



techtera

techtextil

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At the heart
of textile evolution

Press kit



Auvergne-
Rhône-Alpes

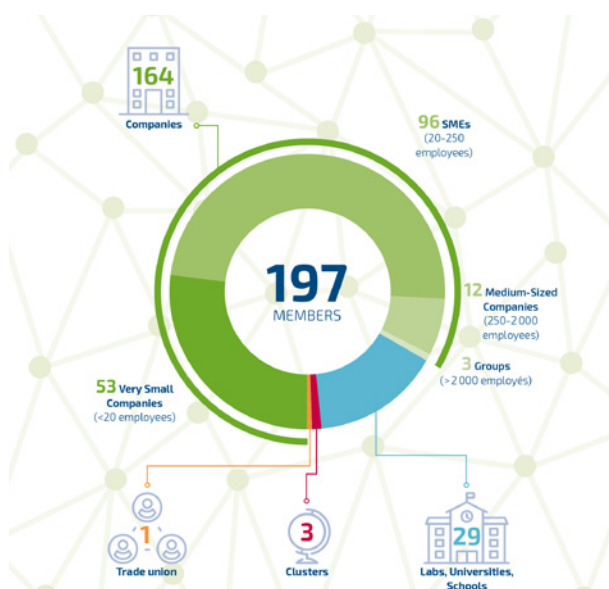


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TECHTERA: AT THE HEART OF TEXTILE EVOLUTION

Techtera is the French innovation cluster dedicated to textile. We animate a network of more than 197 members with the main objective of boosting competitiveness through collaborative innovation.



Our members are supported on:

- innovation and collaborative R&D projects, from the idea to the dissemination of results,
- increasing the levers of innovation, with environmental, technological and economic keys.
- strategy, creation and anticipation of trends in clothing and decoration,
- the marketing of their innovation by individual or collectif support on trade shows, and international collective missions.

The cluster is also involved in structuring actions for the textile industry and related to other sectors, application markets, through interclustering partnerships or European projects.

Under the presidency of Louis Vovelle, Innovation and R&D Vice President of Elkem Silicones, the cluster brings together the skills of 11 employees.

It relies on a wide network of partners:

- the innovation clusters,
- the collective of the Auvergne-Rhône-Alpes region for the industry of the future,
- the European textile platform Euratex,
- the network of fashion players (ESMOD, IFM, ENSAD...),
- the main clusters and research centers.

At the international level, Japan is the historical partner of Techtera since 2005. In 2014, the French and Japanese ministries of economy have signed a memorandum of cooperation with associations like Techtera and JCFA (Japan Chemical Fibers Association). The latter was renewed in 2017, reinforcing the cooperation between the two countries, on both research and market.

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THE TEXTILE SECTOR IN FRANCE AND IN THE AUVERGNE-RHÔNE-ALPES REGION

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The textile industry groups three types of activity: the manufacture of threads (spinning, miling, texturing...), the manufacture of textiles (weaving, knitting...) and their treatment (finishing, coating, impregnation...).

In the 1980s, this sector experienced a significant decline in the face of globalisation of markets, competition from low-cost countries, and pressure from the clothing industry. To ensure their survival, companies in the sector have reorganised and diversified to focus on activities with high added value. This strategy paid and since 2010, the textile industry has returned to the growth of its turnover, its exports and its recruitments. In 2017, the

2,150 companies in the sector generated a turnover of 13.4 billion euros, of which 8.9 billion from exportation and employed 60,300 people. Its recruitment needs, related to retirements and the conquest of new markets are estimated at 15,000 positions by 2022.

The Auvergne-Rhône-Alpes region gathers one third of the companies in the sector (626 companies) for a turnover of 3.35 billion euros (25% of the national turnover). It is the first employment area of the French textile industry with 17,500 employees, according to the French International Textile Union.

THE TECHNICAL TEXTILES SECTOR

The technical textile refers to textile products with technical properties offering specific functionalities adapted to well-defined uses. In France, the technical textiles industry now accounts for about 40% of total textile output (in value). It is the main driver of the French sector: 511 companies, for a turnover of 10,648 M € and a workforce of 36,500 employees.

