to be confined by the limitations of existing materials. Instead, it emerges as a new fabric with

self-defining aesthetics. It offers a leather-like feel, boasting unique properties tailored for fashion, sportswear, and automotive applications.

With its official availability to the general public in May 2024, Polybion's Celium™ is set to create an entirely new category, not just to serve as a mimic of leather or another form of plastic, like most alternatives to leather in the market. The launch is complemented by the introduction of the Celium™ Swatch Sampler, a curated collection designed to inspire and enable designers and material engineers to explore the vast potential of this material. The sampler showcases the fabric's remarkable versatility, showcasing a spectrum of possibilities. From vibrant marbled patterns achievable only with bacterial cellulose to timeless classic tones, it underscores the material's adaptability for diverse applications. With biology-related hurdles solved at scale, Polybion finally unveils its landmark material, marking a pivotal moment in the widespread adoption of bacterial nanocellulose for consumer product applications, empowering more brands to adopt low-carbon materials into their product categories.

EU approves new ‘ecodesign’ rules to promote sustainable products

■ Mohiemen Tanim

The European Union (EU) has taken a significant step towards a more sustainable future with the approval of new “ecodesign” rules. These regulations aim to transform the way products are manufactured, consumed, and disposed of within the bloc, with a particular emphasis on the textile and fashion industry.

The new ecodesign rules target the prevailing “take, make, throw away” model that dominates the fashion sector. This linear model is characterized by low-quality, inexpensive clothing designed to be quickly discarded and replaced. The environmental costs of this system are significant. The textile and fashion industry is responsible for a substantial share of global greenhouse gas emissions, water pollution, and microplastic contamination.

The new EU regulations aim to address these challenges by promoting a more circular economy for textiles.

This can be achieved through a variety of strategies, including:

- » **Design for durability and repairability**
- » **Promote reusability and rental models**
- » **Improve recyclability:**
- » **Ecodesign requirements**
- » **Digital product passports**
- » **Extended producer responsibility**

Benefits of the New Ecodesign Rules for the Textile & Fashion Industry

- » **Reduced costs**



Figure: Ecodesign rules to ensure sustainable products on EU market ,
Credit: NicoElNino - stock.adobe.com, Copyright: Nicolas Herrbach

- » **Enhanced brand reputation**
- » **Innovation**

Challenges of Implementing the New Ecodesign Rules

- » **Increased costs:**
- » **Consumer behavior**
- » **Enforcement**

The Impact on Consumers

Consumers will be directly affected by the new ecodesign rules in several ways:

- » **Price:** There may be a slight increase in the initial cost of clothing as companies invest in more sustainable materials and production methods.
- » **Transparency:** Digital product passports will provide consumers with greater transparency

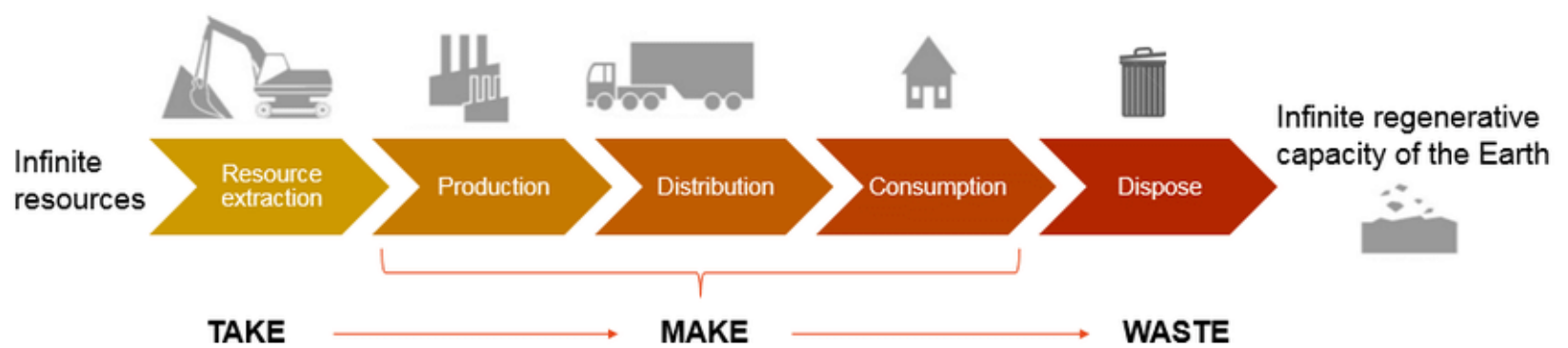


Figure: “take, make, throw away” model

- about the environmental impact of the clothing they purchase.
- » **Availability:** The availability of certain styles or trends may be limited as companies shift towards more sustainable production methods.
 - » **Shifting consumer behavior:** The new ecodesign rules are likely to encourage a shift towards more mindful consumption habits. Consumers may be more inclined to:
 - » Repair and care for their clothes to extend their lifespan.

» Consider renting clothing or buying second-hand clothes.

The Future of Sustainable Textiles in the EU

The new ecodesign rules represent a turning point for the textile and fashion industry in the EU.

These regulations have the potential to:

- » **Reduce the environmental impact of the industry**
- » **Create a more circular economy**
- » **Drive innovation**
- » **Set a global standard**

Making sustainable products the norm in a more resilient Single Market



Figure: Overview of initiatives in the EU’s Circular Economy package, © European Commission

Danish scientists develop a sustainable alternative to ‘Indigo Dye’

■ Asif Iqbal



For centuries, indigo has been the dye of choice for creating denim’s iconic blue color. Indigo is the sole molecule that produces the distinctive hue that blue jeans are known for. In a billion-dollar industry like blue denim, the overwhelming demand has made synthetic indigo the standard for blue jeans production.

The traditional dyeing process carries a significant environmental burden. Synthetic indigo, being insoluble in water, necessitates a chemical reduction process, typically involving sodium dithionite, to bind to fabric. This process can release harmful substances into waterways, contributing to pollution and posing risks to human health.

The denim industry consumes approximately 50,000 tons of synthetic indigo annually and around 84,000 tons of the reducing agent, sodium dithionite, as reported by the American Chemical

Society. The adverse environmental and social impacts of synthetic indigo production include water and soil pollution, which could result in crop damage and human toxicity, according to the study.

The Danish Solution: Indican-Based Dyeing

Researchers from the Technical University of Denmark have introduced an innovative technique for dyeing blue denim that reduces environmental impacts associated with indigo by an impressive 92%. By utilizing indican, a natural precursor that is soluble, instead of traditional indigo, the need for treatment with potentially harmful chemicals like sodium dithionite is eliminated.

Indican, a precursor to indigo, is naturally found in the same plant species, *Indigofera*. “Indican, the β -O-glucoside of the indigo precursor indoxyl, is the natural storage form of indigo



Figure: Untreated or partially treated effluent from textile factories, usually blue / indigo in color, is killing African rivers, Flags Report. Photo: Water Witness

in indigo-producing plants,” according to the study. This compound has been proposed as an environmentally friendly alternative for dyeing blue denim, as indican dyeing eliminates the need for reducing agents while still resulting in the desired indigo color in the yarn.

One of the key advantages of indican is its water solubility, which allows for its application to denim without the use of harmful chemicals. The innovative dyeing process involves treating the denim with indican, which then transforms

indigo through either a harmless enzymatic process or exposure to light. This method not only reduces the environmental impact of traditional dyeing processes but also produces high-quality, sustainable denim products.

The current challenge lies in the need to increase the production of indican in order to meet the demands of the global denim market. By scaling up the production of indican, it is possible to eliminate the use of toxic chemicals currently employed in denim dyeing, thus creating a much cleaner and more sustainable process.

The denim industry has the opportunity to lead the way in adopting this innovative approach. By investing in the establishment of indican production facilities and integrating this eco-friendly dye into their manufacturing processes, the industry can make a significant impact on reducing its environmental footprint.

As consumer demand for sustainable clothing continues to grow, indican offers a commercially viable solution for the denim industry. So, buyers should communicate very clearly that they’re interested in buying sustainable denim. Thus, they can put some pressure on the brands. This presents a win-win situation: the environment benefits from reduced pollution, while consumers can enjoy their favorite blue jeans knowing they are making a positive impact.

