

Textile Innovation on show at Techtextil Frankfurt, 21-24 June 2022

Present for over twenty years at Techtextil in Frankfurt, SMI's TexClubTec Technical Textiles Section will organize an exhibition forum, in collaboration with ICE Agenzia, with the aim of presenting product innovations resulting not from a single production phase but from an innovative approach spread synergistically throughout the supply chain, from raw materials to the finished product.

Inside the Forum, located in hall 12.1 stand no. C58, therefore, cutting-edge products developed by member companies of SMI-TexClubTec will be presented, characterized by the ability to offer specific performances or made with innovative processes, thus offering a rich and diversified overview of the main companies in the sector.

Below, a preview of what will be possible to see and touch at the fair, listed by company name in alphabetical order.

Company Name	Production	Page
CHARGEURS PCC	Interlining, Polyurethane fusible film, Wadding	2
CITTADINI SPA	Knot and knotless nets in synthetic fibers; technical yarns; industrial sewing threads; braids; ropes	3
COATYARN SRL	Coated Yarns, biodegradable geomat	6
FAIT PLAST	Breathable membranes, thermoadhesive films, technical films, polyurethane films, thermobonding tapes, decorative films	9
FILIDEA SRL	Technical Yarns	10
GHEZZI SPA	Double twisting, covering, assembling, twist&texturizing and preparation for dyeing cones. Continuous filament twisted, stretch and fancy yarns.	12
IMBOTEX SRL	Natural, recycled and technological textile paddings	13
MAGLIFICIO ALTO MILANESE SRL	Circular knitted fabrics	16
PENN ITALIA / PENN TEXTILE SOLUTIONS	Portfolio of mainly stretch fabrics, with options to create differentiated zones of power and stretch, body mapping, placed 3D structures and other innovative concepts	18
POZZI ELECTA SPA	Eco ring yarns	20
RADICIGROUP	Chemical intermediates, polyamide polymers, high performance engineering polymers, nylon yarn, polyester yarn, yarn made from recovered and bio-source materials, nonwovens and personal protective equipment for the industrial and healthcare fields	21
SITIP	Synthetic warp-knitted fabrics and stretch and circular fabrics	23
SXP STILMOTOR	Design and produce technical equipment for the defence and personal safety of the police, as well as clothing and protection for sports and professional use since 1974.	26
TESPE SRL	Technical Textiles for thermal insulation and static seals for high temperatures: Ropes, Braids, Sleeves, Tapes & Ribbons, Fabrics, Insulating Cushions and Pillows, Expansion Joints	27
WINDTEX VAGOTEX SPA	Waterproof and breathable membranes	29

CHARGEURS PCC

Chargeurs PCC is part of a French Multinational Group with a 150-year-old history of industrial and commercial activities. During the decades, a comprehensive interlining range for the most sophisticated needs of the garment industry in menswear, ladieswear and shirts, with a particular focus on Sustainability, CSR, together with Performance and Innovation, have been developed.

In this regard, the S360 range is introduced, which includes and expands our previous range of products based on recycled yarns and bio-sourced raw materials. In addition: these articles are mainly manufactured in the factory in France for a still more dramatic reduction of your and our "carbon footprint".

Product 1: **6019/F28 - Fusible interlining**

Composition: 100% PA – Weight: 35 gr/sm

Fusible with a special coating which, thanks to the particular chemical composition of the polymer, guarantees a perfect adhesion also on fabrics with waterproof and windproof membranes or polyurethane layers.

Product 2: **PBT 105 - Polyurethane fusible film**

Composition: 100% PU – Weight: 60 gr/sm

Polyurethane film with superior properties of elongation and recovery, for technical applications.

Product 3: **SFD 8515 – 150 - Wadding**

Composition: 85% Nativa Wool + 15% PLA – Weight: 150 gr/sm

Fully traceable, blockchain-backed Nativa Wool is blended with environmentally friendly, plant-derived polylactic offering enhanced degradability, to create a sustainable, warm, washable and moisture resistant insulation solution which retains loft, controls odors, provides natural thermoregulation, supreme performance, comfort and a soft handfeel.

Product 4: **SFD 8020 – 150 - Wadding**

Composition: 80% Nativa Wool + 20% recycled PL – Weight: 150 gr/sm

Fully traceable, blockchain-backed Nativa Wool is blended with durable, recycled GRS certified polyester, to create a sustainable, warm, washable and moisture resistant insulation solution which retains loft, controls odors, provides natural thermoregulation, supreme performance, comfort and a soft handfeel.

Product 5: **ABRASTOP**

67% PL + 33% Cotton – Weight: 360 gr/sm

Anti-abrasion fabric, high performance technical product, ideal for use in high abrasion areas. Application fields: work wear, street wear, technical sportswear, luggage, safety and sports footwear.

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CITTADINI SPA

Cittadini spa has been successfully operating for over 89 years in the textile niche of net and yarn processing. In the current plant of Paderno Franciacorta, the production, verticalized with technologically advanced machineries, has been diversified and includes all knot and knotless nets in synthetic fibers; technical yarns for weaving mills, ribbon factories, fabrics for furniture and industrial uses; industrial sewing threads and braids for clothing, leather goods, footwear; braids and ropes.

Cittadini's goals have always been sustainable development and equitable and inclusive growth, in the belief that the company must generate value in a long term perspective, operating according to the ESG principles of economic, social and environmental sustainability, with the aim of contributing to the improvement of the area and community in which it operates. In this perspective, Cittadini spa has reorganized the entire productive cycle in an efficient and responsible way, promoting a rational use of resources with a series of investments in new "Industry 4.0" machinery, the self-production of renewable energy with photovoltaic systems, the use of an advanced high-efficiency LED lighting system, the renewal of the water purification system, the regeneration of all fiber scrap and the recycling of all waste.

The "green philosophy" embraced by the company has also stimulated Research and Development in the field of new fibers, according to the criteria of the circular economy, giving rise to the production of yarns and nets processed with recycled materials, which allowed Cittadini to obtain in 2020 the prestigious GRS 4.0 Certification (Global Recycle Standard). This certification is fundamental to meet the requirements of processing of increasingly sustainable products, especially in the Fashion/Design sector and the technical sector for eco-compatible applications. Cittadini, following its policy of "continuous improvement" in CSR activities, operating in various areas and in a variety of ways in relation to the Environment and the Territory, also obtained ISO 14001 Environmental Certification.

Product 1: **Tenaxfil BioExtreme**



The most innovative sewing thread made by Cittadini spa with Dyneema® Biobased fiber, the new bio-based Dyneema® fiber, the first ultra-high molecular weight polyethylene fiber (UHMPE), which improves sustainability in the fibers for the highest and performing performances. Despite having the same characteristics and performance as conventional Dyneema® fiber, recognized by all as the most resistant fiber in the world, Tenaxfil BioExtreme requires less consumption of raw material in its manufacture and therefore has a lower carbon footprint than other materials.

The characteristics of Tenaxfil BioExtreme are: - strength 15 times greater than steel for the same weight - toughness up to 42.5 cN / dtex - exceptional resistance to cuts, abrasion, tearing and traction, - very high resistance to atmospheric agents, UV rays, chemicals - extreme durability in water and useful life - low water absorption and consequent better handling of the seam on the fabric - better stability of the fabric or mesh.