Transportation equipment (35-40%)

Aerospace, automotive, railway, maritime

Applications:

textile-reinforced rubber products, carpets, safety (belts, airbags, lifejackets, life rafts...)

Health and hygiene (15-20%)

Applications:

cleaning, hospital linen, health devices, protection, biotextiles

Building (10-15%)

Construction in the building, civil engineering

Applications:

building materials and components, stabilisation, separation, drainage, structural and soil reinforcement, erosion control

MAIN APPLICATIONS OF TECHNICAL TEXTILES

Sports and recreation (5-10%)

Applications:

canvases for paragliders, parachutes, sails, tents, sports equipment, camping equipment, sportswear...

Protective gear and safety equipment (5-10%)

Applications:

chemical protection, anti-flame and anti-cut equipment, outdoor use (radiation protection...), other safety equipment (ropes, straps...)

Other industrial applications (15-20%)

Applications:

filtration, insulation, belts, cleaning, draw, packaging...

THE TEXTILE SECTOR IN FRANCE AND IN THE AUVERGNE-RHÔNE-ALPES REGION

The societal challenges that guide and determine the products of tomorrow:

- Increasing demand for transparency and ethics
- The need to live better and longer
- The need for every worker to be safe while working
- A logic of mass customization more and more developed
- Awareness to do better with better, in a logic of saving resources
- Everyone's desire to be entertained, to take care of oneself
- The need to differentiate in a context of globalisation of markets

Beyond these societal challenges, the textile sector is confronted with strong industrial challenges:

- Demonstrate agility, ability to adapt and be responsive in a competitive environment
- Have a CSR strategy that is compatible with the increased requirements of end-users, regulation, and ecological transition
- Learn how to take advantage of the great versatility of textile potential applications, and anchor its ability to renew itself by identifying target markets with high added value
- Make teams grow and progress through lifelong training and boost the attractiveness of the industry

To meet these challenges, Techtera supports its members, leading companies in the market and witnesses to the industrial and technological excellence of the sector on three major technological axes:

- Intelligent high-performance materials: additive manufacturing, smart textiles, textiles and composites, development of new high-performance textile materials...
- The circular economy: bio-sourced and alternative materials, recycling, eco-efficient processes, short circuits...
- Plant 4.0 and the new business models: vertical and horizontal integration of the industry, customisation, servitisation...

TECHTERA, 1ST FRENCH DELEGATION ON TECHTEXTIL 2019 TRADE FAIR

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For the 7th consecutive edition, Techtera will be present at Techtextil (Frankfurt, May 14th to 17th), alongside 35 industrial companies on a 450 sqm surface, dedicated to the innovations and know-how of its members. This is the most important French delegation present on this trade show.

The Auvergne-Rhône-Alpes Region, which financially supports the participation of companies at the show, will be particularly well represented. 34 of the 35 participants present are located in the region.

Thread preparation

Azur Textiles/SNTC - Blanchard - BMI Sofila
Carlhian - JTTI Group - Massebeuf
Moulinage du Solier - Payen - R-Stat
Schappe Techniques

9 companies

Textile processes

ADDEV Materials - AJ Biais - Azur
Textiles/SNTC - Balas Textile - Berthéas
Billon Technic - Blanchard - Carlhian - Diatex
Europrotect - Fibroline - Fontanille Scop
JTTI Group - MDB Texinov - Payen - Sasytex
Satab - Schappe Techniques - Stevtiss
TDV Industries - Techni Sangles - Texti Sonics

22 companies

Finishing

ADDEV Materials - AJ Biais - Alpex Protection
Art Martin - Balas Textile - Billon Technic
Europrotect - Fontanille Scop - JTTI Group
MDB Texinov - Sasytex - Satab
Schappe Techniques - Stevtiss
Techni Sangles

15 companies

Machines

DFD - Euveka - Texti Sonics
Thimonnier

4 companies

Raw materials

Elkem - Rhodia Opérations

2 companies

Technical centers Design offices

IFTH - Toptexcube

2 companies



EXCELLENCE COMES WITH INNOVATION

With a strong entrepreneurial and innovative spirit and a strong interest in sustainable development, whether environmental or societal, our 35 companies are great ambassadors to promote French excellence. A detailed review of some of the iconic innovations that will be presented at the Tectextil trade show.