“

Indigo creates this really fantastic hue that we all know and love, but we are producing it from petrochemicals because the demand is simply too high. Synthetic indigo is not a “dyeing competent” on its own, so reducing chemicals are needed to treat the denim, which leads to some environmental challenges in the dyeing hubs of the world.

Ditte Hededam Welner, lead researcher of the study and biologist at the Novo Nordisk Foundation Center for Biosustainability in Denmark

Empa Develops Eco-Friendly Water Repellent Textile Finishing Solution

Rahbar Hossain

For decades, per- and polyfluoroalkyl substances (PFAS) have been the workhorses of water repellency in textiles. From rain jackets to ski pants, PFAS coatings have kept us dry, but at a hidden cost. These “forever chemicals” accumulate in the environment and human body, posing potential health risks. Now, a team of researchers at the Swiss Federal Laboratories for Materials Science and Technology (Empa) has developed a promising alternative – an eco-friendly water-repellent solution free of PFAS.

The Problem with PFAS

PFAS are a group of man-made chemicals known for their ability to repel water, oil, and grease. This property has made them ubiquitous in a wide range of products, including textiles, non-stick cookware, firefighting foams, and even food packaging. However, their persistence in the environment and potential health effects have raised serious concerns.

Studies have linked PFAS exposure to various health problems, including cancer, thyroid issues, and developmental delays in children. As a result, public pressure and growing regulations are pushing for alternatives.



Figure: Textile fibers (blue) can be given a uniform water-repellent finish using plasma coating. Even more demanding elastic fibers (red) remain permanently impregnated thanks to the new process. (Scanning electron microscopy, colored) Image: Empa

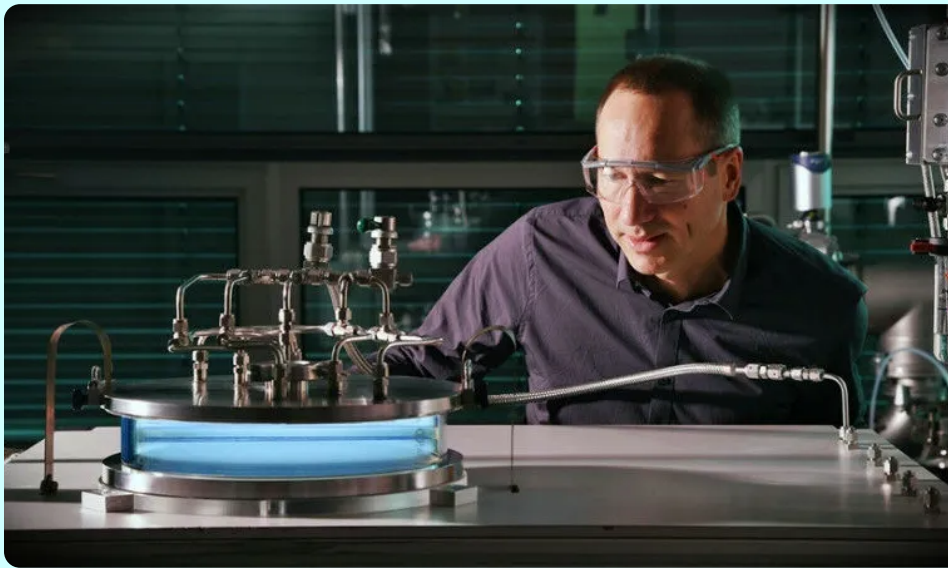


Figure: Empa researcher Dirk Hegemann develops plasma coating processes for environmentally friendly textiles. Image: Empa

“

PFAS chemicals are highly stable and don’t break down easily. They build up in the environment and can enter our bodies through contaminated water, food, or even dust.

Dr. Dirk Hegemann,
Lead Researcher at Empa’s
Advanced Fibers Laboratory

A New Hope: Siloxanes to the Rescue

Empa’s researchers, working in collaboration with Swiss textile companies, have developed a novel approach using “highly cross-linked siloxanes” to impart water repellency to textile fibers. Siloxanes are a class of organic compounds containing silicon and oxygen. Unlike PFAS, siloxanes are considered safe and readily degrade in the environment.

Here’s the science behind the solution:

Precise Application: The siloxanes are first

atomized (broken down into tiny particles) and then activated in a reactive gas environment. This activation process ensures they retain their water-repellent properties.

Plasma Power: The activated siloxanes are then applied to the textile fibers using a plasma coating technique. This method utilizes a highly ionized gas (plasma) to precisely coat the fibers with a thin (around 30 nanometers) layer of the siloxane material.

Uniform Coverage: One of the key advantages of plasma coating is its ability to create an even distribution of the coating material, even

“

PFAS coatings tend to lose their effectiveness after repeated washing cycles, especially in stretchy fabrics. Our siloxane-based solution, on the other hand, maintains its water repellency even after several washes.

Dr. Dirk Hegemann
lead researcher at Empa’s
Advanced Fibers Laboratory

on complex structured textiles. This ensures consistent water repellency throughout the fabric.

Beyond Safety: Performance Benefits

Initial lab tests reveal promising results. Textiles treated with the new siloxane coating exhibit better water repellency and faster drying times compared to their PFAS-coated counterparts. However, the true advantage emerges after multiple washes.

This superior durability offers a significant benefit for garments that require frequent washing, such as sportswear and outdoor gear.

Scaling Up for Sustainability

While the lab results are encouraging, the

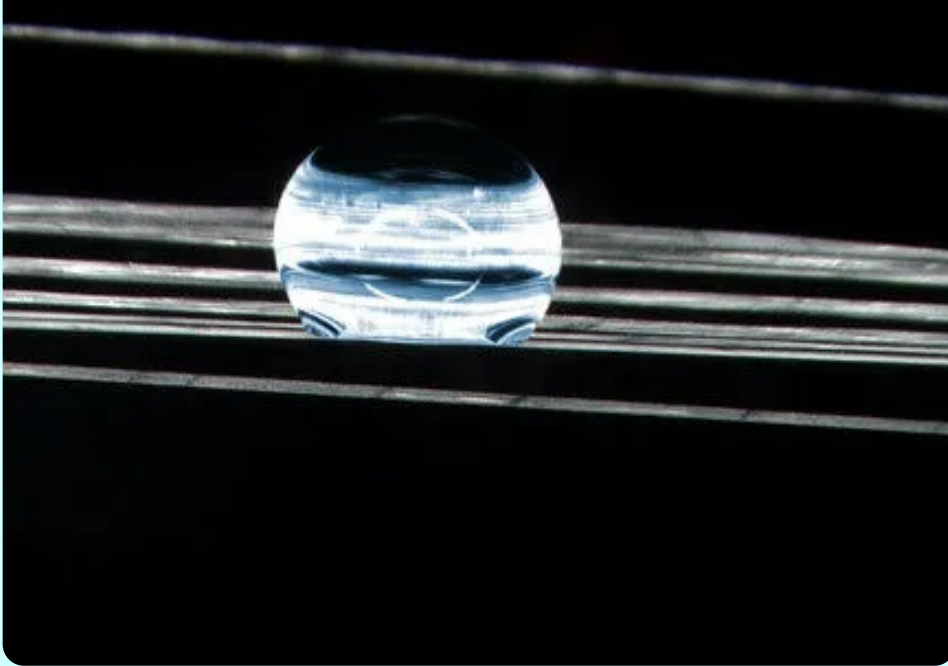


Figure: Where water cannot penetrate: Even stretched fibers allow the water droplet (blue) to roll off. (Microscopy, 30x magnification) Image: Cilander/ Empa

next step is to translate this technology into an economically viable industrial process. Dr. Hegemann and his team are working on scaling up the process to meet the demands of large-scale textile production.

The project has received funding from Innosuisse, the Swiss Innovation Agency, highlighting the importance of sustainable innovation in the textile sector.

Collaboration for a Greener Future

The development of this new water-repellent solution is a testament to the power of collaboration. The partnership between Empa researchers and Swiss textile companies demonstrates a shared commitment to sustainability and innovation.

Several Swiss textile companies, including Lothos KLG, beag Bäumlin & Ernst AG, and AG Cilander, are already on board, recognizing the potential of this new technology.

“

This project exemplifies successful collaboration between materials science, fiber technology, and plasma coating. It leads to an innovative, sustainable, and effective solution.