Tenaxfil BioExtreme is the ideal sewing thread for various applications: seams on light fabrics for outdoor and sports use (cycling, tents, suits, backpacks, etc.), on fabrics for evergreen

jackets and for all weather conditions (when you desire to reduce weight while maintaining an extraordinary resistance), on particularly robust and protective workwear, on denim fabrics to ensure their durability, strength, protection and cut resistance, without decreasing comfort, softness and wearability in very heavy applications or extreme sports.

Product 2: **Tenaxfil Green Pes**



The most innovative eco-sustainable sewing thread, made from recycled, GRS 4.0-certified high-tenacity polyester yarn, with a focus on a circular, regenerative, zero-waste economy. It is available raw and dyed for all applications, both fashion and technical, to meet the specific creative and performance needs of customers.

Product 3: **Tenaxfil AT Recycled**



Twisted nylon or recycled polyester yarn, GRS 4.0 certified. Innovative article to combine sustainability and excellent performance, replacing traditional nylon or polyester HT yarn, for uses in weaving, ribbon mills and technical applications. It is available in a wide range of titles, raw or custom dyed, in industrial spools.

Product 4: **BioExtreme Net**



Knotless nets produced in Dyneema® Bio-based, a very tough, bio-based polyethylene fiber, which combines maximum strength (15 times greater than steel for the same weight) with a minimum weight (one third compared to polyamide mesh), intended specifically for aquaculture, where they are used for the construction of cages for fish breeding and for the protection of plants.

It is also used for particular technical applications, which require very high and constant performance over time.

Features:

- Extreme toughness up to 42.5 cN /dtex
- Exceptional abrasion resistance
- Very high resistance to all stresses, cut and mechanical traction
- Low water absorption and consequent greater manageability of the net in place
- Better stability of the mesh and its breathability
- Remarkable buoyancy on water and resistance to moisture, UV rays and chemicals

Type of available nets: Nets in Dyneema® Bio-based

- Knotless processing, classic rhomboidal and hexagonal knitting, warp-knit weaving on innovative and electronic looms, 800 / 1.000 / 1.200 mesh height that allow to develop large seamless dimensions, significantly increasing resistance of the article produced.

- knot processing, simple or double, for the weaving of particular nets, which require exceptional toughness and very high performance for use in "extreme" conditions.

Product 5: Fashion Green Net



The most innovative eco-sustainable net, made from recycled yarn, certified GRS 4.0, with a view to the circular economy. It is available raw or custom-dyed for all applications, both fashion and technical, to meet all creative and performance needs of the most sustainability-conscious. Fashion Green net has established itself as a very flexible and versatile fabric for both elegant and technical/sports applications. Each net, available in different thicknesses and meshes, dyed in trend colors or according to customers' samples, can be used as a single garment or paired with different fabrics as a first, second or third layer, depending on the customer's needs, with customized finishes.

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COATYARN SRL

CoatYarn s.r.l. was born as Expotex Srl's sister company, already well known in the technical textile field for over 30 years. Its young and dynamic Team takes pride in the research and development of innovative coated yarns solutions, continuously aiming at performance improvement.

Coated Yarns Industrial is a range of yarns developed for the technical-industrial world, with high performance and variety of applications in mind: yarns specifically designed to satisfy the growing needs of an ever-changing industrial reality.

CoatYarn's Technicians thrive in this reality and strive to meet the latest market requests. CoatYarn's supply chain is proudly Italian and European, with providers fully certified under the standards of their respective fields.

The Coated Yarns Industrial range includes yarns with cores of different nature such as, but not limited to:

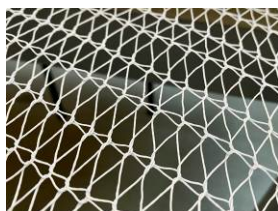
- **Fiberglass, Steel, Carbon, Aramid fiber, Basalt, Polyamide, High tenacity Polyester**

which are covered in extrusion by coating with different thermoplastic materials:

- **Polyamide low melt**, known for its high adhesive power and broadly used for fabric stabilization, it is also compatible with Epoxy resin. The variety used is proudly derived from bio, renewable sources, in full compliance with our attention for the environment; **Polyester low melt**, which can be melted at low temperatures and easily bonded with other fibers; **Polyamide 12**, with high resistance to abrasion and chemical agents; **Peeek**, a superpolymer with melting temperatures above 300 ° C, used in the world of composites thanks to its unique mechanical properties; **Polypropylene**, due to its great compatibility with rubber; **EVA**, broadly used by virtue of its very low melting point and excellent adhesion properties; **TPU**, which features excellent resistance to abrasion, oils and fats, weather, wear and tear, light, solvents, therefore being an excellent multifaceted choice for a broad number of applications, and many other materials. Ageing stability and lightfastness are a given.

The custom-engineered solutions provide technical answers to most industrial yarn requirements. The coated yarns are based on different core fibres, usually covered with polymeric materials in order to enhance their functional properties and make the end product suitable for a variety of fields, including Composites, Military, fabrics for the structural reinforcement of buildings and infrastructures, Cables, Nets, Ropes, Workwear, Transportation and Telecommunications Industries.

Product 1: **BIODEGRADABLE GEOMAT**



The collaboration with the Civil and Industrial Engineering and Biology Departments at Pisa University started as a way to answer the need for a biodegradable geomat that could help the repopulation of Posidonia plants in the Tuscan archipelago.

Thanks to the constant research, a highly sustainable coated yarn has been studied and developed. Its fiberglass core, having a high percentage of silica, grants the net high tenacity and resistance during its active time while becoming part of the marine soil end of life. Its coating is composed of Thermoplastic biopolymers (PBSA) which have been identified as **totally biodegradable** in seawater over time by the University of Pisa and its partners ASA (Azienda Servizi Ambientali Spa), Acquario di Livorno and Ispra (Istituto Superiore per la Protezione e la Ricerca Ambientale).

The same net can be produced using yarns with different cores, such as the cellulose-based Lenzing™ Lyocell filament yarn or other biodegradable materials for the most various applications.

With this yarn, in cooperation with Tex Tech Technologies Srl, a geomat has been realized for the first time through knitting process, getting **a net with variable meshes, perfectly adapting to the sea floor.**

This geomat will be used for the creation of "undersea gardens", allowing the repopulation of posidonia plants under the sea. The colonisation by vegetation is in fact necessary for the health of the marine ecosystem, but rather difficult to achieve naturally. Geomat secures a strong anchorage of the roots to the soil, moreover its variable meshes adapt to the natural growth of the plant, finally biodegrading completely with no impact on the delicate marine ecosystem.

Coatyarn cares for the environment and tries to make products as sustainable as possible, in addition to always being on the lookout for new ways to reduce the ecological footprint.

Product 2: **TPU EVOLUTION GRAPHENE®**

Our TPU Evolution Graphene® was born thanks to the collaboration with OCSiAl, among the world's largest producers of graphene nanotubes. This coated yarn combines the excellent performances of Thermoplastic Polyurethane (TPU) with the mechanical properties of Graphene, in particular **electrical and thermal conductivity**.

This amazingly performing yarn grants excellent resistance to abrasion, hydrolisis, alcali, and the peculiar soft handskin effect of TPU Evolution®. The tests developed with OCSiAl gave incredible results showing extraordinary levels of electrical and thermal conductivity.



The applications of TPU Evolution Graphene® are various: from sportswear, healthcare, fitness to all sorts of textiles potentially ideal for waerable technology. Graphene in fact not only improves the resistance to wear, abrasion and tearing. The excellent conductivity makes of it the perfect ally for smart textiles, wearable sensors and gloves for electronical and antistatic dissipation.