Euveka invents Eminéo, the automative and evolutionary manikin

Reproducing, in less than 30 seconds, the evolutions of a body through the ages or morphotypes, this technology impacts the entire value chain from creation, to production, to retail in order to make processes more reliable, faster and more ethical in terms of textile waste.

Managed from a tablet or computer through the design software Mimeo, the Eminéo robot manikin can evolve from size 34 to 44 (German sizes), wholly or per zone, in height or in width, according to a given body scale.

Originally, Eminéo was designed to assist fashion professionals in the prototyping and selling of garments without fitting. But Euveka also targets the sports, medical and security sectors where Eminéo could be very useful, for example, simulate deformations of the damaged bodies and thus making it possible to better adapt the support materials.



MORE INFORMATION?

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Satab launches connected ribbons in global exclusivity

The scope of this new range, which has generated the filing of 4 patents, is vast and even unlimited.

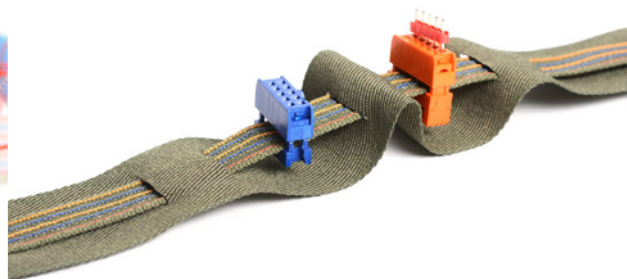
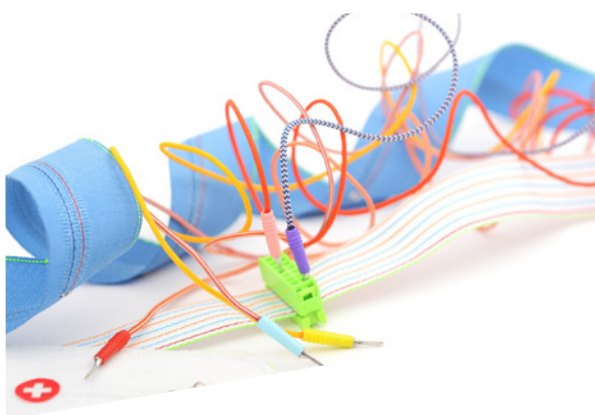
Anyone wishing to create connected objects using textiles is likely to be interested in this new generation of smart ribbons. In fashion, the e-ribbon becomes aesthetic or functional when a sweatband for sport stand in for a headlamp.

For the packaging sector, gift packaging becomes a message carrier by connecting to a smartphone. In the house, carpet and

wallpapers in fabrics can integrate light markings. For personal protective equipment or health, connected ribbons become multiple sensors: heat, humidity, atmospheric pollution...

To facilitate the use of its e-ribbons, Satab has developed an ingenious and complementary range of 4 categories of e-ribbons.

- Conductive e-ribbons carry energy but also information.
- E-ribbons tools, like battery e-ribbons equipped with button cells, are used to power, capture or actuate e-ribbons conductors.
- Non-conductive, interface e-ribbons make connection easier, such as cable tie tape or tape.
- Lastly, the e-braids, containing 1 or 2 wires, which can be set with lugs, are ideal for adding elegance to the lamp electrical wire or inventing connected embroidered patterns.



MORE INFORMATION?

EXCELLENCE COMES WITH INNOVATION



Art Martin and Toptexcube imagine a technical thermoformed backpack

The innovative backpack developed by Art Martin and Toptexcube offer high technical performances. It was designed to perfectly adapt to nomadic lifestyle of users and their expectations in terms of comfort, resistance, design and practicality.

The collaboration between the two companies allowed them to put in common their know-how and units of production, in order to apply them to a market still little worked in terms of heat sealing and thermoforming, but for which these technologies present real assets.

If the front of this bag calls out by its design and its technicality, the back panel is equally intriguing and complex to meet the comfort constraints of this product. The use of mold specially developed to track dorsal movements

and breathable foam, allows the product to bring more ergonomics and ventilation while relieving the back load. In design terms, the completely molded back gives a technical aspect to the bag and comes structure the latter, giving it rigidity.