Dominik Pregger from Lothos KLG

Denmark bans PFAS in clothing (Effective 2026)

■ Arif-Uz-Zaman

Denmark is taking a bold step towards protecting public health and the environment with a proposed ban on per- and polyfluoroalkyl substances (PFAS) in clothing and footwear. This decision, announced in April 2024, will come into effect on July 1, 2026, giving businesses a two-year transition period to adapt.

PFAS, often referred to as “forever chemicals” due to their extreme persistence in the environment, are a class of synthetic chemicals widely used for their water- and stain-repellent properties. They can be found in a variety of products, including clothing, footwear, food packaging, carpeting, and firefighting foams. However, growing scientific evidence links PFAS exposure to a range of health problems, including cancers, developmental delays in children, and issues with the immune system and reproduction.

While the ban applies to most clothing and footwear, there will be an exemption for professional and safety gear where suitable alternatives to PFAS might not be readily available. This ensures that firefighters and other



PFAS are commonly used to manufacture water repellent fabric © freepik

workers whose safety depends on water-resistant clothing are not put at risk.

The two-year transition period is designed to give

“

This is a landmark decision. By banning PFAS in clothing, Denmark is sending a strong message to the global marketplace that safer alternatives are needed.

Sarah Doll, a scientist with the Environmental Working Group

“

We must take the lead in working to limit PFAS at the source. A national ban on the import and sale of clothing, shoes and implementation agents with PFAS is an important step on the way to limiting emissions and will have a real environmental effect in Denmark.

Danish Environment Minister
Magnus Heunicke

manufacturers time to develop and implement alternatives to PFAS. The textile industry is already exploring various options, including new fluorine-free water repellents and bio-based solutions. This shift presents an opportunity for innovation and could lead to the development of safer and more sustainable materials for clothing and footwear.

Developing and implementing cost-effective and equally functional alternatives to PFAS will require collaboration between industry, researchers, and policymakers.

Hidden Fees vs. Fair Value: Can True Pricing Bridge the Gap?

■ US Shampa

he benefits of True Pricing- What would True Pricing change from the current hidden pricing system?

In today’s consumer-driven world, pricing transparency has become a crucial factor in making informed purchasing decisions. However, the prevalence of hidden fees has made it increasingly difficult for consumers to truly understand the total cost of a product or service. Hidden fees, also known as undisclosed charges or extra costs, are additional expenses that are not openly disclosed upfront but are later added to the final bill. These fees can range from minor inconveniences to significant financial burdens, leaving consumers feeling deceived and frustrated. In this section, we will delve into the world of hidden fees, exploring their impact on pricing transparency and providing insights on how to identify and avoid them.

We are in a climate crisis, which is also a consumption crisis. A major problem is that the prices of sustainable products are generally higher than those of conventional products. Although many consumers see a quality advantage in sustainable products, they ultimately choose the conventional option—simply because of the lower price a phenomenon also known as the “attitude-behavior gap” or “green gap”. In this context, we look at a price-related marketing tool increasingly being used in practice and causing a stir so-called true cost campaigns that communicate “true costs” of products by displaying them next to the regular retail prices that consumers continue to pay.

Hidden costs is the term used for non-visible costs associated with the production of the items and may include external aspects such as environmental pollution, depletion of natural resources, or social costs such as forced labor or violations of workers’ rights.



To Avoid Hidden Fees:

- » Always read the terms and conditions before making a purchase or signing up for a service.
- » Compare prices from different providers to ensure you’re getting the best deal.
- » Ask questions and seek clarification about any fees you don’t understand.
- » Consider using apps or tools that can help you track and manage your subscriptions and expenses.
- » Be diligent about checking your financial statements regularly for any unexpected charges.

Price variation works when the buyers believe that the justification for the variation is valid.

Using supply and demand imbalances to justify price discrimination is a more sensitive area for consumers. They generally accept supply and demand as a valid argument when price differences are relatively small—in the range of 20% to 25%. But when companies try to use the argument to justify extreme price differences (100% or more), it leads to accusations of price gouging, which not only angers customers but also makes them skeptical of the supply-and-demand argument.

Precision Updates

Groz-Beckert and Santoni develop innovative INNOTAS knitting system successfully

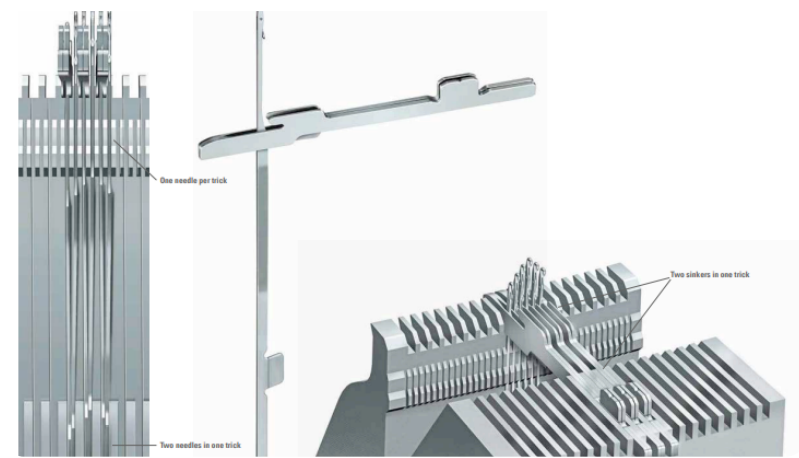


Figure: The INNOTAS system

In recent years, Italian circular knitting machine manufacturer Santoni (part of the Lonati Group) and Groz-Beckert have worked together to develop a new self-cleaning knitting system for the INNOTAS circular knitting machine. The knitting system is also called INNOTAS and consists of the circular knitting machine needle SAN™ DUO and the corresponding sinker SNK DUO-OL

The circular knitting machine needle SAN™ DUO with the sinker SNK DUO-OL was developed to meet the desired requirements. The special feature: In the innovative knitting system, there are two needles in the needle channel and two sinkers in one sinker channel. The benefits became apparent in initial field trials with experienced end customers in 2016. In the following years, the knitting system was continuously analyzed and further optimized.

The double filling in the needle channel significantly reduces soiling. In addition, the further developed shape of the knitting system ensures that any yarn lint is automatically removed from the machine during the knitting process. This extends the cleaning interval, making work more time-efficient and increasing productivity.

<https://www.texspacetoday.com/groz-beckert-santoni-develop-innotas-knitting-system/>

More efficiency and sustainability for warp preparation by Karl Mayer

KARL MAYER is to showcase its newly developed Inline energy recycling during drying, BLUEDYE for environmentally friendly indigo dyeing and innovations for less downtime at ITM 2024 to be held in Istanbul from 4 – 8 June. The brand new system CASCADE offers customers a solution that enables them to significantly reduce steam consumption on sizing machines and dyeing systems. The basis for this is efficient energy recycling within the cylinder dryer: part of the system's process steam flows is reused to heat

up the final cylinder stages, in which the residual moisture is removed from the yarn at lower pressure and temperature values. Depending on the process conditions and system design, a steam saving of around 7% is thus possible and demonstrably so.

KARL MAYER Warp Preparation has long been a reliable partner to the Turkish textile industry. The technology leader can be found in Hall 3, Stand 303A at the Tüyap Fair and Congress Center in the capital.

<https://www.texspacetoday.com/more-efficiency-and-sustainability-for-warp-preparation-by-karl-mayer/>

Epson's Latest Hybrid Direct-to-Garment and Direct-to-Film Printer Now Available

Epson on 21st May announced the SureColor® F1070 hybrid printing solution is now available. Ideal for garment decorators, entrepreneurs, artisan businesses, and print service providers, the easy-to-use printer is purpose built for both direct-to-garment (DTG) and direct-to-film (DTFilm), supporting printing on a variety of materials and uniquely shaped products. The compact, cost-effective printer is designed to deliver high-quality output to empower designers to spend more time creating and honing their craft.

