



THE EUROPEAN ADVANCED TEXTILE MATERIALS WORLD CLASS CLUSTER

Strengthening the competitiveness of European advanced textiles' companies

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WHAT IS EU-TEXTILE2030?

EU-TEXTILE2030 is a European Economic Interest Grouping created in November 2019 as a result of more than seven years of cooperation between seven European clusters on advanced textile materials.

VISION

To increase the competitiveness of European SMEs in the advanced textiles' materials sector

MISSION

To gather the European SMEs and other organizations related to the advanced textiles' materials sector, through clusters, with the development of specific actions and support services, mainly in 3 axes: collaborative projects in the areas of R&D&I, internationalization and fundraising.



European Economic Interest Grouping based in Brussels



Network of clusters



Representing the EU advanced textile materials' sector 680 SMEs 90 Research organizations

MEMBERS



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AJ BIAIS NOW SOLDS WASHABLE TEXTILE MASKS ONLINE





Faced with the unprecedented crisis in France, AJ Biais has decided to mobilize a large part of its production facilities to manufacture masks for non-sanitary uses, to be worn by the general public in order to participate in the effort to fight the COVID-19 pandemic. This specialist of borders manufacturing for household linen, clothing, bedding and even top-of-the-range products can now produce up to 70,000 masks each day.

"After the government announcements, we decided to close our production sites to protect our employees," explains Raphaël Laval, head of AJ Biais. But, after three days, we received many requests from customers making masks for bias. We decided to ensure this production but also to take the initiative to create masks".

These masks are now available for sale directly to individuals, with a wide range of choices (plain colors, or "fantasy" designs), and can be washed up to 30 times and are designed for children and adults. They are an alternative to the absence of masks for a large part of the population: employees assigned to posts or missions involving regular contact with the public (police forces, reception or cashier hostesses, etc.), members of a community in order to protect an entire group.

Following AFNOR (French association for normalization) standards, and tested by the Directorate General of Armament, the masks are sold online on a dedicated website: <u>www.mon-masque-et-moi.fr</u>. The cost per use is 0.17 euro.





FROM PROMOTIONAL PRODUCTS TO REUSABLE FACEMASKS





Member of:

ARPE is a small family business founded in 1991 that designs, manufactures, cuts, sews and stamps in Barcelona customized microfiber products for the promotional products sector, cultural sector, optics and optometry, automotive, gymnasiums and collectives. Unique products for their European originality, creativity, functionality and design.

At the beginning of the COVID-19 pandemic, given the shortage of protective material, the company shifted its manufacturing from promotional products to surgical masks.

ARPE has develop a textile facemask that is customizable, reusable, and washable. It fulfills with the UNE-EN-0065 specification for reusable facemask for common use (SKUT). SKUT is a circular knitted fabric facemask made with recycled yarns from post-consumer PET bottles and using 100% renewable energy.

In just two weeks, the company was able to adapt to the situation. It reorganized the entire factory and the different departments. In a record time, ARPE went from producing promotional products to masks thanks to the hard work of the entire team.

The objective was to manufacture at maximum speed the largest number of white masks to contribute in the fight against COVID-19.

Up to now, they have distributed almost a million masks to different sectors, such as municipalities, logistics' companies, companies in the food sector, as well as insurers, small businesses, automotive, transport, etc.

Recently, the Technical University of Catalonia (UPC) selected SKUT facemasks as the best ones in the market. They are suited to meet the needs of university staff and students.

Nowadays, ARPE is able to manufacture personalized masks in full color thanks to its know-how on the design and printing technology. Furthermore, the company is on the process to launch a new category of masks offering higher protection: reusable surgical masks.





FROM BLANKETS TO MASKS



Member of:

ATEVAL

Belpla, S.A. is a Spanish company specialized in the manufacture and marketing of blankets, with more than 50 years of experience in the home textile sector.

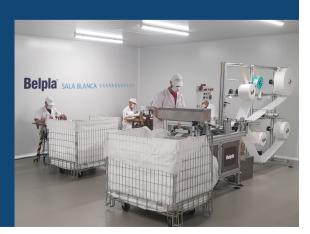
Belpla S.A. has its own facilities of more than 60,000 m2 distributed in 5 production centres located in Spain. Its modern facilities include spinning, warping, weaving, printing, finishing, embossing, embroidery and tailoring, which make it possible to have total control over production, ensuring the highest standards of quality.

In the midst of the enormous economic difficulties that have been caused by Covid-19, they have changed their production lines to contribute to and mitigate the effects of the disease on our health system and society.

They suddenly had a business with no customers or incomes, and they reacted very quickly to adapt the new production line.

They have developed a mask with a metal and plastic-free nasal adjustment and an adapted to chin that prevents fogging of the glasses.

The hygienic masks comply with the UNE 0065-01 standard for hygienic masks, with AITEX test approval 2020TM2508. Now, they have a capacity production of 7M mask/ month.





TEST PASSED BY MADE IN ITALY SURGICAL MASKS. TOGETHER AGAINST COVID19





The pandemic didn't stop us. Coronavirus changed the way we cope and react to a crisis that none of us ever thought we would have to face. The need to find a quick response pushed us to reivent us, to research and to take commitment.