In addition, a strong attention was given to support, such as braces, which have been equipped with reinforcement of inserts with thermoformed foams to ensure comfort, technicality and decrease the feeling of weight of the bag. The front, the back and the braces will be predominantly assembled by heat sealing. This manufacturing technology helps to strengthen the impermeability of the product and to bring differentiating design and new features. These confections are made in France.



MORE INFORMATION?

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EXCELLENCE COMES WITH INNOVATION



Moulinage du Solier develops a range of thermochromic wires

Moulinage du Solier has developed the range T.R.Y. for Thermo-Reactive Yarn: threads that change color when are heated or cooled to a given temperature. For example, a originally purple thread, will turn red at 30°C (86 °F), then white at 50°C (122°F). When the thread cools down, it returns to its original color.

According to applications, it is possible to choose up to two reactive temperatures, from -20° (68°F) to 70°C (158°F) and the original colors (among the primary colors) and reactive. Currently, the threads are made with polyester (continuous filaments, 170 dtex), but trials are in progress on other subjects such as cotton. This new thread finds its application in all sectors of activities: decoration, building, personal protective equipment, electrical protection... Besides its playful and aesthetic qualities, it constitutes a real warning system.



Fibroline and TWE Group develop a revolutionary concept of absorbent materials for the hygiene field

Baby diapers, feminine hygiene or incontinence products, are usually composed of SAP powder (super-absorbent) impregnated in different types of porous materials (non-woven, fluff, etc.). Homogeneity and controlled location of this powder in the absorbent layer is one of the keys to achieve the best absorption properties. It's about getting an optimal distribution for the substrate in the thickness, thus avoiding any effect of "gel blocking".

TWE Group & Fibroline have developed a revolutionary patent concept: the TWE Amphibia core materials, associating an important hygiene and nonwovens know-how to a unique powder impregnation technology.

Several lines are now running industrial and an acceleration of market penetration of this solution is expected in the coming years, thanks to the increase in demand for more efficient and finer materials.

¹ Gel blocking: SAP absorbs liquids so quickly that a layer of waterproof gel is created at the liquid / polymer interface, preventing the diffusion of water.

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INNOVATE AND CONQUER NEW MARKETS

Innovation is a strategic priority for companies evolving in the textile industry. It aims to cope with competition, specially from abroad, to diversify its outlets by promoting the penetration of textiles into new areas of application and to increase its market power with customers. But that says research and development, also means strong financial, human and material investments, which could represent a risky gamble for SMEs. Techtera supports the development of industries in the sector through collaborative research and allows them to establish themselves into new markets, including international, through dedicated services.

COMPANIES' NEEDS IN R&D

- Participate in the emergence of innovative projects: collaborate with contractors, take part in disruptive projects for the sector, consolidate pre-existing links or meet new industrial partners.
- Pool resources and risks.
- Structure its innovation project: ensure the viability and solvency of the project.

TECHTERA'S ANSWERS

Generate and support projects

Labeling of projects

The Techtera label guarantees the viability of a project, its technical and economic strength. Thus, a project labeled by Techtera is twice as likely to be funded by public bodies. This label is given after a double examination of the project, carried out by:

- The Scientific and Technological Commission (CST), composed of experts who evaluate the innovation of the project and its orientation towards a given call for projects.
- The Executive Office (BE) conducts a second review on the basis of the opinion issued in CST, then by analysis of the architecture of the project. At the end of this second examination, the BE officially awards the label of Techtera.

Project editing

Techtera supports its members in their innovation process, helping them at each key stage: emergence, structuring (identification of technological barriers, budget, work packages, consortium agreement), labeling, financing, monitoring and product launching into the market.

THE COLLABORATIVE PROJECTS IN 2018

Since 2005, 210 collaborative R&D projects have been labeled and accompanied by Techtera for a total budget of € 546 million.



22 projects in the process of emergence



6 projects ready to bloom



11 labeled projects



9 funded projects



4 projects launched

INNOVATE AND CONQUER NEW MARKETS

Foster the emergence of ideas

Innovation Workshops

The aim of the Innovation Workshops is to stimulate innovation in companies through collaborative research projects.

They bring together researchers and industrialists, deal with a particular technology and lead to the creation of R & D projects.

