

November 2024 Issue No. 40



## Footprints of Innovation:

The Future of Sustainable Footwear



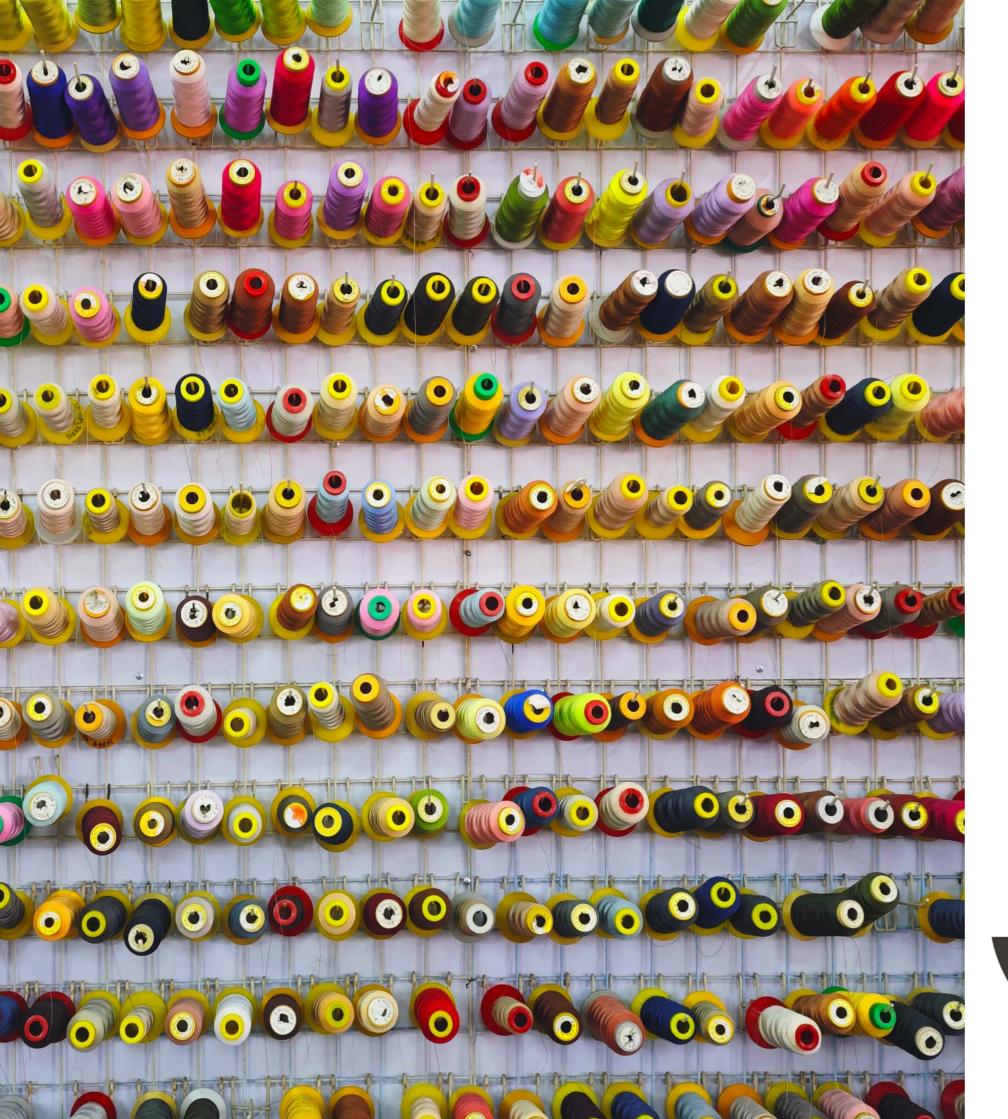


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> **Design** He Wang

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## Your One-Stop Solution for

#### Sustainable and Innovative Footwear Production

#### Dear Sourcing and Sustainability Managers,

Are you seeking a footwear production partner that aligns with your commitment to sustainability and innovation? Look no further.

At Circular Solutions we offer a comprehensive solution for all your footwear production needs. Our extensive production capacities span a wide range of countries, providing flexible solutions tailored to your market demands in North America and the European Union.

#### Why Partner with Us?

- Sustainable Supply Chain: We collaborate with partners
  across the entire supply chain. From Leather Working
  Group (LWG) Gold-rated tanneries, including wet blue
  production, to suppliers of recycled materials for soles and
  uppers, we ensure every component meets the highest
  sustainability standards.
- Innovative Production: Our commitment to innovation means we stay ahead of industry trends, providing you with cutting-edge designs and materials that set your products apart.



- Advanced Software Integration: Our proprietary software allows us to design, plan, produce, and monitor each order meticulously, ensuring we meet your exact requirements with full transparency.
- **Global Flexibility:** With production facilities in multiple countries, we offer scalability and flexibility to adapt to your specific needs and regional preferences.

#### **Let's Drive Sustainable Innovation Together**

Choosing **Circular Solutions** means partnering with a leader dedicated to sustainability and innovation. We are committed to helping you achieve your sourcing and environmental goals while delivering exceptional products.

#### **Contact Us Today**

Ready to take the next step? Contact us to learn how we can support your sustainability initiatives and elevate your product offerings.

Sincerely,

Karl Borgschulze Michael Boenisch







#### Welcome to the machine

Welcome To The Machine (2019 Remix) lyrics © BMG Rights Management



#### Welcome to the machine

Welcome To The Machine (2019 Remix) lyrics © BMG Rights Management

## Your One-Stop Solution for

Sustainable and Innovative Footwear Production



Looking for a partner that combines sustainability with innovation in footwear production? Discover a comprehensive solution tailored to meet your sourcing and environmental goals.