Excellent quality standards together with constant technical research are our mission. Our team of technicians and engineers look everyday for the latest news, to be always one step further and meet the needs of a constantly renovating industry.

Product 3: TPU EVOLUTION® FOR 3D KNITTED SHOES: ONE KNIT, ONE SHOT, ONE SHOE



The 3D knitting shoe technology, developed by our partner Lonati Spa, allows for a drastic **reduction of production times and cost**.

With this process it is possible to obtain directly from the machine and in one shot the full shoe upper with the exact design you had in mind, avoiding further applications.

Knitting our TPU Evolution® in strategic positions, either high stressed or decorative areas, means that you can obtain your shoe upper *ready to wear* by heat-pressing for a few short seconds. This process fully activates TPU Evolution®, giving the desired finishing without the need to perform further operations. When realized only with TPU Evolution®, you can also get a **100% recyclable and sustainable product**.

TPU Evolution® grants different effects, such as **water-resistance, great abrasion resistance**, and allows for the creation of matt or shiny logos directly on the shoe upper. You will feel the **comfort** when wearing the shoe, thanks to the peculiar softness of the yarn.

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FAIT PLAST

Fait Plast has a long history in manufacturing thermoplastic films. This history dates back to 1965 when Fait Plast was a producer of PVC resins and Polyolephinic (PP and PE) films for food and industrial packaging. Since then Fait Plast evolved to a leading company of technical films and tailor-made solutions, thanks to the own exclusive know-how and engineering capability that allowed 50 years of continuous improvement and development.

Product 1: **Recyclable laminated fabric with breathable membrane Faitex 1850 and "mono-material" concept**

One of the biggest challenge in the market is circularity and the use of recycled product for garments coming from post-consumer products, but how can we "create" this material if garments have polyester fabric, polyurethane membrane, bonding tapes and hot melt glue all in different polymers?

Fait Plast developed membranes and seam sealing tapes in copolyester and copolyamide that can perfect match with your fabrics in the same material creating a "mono-material" garment that becomes 100% recyclable.

Faitex 1850 is a high breathable and soft 8my membrane in copolyester for technical application like cycling or running garments.

Product 2: **Renewable membrane for eco-sustainability:**

Our goal in Fait Plast is to reduce our carbon footprint using more and more raw materials coming from renewable sources with certified % of BCC (Biobased Carbon Content).

- **Faitex RN101** is a new highly breathable CoPES membranes with 18% BCC ASTM D-6866, easy to laminate thanks to the high melting point and with a good resistance to mechanical stresses and washes. Typical applications are workwear, sportwear, shoes, technical clothes.
- **Faitex RN301** is a new very highly breathable CoPA membranes with more than 45% BCC ASTM D-6866. Typical applications are shoes and technical clothes, in particular with Polyamide fabrics to obtain "mono-material" and full recyclability of post-consumer garments.
- **CP001**: new lines of compostable thermoadhesive films and breathable membranes fully compostable according to EN13432. In association with natural and biodegradable fabrics such as cotton, wool, the laminated product will become fully compostable.

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FILIDEA SRL

Filidea srl is an innovative Company and belongs to the Marchi & Fildi Group, an international spinning group with headquarters in Biella – Italy. The Group is specialized in the production of yarns for fashion and for technical end uses. Filidea, with its brand Filidea Technical Yarns, develops and produces innovative and high performance yarns for protective wear, workwear, filtration systems, automotive and sewing threads. Sustainable innovation has always represented a fundamental pillar for the Group.

The R&D department, a pilot plant of 1200 m2 with industrial machineries in reduced scale, is located in Biella - Italy and allows a continuous development of yarns, matching the requests of nowadays standards. The internal dyeing mill, located in Biella too, is able to dye almost all kinds of fibers (natural, artificial), with a very low environmental impact.

The Group cooperates continuously with universities, research centers, fibers producers and several partners for the development of innovative yarns and special projects.

Product 1: **Metafine**



The fire resistant yarn Metafine, based on aramidic fibers, is a product of the latest generation. Metafine yarns are made by an high performance spinning process and are used for the production of fire resistant fabrics, that make a protection barrier for the body against flames and high temperature, like for example for the production of firefighters and racing suits.

The production of garments with inherent flame resistant properties can find in Metafine a new solution with high standards and responsibility for the environment, one of the most important topics of our days. The modern dyeing plant created by Filidea and located in Biella - Italy allows to save up to 48% of water and up to 57% energy in comparison with a traditional plant (Data Based on LCA Study made by ICEA in 2020).

The yarn Metafine by Filidea Technical Yarns is available both in raw white and yarn dyed, also in high visibility colours.

Product 2: **Protal**



The yarn Protal is produced by Filidea srl with the brand Filidea Technical Yarns.

Protal is a brand of Waxman Fibers that joins modacrylic fiber Protex with other fibers of natural and synthetic origin. The yarn Protal matches the features of flame retardant performance with a high comfort in contact with the skin.

The production of garments for specialist sectors like electrical companies, oil & gas plants and the automotive industry can find in Protal a new solution with high standards and responsibility for the environment, one of the most important topics of our days. The modern dyeing plant created by Filidea and located in Biella - Italy

allows to save up to 48% of water and up to 57% energy in comparison with a traditional plant (Data Based on LCA Study made by ICEA in 2020).

The yarn Protal by Filidea Technincal Yarns is available both in raw white and yarn dyed, also in high visibility colours.

Product 3: **Trevira CS**



Trevira CS is a brand of the Company Trevira. Filidea Technical Yarns has been producing the yarns Trevira CS for more than 3 years and it identifies the most important products for the contract sector. All the products made using Trevira CS yarns are fire retardant and are used for the production of upholstery, curtains and any textile material used for the furnishing of public areas, like hotels, theaters, cinemas.

The chemical structure of the Trevira CS fibers guarantees a long-term safety and security; materials made from these fibres and filament yarns are likewise permanently flame retardant. Thanks to the durability of the products made using Trevira CS fibers and their environmentally friendly manufacturing process, materials made from Trevira CS require no additional, environmentally damaging fire protection treatment such as that required by normally combustible materials.

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GHEZZI SPA

Founded in 1949 as a twisting company specialized in the production of silk yarns, GHEZZI SPA has followed over the years all the technological evolutions that have led to the advent of artificial and synthetic fibers, continuously innovating its plants and expanding its structure and its own organization.

Double twisting, covering, assembling, twist&texturizing and preparation for dyeing cones: these are the main technologies and processes that today Ghezzi SpA is able to carry out for the production of mainly continuous filament twisted, stretch and fancy yarns for outdoor, curtains and furnishings. To these is added the most recent and promising production of yarns for medical use and multicomponents for technical fabrics and for industrial uses.