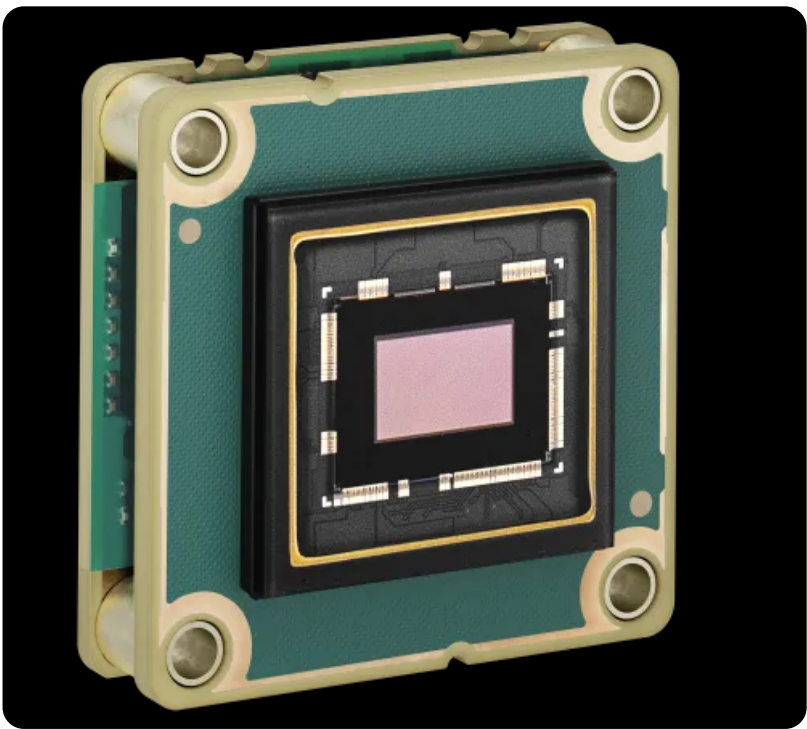
Customized apparel shop Crystal's Kre*ations has been leveraging the SureColor F1070 to bring



DTG printing in-house and expand print services to include DTFilm for an added revenue stream. Owner Steven Salazar shared that the SureColor F1070 easy-to-use features and low maintenance requirements have been a significant upgrade for the business.

<https://www.texspacetoday.com/epsons-latest-hybrid-direct-to-garment-and-direct-to-film-printer-now-available/>

Basler dart M, a camera based on the modular principle



The dart M is a modular, board level camera with GigE interface and an optimum price/performance ratio. Use the modular principle to put together a camera that is an exact fit for your application.

The dart M camera adapts to the installation situation of your application: based on the camera module, you can put together a modular camera that meets your requirements and obtain an easy-to-integrate, cost-efficient camera. The sensor on the camera module, distance between sensor and Ethernet socket, power supply, and lens mount can all be flexibly selected.

<https://www.texspacetoday.com/basler-dart-m-a-camera-based-on-the-modular-principle/>

NTU develops wearable electronic garments from ultra-thin semiconductor fibers

Homayra Anjumi Hoque

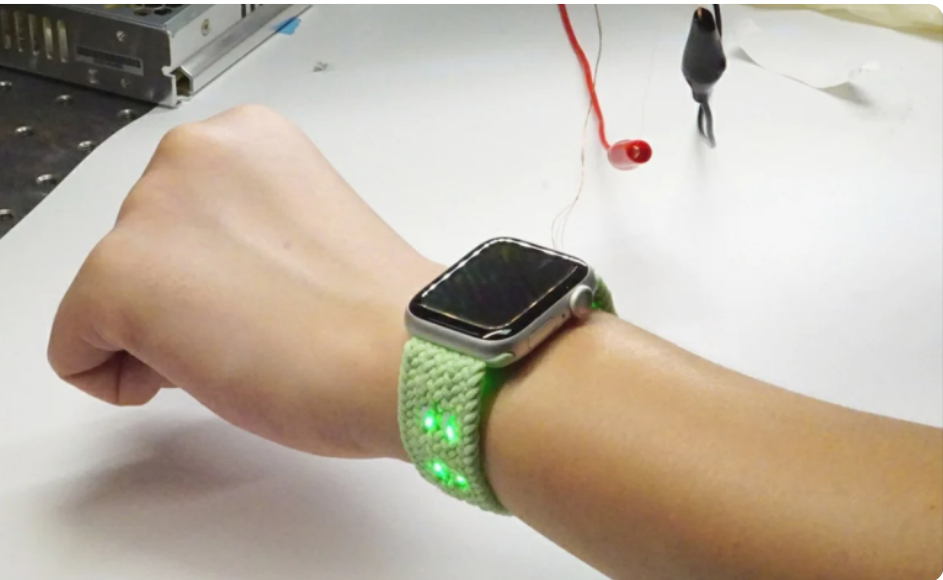


Figure: A smart watch with a flexible band made with nanofiber able to measure heart rates Credit: Handout

Nanyang Technological University scientists have developed ultra-thin semiconductor fibers that can be woven into the fabric, transforming wearable garments into advanced electrical interfaces. This breakthrough not only transforms the concept of smart clothes but also opens up a new universe of possibilities for the Internet of Things, where connectivity and functionality meet in the very threads of wearable garments.

The researchers have used modeling and simulations to understand how stress and instability develop throughout the manufacturing process, and they discovered that the problem could be solved with careful material selection and a sequence of procedures followed during fiber production.

Notable prototype demonstrations of the research

To demonstrate the fibers' functionality, the researchers created prototypes such as a smart beanie hat that alerts a visually impaired person to cross the road safely via a mobile phone application; a shirt that receives information and transmits it via an earpiece, similar to a museum audio guide; and a smartwatch with a strap that functions as a flexible sensor that conforms to

users' wrists for heart rate measurement during physical activities. The researchers hope that the invention could help to accelerate the creation of ultra-long and durable semiconductor fibers that are scalable while also providing electrical and optoelectronic (meaning they can sense, transmit, and interact with light) capabilities. attributed the manufacturing of the semiconductor fibers to the research team's interdisciplinary nature.

Development chronology of the fiber

To develop the fibers, the researchers used couple of typical semiconductor and synthetic materials: a silicon semiconductor core with a silica glass tube, and a germanium core with an aluminosilicate (Al₂SiO₃) glass tube. The materials were chosen for their complementary properties, such as thermal stability, electrical conductivity, and the capacity to enable electric current to pass (resistivity).

“Semiconductor fiber fabrication is a highly complex process, requiring know-how from materials science, mechanical, and electrical engineering experts at different stages of the study. The collaborative team effort allowed us a clear understanding of the mechanisms involved, which ultimately helped us unlock the door to defect-free threads, overcoming a longstanding challenge in fiber technology,”

NTU Associate Professor Lei Wei

Silicon was chosen because of its ability to be heated to high temperatures and controlled without degrading, making it ideal for use in extreme-condition electronics such as sensors on firefighters' protective equipment. Germanium, on the other hand, permits electrons to flow swiftly through the fiber and operate in the infrared range, making it ideal for use in wearable fabric-based sensors that are compatible with indoor light-fidelity (LiFi) wireless optical networks.

The researchers then inserted the semiconductor material (core) into the glass tube and heated it to a high temperature until the tube and core were soft enough to be pulled together into a thin continuous filament. Because of the differing melting temperatures and thermal expansion rates, the glass acted like a wine bottle during the heating process, containing the semiconductor material that filled the bottle as it melted.

After the strand has cooled, the glass is removed and joined with a polymer tube and metal wires. After another round of heating, the components are brought together to form a flexible thread that is as thin as hair.

“

“Silicon and germanium are two commonly utilized semiconductors that are typically considered highly brittle and prone to fracture”

Co-principal investigator, Distinguished University Professor Gao Huajian, who completed the work while at NTU

The fibers were also tested for washability, with a textile woven with semiconductor fibers being washed ten times in a washing machine, and the results revealed no substantial decline in fiber performance.

Convenience for industry adoption and industry practices

To broaden their applicability, the researchers intend to expand the sorts of materials used for fibers and build semiconductors with various hollow core forms, such as rectangular and triangular. To demonstrate the compatibility

of the newly developed semiconductor fibers for real-world applications, the researchers designed smart wearable electronics. These include a signal-detecting watch, a beanie, and a sweatshirt.

To make a gadget that helps the vision handicapped traverse busy highways, the NTU team woven fibers into a beanie hat and attached an interface board. When tested outdoors, light signals acquired by the beanie were transmitted to a mobile phone application, resulting in an alert.