#### **Global Production Capacities**

- Extensive production facilities across a wide range of countries
- Flexible solutions for markets in North America and the European Union

#### **Sustainable Supply Chain Partnerships**

- Collaboration with LWG Gold-rated tanneries, including wet blue production
- Utilization of recycled materials for soles and uppers
- Commitment to the highest sustainability standards throughout the supply chain

#### **Innovative Technology Integration**

- Proprietary software for designing, planning, producing, and monitoring each order
- Full transparency and meticulous attention to customer requirements
- Streamlined processes for efficient and effective production management

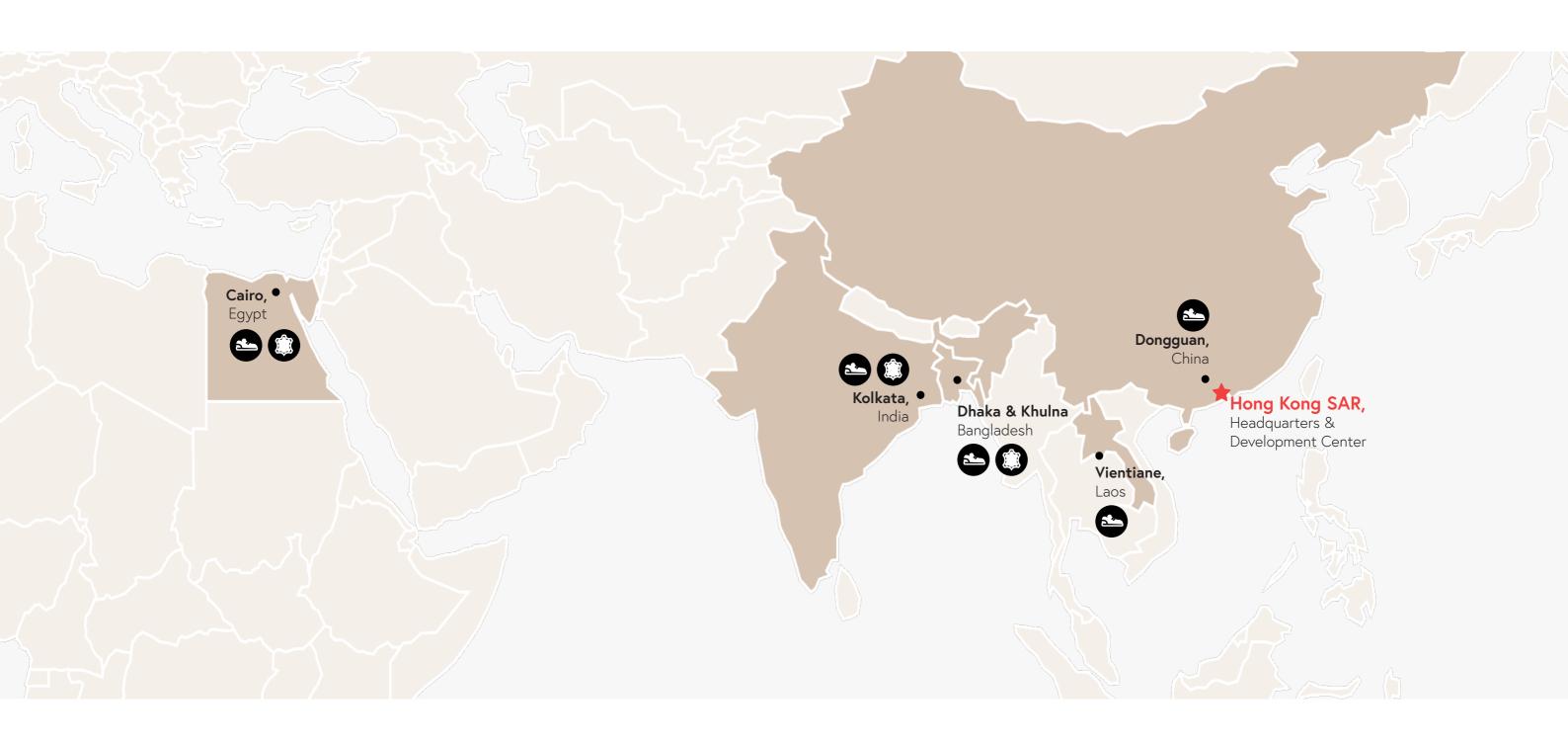
#### Why Choose Us?

- Sustainability Focus: Dedicated to environmentally friendly practices at every production stage
- Innovative Solutions: Offering cutting-edge designs and materials to set your products apart
- Global Flexibility: Ability to scale and adapt to specific needs and regional preferences

Elevate your footwear offerings by partnering with an industry leader committed to sustainable innovation.

## Where to Find

## Our Material and Production Network



## Overview

## Requirements



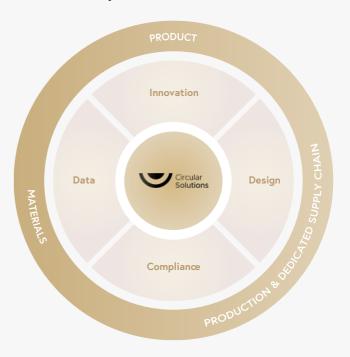
#### Quality

- Material Selection: We choose high quality materials that align with the brand's standards and customer expectations. This includes fabrics, leathers, and synthetic materials that offer durability, comfort, and aesthetic appeal.
- Manufacturing Processes: We work with partners of skilled craftsmanship and advanced manufacturing techniques to ensure product consistency and excellence. Quality manufacturing reduces defects and returns.
- Quality Control: We implement rigorous quality control measures at every production stage. Regular inspections and testing help maintain high standards and build customer trust.

#### **Price**

- Cost of Production: We analyze all costs involved, including materials, labor, overhead, and logistics. Understanding these costs is essential for setting a competitive price point.
- Pricing Strategy: We develop a pricing model that balances profitability with market competitiveness. Consider factors like target audience, perceived value, and competitor pricing.
- Economies of Scale: We optimize production volumes to reduce per-unit costs.
   Larger production runs can lower costs but require accurate demand forecasting to avoid excess inventory.

## State of the Art Product Development and Production



#### **Legal Requirements**

- Regulatory Compliance: We ensure all products meet local and international regulations, such as safety standards, flammability requirements, and chemical restrictions (e.g., REACH, CPSIA).
- Labeling and Documentation: We adhere to legal requirements for product labeling, including country of origin, material composition, care instructions, and size information.
- Trade and Import/Export Laws: We comply with customs regulations, tariffs, and trade agreements in all countries where the product will be sold.

#### **Sustainability**

- Eco-friendly Materials: We use sustainable, recycled, or organic materials to reduce environmental impact. This appeals to environmentally conscious consumers and can differentiate your brand.
- Sustainable Manufacturing: We implement processes that minimize waste, reduce energy consumption, and lower carbon emissions. Consider certifications like ISO 14001 for environmental management.
- Ethical Labor Practices: We uphold fair labor standards, including fair wages, reasonable working hours, and safe working conditions. Certifications like Fair Trade or SA8000 can validate your commitment.
- Transparency and Reporting: We are transparent about your supply chain and sustainability efforts. Regular reporting can enhance brand reputation and customer loyalty.