Examples of themes: assembly, chitosan, 3D printing.

Valorisation Workshops

The aim of the Valorisation Workshops is to spread the benefits of R&D projects labelled by Techtera and carried out by the members of the cluster. Beyond this, the objective is to promote the transfer of know-how by highlighting the results of R&D projects and opening them to commercialisation.

Examples: valorisation of the benefits of the TEX-SHIELD Project (development of hydrophobic treatments low in fluorine capable of replacing perfluorinated resin treatments), RFID workshop...

Techtera Network Workshops

The objective of the Techtera Network Workshops is to build a dynamic of innovation in the textile industry by generating R&D projects and by animating specialized networks: meeting with key players, targeted communication, grouped actions, meeting and exchange spaces.

They discuss innovation in each of Techtera's five strategic business areas:

- security / PPE,
- building / infrastructure,
- fashion, luxury, decoration,
- transport,
- health / sports.

They led to several development or collaborative projects such as:

- EPI of tomorrow with the firefighters of the Rhône (ETINCELS² project - See page 17),
- the concrete of the future thanks to textile innovations, with INDURA (FOURMI project),
- functional textiles in automotive interiors (LITEVA project - See page 14).

Techtera's clubs:

- RECIT: Recycling and Circular Economy,
- STeW: Smart Textiles and Wearables.



MORE INFORMATION?

LAST PROJECTS ACCOMPANIED BY TECHTERA

LITEVA

Develop multifunction textiles for emitting the appropriate alerts for the safety of autonomous vehicles users.

Budget: 3,7 M€

Partners: 9

Market: automotive



FILOGRAPH

Manufacture a smart textile with a graphene coated natural and/or biosourced yarn. The conduction properties will provide a free-battery equipment while preserving lightness and flexibility.

Budget: 2,8 M€

Partners: 7

Market: sports



NCF HP2

Design a new generation of "Non-Crimp Fabric" type made from carbon fibers, and develop the associated textile processes for manufacturing thermoset composite parts for the aeronautic and automotive industries.

Budget: 4,1 M€

Partners: 4

Markets: aeronautics, transport



ALLIANCE

Develop technological or business partnerships between the textile sector, the NICT and the fields of application of defense and security.



Budget: 270 K€

Partners: 7

Market: security, defense

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LAST PROJECTS ACCOMPANIED BY TECHTERA

BIOPAD

Qualify and bring to the market an innovative mulching product, 100% vegetal and biodegradable fibers-made, made in France following a patented spun lacing process, made from local by-products and to be used in market gardening and organic vine-growing.

Budget: 409 K€

Partner: 1

Market: agriculture



ORGTEX

Make the best use of organic materials in wearable biomedical monitoring systems, to develop biocompatible solutions for low-cost interfacing between electronic devices and the human body.

Budget: 890 K€

Partner: 1

Market: health



SMARTEES

Help innovative companies to grow their business in adopting flexible electronics in new products lines.

Budget: 4,5 M€

Partner: 10

Market: industry

POLYBIOSKIN

Broaden the use of biopolymers in biomedical, cosmetic, and sanitary skin-contact applications.

Budget: 4 M€

Partner: 12

Markets: well-being, health



CHAB

Fabricate a circular knit that will be used to wrap concrete piles to reinforce infrastructure.

Budget : 1,1 M€

Partner: 4

Market: infrastructure

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PROJECTS ACCOMPANIED BY TECHTERA AND LED BY OUR MEMBERS PRESENT AT TECHTEXTIL



SEALCOAT reinvents the airship balloons coating

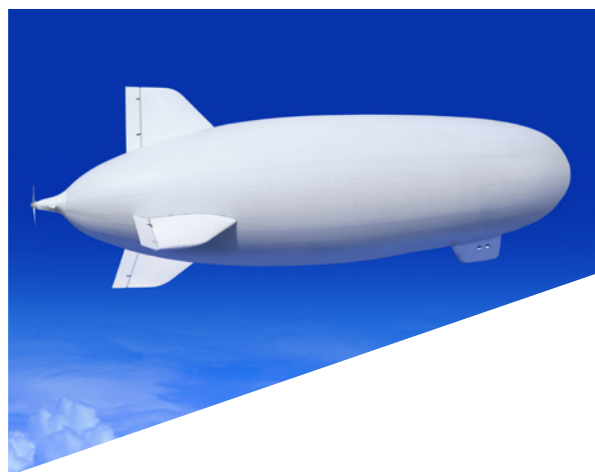
The SEALCOAT project (Strong External Airship Light Cover for ATmospheric protection) aims to develop an environmentally friendly external airship cover that meets the climatic and aerodynamic requirements. It fits with a project of airship development able to quickly transport (100 km / h) heavy loads (50 tonnes capacity equipment or materials). The current forecasts plan a commercialisation of 140 airships over ten years from 2024.