Product 1 - **Gloves**



- Cut and impact resistance (glass/PL and UHMWPE/glass/PL yarn)
- flame retardant high tenacity (viscose yarn)
- antistatic and antibacterial (silver stretch yarn)

Product 2 – **Blue shirt and pants**



- Graphene shirts with antibacterial and heat management properties:
- viscose graphene shirt made by two yarns : viscose with 1% of graphene additives inside near to the body and nylon outside
 - polyester graphene shirt made by polyester yarn with 0,5% of graphene additives

Product 3 – **Yarns**

- **ANTISTATIC dtex 189** (polyester+carbon polyester): antistatic properties
- **ANTISTATIC dtex 582** (CORDURA + carbon polyester): antistatic properties
- **COTONE/ACCIAIO nm 49** (cotton + steel yarn): high resistance and anti electrosmog properties
- **STRETCH VISCOSE GRAPHENE dtex 147** (viscose with 1% graphene additives + spandex): antibacterial and heat management properties
- **VISCOSE GRAPHENE dtex 110/600 S** (viscose with 1% graphene additives + spandex): antibacterial and heat management properties
- **STRETCH CORDURA dtex 380** (CORDURA + spandex): high resistance properties
- **G_ETHYLENE_HT/KEVLAR/ACCIAIO nm 5** (UHMWPE + KEVLAR + steel): high resistance to impact and cut properties
- **PARA-AR/STEEL 5166** (PARA-AR + steel): high resistance to impact and cut properties.

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IMBOTEX SRL

Founded in 1955 and based in Cittadella, North East of Italy (Padova area) Imbotex Srl is an Italian leading manufacturer of natural, recycled and technological textile PADDINGS. Flexibility and innovation are the hallmarks of our products, making them the ideal partners in a variety of sectors, ranging from furniture to bedding, high fashion, workwear and professional sports.

The company is organized into two divisions:

- paddings for Bedding and Furnishings;
- paddings/high-performance insulations for Sportswear, Fashion, Embroidery and Footwear.

These two sectors operate in synergy with each other, thanks to an ongoing exchange of manufacturing technologies and know-how.

The dynamic female management of the business has made it possible to successfully combine innovative, high-tech production processes and materials with an increasingly close eye on nature and the environment.

The company maintains a strong grip on its roots, operating in an area characterized by a lengthy tradition of manufacturing excellence and entrepreneurial spirit, while remaining open to ongoing dialogue with other international businesses and markets, partners, customers and suppliers.

Sustainability and recycling have always been a core part of the company's DNA. The concept of Circular Economy responds to the desire for sustainable development, in the context of the growing pressure of production and consumption on the world's resources and environment.

In 2019 it was founded a new branch, Imbotex Lab, totally focused on the Circular Economy concept. A process based on innovative technologies SPLIT IN 3 STEPS was patented:

- collection of discarded virgin material scraps from production, then sorted per different colors;
- transformed through a mechanical process into very fine fibers;
- blended with recycled polyester to create the pad.

Imbotex aims to offer responsible paddings, encouraging the reduction of resource consumption as virgin raw materials, water and energy.

Product 1: **Climalight**



100% Rec. Polyester - Different weights available - Cuttable width 152 cm.

A very soft padding made of last generation microfibers, with special water-repellent silicones, which compose an incredibly soft, lightweight and water resistant thermal core. Climalight provides warmth and comfort without weight, allowing freedom of movement and making it the perfect layer. The ultra-fine fibers of insulation form a tight collection of air pockets that trap

heat from your body and keep the cold out, providing an excellent warmth-to-weight ratio. Climalight siliconized microfibers were developed to be water resistant so your insulation stays drier and maintains its insulating properties.

Climalight padding uses an ultimate microfiber structure to help the body retain warmth and conserve energy. This padding mimics the compressibility of goose down and is breathable, allowing moisture vapor to be transported through the fibers and away from the skin.

Product 2: **Nouvelle**



60 % r-Silk (r-SE); 40% PLA. Width: 152 cm - Different weights available. A new frontier in mindful fashion and sportswear, NOUVELLE adopts an upcycling approach wherein leftover printed silk fabrics are repurposed to create a new insulating material. Nouvelle is created in four steps:

- We collected as "end of waste" **silk fabrics scraps** from leftover silk fabrics rolls.
- The scraps are **garneted mechanically** and transformed into very fine fibers
- We make a **decOLOR process** with GOTS approved substances
- Finally the fiber are **blended with PLA** (polylactic fibre)

This upcycled insulation allows the creation of very light paddings that have unique thermal insulating properties, as per following thermal test results: 150 gr/sm: 2,2 (CLO value).

Product 3: **Nativa Silk Pad**



52 % Rec. Silk; 28% Rec. Polyester; 20% Rec. low-melt polyester fiber - Different weights available - Cuttable width 152 cm.

NATIVA SILK PAD is the new "active warmth padding" that allows air exchange for breathability and comfort in more dynamic situations. This new 100% recycled padding has the amazing ability to keep us cool when it's warm and warm when it's cold. Silk has a smooth, soft texture that is not slippery, unlike many synthetic fibers. Silk's absorbency makes it comfortable to wear in

warm weather and during sport performances. Its low conductivity keeps warm air close to the skin during cold weather.

Silk's part is composed by pre-consumer yarn's wastes – these come from the end of cones which are discarded during the production of noble pure silk fabrics. The cones are recovered and the part of pure silk is removed and then degummed. The fibroin, which composes 75% of the yarn, is finally mixed with GRS polyester staple fibers.

Product 4: **Luxepad**



51% Recycled Cashmere; 45% Recycled Polyester; 4% Recycled Wool - Width: 152 cm - Different weights available.

Lightweight, breathable thermal padding, giving new purpose to otherwise discarded precious materials made of cashmere.

Recovered scraps of cashmere fabrics during the subsequent production of coats are upcycled to create warm and light insulations, using a patented process in three steps; firstly, recovered materials are gathered and sorted in Northern Italy; secondly, they are transformed through a mechanic process into very fine fibers; lastly, the fibers are blended with recycled polyester, creating a high performing insulating mix, ready to be processed to create the pad.

This process, whose patent was filed, allowed to create a product highly resilient, features extraordinary tensile and strength qualities and with consistent insulating capacity. The entire process is less impactful in terms of energy and resources consumption.

Product 5: **Cameluxe**



52% Recycled Camelhair; 48% Recycled Polyester - Cuttable
Width: 152 cm - Different weights available.

Lightweight, breathable thermal padding, giving new purpose to otherwise discarded precious materials made of camelhair. Recovered scraps of camelhair fabrics during the subsequent production of coats are upcycled to create warm and light insulations, using a patented process in three steps; firstly, recovered materials are gathered and sorted in Northern Italy;

secondly, they are transformed through a mechanic process into very fine fibers; lastly, the fibers are blended with recycled polyester, creating a high performing insulating mix, ready to be processed to create the padding.

This process, whose patent was filed, allowed to create a product highly resilient, features extraordinary tensile and strength qualities and with consistent insulating capacity. The entire process is less impactful in terms of energy and resources consumption.

Product 6: **Paddyluxe**



46% Recycled Camelhair (r-WK); 6% Recycled Silk (r-SE); 48% Recycled Polyester (r-PL) - Width: 152 cm - Different weights available.

Lightweight, breathable thermal padding, giving new purpose to otherwise discarded precious materials made of camelhair and silk faux fur. Recovered scraps of camelhair and silk faux fur fabrics during the subsequent production of coats are upcycled to create warm and light insulations, using a patented process in three

steps; firstly, recovered materials are gathered and sorted in Northern Italy; secondly, they are transformed through a mechanic process into very fine fibers; lastly, the fibers are blended with recycled polyester, creating a high performing insulating mix, ready to be processed to create the padding.

This process, whose patent was filed, allowed to create a product highly resilient, features extraordinary tensile and strength qualities and with consistent insulating capacity. The entire process is less impactful in terms of energy and resources consumption.