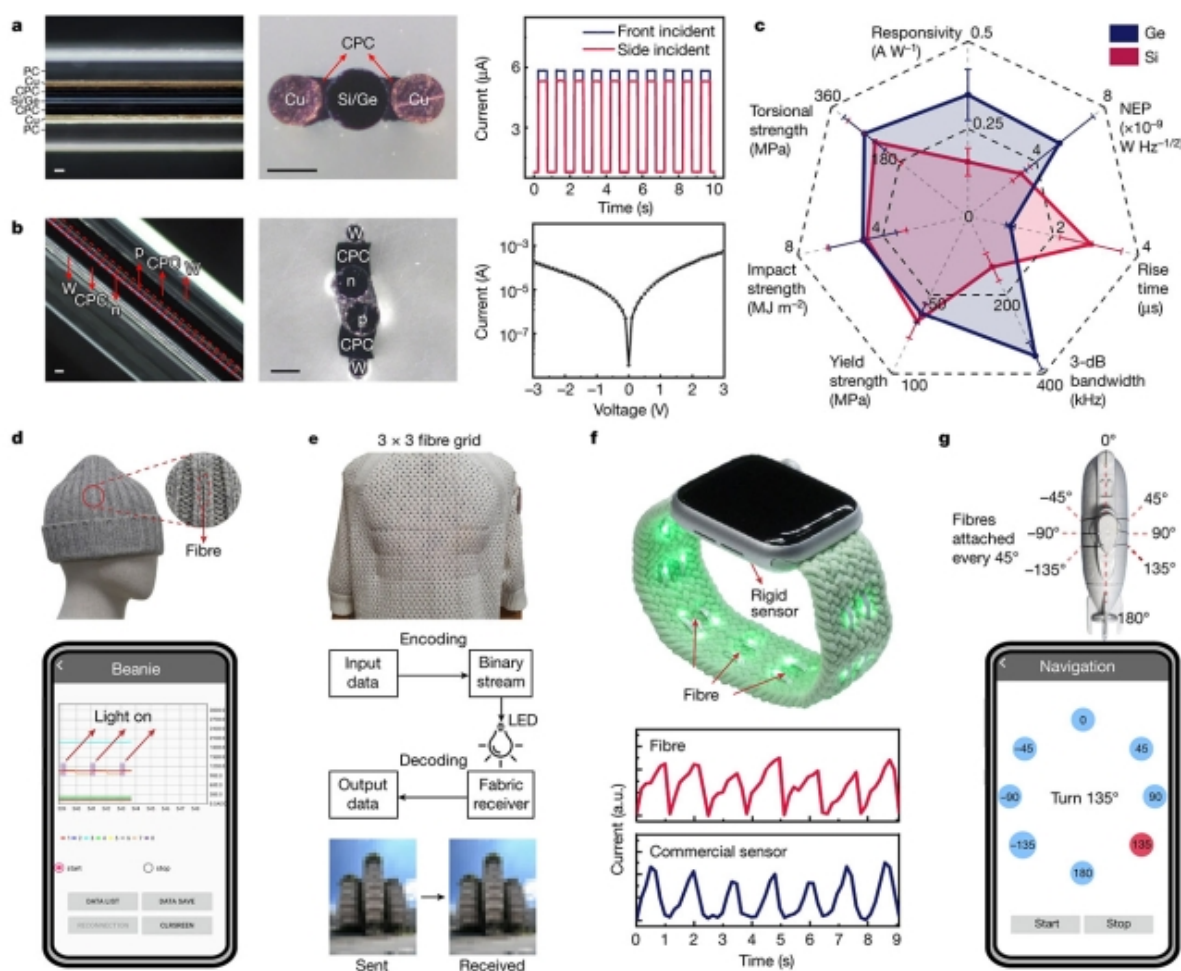


Figure: The resulting optoelectronic fiber can be woven into large-scale fabrics, enabling a broad scope of applications. Credit: NANYANG TECHNOLOGICAL UNIVERSITY

Revolutionizing Textile Printing: The R-JET DTF Machine by RH Corporation

RH Corporation Story



Figure: R-JET™ DTF machine

In the dynamic world of textile printing, innovation is the key to staying ahead. RH Corporation, a trailblazer in the industry, introduces the R-JET DTF (Direct-to-Film) Printing Machine, a game-changer for businesses in Bangladesh and beyond. As DTF technology gains momentum globally, the R-JET stands out as a beacon of progress, offering unparalleled benefits that cater to the evolving demands of the textile market.

What is DTF Printing?

DTF printing is a cutting-edge process that involves printing designs onto a special film, which is then transferred onto fabric. This method has revolutionized the industry with its ability to produce vibrant, high-quality prints on a wide array of materials.

The R-JET Advantage

The R-JET DTF machine, offered by RH Corporation, embodies the pinnacle of printing excellence. Here's why it's becoming the preferred

choice for textile businesses:

- » **Versatility:** The R-JET can print on a multitude of substrates, including cotton, polyester, and blends, regardless of color or texture.
- » **Quality:** It delivers prints with incredible detail and color fidelity, making intricate designs come to life.
- » **Durability:** Prints made with the R-JET are known for their longevity, enduring multiple washes without fading.
- » **Eco-Friendly:** Utilizing eco-friendly inks, the R-JET aligns with the global shift towards sustainable practices.
- » **Cost-Effectiveness:** It offers competitive pricing for both small and large orders, ensuring a high return on investment.

Empowering Businesses with the R-JET

RH Corporation's R-JET DTF machine is not just

a piece of equipment; it's a catalyst for growth. It empowers businesses to:

- » **Expand Product Offerings:** With the R-JET, companies can diversify their products, catering to a broader audience with custom prints.
- » **Increase Efficiency:** The machine's advanced technology streamlines the printing process, reducing turnaround times and boosting productivity.
- » **Enhance Quality:** The superior print quality elevates the value of the final product, attracting more customers and generating higher revenue.

RH Corporation introduces the state-of-the-art DTF textile printing machine, designed to revolutionize your printing business with its cutting-edge technology and high-efficiency performance- R-JET

- » **Print Head:** Dual Epson DX5, original and unlocked for superior quality.
- » **Print Width:** A generous 1820 mm to accommodate large fabrics.
- » **Max Print Thickness:** Up to 5 mm, offering versatility for different textile types.
- » **Ink Droplet Size:** Precision droplets ranging from 1.5-21pl.
- » **Printing Resolution:** High-definition prints at 1440 DPI.
- » **Printing Speed:** Achieve up to 56 sqm/hr with 2 heads in 2 PASS mode.
- » **Color Range:** CMYK for a full spectrum of vibrant colors.
- » **Ink Type:** Sublimation ink, perfect for polyester and blends.
- » **Drying System:** Optional infrared heater for quick drying.
- » **Ink Supply System:** Optional large bulk system, 1800ml*4 for uninterrupted printing.
- » **Auto Cleaning System:** With anti-clogged flash spray and moisturizing function.
- » **Media Adsorption:** Adjustable strength sucking

system for stable media handling.

- » **RIP Software:** Photo print for efficient processing.
- » **Operating Systems:** Compatible with a wide range of Windows platforms.
- » **Input Power:** AC 220V 50Hz; 6000W for robust operation.
- » **Work Environment:** Optimal performance in 18-35°C and 40%-70% humidity.
- » **Weight:** Net weight of 350 kgs and gross weight of 420 kgs.
- » **Printer Dimensions:** L3140W880H1320mm for a compact footprint.

This DTF printer is not just a machine; it's a gateway to expanding your creative horizons. From sportswear to home textiles, and soft-signage to outdoor advertising, the possibilities are endless. Experience unparalleled print quality, reliability, and the joy of bringing vivid, pin-sharp images to life.

Elevate your printing game with this DTF printer – where innovation meets industrial production capabilities.

The R-JET DTF machine by RH Corporation is more than just a technological marvel; it's a testament to the company's commitment to innovation and excellence. As DTF printing continues to make waves in the textile industry, the R-JET stands ready to propel businesses into a new era of printing prowess. Embrace the future with RH Corporation's R-JET – where quality, versatility, and sustainability converge to redefine textile printing.