The innovation of this program lies in the functional characteristics of the external cover produced by Diatex. It must guarantee the airship a life span of 30 years:

- Resistance to climatic conditions (sealing, thunder resistance...).
- Aerodynamics (maintaining the shape of the airship under flying dynamic pressures: resistance and elasticity).

- Environmental aspect: exclusion of post-pose treatments to remove the risks of pollution during assembly (interlining).
- Material intelligence: rapid localisation of potential damage caused by impact and temporary reinforcement of the structure ("self-healing") pending maintenance operation.

Safran Aerospace, through its subsidiary Safran Aerosafety Systems, is the project industrial master builder that brings together 6 partners: Flying Whales, Diatex, IFTH, Catalyse, IMP (INSA Lyon).



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PROJECTS ACCOMPANIED BY TECHTERA AND LED BY OUR MEMBERS PRESENT AT TECHTEXTIL



ETINCELS²: a new efficient and instrumented fire suit

ETINCELS² project was born from the observation that the outfits used by the firefighters are too hot, too insulating, even suffocating and that the body's moisture is not evacuated. The whole purpose of this project is in its name, as it is to develop clothing and underwear of INovants, Comfortable and Limiting Thermal Stress in intervention.

The ambition is to equip this new fire outfit with the most modern technologies of physiological sensors able to measure in real time the heat stress of the firefighter in intervention.

Beyond that, it will alert the firefighter and his team on 4 alert criteria defined by representatives of the profession: duration of intervention, heart rate, surface temperature and outdoor temperature.

By the end of 2019, the prototypes will be ready for a test campaign in the course of 2020.

The ETINCELS² project, amounting to 3 million euros, is carried by Europrotect. It brings together companies Alpex, Balsan, TDL, Racer, LIBM, IFTH, Ceren-Valabre and Bodycap (subcontractor for the electronic part).



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INNOVATE AND CONQUER NEW MARKETS

COMPANIES' NEEDS IN BUSINESS DEVELOPMENT

- **Reach relevant contacts:** create partnerships, extend and/or consolidate its client portfolio, meet with contractors.
- **Better understanding of the market:** discovering new application markets, keeping abreast of evolutions and major new developments in the industry.
- **Market innovations:** present its products and innovations on key industry events or through a direct approach to validate the right targets.
- **Develop its notoriety in France and abroad.**

TECHTERA'S ANSWERS

Launch its innovations

Techtera aims to inject innovation into the markets. The cluster seeks to transform the collaborative projects it has supported so that the resulting innovative products, processes and services can exist in the markets and be economically viable.

In order to help the innovations find their way into the markets, the cluster offers companies a variety of tools adapted to their needs, enabling them to identify potential new applications, approach targets to validate market potential and gather technical and market information.

Market studies

Techtera leads several market studies per year to allow its members to apprehend the opportunities of textile applicative markets abroad.

Sessions were organised around the Japanese market, one on the transport sector and the other on health and well-being, around the German market, Israeli market, Korean, the United States...

Collective missions

Techtera organises collective missions abroad allowing the participants (companies, laboratories, universities) to engage in various actions: technological and commercial monitoring, business development, identification of partners, network development. Many missions have already taken place in Japan, Korea and Taiwan, Germany, Israel, the United States...



Technological Mission in Israel (technical textiles), march 2019.

MORE INFORMATION?

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INNOVATE AND CONQUER NEW MARKETS

Exhibitions

Techtera supports its members for marketing, communication and logistics at major international trade shows in the textiles and composites sector.