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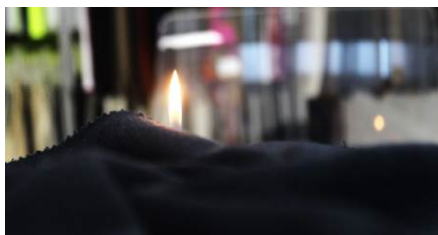
www.imbotex.it

MAGLIFICIO ALTO MILANESE SRL

For 50 years, even starting from a simple idea, every kind of yarn into knitted fabrics have been transformed, and today the Company is able to offer to customers a range of unique and complete products for the most different applications. The high specialization and professionalism allowed the Company to become one of the most qualified and versatile producers of "100% made in Italy" circular knitted fabrics, offering a product of absolute quality and a quick and efficient service thanks to the complete control of the entire production cycle.

The large number of machines, product finishings and dyeing techniques, also allows to create "tailor-made" products to satisfy specific needs and requests. It is also offered a wide stock service to quickly respond to a constantly evolving market. Within the collections, there is one called "Hitext", dedicated to aramid fabrics, also in blends with FR viscose, modacrylic and antistatic, which provides fireproof and antistatic features. Wide availability of fabrics compliant with EN ISO 15025 and EN ISO 1149 standards, as well as EN ISO11612. The flexibility and reactivity allow to respond quickly to requests in the event of customer specifications and custom developments. All fabrics are suitable for protective clothing (workwear), military, police and firefighters.

Product 1: **TAPUL**



Interlock composed by: 93%(meta) aramid, 5% (para) aramid, 2% nylon (antistatic) Weight: 230 gr.mq This fabric is certified UNI EN ISO 11612 :2015, which specifies performance requirements for protective clothing made from materials, which are designed to protect the wearer's body from heat and/or flame.

The performance requirements set out in ISO 11612:2015 are applicable to protective clothing which could be worn for a wide range of end uses, where there is a need for clothing with limited flame spread properties and where the user can be exposed to radiant or convective or contact heat or to molten metal splashes. Tapul is also certified UNI EN ISO 1149-5 :2018. This European Standard specifies material and design requirements for electrostatic dissipative protective clothing, including hoods and caps to avoid incendiary discharges, where the minimum ignition energy of an explosive atmosphere is not less than 0,016 mJ. Ideal for protective garments, workwear, military and police.

Product 2: **KOTOR**



Fleece composed by: 92% polyester (0,3% graphene) 8% elastan Weight: 205 gr.mq. Kotor has a face in Polyester with graphene, and the external face in polyester tone on tone. Graphene has some particular properties: o Thermoregulation: it can keep the basal body temperature stable, with no strong thermal fluctuations detected in the event of changes to the surrounding temperature or physical exertion. or

Antibacterial: Graphene nanoparticles are free from acute and chronic toxicity and have excellent anti-bacterial properties. The construction of the Fabric is made to have the internal face, in contact with the body, made with polyester-graphene yarn and the external face made in 100% polyester Ideal for sports garments.

Product 3: **BELLUSCO GRS**



Jersey composed by: 53% recycled polyester, 40% polyester (Coolmax) 7% elastan. Weight: 135 gr.mq. Bellusco is made with polyester Coolmax; this yarn derives from plastic bottles which are collected, cleaned, ground into flakes, and turned into shavings; they are then spun into fibres and yarns. The fibre obtained is made from 97% of recycled resources. It is developed with "push pull technology", a specific construction that in combination with Coolmax yarn guarantee to keep away moisture from the body to keep the wearer cool and dry.

This article is certified GRS (Global Recycles Standard): a certification which verifies the full supply chain and addresses traceability, environmental principles, social requirements, chemical content and labelling. With GRS certification, you can communicate to customers your commitment to truth in materials and support for a circular economy that reduces waste by using it to make new products. Ideal for sport garments, t-shirt and underwear.

Contact details:

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Booth at Techtextil: Hall 12.1 – C60

PENN ITALIA SRL/ PENN TEXTILE SOLUTIONS GMBH

Penn Italia and Penn Textile Solutions – two companies – one partnership – combining Italian creativity with German high performance and innovative knitting technology. The philosophy is to offer a fusion of Italian design and German engineering in our portfolio of mainly stretch fabrics, with options to create differentiated zones of power and stretch, body mapping, placed 3D structures and other innovative concepts. The Company global market includes underwear, sportswear, medical and other technical end uses. They have a wide range of Eco friendly innovative products and are OekoTex certified.

Product 1: **13408**



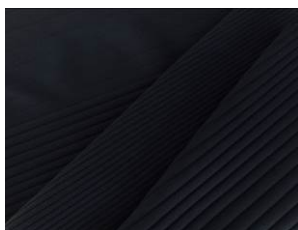
Dreamknit customized shape, placed zone, open holes, high breathability, less seaming, perfecting fitting

Product 2: **13423**



Dreamknit, freedom of movement placed zones, different compression, high breathability, open holes, perfect fitting.

Product 3: **13346**



Dreamshape sport, 3D effect, placed structures, breathable, soft touch.

Product 4: **13419**



Dreamshape sport gripper band used in cycling, running, open holes, high breathability, gripper on the back.

Product 5: **65062**



Soft spacer, clean cut, double face, square stretch, control compression.

Product 6: **12251**



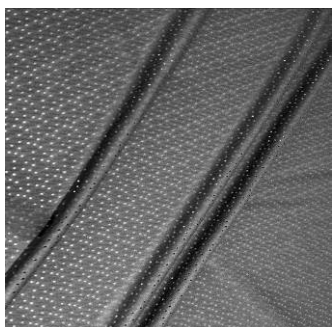
Dreamshape sport, gripper band used for cycling, running, with personalized logo, open holes, high breathability, gripper on the back.

Product 7: **13341**



Dreamknit compression zones with stretch, combine with holes and 3D effect, all pieces on the cutting table, better color matching, less left over, all in one to make the different.

Product 8: **13422**



Dreamshape sport, compression zones, open holes.

Contact details:

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amministrazione@pennitalia.it

POZZI ELECTA SPA

Pozzi Electa has been expressing the excellence of Made in Italy in ring cotton spinning for 5 generations, through a **zero-impact**, rigorous and highly specialized production process, carried out entirely in Italy, Val Seriana.

The self-production of **electricity from renewable sources** grants a low environmental impact of the entire production line.

The attention to the environment also involves the selection of raw materials, both **noble** and **recycled**. We choose **suppliers of global significance**, with trackable productions aimed at ensuring their **non-involvement in labor and environmental exploitation**.

The Pozzi Electa Collection includes a range of ring "Ecoyarns" produced with sustainable, recycled or natural raw materials: in particular **NYLON BIO** yarn, made with staple Nylon 6.6 characterized by a rapid **biodegradation process**; **CRABYON** yarn produced with chitin-chitosan deriving from **recycling of the shellfish carapace**, which confer antibacterial properties, the brand new yarns containing cellulose fiber obtained from orange **ORANGE FIBER** and other proposals available on the company's [website](#).

In addition, the Company obtained the **GRS Certification (Global Recycle Standard)**, with which our company's adherence to a sustainable production and consumption model is guaranteed. The fibers currently involved in the GRS Certification are Cupro, Silk, Polyester, Cotton and Nylon, available as yarn as well as **rovings and slivers**.