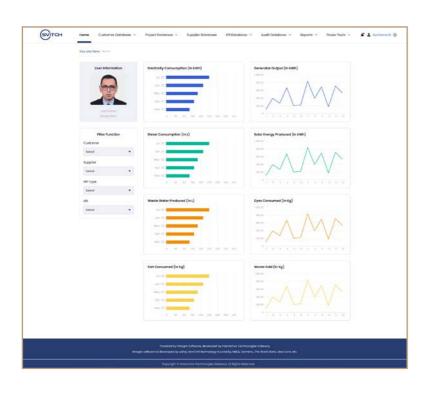


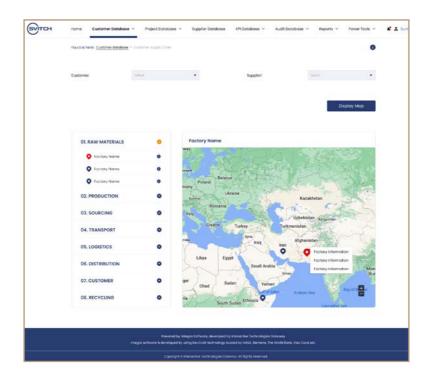
# Software

## Svitch:

## Technology Driven Supply Chain Solutions







#### What is Svitch?

Svitch is our cloud-based communication platform and database tool to create transparency and manage orders and data of any complex supply chains. It establishes channels of communication throughout the entire supply chain and allows easy data gathering through freely definable order- and quality management processes, questionnaires, document management and more. Collected data is further analyzed and summarised in automatically generated reports to be used internally, or employed as an effective marketing tool to support your customers.

- Transparency and Communication Module
- Law into Action

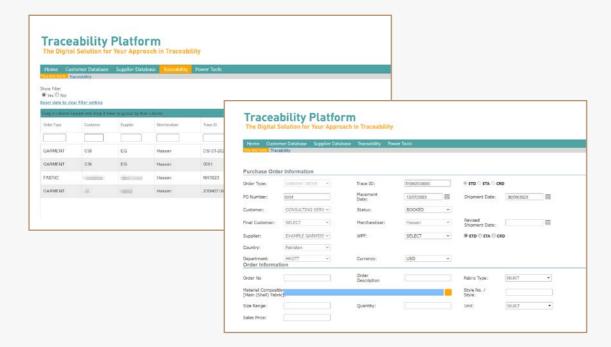
- Documentation Module
- Audit and Corrective Action Module
- KPI Monitoring and Analytics Module
- Traceability Module
- Order Management Module
- Quality Control Module
- Marketing Module, including Digital Showroom

With its different modules, Svitch allows for the proactive management of orders covering all aspects including compliance and liabilities along global supply chains.



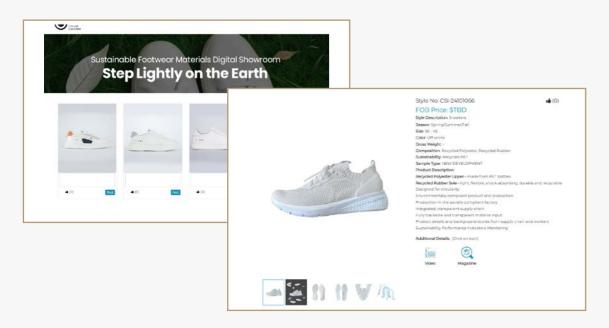
#### **Traceability Module**

• The Traceability Module provides a comprehensive overview of the supply chain, tracing the journey from raw materials to final products.



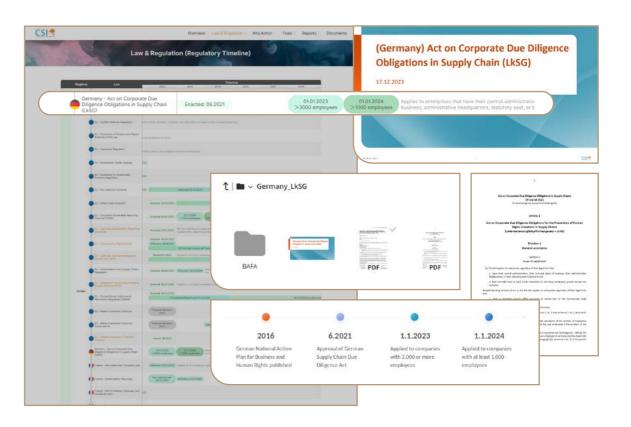
#### **Digital Showroom**

• The digital showroom is a product communication platform, it offers the possibility to pro-actively showcase new products or ideas with 3D scans, photos, and other media in the cloud.



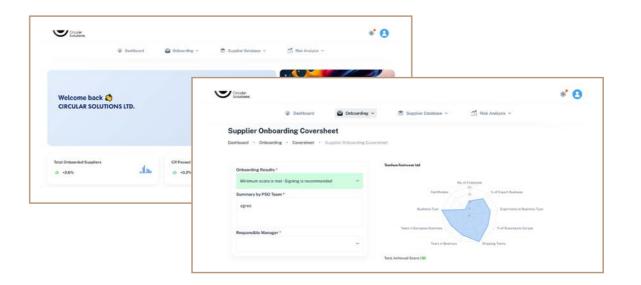
#### Law into Action

Stay ahead of the curve with our innovative tool that brings together ESG laws and regulations from countries and organisations around the world.



#### Customization

• Whether it's enhancing transparency and communication, managing compliance, or supporting marketing efforts, Svitch provides personalized solutions.