RH Corporation is dedicated to providing state-of-the-art machinery and unparalleled service. To learn more about the R-JET DTF machine and how it can transform your business, visit RH Corporation's website: <https://rhcorpbd.com/contact/> or Email to: info@rhcorp.com



SPECIFICATION

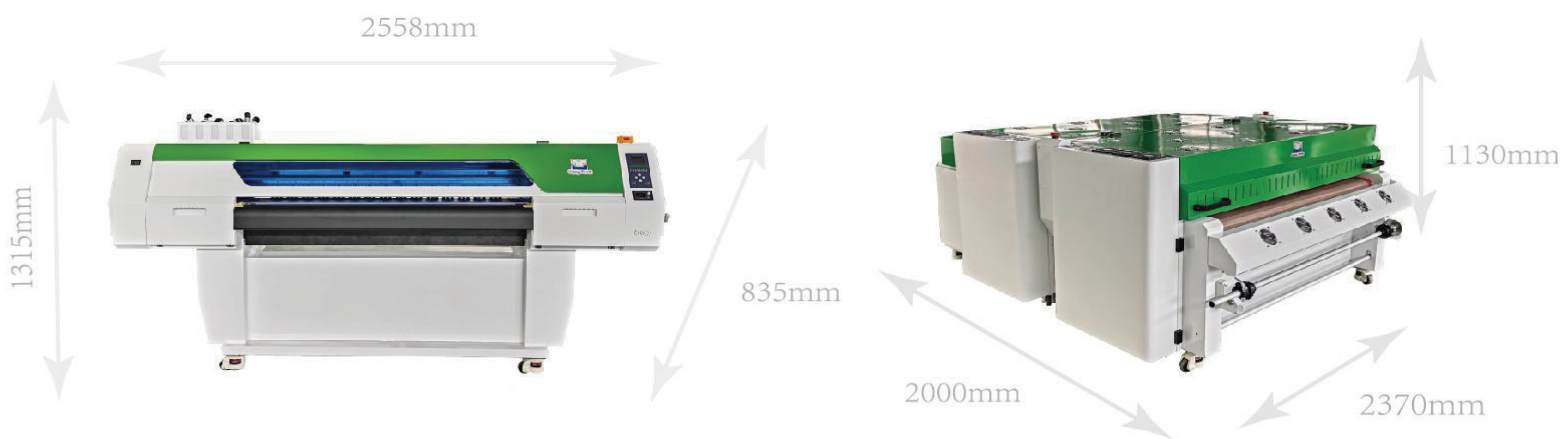
* Five Print Heads Speed

720x1200dpi - 4pass 72 m²/h

720x1800dpi - 6pass 48 m²/h



Both sides of the baking lampshade can be opened simultaneously, making it convenient for staff to observe the drying process at any time.



In Bangladesh, please contact:

SAS ENTERPRISE | ECO SOLUTIONS FOR FUTURE GENERATIONS

SAS ENTERPRISE
240, Tejgaon I/A, Dhaka 1208 Bangladesh
Tel.: +880 9609006215-16 | Email: info@rhcorpbd.com
Web: www.rhcorpbd.com

Automation Updates

Silana Secures €1.5 mn Funding for Global Rollout of Garment-Making Robots

Vienna's Silana, a startup creating the world's first sewing robot, secured €1.5 million to improve garment production. This aims to tackle poor working conditions in the industry. SOSV, a DeepTech investor, led the funding round. The capital will accelerate robot development for launch next year.



Currently, garment production is entirely manual, leading to relocations to Southeast Asia due to lower labor costs. Silana's robots will allow European producers to bring manufacturing back closer to consumers, reducing transportation emissions and waste.

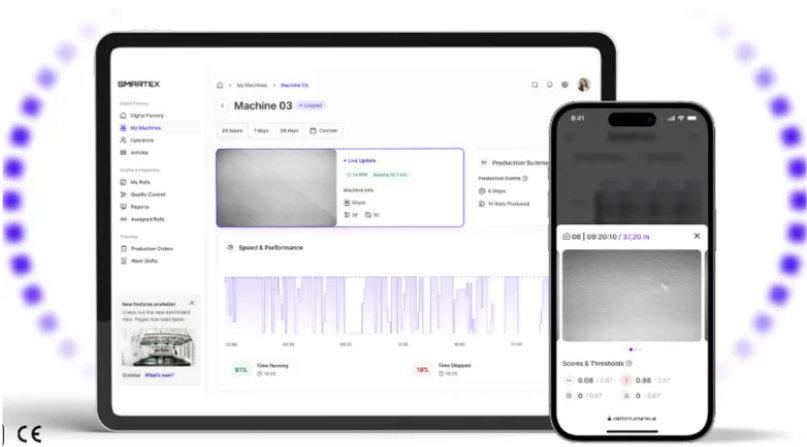
Silana's founders have extensive experience. Michael Mayr (COO) comes from a family running Austria's largest fashion retailer. Michael Hofmannrichter (CEO) previously worked in sustainable fiber production investment. Anton

Wohlgemuth (CTO) is a former research scientist with software and hardware engineering expertise.

Silana's robots will automate all stages of clothing production, from fabric rolls to finished T-shirts. They have already received pre-orders for nearly 200 machines, capable of producing 30 million T-shirts annually. The company plans to expand its product line beyond T-shirts in the coming years. With a growing team, Silana is seeking ambitious engineers to join their mission of revolutionizing the textile industry.

<https://www.texspacetoday.com/silana-secures-e1-5mn-funding-for-global-rollout-of-garment-making-robots/>

Smartex FACT Empowers Knitting Factories with AI



Smartex FACT is an all-in-one digital management solution for knitting factories. It offers features like automatic roll grading, real-time production visibility, and quality control. With Smartex FACT, factory owners can monitor operations remotely, improve efficiency, and ensure consistent quality. This allows them to make data-driven decisions and stay competitive in the textile industry.

<https://www.texspacetoday.com/smartex-fact-empowers-knitting-factories-with-ai/>

HIGHTEX 2024 will showcase the future of TechTex

■ Monir



The upcoming HIGHTEX 2024 exhibition, scheduled for June 4th-8th, 2024, is poised to be a landmark event for the technical textiles and nonwovens industry.

From Surprise to Ubiquity: The Rise of Technical Textiles

The term “technical textiles” might initially sound counterintuitive. However, these specialized fabrics are woven into the very fabric of our lives, playing a vital role in diverse sectors ranging from healthcare and agriculture to construction and transportation. From surgical gowns to car interiors, technical textiles offer superior functionality compared to traditional textiles, boasting properties like strength, durability, fire resistance, and breathability.

The dominance of technical textiles is undeniable. Industry estimates suggest they now account for a staggering 45-50% of the entire textile sector. This dominance is further bolstered by projected market growth. According to Grand View Research Inc., the global technical textiles market is expected to reach a staggering USD 272 billion by 2030,

reflecting a robust compound annual growth rate (CAGR) of 4.7%. This growth trajectory highlights the immense potential of the sector.

HIGHTEX 2024: A Hub for Innovation and Collaboration

The high level of interest surrounding HIGHTEX 2024 underscores the industry’s dynamism and the critical role innovation plays in shaping its future. Technical textiles are poised for even greater integration into various industries and living spaces. HIGHTEX 2024 serves as a vital platform for accelerating this integration process and fostering collaboration amongst industry leaders.

The exhibition will showcase the latest advancements in technical textiles and nonwovens across a broad spectrum of fields, including:

- » **Medical Textiles**
- » **Transportation Textiles**
- » **Agricultural Textiles**
- » **Building Textiles**
- » **Home Technical Textiles**
- » **Food Textiles**

 <https://www.texspacetoday.com/hightex-2024/>

Young engineers awarded at Techtextil for sustainability & automation

■ Md Muddassir Rashid



Figure: Anna Markic, Mark Zenzinger, Lena Fink, Peter D. Dornier, Fabio Bußmann, Katharina Maria Ernst, Lennart Hellwig, Dr Harald Weber.

Six up-and-coming engineers were celebrated for their groundbreaking work at the Techtextil trade fair in Frankfurt. The Walter Reiners Foundation awarded prizes in both sustainability and automation categories, recognizing exceptional bachelor's and master's theses.

Sustainability prizes were presented for research focused on developing resource-efficient products and technologies.