Product 1: "Ecoyarns" ring yarns

Produced with sustainable, recycled or natural raw materials: in particular

- **NYLON BIO** yarn, made with staple Nylon 6.6 characterized by a rapid **biodegradation process**;
- **CRABYON** yarn produced with chitin-chitosan deriving from **recycling of the shellfish carapace**, which confer antibacterial properties,
- the brand new yarns containing cellulose fiber obtained from orange **ORANGE FIBER** and TENCEL™ Lyocell from wood.

Contac details:

www.pozzielecta.it

RADICIGROUP

With approximately 3,000 employees, sales revenue of EUR 1,508 million in 2021 and a network of production and sales sites located throughout Europe, North America, South America and Asia, RadiciGroup is one of the world's leading producers of a wide range of chemical intermediates, polyamide polymers, high performance engineering polymers and advanced textile solutions, including nylon yarn, polyester yarn, yarn made from recovered and bio-source materials, nonwovens and personal protective equipment for the industrial and healthcare fields.

These products are the result of the Group's outstanding chemical expertise and vertically integrated polyamide production chain and have been developed for use in a variety of industrial sectors, such as: automotive – electrical and electronics – consumer goods – apparel – furnishings – construction – household appliances – sports. The basis of the Group's strategy is a strong focus on innovation, quality, customer satisfaction and social and environmental sustainability. With its business areas – Specialty Chemicals, High Performance Polymers and Advanced Textile Solutions –, RadiciGroup is part of a larger industrial group that also includes textile machinery (ITEMA), energy (GEOGREEN) and hotel (SAN MARCO) businesses.

Product 1: **RadiPeople Pro**



RadiPeople Pro is a chemical protective clothing by RadiciGroup combining performance with comfort and ergonomics.

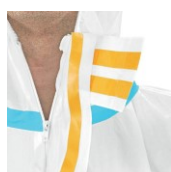
Its key features are:

- Excellent barrier against dust and splashes.
- Taped seams offering a protection barrier equivalent to the fabric itself.
- Antistatic treatment (in conformity with EN 1149-5:2008).
- Extremely heavy-duty yet lightweight coveralls, featuring an optimal compromise between protection and comfort.
- Self-adhesive chin flap for a tighter fit around a respirator, if needed.
- Elastic around face opening and at wrists and ankles. Glued-in elastic waist. Thumb loops to prevent the sleeves from riding up.
- Multiple Sizes (from S to XXL).

The main applications include: maintenance, pharmaceutical manufacturing plants, research & development laboratories and medical facilities.

RadiPeople Pro is compliant with:

Category III, Types 4-B, 5-B and 6-B, EN 1073-2, EN 1149-5, EN 14126.



Self-adhesive
Zipper and
chin flap



Elasticated
waist
(glued-in)



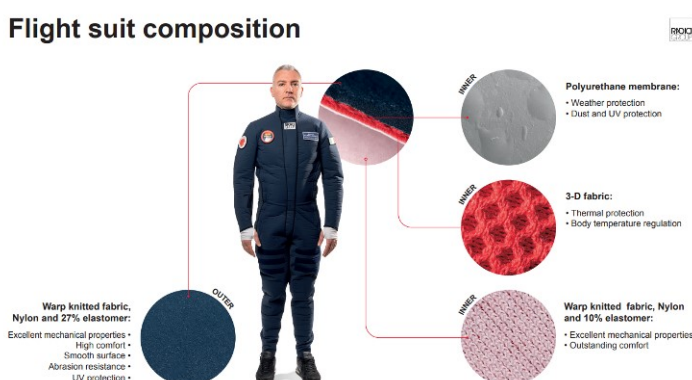
Thumb
loops

Product 2: **Spacesuite**

A network of Italian textile excellence (**Eurojersey**, **Vagotex** e **DEFRA**), headed by **RadiciGroup**, has created the first spacesuit for analogue simulation fully designed and engineered in Italy for the Space Medicine Operations (SMOPS) Mars mission, promoted and organized by Mars Planet – the Italian chapter of the Mars Society – under the patronage of the Italian Space Agency.

The SMOPS analogue mission is mainly focused on space medicine: health monitoring of future astronauts and development of support technologies for the simulation of life in space and planet environments.

Flight suit composition



The suits showcased in the Forum were used in a series of experiments carried out at the Mars Desert Research Station in the state of Utah, USA, from 10 to 23 April 2022, that simulated the life and work conditions mission crews will face on the Martian surface.

2 items of technical wear were developed and produced:

The **undergarment set of the spacesuit** consists of a long-sleeve shirt and shorts made with nylon warp-knit Sensitive® Fabrics from Eurojersey to ensure comfort and breathability. The shirt is equipped with electrical circuitry and sensors designed to measure the vital signs and geospatial parameters of the astronauts. The sensors can be detached, so that the garment can be washed with no risk of damaging the internal circuitry.

Hence, a **comfortable flight suit** suitable for use during work activities and capable of supporting the analogue astronaut in an environment simulating the Martian atmosphere. Made lighter by eliminating all superstructure, the suit meets both aesthetic and performance needs; in fact, the double-sided stitching allows for reducing thickness to the minimum and improving mobility and lightness by 30%. The garment has wearable technology pockets designed for optimal usage of space and volume. Furthermore, it has excellent skin contact properties and is designed for maximum comfort and flexible movement, thanks to the elasticity and high breathability of the materials used (nylon, in particular). The suit is also dustproof, offers UV protection and ensures good thermal resistance. The latter property is achieved through air trapped in the fabric interstices that flows freely inside a 3D alveolar structure, thus providing a self-regulating body temperature system.

Contact Details:

Product 1 – Radipeople Pro - Andrea Borgis, Head of business line

Product 2 – Space Suit – Filippo Servalli

www.radicigroup.com

Booth at Techtextil: Hall 9.1 – D50

SITIP SPA

Sitip S.p.A. is an Italian company with over 60 years of experience, specializing in the production of synthetic warp-knitted fabrics, intended for the technical industrial world, and stretch and circular fabrics, intended for the world of clothing.

Three the main types of production: fabrics for mechanical fastening systems for technical-industrial applications; technical fabrics and supports for lamination and coating intended for industry; eco-friendly fabrics branded **NATIVE Sustainable Textiles**; stretch fabrics for sport and athleisure.

The application markets are the most different, including orthopedics, personal care, abrasives, furniture, footwear, clothing, automotive.

Official Supplier of Giro d'Italia since 2014 with the supply of fabrics for the "Maglia Rosa" Sitip, consolidates its bond with sport and in particular with the cycling sector, demonstrating the great expertise in the production of highly technical sportswear fabrics, used by the biggest international active brands.

Continuous innovation goes hand in hand with a far-sighted corporate strategy, since Sitip makes use of the most recent technologies and the most advanced machinery to allow continuous production and quality updating. R&D activities are carried out in close collaboration with its customers and partners.

Sustainable development is a fundamental objective for ever greater environmental quality and social equity. To achieve this, Sitip operates in line with international certifications such as OEKO-TEX®, BLUESIGN®, GRS and adheres to the ZDHC gateway, adding to these an ISO 14001 environmental management system.

Product 1: **NATIVE-STRAPP RES ACR**



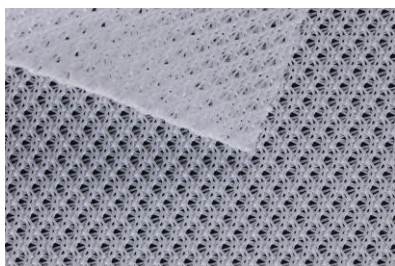
100% PAR, H/cm 127, g/m² 255.