Svitch



## rPVB Leather

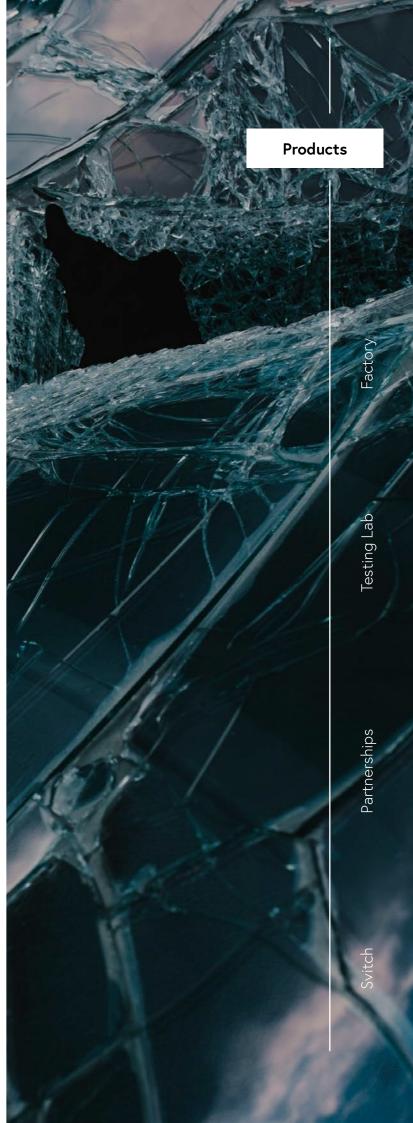
## Waste into Valuable



rPVB vegan leather is an environmentally friendly innovative material made from recycled polyol ester (PVB) from discarded car windshields and building windows, offering high-performance protection and durability, and is GRS certified.

The Glass Separated from the Safety Glasses can also be further upcycled too.

The waste glass recycling system already has a complete supply chain. Recycled glass is widely reused in building materials, fireproof bricks, glass bricks and foam particles, etc.; glass recycled from windshields is mainly remanufactured into glass wool, which can be used as heat insulation and sound insulation and flame retardant building materials



## rPVB Leather

## Shoes & Certificates



#### **Outsole: rTPR**

Made from recycled Thermoplastic Rubber, our outsoles are durable and environmentally friendly.

#### **Upper:** rPVB

Crafted from recycled Polyvinyl Butyral, offering strength and sustainability.

**Products** 

## Carbon Nanotube (CNT)

## New Era of Comfort



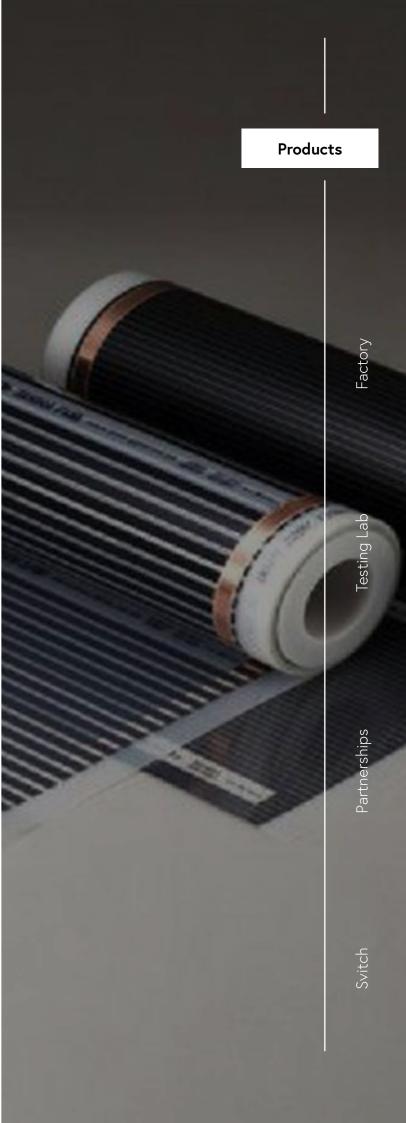


At Carter Industrial, we believe in the power of enduring performance. Our Carbon Nanotube (CNT) Heating Apparel stands as a testament to this belief, having undergone rigorous durability testing for over 100,000 hours since 1997.

Our CNT Heating Apparel incorporates Smart Temperature Control technology, a feature that we take immense pride in. It intelligently adjusts heat according to the local temperature. This means that if an area is obstructed by physical objects,

The testing continues, and to date, the CNT Heating Apparel maintains its original functional performance. To put this into perspective, 100,000 hours of continuous operation equates to 12 years. If used for 8 hours a day for 5 months a year, this translates to an impressive lifespan of 83 years.

Smart Temperature Control technology, a feature that we take immense pride in. It intelligently adjusts heat according to the local temperature. This means that if an area is obstructed by physical objects, clothing layers, or exposed to different weather conditions, the Smart Temperature Control technology can automatically adjust the heating element. This unique feature ensures our CNT Heating Apparel is not only safe but also energy-efficient. Experience the comfort and durability that's always with you.



## Carbon Nanotube (CNT)

## Heating Boots





Step into a new era of comfort and warmth with our innovative boots, designed with advanced Carbon Nanotube (CNT) technology. Our Heating Boots are more than just footwear - it's a warm embrace from the future. Stay warm, stay stylish, stay ahead with us.

Unleash the Power of Warmth with our ultra-thin heating element, measuring just 0.4mm in thickness. Our Heating Boots are not only sleek and comfortable but also packed with the latest technology.

We are proud to uphold the highest standards of safety and environmental sustainability. Our products strictly adhere to the US Title 21 of the CFR Food and Drug Administration standard and EU RoHS and REACH material standards, ensuring that our heating solution is as safe as it is efficient.

We are committed to a greener future. Our system guarantees zero release of Volatile Organic Compounds (VOCs), making our Heating Boots an eco-friendly choice.



## A Sustainable Innovation

## Pineapple Fiber



In cooperation with research centers and Bangladesh local partners, CS has developed high quality pineapple fiber for industrial production. The fiber is exceptionally sustainable and versatile.

To make pineapple fabric, fiber is extracted from pineapple leaves, washed and sundried for several hours. It is then combed

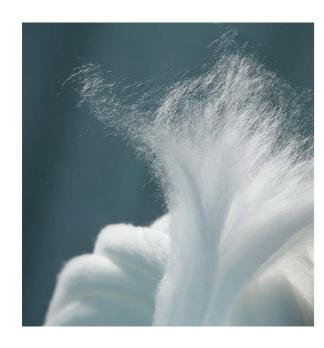
and spun into yarn. Using traditional warps and looms, the yarn is handwoven into a soft and sustainable fabric. Pineapple fiber can be used as material for home textiles, denim and other apparel, either in combination with other materials, such as organic cotton, or in 100% pineapple fabric.