In the bachelor's category, Anna Markic (Reutlingen University) received a €3,000 award for her thesis on carbon fiber recycling. Mark Zenzinger (Albstadt-Sigmaringen University) was also awarded €3,000 for his work on automating the production process for welded textile hard goods. Lena Fink (TU Dresden) earned a €3,000 promotion prize for her project on a device

simplifying braiding machine maintenance.

The master's category saw Fabio Bussmann (RWTH Aachen) take home a €3,500 prize for his analysis of life cycle assessments for alternative geotextile materials. Katharina Maria Ernst (TU Dresden) received a €3,500 sustainability award for her research on developing a process to treat chitosan fibers for carbon fiber production. Lennart Hellwig (RWTH Aachen University) was honored with a €3,500 prize for his work on applying machine learning in nonwovens manufacturing.

These awards highlight the significant contributions young engineers are making to the future of textiles. Their dedication to sustainability and innovation has the potential to revolutionize the industry.



Picanol unveils innovative TechTex at Techtextil Frankfurt

■ Tanvir Ahmed

Picanol, the world leader in weaving machine manufacturing, is showcasing its dedication to innovation and sustainability in technical textiles at Techtextil Frankfurt, the premier international trade fair for the industry. From April 23rd to 26th, visitors to Hall 12.0, Booth C01, will experience a powerful combination of Picanol's advanced weaving technologies and the comprehensive digital platform, PicConnect.

A Commitment to Weaving Excellence

Technical textiles have become a core focus of Picanol's long-term strategy. Their presence at Techtextil Frankfurt underlines their dedication to providing customers with the best possible solutions. By offering a unique combination of cutting-edge rapier and airjet weaving platforms alongside the PicConnect digital suite, Picanol empowers its customers to achieve unmatched reliability, performance, and flexibility – all while prioritizing sustainability.

During the event, Picanol will present a wide range of solutions specifically designed for

technical fabric applications. These include filter fabrics, agro-textiles, carpet backing, coating fabrics, para-aramides, and tire cords.

Introducing the Ultimax: A Game-Changing Rapier Weaving Machine

The star of the show is undoubtedly Picanol's brand-new Ultimax rapier weaving machine. This innovative machine prioritizes three key areas:

- » **Ultimate Performance and High-Quality Output**
- » **Sustainable Design**
- » **Unprecedented Ease of Use through Digitalization**

A Suite of Weaving Solutions

While the Ultimax takes center stage, Picanol also showcases its established range of industry-leading machines:

- » **OptiMax-i Connect Rapier Weaving Machine**
- » **OmniPlus-i Connect Airjet Weaving Machine**
- » **OmniPlus-i TC Connect Airjet Weaving Machine**

Carbonfact secures \$15mn to automate environmental reporting

Carbonfact Story

The fashion industry, adored for its trendsetting styles, holds a dark secret: it's a major polluter. This industry holds 10% of global carbon emissions, exceeding even the combined footprint of international flights and maritime shipping [Source: EU Parliament].

This is where Carbonfact steps in, a company determines how fashion approaches sustainability. Founded in 2021, Carbonfact offers automated



We strongly believe the future is about vertical and product-centric Carbon Management Platforms, and we were impressed by the leadership position that Carbonfact has been able to take on the fashion industry.

Bartosz Jakubowski,
Partner at lead investor Alven

carbon management software specifically designed for the fashion industry. This innovative platform tackles the industry's significant challenge – accurately measuring and reporting emissions across complex supply chains.

Measuring a fashion brand's carbon footprint is a cumbersome, resource-intensive task. Gathering accurate data from numerous suppliers scattered across different tiers of the supply chain is a significant hurdle. Carbonfact addresses this problem by automating the entire process.

Their software seamlessly integrates with a company's existing IT systems. It then cleans and analyzes the data, pinpointing inconsistencies and missing information. Leveraging machine

learning, Carbonfact fills in the gaps and delivers reliable footprint calculations, even with incomplete data.

Carbonfact's recent success is a testament to the growing importance of sustainability in fashion. Their \$15 million Series A funding round, led by existing investor Alven and joined by new investor Headline, is a significant vote of confidence. The company's impressive roster of clients includes established brands like New Balance, Columbia, and Carhartt, demonstrating the industry's receptivity to Carbonfact's solutions.



After meeting with hundreds of textile brands and suppliers we realized that collecting data and reporting on all product and supply-chain information is a complex task that requires more comprehensive data management than spreadsheets allow. We believe that fashion brands should be able to measure and report on climate progress with limited manual work.

Marc Laurent,
CEO and Co-founder, Carbonfact

Circularity Updates

European Circular Economy 2024 conference kicks off in Brussels



The European Commission and the European Economic and Social Committee host the seventh edition of the European Circular Economy Stakeholder Conference on 15 & 16 April 2024.

The event focused on turning circular visions into actions and included discussions on policy, cities' roles, and critical raw materials.



<https://www.texspacetoday.com/european-circular-economy-2024-conference-kicks-off-in-brussels/>

New rPolyester database launched to facilitate Textile Recycling by Accelerating Circularity & Performance Days

A new partnership between Accelerating Circularity and Performance Days aims to boost awareness of recycled polyester (rPolyester) derived from textiles. The effort will culminate in the launch of a "Reality Zone rPolyester" database at an event in Munich.

This database will be a resource for companies looking to incorporate recycled textiles into their

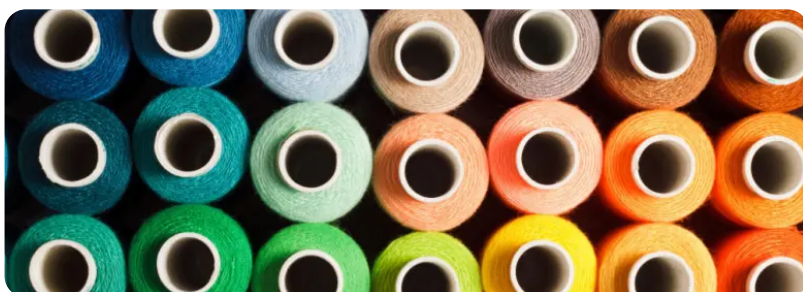


products. It will include information on who makes these rPolyester materials, what types are available, and where to source them.



<https://www.texspacetoday.com/new-rpolyester-database-launched-to-facilitate-textile-recycling/>

CTI unveils new metrics for Circular Fashion



The fashion industry is launching a new way to measure how sustainable clothing brands are by tracking how much clothing is reused or recycled. This new system is called the CTI Fashion Initiative and it will be based on existing

circularity assessment frameworks. The goal is to get all fashion companies to agree on the same way to measure how circular they are. This will make it easier to compare brands and hold them accountable for their environmental impact. The CTI Fashion Initiative is being led by the World Business Council for Sustainable Development, VF Corporation, and Deloitte. They hope that by working together, the fashion industry can become more circular and sustainable.



<https://www.texspacetoday.com/cti-unveils-new-metrics-for-circular-fashion/>

Archroma and Cotton Inc. Recommit to Sustainable Cotton



Archroma and Cotton Incorporated are teaming

up again to create a more sustainable cotton industry. They are developing dyes from cotton byproducts, such as burs, stems, and leaves. This will reduce reliance on oil-based dyes and create a more circular economy for cotton. Cotton Incorporated says this is a great example of how sustainability can lead to innovation throughout the textile industry.

<https://www.archroma.com/press/releases/archroma-and-cotton-incorporated-reaffirm-commitment-to-innovation-for-cotton-circularity>

Finger Lakes Gears Up for Sustainable Fashion with Goodwill Textile Event

Goodwill Industries held a summit focused on recycling clothes. The summit included representatives from the US, Canada, and Finland. Participants learned about new sorting and recycling technologies and shared successful projects, like a Walmart-funded initiative that turns unusable clothes into materials for new textiles. This summit highlights Goodwill's commitment to sustainability in the clothing industry.



<https://www.texspacetoday.com/finger-lakes-gears-up-for-circularity-with-goodwill-textile-event/>

UNECE Pushes for Circular Economy Adoption at World Circular Economy Forum 2024



The UN is working on several initiatives to promote a circular economy, where resources are reused instead

of wasted. They are looking at new business models, traceability in supply chains, food systems, and knowledge sharing.