ISPO
(sports)
Munich



JEC WORLD
(composites)
Paris



AVANTEX
(fashiontech)
Paris



Competitiveness Workshops

The objective of the Competitiveness Workshops is to increase the innovation and market skills of companies and give them keys to read their competitive environment.

In 2018:
27 workshops
1286 participants

8 innovation workshops

- Printed electronics and textile
- Metallisation: Interest and applications for textiles and soft materials
- 3D printing for textile applications and soft materials
- Textile and energy
- Polymeric materials in the sports field and recreation
- Materials & products to innovate in the food packaging sector
- Reactive extrusion
- Industry of the future: eco-efficient processes and factory

11 competitiveness workshops

- Potential and opportunities of the Japanese market
- Technical textiles in Japan
- Patent monitoring: main players of textile innovation
- Digital communication strategy
- Marketplace: building a sustainable and profitable growth in marketplace
- European fundings for SMEs
- Presentation of the worth program
- Workshop South Africa
- European fundings for R&D
- Germany: the technical textile market & interculturality
- Boostalps: automotive & textile

1 valorisation workshop

- ACIC Conference: What practices to network innovatively with SMEs?

1 Techtera network workshop

- The textile, vector of innovation in the equine sector

6 trends workshops

- 2 fashion workshops: trends analyses
- 2 decoration workshops: decoding house trends
- 2 360° workshops: markets and trends overall

In 2018:

- 20 trade shows and collective missions
- 90 companies accompanied

TECHTERA COMMITTED TO SUSTAINABLE DEVELOPMENT

Club Recycling and Circular Economy in the Textile Industry (RECIT) 25 members

In January 2017, Techtera created the RECIT club: Recycling and Circular Economy in the Textile Industry in order to promote the emergence of collaborative initiatives of valorisation. It has vocation, ultimately, to contribute to the structuring of a textile waste recovery sector with strong territorial roots.

The work of the RECIT Club is focused on the textile production wastes and address the following topics:

- Establishment of the collection from the companies for a consolidation of the deposit.
- Traceability and identification of production waste (shapes, quantities, frequency...).
- Reduction of production wastes by ecodesign (process, methods and organisation of production).
- Technologies for processing production wastes (existing processes and innovation tracks).
- Valorisation by upcycling and interactions with designers.
- Economic model of a recycling sector (costs, benefits for industry...).
- Application markets and products made from recycled textile.

Project "Chutes, on recycle !" (We recycle production wastes!)

The event "Chutes, on recycle !" organised by Techtera with the support of the Greater Lyon Metropolis is part of the actions of the club RECIT. It brought together more than 90 industrialists and designers on november 13, 2018.

Objective: to connect textile manufacturers and upcycling players with the ambition to value production wastes. 200 appointments were organised during the day.

The event was also a place of exchange through conferences, an exhibition of the creations and the awards ceremony of the upcycling initiatives competition.



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TECHTERA COMMITTED TO SUSTAINABLE DEVELOPMENT

R&D projects

Textile recycling

ECOCHARGE: Exploiting end-of-life polyester/cotton type textile as fibrous reinforcing filler for plastic materials (polyolefins and polyamides).

TECHNYMAT: Developing materials from production and end-of-life textile waste to create plastic materials, insulation materials, and materials for the manufacture of synthetic yarns from recycling.

VALTEX: Developing a viable and sustainable recovery of end-of-life vehicle textiles and professional clothing for recycling into acoustic and thermal insulation.

Bio-sourced materials

AGROBOOST: Developing agro-sourced technical textiles, with complete, verifiable biodegradability, without fragmentation and meeting the requirements of future regulations.

BIOPAD: Qualify and bring to the market an innovative mulching product, 100% vegetal and biodegradable fibers-made, made in France following a patented spunlacing process, made from local by-products.

ECOLASTANE: Development of elastane fiber and bio-sourced polyester (70 to 100%) in order to substitute the usual process that includes oil. Use for sport clothing.

Eco-efficient processes

DEPERFLEX: Develop a comfortable, sturdy, repellant material appropriate for sportswear, and eco-friendly thanks to a fluor free coating.

ECOMAT: Development of eco-aware silicones and polyurethanes (free mercury and stain catalysts). Use for automotive parts, sole and sport clothing.