## Lenzing

## Tencel Lyocell









#### What is TENCEL™?

TENCEL™ is Lenzing's flagship brand for textiles. Used for a variety of highly specialized applications, the benefits of TENCEL™ Lyocell and Modal fibers can be discerned instantly: Soft to the skin and smooth to the touch.

#### **TENCEL™** Lyocell

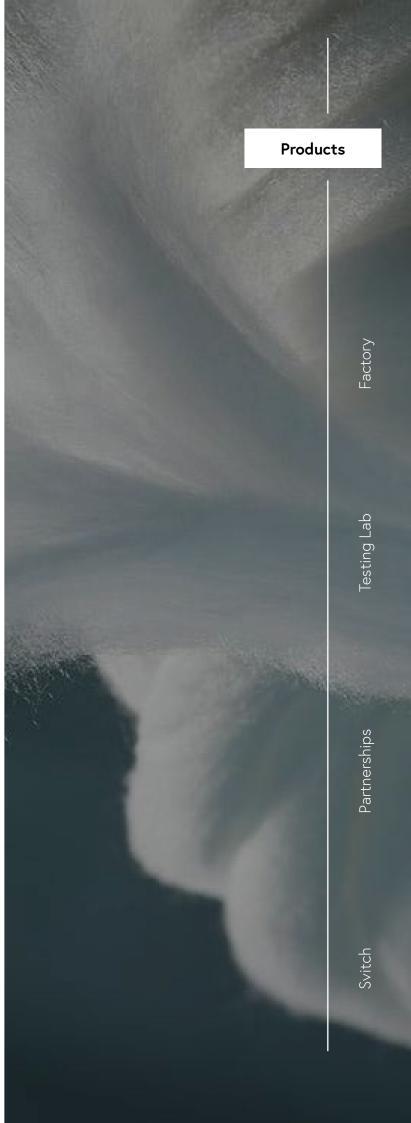
TENCEL™ Lyocell fibers are derived from controlled or certified wood sources using a unique resource-saving, closed loop production process – resulting in close-to-

zero wastage. Unique physical properties lead to their high tenacity profile, efficient moisture control, and gentleness to the skin.

TENCEL™ Lyocell are regenerated cellulosic fibers known for their natural comfort and environmentally responsible closed loop production process. They deliver quality, performance and versatility. Their unique physical properties lead to their high tenacity profile, gentleness on skin and good moisture management, especially desired in products where good thermo-physiological performance of textiles is required.

## Pineapple Tencel Upper

Made from a mixture of Pineapple fiber and Tencel

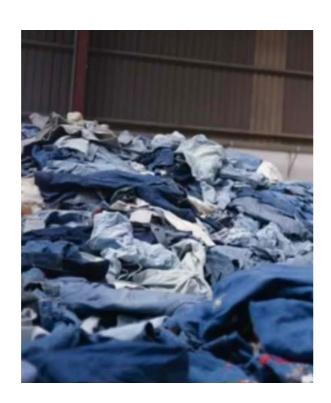


## Circular Solutions:

## Garments, workwear and instituional textiles into new products



Recycled Denim Upper



Recycled Wool Upper





Our new collection redefines sustainable fashion. Crafted from recycled wool or recycled denim, each upper not only celebrates style but also champions environmental responsibility. By transforming these materials, we reduce waste and breathe new life into fashion.

Every piece is crafted with precision, offering durability and unmatched comfort. Our products are designed to withstand the test of time, proving that sustainable fashion can be both beautiful and practical.

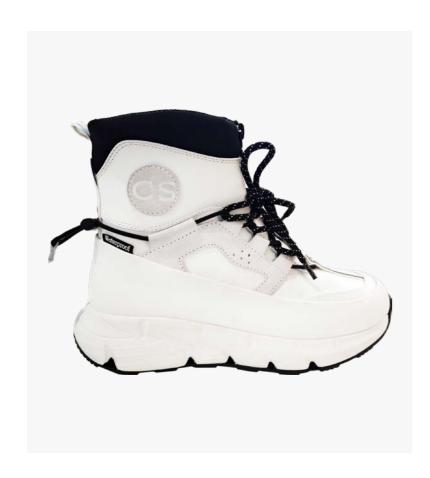
By choosing our collection, you're supporting a greener future and making a meaningful impact. Embrace fashion that aligns with your values and showcases your commitment to the planet.



Recycled Wool Color Shade Cards

## Waterproof

## Shoes

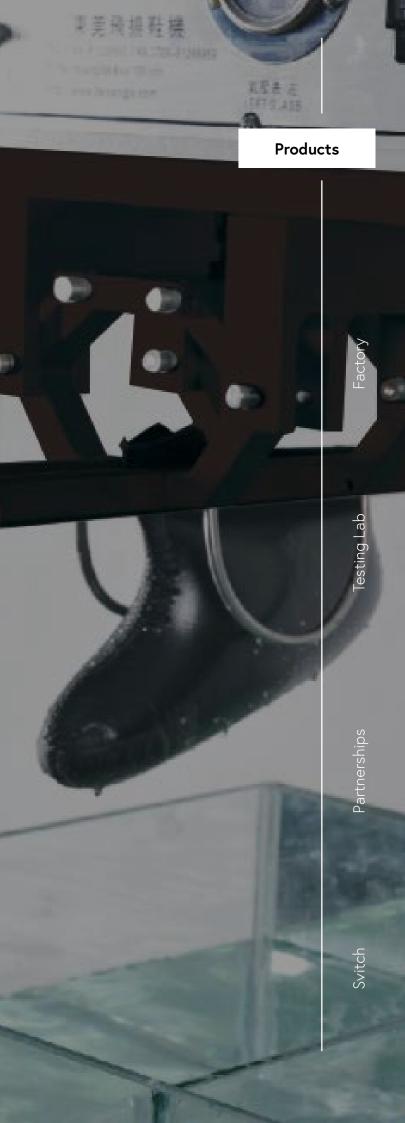




Lining Leak Tester

The waterproof shoes are designed to keep your feet dry and comfortable in all weather conditions. Utilizing advanced materials and technology, these shoes provide exceptional protection against moisture without sacrificing breathability.

Our waterproof shoes undergo rigorous testing to ensure they meet the highest standards of quality and performance.