For example, they are studying how platforms like Amazon can be used to create circular marketplaces for used goods. They are also developing a data standard for tracking textiles throughout the supply chain. In the food sector, they are working to reduce food waste by sharing best practices and promoting new technologies. The UN will showcase these initiatives at a conference in Geneva in June.

<https://unece.org/media/Circular-Economy/news/390450>

Lenzing partnered with Candiani Denim to protect glaciers & promote circularity

■ Desk Report

The Lenzing Group, a leading supplier of regenerated cellulose for textiles, has embarked on a groundbreaking initiative that tackles two pressing issues: glacier protection and promoting circularity in the textile industry. Partnering with Candiani Denim, a renowned denim producer, this project offers a glimpse into a more sustainable future for fashion.

Protecting Glaciers with Innovation

Global warming is causing glaciers to melt at an alarming rate. Geotextiles, typically made from fossil-based fibers, are used to protect ice and snow. These materials shed microplastics that pollute the environment and enter the food chain. Lenzing’s solution involves replacing these non-biodegradable geotextiles with nonwovens containing cellulosic LENZING™ fibers. These innovative fibers are not only biodegradable but also demonstrably effective. A pilot project on the Stubai Glacier in Austria showed that these new geotextiles helped save four meters of ice from



melting. The project’s success led to its expansion across all Austrian glaciers frequented by tourists in 2023.

From Glacier Waste to New Garments: Embracing Circularity

The first phase of this pilot project yielded a “Glacier Jacket,” showcasing the viability of this approach. Partners involved in this phase include Marchi & Fildi Spa, a specialist in mechanical recycling, and the avant-garde fashion studio Blue of a Kind.

The “glacier denim” fabric is a testament to the power of circularity. It combines recycled nonwovens from used geotextiles with TENCEL™ Lyocell fibers made using REFIBRA™ technology, which incorporates cotton textile waste alongside wood pulp. Organic cotton is also included in the blend.

The use of REFIBRA™ technology lends a brighter, glacier-white hue to the ecru denim. This innovative fabric can be recycled multiple times, creating a “never-ending cycle of sustainability.” The 3×1 right-hand twill construction adds a touch of sophistication to this eco-friendly material.

“

The collaboration is a testament to the power of partnership; driving innovation and sustainability, reducing environmental impact and encouraging collaborative action against climate change for global impact across the textile industry,

Sarah Doll, a scientist with the Environmental Working Group

Archroma & Cotton Inc. renew collaboration to promote cotton circularity

■ Sanjoy Kumar Saha



Archroma, a leader in sustainable specialty chemicals, and Cotton Incorporated, the research and development arm of the cotton industry, have renewed their eight-year partnership to accelerate the shift towards a circular economy in cotton production.

The collaboration began in 2016 with a shared goal of developing dyes from cotton byproducts. Cotton production in the US, the world's third-largest producer, generates not only cotton fiber but also cottonseed for food and animal feed. Additionally, cotton processing creates byproducts like burs, stems, and leaves that are used in various applications. Cotton Incorporated saw the potential to utilize these byproducts for creating dyes.

Leveraging their expertise in sulfur dyes, Archroma's research team developed DIRESUL[®] Earth-Cotton, a dye made from US cotton byproducts using their patented EarthColors[®]

technology. This sustainable alternative to traditional oil-based dyes allows brands to offer textiles in natural shades while keeping the entire cotton lifecycle within a circular economy.

"Cotton's versatility allows for near-complete utilization of the plant," said Mary Ankeny, Vice President of Product Development and Implementation Operations for Cotton Incorporated. "We are committed to working with innovators like Archroma to develop new methods for achieving circularity in cotton production."

"The creation of DIRESUL[®] Earth-Cotton exemplifies how sustainability can drive innovation that benefits the entire textile chain," said Umberto De Vita, Market Segment Director for Denim at Archroma Textile Effects. "We are excited to continue collaborating with Cotton Incorporated as a valued partner in leading the textile industry towards a more sustainable future."

Trump Victory Could Threaten \$1 Trillion in Clean Energy Investments, Warns WoodMac



Former U.S. President and Republican presidential candidate Donald Trump attends a campaign rally in Wildwood, New Jersey, U.S., May 11, 2024. REUTERS/Evelyn Hockstein/File Phot

A Trump victory in the November 5 election

could endanger \$1 trillion in low-carbon energy investments and increase carbon emissions by 1 billion tonnes by 2050, according to Wood Mackenzie. “This election cycle will really influence the pace of energy investment,” said David Brown of Wood Mackenzie’s Energy Transition Research. Trump plans to reverse Biden’s climate policies and may withdraw from the Paris climate agreement again, contrasting sharply with Biden’s focus on climate change and clean energy. Wood Mackenzie projects \$7.7 trillion in U.S. energy investments by 2050 under current policies, which could be \$1 trillion less if Trump reverses key low-carbon policies.

<https://www.texspacetoday.com/trump-victory-could-threaten-1tn-in-clean-energy-investments-warns-woodmac/>

KARL MAYER's Cloud-Based System Optimizes Energy Use in Warp Knitting

KARL MAYER GROUP launched an Energy Efficiency Solution to help warp knitting companies monitor and manage their energy use. This cloud-based system combines sensor technology with software to analyze real-time and historical data.

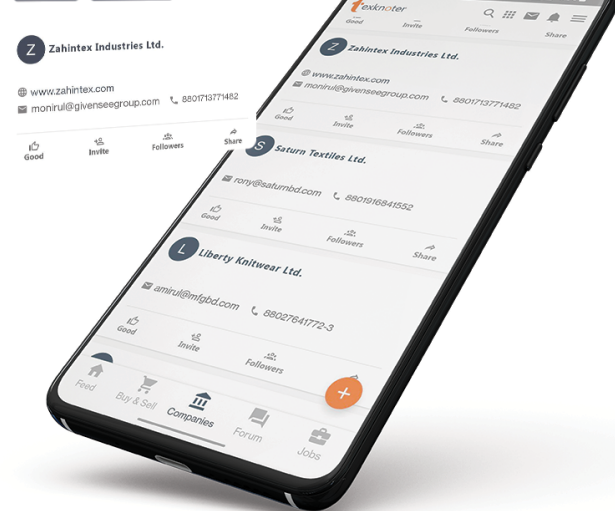
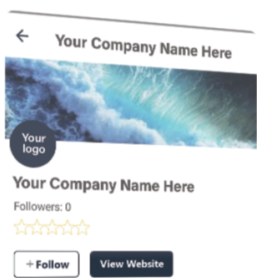
Customers can view energy consumption for individual machines or their entire fleet, broken down by production, heating, and standby modes. They can also compare energy use for different

machines or fabrics and generate reports. A key feature is automated heating control. Users define production schedules and the system calculates optimal heating times to minimize energy waste.

In pilot tests, this solution achieved 5-10% monthly energy savings. The system will be rolled out gradually, starting with KAMCOS® 2 machines, with plans to retrofit KAMCOS® 1 machines and eventually include all KARL MAYER machines.

<https://www.karlmayer.com/en/news-and-media/news/first-energy-efficiency-solution-for-warp-knitting-machines/>

NETWORK



Post

Buy & Sell

Companies

Events

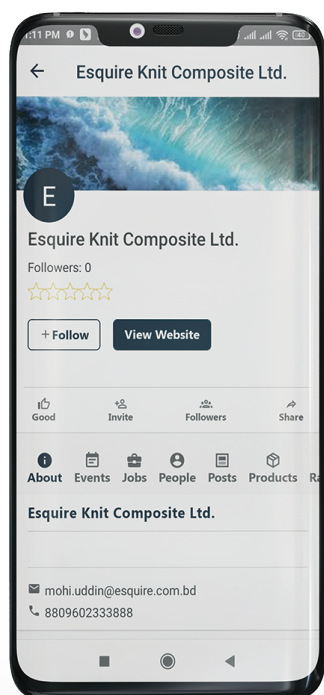
Forum

Jobs

Profile

Messages

Notification



Create Your

Profile

Create & build your profile

Events

Create & Join events
in a single place.

Buy & Sell

A dedicated marketplace
to buy & sell products.

Jobs

Post jobs easily and get the right professionals.

Post

Share thoughts or views with people of the same interest.