ECOSILAC: New eco-designed process for synthetic silicone acrylates, conferring surface properties on various substrates (textile, plastic, glass).

FOMOTEX: Develop nonflammable coatings, in latexfree textile layers with multifunctional characteristics and meeting current regulations. The manufacturing process used will include impregnating dry powders, with a significant reduction in water and energy consumption.

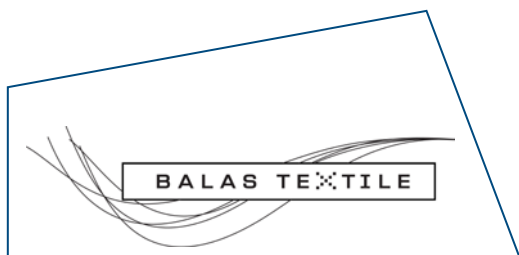
PLUG&WET: Improve productivity while reducing water and energy consumption for a more efficient weaving process.



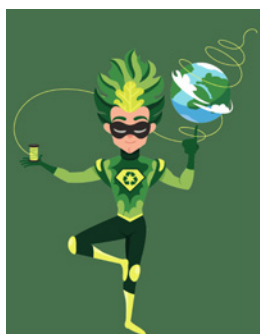
MORE INFORMATION?

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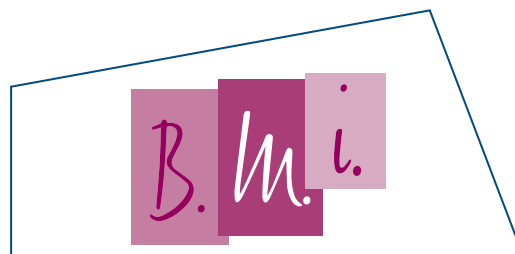
CLOSE-UP ON THREE OF OUR MEMBERS COMMITTED TO SUSTAINABLE DEVELOPMENT



Balas Textile, an ISO 9001 and 14001 certified company, proposes the Willskin® Green range, composed of technical fabrics made from recycled synthetic materials (polyester or polyamide).



For polyester, the company uses mainly the brand Newlife™, which is a unique, complete and certified system of threads coming from post-consumer plastic bottles, transformed into polymer by a mechanical process, no chemical, all fully spun in Italy. For polyamide, this yarn is made of 100% recycled material falls, allowing to aim at "zero waste" during the production phases. The process is GRS (Global Recycled Standard) certified. Ultimately, Balas Textiles wants to propose a collection composed of 80% recycled materials.



BMI - Sofila developed at the end of 2008 the Greenfil range, high-performance nylon yarns made from biopolymers obtained by the successive transformations of the castor plant. A solution that respects the environment, since castor is a 100% renewable material, grown without GMOs on poor soils and not requiring irrigation. Coming from the agro-resource, this material also makes it possible to reduce dependency on oil.

Greenfil yarns have notable characteristics: hyper-resistance, anti-odor, hypoallergenic, bacteriostatic, antiperspirant and chlorine-resistant. Containing no health threatening substances, they are very suitable for the manufacture of clothing, including stockings, socks, swimsuits, or other products in the medical sector.



MORE INFORMATION?

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CLOSE-UP ON THREE OF OUR MEMBERS COMMITTED TO SUSTAINABLE DEVELOPMENT



For more than 20 years, TDV industries has engaged in a pro-active sustainable development.

The company is labeled Oeko-Tex, GOTS (Global Organic Textile Standard), Cotton Fairtrade Partner by Fairtrade (Max Havelaar), OFG (Origine France Garantie), and also responds to ISO 9001 and ISO 14001 standards.

TDV Industries is one of the first companies of the textile industry to calculate and display the environmental footprint of each fabric produced. A custom developed calculator can model the footprint of each product reference and edit the environmental identity card of manufactured fabrics.

TDV Industries has focused on 6 criteria: beyond the classic CO2 emission, it added water consumption, eutrophication water, aquatic eco-toxicity, depletion of non-renewable natural resources and non-renewable energy consumption.

The calculator makes it possible to clearly visualize the differences in impacts between fabrics made in France and beyond our borders but also between conventional versions or ethical (organic cotton, Fairtrade cotton, recycled polyester, etc.).



MORE INFORMATION?

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