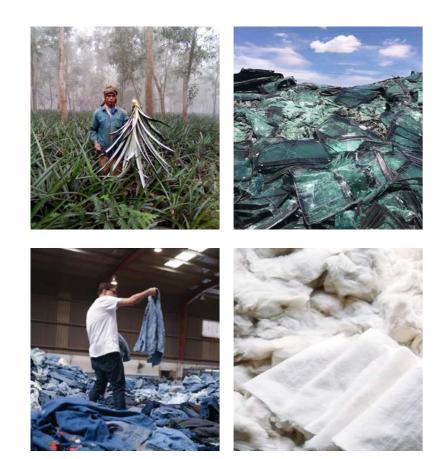


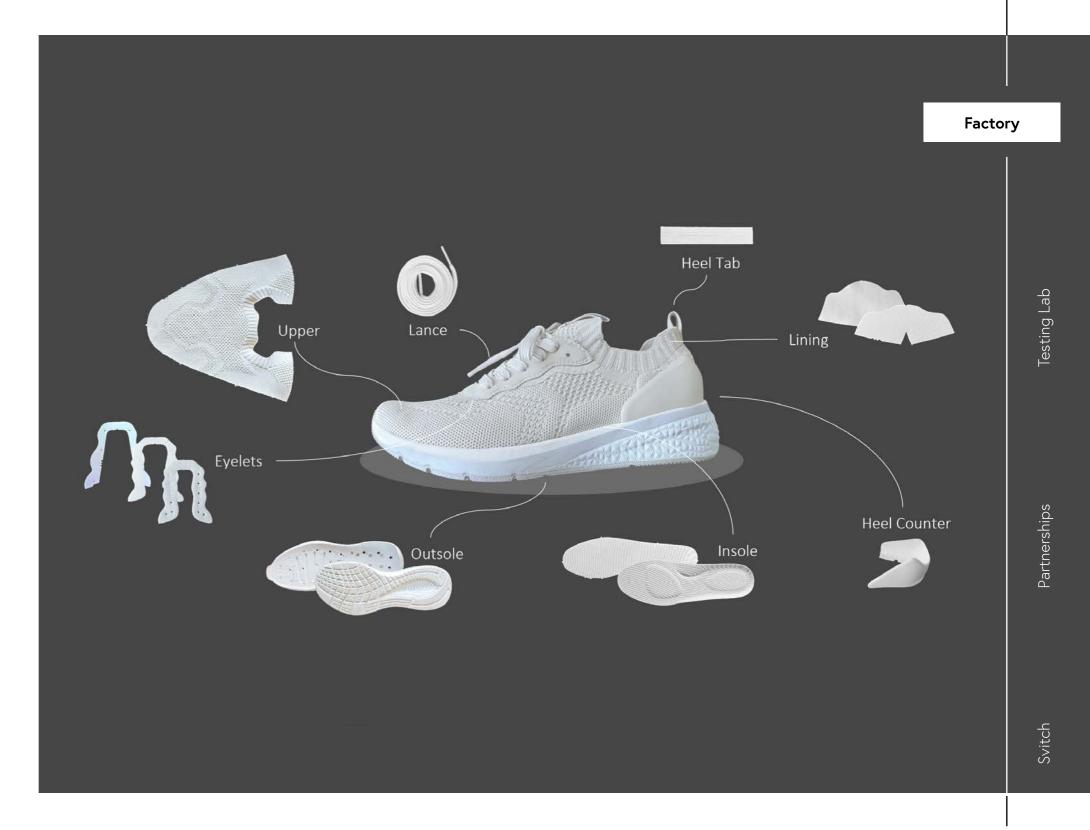


## **Shoes Components:**

We start from scratch and check every component so you can choose

Each component is meticulously selected to offer eco-friendly alternatives without compromising quality or style. We start with pineapple fiber, known for its strength and sustainability, followed by recycled denim, which breathes new life into discarded textiles. Our shoes also feature recycled wool, providing warmth and comfort, and recycled PVB, which adds durability. Additionally, apple leather offers a vegan and innovative material choice. Every element in our shoes reflects our commitment to a sustainable future, allowing you to make environmentally conscious choices with every step.





## **Production Sites:**

With our network of integrated partners for material production, assembly, and footwear production we cover all aspects of innovative and sustainable production













## Tour









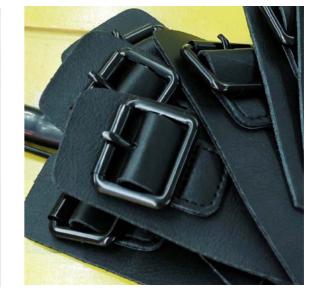
A glimpse into our state-of-the-art manufacturing facilities, showcasing our commitment to quality and sustainability.

## Tour

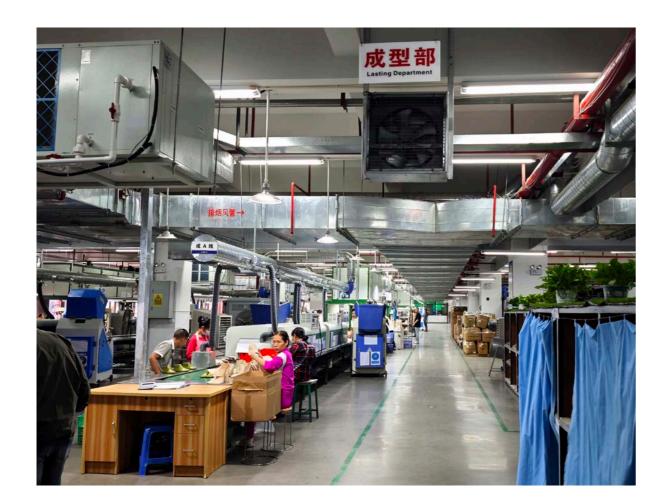


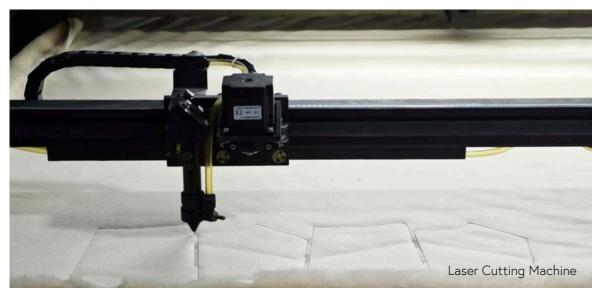






## Tour









## **Testing**

## Lab







Material Flex Tester



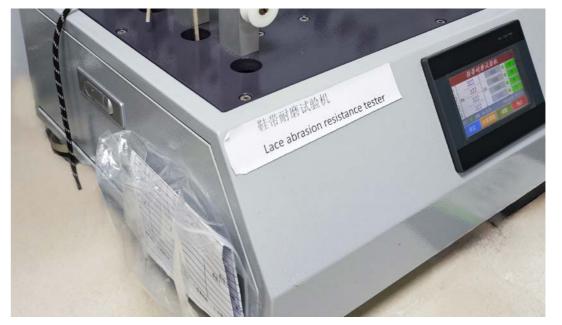
Outsole Flexing Tester



Finished Shoes Flexing Tester



Zipper Performance Tester



Lance Abrasion Resistance Tester

Our rigorous testing ensures all products meet the standards of durability and performance.