It is a brushed tricot warp knit, made with pre-consumer yarns, certificated OEKO-TEX®.

It's a hook-receptive fabric and the main use is the Medical&Orthopedic sector.

The Sitip brand is **Native Sustainable Textiles**, a technology applied to fabrics made with recycled yarns and low-environmental-impact chemicals with reduced consumption of natural resources.

Product 2: **NATIVE-MOON PES**



100% PES RECYCLED, H/cm 155, g/m² 235.

It is an anti-abrasion tricot warp knit, no-brushed, made with post-consumer yarns, certificated OEKO-TEX®.

The main use is the Footwear sector.

The Sitip brand is **Native Sustainable Textiles**, a technology applied to fabrics made with recycled yarns and low-environmental-impact chemicals with reduced consumption of natural resources.

Product 3: **NATIVE-PARIGI NG**



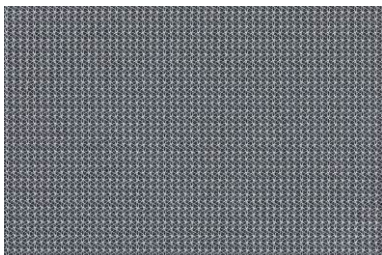
82% PA RECYCLED 18% PES RECYCLED, H/cm 160, g/m² 185.

It is a no-brushed tricot warp knit, made with pre-consumer yarns, certificated OEKO-TEX®.

The main use is the Footwear sector.

The Sitip brand is **Native Sustainable Textiles**, a technology applied to fabrics made with recycled yarns and low-environmental-impact chemicals with reduced consumption of natural resources.

Product 4: **NATIVE-MIRA L G30 H160 70-30**



70% PA RECYCLED 30% PA, H/cm 160, g/m² 30.

It is a no-brushed tricot warp knit, made with pre-consumer yarns, certificated OEKO-TEX® and BLUESIGN®.

The main use is the Footwear sector.

The Sitip brand is **Native Sustainable Textiles**, a technology applied to fabrics made with recycled yarns and low-environmental-impact chemicals with reduced consumption of natural resources.

Product 5: **VEL5872+MTP2,3 35+VEL5872COLLA**



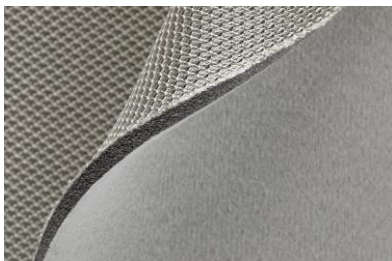
76% PA; 11% EA; 13% PU, H/cm 145, g/m² 540.

It is a laminated warp knit, certificated OEKO-TEX®, made with:

- VELL. ELAST. 5872 H150: a tricot warp knit, bi-stretch and brushed, for hook-receptive
- MTP D.035 MM.02,0 H.152 ANTRAC (foam)
- VELL. ELAST. 5872 H150: a tricot warp knit, bi-stretch and brushed for hook and loop applications.

The main use is the Medical&Orthopedic sector.

Product 6: **K040+PE4 30+STRAP NR-COLLA ASX**



77% PA; 23% PU; H/cm 145, g/m² 520.

It is a laminated warp knit, certificated OEKO-TEX®, made with:

- OP.K040 ITIS G230 H153 TINTO: an anti-abrasion tricot warp knit, no-brushed
- MTP D.035 MM.02,0 H.152 ANTRAC (foam)
- VELL.STRAPP G200/10 H150 NON R: a brushed tricot warp knit for hook and loop applications.

The main use is the Medical&Orthopedic sector.

Product 7: **SHALIMAR L ST. FOR.+S45 MM.3,5**



42% PL; 27% PBT; 31% PU; H/cm 150, g/m² 269.

It is a laminated warp knit, certificated OEKO-TEX®, made with:

- **SHALIMAR L SANITIZED IDROFILO FORO PICCOLO REDBULL:** a brushed tricot warp knit, printable, antibacterial (Sanitized®) and hydrophilic (**2DRY Enduring Freshness** - Sitip Technology that make the fabric quick drying, wicking moisture away from the body and leaving it with a sensation of pleasant

freshness.)

- **FILTRO S45 MM.03.5 H.153 ANTR** (breathable foam)

The main use is the Helmets sector.

Product 8: **Cycling suit**

Cycling shorts are made with **IMPACT PRO + THUNDERBIKE POWER** fabrics. The shirt is made with **NATIVE PIRATA** and **NATIVE BICIMANIA** fabrics)

- **IMPACT PRO** is a technical fabric characterized by high abrasion resistance. Made with high tenacity yarns, **IMPACT** minimizes skin scratches caused by falls, combining technical performance with high comfort. For sportswear, it is particularly suitable for cycling, mountain bike, climbing, skating and skiing, while it can also be used for workwear.
- **THUNDERBIKE POWER** is a technical fabric which guarantees excellent elastic module and perfect fit over time. Thanks to the high-density textile pattern, the fabric offers excellent no-see-through effect together with high UV protection (UPF 50+) for the athlete. Particularly suitable for cycling, triathlon and running trousers.

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E-mail: info@sitip.it

Booth at Techtextil: Hall 12.1 B45

SXP STILMOTOR EXTRA PROTECTION

People from different backgrounds united by a single interest: use technical capabilities and creative applications in order to realize objects and create innovative solutions which provide reply to specific needs. The Company designs and produces technical equipment for the defence and personal safety of the police, as well as clothing and protection for sports and professional use since 1974. The products are made using mainly plastic materials and high-performance technical fabrics, thanks to an historical and skilled know-how.

SXP is certified for the Quality Systems according to UNI EN ISO 9001 since 2003 and for the Environmental Efficiency to UNI EN ISO 14001 since 2009.

The matters of sustainability and social responsibility are the guiding principles in the company philosophy and form integral part of many projects since years.

Our values: Style, Materials, Research.

The protection, safety and comfort of the individual are always our focus during the design and production process. The Company creates products by merging creativity and functionality, ergonomics and aesthetics, safety and attention to detail. Flexible solutions interact constantly with a meticulous methodology. The industrial process is characterized by the use of our injection moulds, thermoforming and internal CAD system.

The company laboratory is equipped with a wide range of specific equipment and instruments suitable for all phases of prototyping, sampling and mass production: storage of materials, cutting, manual and automatic sewing, application of buttons and rivets, assembly, finishing touches, final inspection and packaging. The company believes in research, in change, in personal development, in teamwork, in respecting the environment and in fidelity to the Made in Italy. The production takes place entirely in Italy.

Product 1: Protective and shockproof multifunctional armour for horses: leg protections



The leg component of the armor is meant to encompass total protection of the legs. Easy to wear, they wrap the front legs in areas that are most at risk of injury, including the knees and hocks. Exclusive reinforcement for the back of the legs and the knees ensures a total and absolute protection guarantee.

Uses :

- horse transportation
- pre and post comfort and protection for horses as they recover from anesthesia
- rehabilitation for neurological problems
- behavioural problems
- reintroduction to sociality for pathological subjects
- during rescue and recover



Contact details:



TESPE

Since 1993, when TESPE was founded, the company has been specialized in the production of Technical textiles and industrial seals for high temperatures, with cutting-edge materials and production techniques, to guarantee the highest quality of service and high performance throughout the range of our products.