## Carter Industrial Company

## Profiles



Carbon Nanotube (CNT) Composite Film



Recycled PVB Leather



Recycled PVB Leather

Carter Industrial Company

#### What is Carter?

Established in 2009, CARTER INDUSTRIAL COMPANY is a global enterprise supplying synthetic leather, and film. We pride ourselves on serving customers worldwide, with a strong presence in the Asia Pacific, Europe, and North America. Our head office is strategically located in Hong Kong, and we have established production facilities in Guangdong and Jiangxi provinces, as well as a research institute in Taiwan. In addition to supplying synthetic leather and film materials, we offer comprehensive OEM/ODM services, always striving for a win-win scenario with our customers by prioritizing our relationships and the quality of our products.

#### What makes Carter unique?

We are a leading manufacturer specializing in PVB, PVC, PU, TPU, Carbon Nanotube (CNT) Composites Synthetic Leather & Film.

Our latest innovation is the Carbon Nanotube (CNT) Composite Film, an EMI and EMR electromagnetic shielding series composite. This advanced material is conductive, thermally conductive, and versatile in its applications.

At Carter Industrial Company, we are committed to continual innovation to meet the diverse demands of our customers and the industry. We are shaping the future of advanced materials.

## Capital Shoes Factory Ltd.

## Profiles









#### **Factory**

#### **What is Capital Shoes Factory?**

Capital Shoes Factory Ltd. has over 30 years of experience in making shoes, especially licensed products, such as Disney, Warner Brothers, Mattel, Sanrio, ELLE, etc. We specialize in making newborn baby stitch & turn, children's sandals, and party shoes.

#### What makes Capital unique?

Through significant investments in automation and streamlined processes, our two leading-edge factories have the capacity to produce over 14,000 pairs of shoes per

day. Advanced leather-cutting machines allow for precise patterns at high speed. Computerized lasters shape each upper to its mold with unparalleled accuracy.

With flexible production lines and teams of problem-solvers, we maintain agility to customize for special orders or expand lines on short notice. This manufacturing muscle, coupled with our artisans' meticulous techniques allow us to craft shoes at an impressive volume while never compromising on quality.

## **AKIJ Footwear Ltd.**

## Profiles







#### What is Akij Footwear Ltd.?

Our journey commenced with SAVAR SHOE INDUSTRY (PVT) LTD., established in 1992 at Dhaka EPZ. Transitioning into the new era, we proudly introduce AKIJ FOOT-WEAR LTD. This expansive shoe venture is strategically situated a mere 20 KM from Shahajalal International Airport, boasting a sprawling 300000 SQF land area with 50000 SQF dedicated to operational activities.

#### What makes Akij Footwear Ltd. unique?

AKIJ FOOTWEAR LTD stands out for its meticulous adherence to contemporary international standards. A marvel of engineering, the factory is complemented by robust back-up generators and state-of-the-art warehouse facilities, creating an eco-friendly and sophisticated environment for footwear production. Supported by our own world-class tannery namely SAF INDUSTRIES LTD. which is rated one of the best Leather Processing Industries in ASIA for Finished Cow Calf Leather running from 1960.

## Classical Leather & Footwear Products Ltd.

## Profiles









#### **Factory**

#### What is CLFP Ltd.?

CLASSICAL LEATHER AND FOOTWEAR PRODUCTS LTD. is one of Bangladesh's rapidly growing leather goods manufacturing companies, operating alongside other factories with exceptional expertise in crafting leather products.

It is a sister concern of Classical Handmade Product Bd. Limited, a globally recognized export manufacturing company specializing in handmade products crafted from natural fibers and garment waste, catering to markets in the EU, USA, and Australia.

#### What makes CLFP Ltd. unique?

Our vision is to redefine luxury through the artistry of leather craftsmanship, with a steadfast commitment to sustainability. We are dedicated to producing premium leather goods, including bags, and ensuring superior quality in every pair of shoes and sandals we create.

## **Technical Profiles**

#### **AKIJ Footwear Ltd.**



Business Type	Shoes Manufacturer	
Location	Dhaka, Bangladesh	
Area	65,000 SQF	
Actual Working Space	37,500 SQF	
Types of Products	Leather Shoes, Boots & Sandals (Men's & ladies)	
Numbers of Production	06 Complete Lines	
Monthly Production	40,000 Pairs	
Annual Output	4,50,000 Pairs/ Year	
Main Technology Used	Wulcanized / Cemented	
Annual Turnover USD	US \$ 8 Million	
Performance and Standard	ISO 9001:2008	

#### **EGIT**



Business Type	Leather Manufacturer	
Location	Cairo, Egypt	
Capacity	1.5 Million SQFT	
Types of Products	Cow & Buffalao Crust & Fin- ished Leather	

- All products made from raw to finish in one tannery consistent quality
- Full tannery is equipped with updated european machines for making top quality.

#### **Pious Tannery**



Business Type	Leather Manufacturer	
Location	Kolkata, India	
Capacity	800,000 SQFT	
Types of Products	Cow Finished Leather for Shook & Bags	

- All products made from raw to finish in one tannery consistent quality.
- Working with good brands in Europe.
- Full tannery is equipped with updated machines for making
- Always 3 million sqft wetblue stock available in tannery ready for production.

#### SAF Industries Ltd.



Business Type	Leather Manufacturer	
Location	Khulna, Bangladesh	
Capacity	1.5 Million SQFT	
Types of Products	Cow & Goat Finished Leather	

- All products made from raw to finish in one tannery consistent quality.
- Working with good brands in USA & Europe.
- Full tannery is equipped with updated european machines for making top quality.