Dynamicity, professionalism and team spirit have been the primary elements allowing to create TESPE which is a manufacturing company born to make technical textiles first and a wide range of products for the industry then.

Research, planning and quality check are the policy of our internal production, which is in a never-ending expansion in order to satisfy at its best any technical and commercial requirement of a more and more qualified and demanding market.

Our Global Service: being a totally reliable technical-commercial partner and not just a simple supplier of products, by using always our experience and professionalism to guarantee the best advice services, technical assistance, timeliness and competitiveness.

Tespe is a leading manufacturer of Technical Textiles for thermal insulation and static seals for high temperatures: Ropes, Braids, Sleeves, Tapes & Ribbons, Fabrics, Insulating Cushions and Pillows, Expansion Joints. It also produces and distributes a wide range of Industrial Gaskets for static and dynamic seals: Special Gland Packings DYNAPACK® for pumps and valves, Sheets and gaskets in Graphite and Asbestos-free, semi-finished products in PTFE, special seals and industrial technical articles. Tespe commercializes and transforms Insulating and Refractory products for high temperature: Cardboard Mineral Fibers, Mats, Boards and Paper in Ceramic and Ecological Fiber, Needle Felts in Glass, Basalt and Silica Fibers, Sheets and products in Vermiculite, Glues and Mastics for high temperatures, articles in Glass Fiber and Mineral Wool.

Products:

SIL-TEX BRAIDED PACKING	SILCAWOOL BRAIDED PACKING	THERMOTEX BRAIDED PACKING	ARAMID BRAIDED PACKING	GLASS WEBBING TAPE MULTILAYER	ARAMID WEBBING TAPE MULTILAYER	THERMOTEX WEBBING TAPE MULTILAYER
Max. 1100 C°	Max. 1050 C°	Max. 750 C°	Max. 400 C°	Max. 550 C°	Max. 400 C°	Max. 750 C°
High temperature gaskets for doors of industrial ovens, boilers, stoves	High temperature gaskets for doors of industrial ovens, boilers, stoves	High temperature gaskets for doors of industrial ovens, boilers, stoves	Wrapped on rollers of the flat glass tempering ovens	High temperature conveyor belts; soft pads for tempering lines of steel tapes and for the handling and contact of hot glass articles	High temperature conveyor belts	High temperature conveyor belts; soft pads for tempering lines of steel tapes and for the handling and contact of hot glass articles

ZYNTEx BRAIDED PACKING	FIBRINOX BRAIDED PACKING	ARAMID WEBBING TAPE	GLASS BRAIDED PACKING GARED WITH HT RED SILICON
<i>Max. 500 C°</i>	<i>Max. 650 C°</i>	<i>Max. 400 C°</i>	<i>Max. 260 C°</i>
<i>For the handling and contact of hot glass articles</i>	<i>For the handling and contact of hot glass articles</i>	<i>Wrapped on rollers of the flat glass tempering ovens</i>	<i>High temperature gaskets for the doors of food industrial ovens</i>

Contact details:

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www.tespe.it

Hall 12.1 Stand B 12.

WINDTEX VAGOTEX SPA

Vagotex was founded in 1980 in Vago di Lavagno, where a dozen operators in the footwear sector led by Ferdinando Fiorio, decided to apply their knowledge into a company. The contribution of each of them made the company grow until it became a real success.

The invention of Windtex, the first elastic waterproof and breathable membrane, in the 90s, was the real turning point in the textile sector and changed the way of dressing in many outdoor sports, making clothing more comfortable and performing. Today Vagotex is certainly one of the companies with the most complete offer in the fabric-coupling sector.

The desire to innovate and keep up with the market has always been the basis of the Vagotex company philosophy. The efforts undertaken are always aimed at service and innovation, with attention to the quality and functionality of the products offered. With a dynamic and positive attitude, we work to get the needs of those looking for high-performance technical fabrics.

Attentive to the values of sport, but also to the needs of the world of fashion, footwear and any innovative textile sector, the company aims to create and refine the technical qualities of the materials to adapt them to any type of request.

The Italian tradition has always been known for the art of working with creativity, inspiration and passion, laboratory art. Thus was born that textile culture that made history in the world. Aware of this historical heritage, Vagotex perseveres with the same operational spirit and unchanged passion. These values lead us in the search for the best resources, people, tools, methods and processes that can innovate, create value and bring evolutions to the world of textiles. For each coupling and lamination service, the best choose us for the spirit and production capabilities with which, honored, we support them.

Product 1: QUICKDRY FRAME

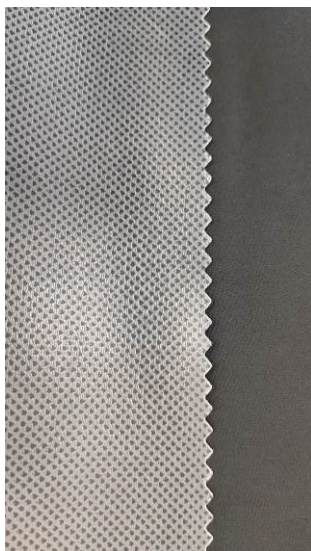


A new technology, a new dream, a new mission: to raise the level of comfort even more in technical garments.

This technology allows you to control and channel excess moisture produced by the human body during sweating, through a hydrophilic circuit, increasing exponentially the level of comfort. Functional both on large and small surfaces, it is completely customizable in design, allows stylistic re-interpretations of the product and enhances the less noble surfaces of

materials or artifacts. QUICKDRY FRAME™ amplifies the already known performance of the material as a real COMFORT-BOOSTER, without distorting its appearance, its water-repellent properties or the characteristics for which the product has established itself.

Product 2: **WINDTEX COMPOST**



What happens when we combine the most advanced technologies and market needs?

A unique item born that can satisfy everyone's needs.

With this in mind, all the new items in the "WINDTEX COMPOST" line are designed and manufactured. These natural fiber fabrics are coupled with a membrane to make the garment technical but without sacrificing the properties of the fabrics.

In particular, WINDTEX COMPOST is a membrane made of polyester copolymers that are biodegradable according to the EN ISO 13432 standard (which is currently used to certify all plastic bags and it's approved for use in landfills).

But not only that, to make the garment 100% BIODEGRADABLE, an EN ISO 13432 certified glue is also used and which therefore allows you to have a garment with a precise and punctual end of life without having to resort to compromises.

It is therefore sufficient to choose a biodegradable fabric (in natural or synthetic fibers) and with WINDTEX COMPOST the performance of waterproofing, wind proofing and helping to maintain body heat will be added to the garment.

Product 3: **FOOTWEAR ECODESIGN**



With the express purpose of providing new products with a more sustainable concept without sacrificing performance, FOOTWEAR ECODESIGN was born.

A series of articles designed to fully embrace everything the market offers to make footwear articles more sustainable.

In particular, the company can create waterproof BOOTY in which each component has been optimized to contribute to the environment.

FABRIC: 100% POLYESTER dyed with the MASS-DYED technique to minimize water consumption

PADDING: 100% POLYESTER using recycled fibers to minimize waste

MEMBRANE: 100% POLYESTER with 18% bio-based material to reduce the use of fossil resources

MAGLINO: 100% POLYESTER to extend the life time of the membrane and of the shoe in general in order to limit the waste we produce

Moreover, as you have seen, it is a 100% POLYESTER material to make recycling easier.

FOOTWEAR ECODESIGN, use the good to create the best.

Contact details:

www.vagotex.it