#### Shifu Footwear Co. Ltd.



Till a local control c				
Business Type	Shoes Manufacturer			
Location	Dongguan, China			
Types of Products	Footwear			
Monthly Production	150000 Pairs			
Performance and Standard	GRS & RCS			
Main Market Countries	UK, USA, SPAIN, PORTUGAL			
Manuf. Proccess	Cold Cementing			
Total No. of Employees	280			
Assembling Section	150			
Stitching Section	80			
Laboratory Section	1			
Others Section	49			
Rubber Sole Press or Similar	Yes			
Laboratory	Yes			
Metal Detector	Yes			

	Equipment /Quantity	Workers	Capacity
Cutting	16	27	200000
Stitching	80	99	200000
Assembling Lines	2	151	200000



# Our Brand Partnerships

# **KIBO** Story







#### What is KIBO?

KIBO means 'hope' in Japanese and our mission is to bring some of it to the world by reinventing how footwear is made.

We think, design and craft with people and the planet in mind. With over 50 years experience in the footwear industry, we understand the needs of customers - comfort, style, design with ethical standards in every step.

#### What makes KIBO unique?

KIBO is a sustainable collective with a mission to reinvent the way fashion is made. Designed for comfort, our products are ethically sourced and made using a combination upcycled and natural materials.

We crafts quality sneakers with an aim to do good for the environment and people. We use upcycled leather & plastic bottles to minimise impact to our planet.



## Sustainability



#### **Apple Leather:**

• Apple Leather is a USDA certified Biobased product recycled from the waste of Apples used in the juicing industry. First, we take apple waste and reduce it into a powder then mix it with other natural plant fibers. This mixture is then processed and bonded onto a plant material base. The manufacturing process is solvent free because the fibres are compressed through a high-pressure water jet system. This way, 95% of the water is recycled and re-used throughout.



#### **Recycled Leather:**

• We start with discarded leather scraps, grind them into fine fibers and combine it with other eco-friendly materials to create a new type of leather that is lighter and more durable than full-grain leather. The manufacturing process is solvent-free because the fibres are compressed through a patented highpressure water jet system. The result is 95% of the water is recycled and re-used throughout.



#### **Recycled Canvas:**

• We rescue fabric scraps from factory floors, shred it and turn that into new fibres that are woven into a new piece of fabric. Even though it is recycled from a mixture of industrial waste and consumer textile waste, our technique produces a new fabric feel cotton fabric. Using recycled cotton reduces water consumption by 98% creating less impact on our environment.

**Partnerships** 

## Sustainability



#### **Recycled Plastics:**

That empty plastic bottle of water in the trash?
We recycle it and other post-consumer plastic
waste and turn them into polyester fibrethat
we knit all our shoelacesand shoe linings
from.



#### **Insoles:**

- That feeling of comfort when you slip into a pair of our sneakers comes from an insole made of natural cork. This keeps it antibacterial, anti-odour and sweat-wicking.
- Then we pad it with dual-density foam for both support and comfort. This way, it is not just our outsides that are eco-conscious but insides too!



#### **Outsole:**

 When you go the extra mile to make a difference, the comfort and durability of natural rubber keeps up with you. Our outsoles are made from recycled rubber compounds.

**Partnerships** 

## Sneakers



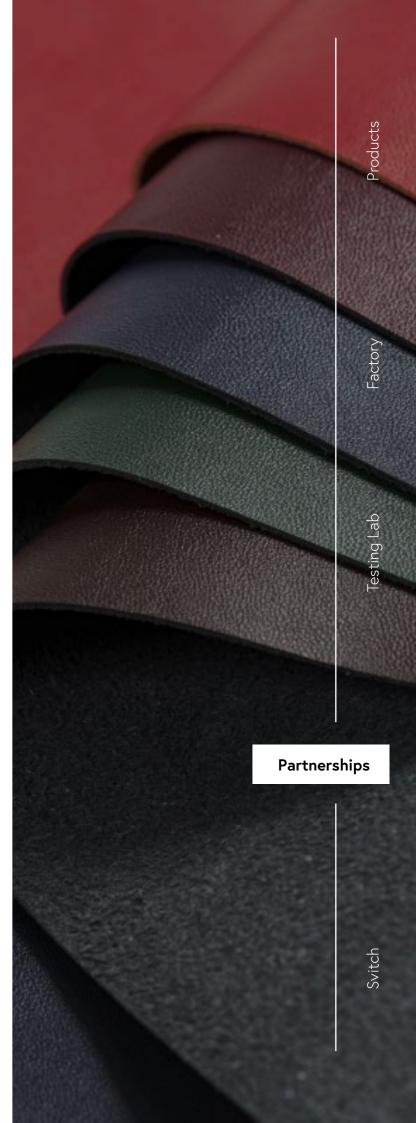
#### The Brooklyn:

• Introducing our newest drop: the Brooklyn! Featuring recycled leather + eco-friendly post-consumer plastic mesh, these trendy kicks are fit for the street and built for everyday wear. Taller soles, roomier fit + maximum breathability, they'll make your feet and Mother Nature happy.



#### **Sydney:**

- Step into sustainable style with these upgraded recycled leather sneakers! Crafted with innovative recycled leather and post-consumer plastics.
- Upper: >50% solvent-free recycled leather, >20% rPET
- Outsole: recycled rubber compound + natural rubber
- Footbed: 100% recycled natural cork
- Shoelaces: 100% rPET post-consumer plastics
- Lining: 100% rPET post-consumer plastics



## Sneakers



#### Mika (Apple Vegan Sneakers):

Each pair is crafted using up to 15 apples' worth of waste! Made from waste from the juicing industry, these "head-turners" are great both for your feet and the environment. Plant-based and vegan-friendly, the Apple Collection sneakers produce 20 times less carbon emission than animal leather alternatives.



#### KIBO x Taloha:

• Experience the magic of KIBO x Taloha, a collection of superheros created by Andre, an 9-year-old boy with a big dream of saving the world alongside the powerful Talohas. Made from upcycled farm waste from the apple juicing industry, these shoes are not only environmentally friendly but also comfortable, lightweight, and water-repellent. Step into the world of KIBO x Taloha and be a part of the journey towards a brighter future, just like our young hero imagined.







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## Circular Solutions