This is the spirit behind the initiative to create a high quality and certified mask to deal with the Coronavirus emergency. Canclini1925, Flenghi Divise, and Fraizzoli, in perfect synergy, have managed to convert part of their production lines to satisfy the need for safety for the community. A surgical mask has been realized and in the last few days it has obtained a favorable opinion for production from the National Institute of Health.

It was not easy, both for bureaucratic's requirements and for ideal raw material scarcity; TNT Meltblown, already rare before the pandemic, became inaccessible since the beginning of March. It's not in our nature to lose heart: we have been fighting to find the best mix of materials to create a medical device that can really protect us.

The mask is made of 3 layers: close to the mouth a stretch cotton blend (with a high filtering power, obtained with a special finishing that makes the mask completely water-repellent) coupled with two layers of 100% polypropylene TNT. The stratification has allowed to successfully pass all the tests required to create a 100% Made in Italy product. The choice of these articles was dictated by the need to find materials for daily use, produced entirely by the Italian supply chain to be independent from foreign countries in a period when the answer had to be immediate. Today we are able to provide these medical devices to hospitals too.





FRESHDYE - SELF-CLEANING TEXTILE FACE MASKS





Textiles with a special FreshDye colouration work on the principle of a photoactive dyestuff generating active forms of oxygen when illuminated by common daylight or artificial light. This results in the self-cleaning effect which provides the fabric with protection against undesirable pollutants. Testing of the material safety have been performed in the National Institute of Public Health. Antibacterial efficiency of the FreshDye fabric was confirmed by lab testing according to standards EN ISO 20 743 and JIS Z 2801. The main advantage is a long service life of the face masks, bed-linen or clothing made from the FreshDye fabric because of the effect wash-permanency in minimum 50 washing cycles at 60°C.

Colouration of cotton and Co/PES blend is ensured in industrial scale in cooperation of companies INOTEX and COC. The FreshDye fabrics can be used for protection clothing of medical staff effective against the transmission of nosocomial infections.

The FreshDye photoactive textile was developed by INOTEX and Centre for Organic Chemistry in project TE 02000006 supported by Technology Agency of the Czech Republic.

Textile care symbols – textiles from 100% cotton or Co/PES blends with the photoactive FreshDye colouration:







ELASTIC BANDS FOR THE HEALTHCARE AND MEDICAL SECTOR





LIASA – La Industrial Algodonera is one of the examples of a company that has shifted part of its production capacity to manufacture components needed for healthcare products to contribute in the fight against COVID-19.

Just in a weekend, LIASA was able to adjust several production lines for continuous manufacturing of elastic bands suitable for medical masks. The company has activated a 4-shift production schedule to enable non-stop 24/7 production in response to the enormous demand of healthcare products pulled by the COVID-19 situation.

The General Manager and Vice-President of LIASA, Jaime Cabré, remarked that with the current adapted production line, it has capacity to produce 4.000.000 meters, which will contribute in the production of 10.000.000 medical masks per month.

LIASA collaborates with several textile companies in the region to manufacture the different medical mask components and integration who have committed to donate them to the healthcare system. Beyond LIASA capacity to produce elastic bands, they also cut them in specific sizes during the manufacturing process to facilitate speed up in the sewing. This shortens the overall production time that is critical in this situation. Its last product contribution against COVID-19 has been an innovative cord used as ear savers for masks for the big distribution and also for the consumer, sold by their new B2C web site, www.cordonshop.com

LIASA is a family business established in 1918 and located in La Selva del Camp. It employs 50 people and has a turnover of about 5 million Euro. Thanks to its century long history, LIASA is aware of the need for commitment and fast response to support society during this difficult period.





INDUSTRY TAKES ADVANTAGE OF THE DEMAND FOR SANITARY EQUIPMENT'S TO BOOST THE SECTOR



Member of:

ATEVAL

MILA ROSA is a home textile producer. In their collections they use natural fibers such as cotton, wool, tencel and natural anti-allergic products to take care of the least detail of your rest.

The project arises as an initiative in the face of the health crisis in which we find ourselves. MILAROSA began to serve at the end of February many hygienic masks made of polyester twill, handmade, to local civil population. Their aim has been to be more competitive, automate the process and reduce waste. To this end, the company has developed surgical masks type IIR that can be manufactured at the new automatized facility so that the cost is being reduced.

At the beginning of April the manufacture in Spain of FPP2 and FFP3 masks was almost non-existent, so it was of great interest to the company to manufacture this type of mask, since beyond the demand as PPE to combat the pandemic, these masks are widely consumed above all in the work environment.

The next step for them is to replace PP spundbond. They are developing a project with a Textile Research Center to replace spunbond nonwovens by polymers to increase the biodegradability and compostability of the masks.

Now, they have a capacity production of 5M mask/ month.





NANOFIBER BASED ANTIMICROBIAL REUSABLE NON VALVE RESPIRATOR



Unique respirator with anti SARS-CoV-2 (COVID-19) protecting features. BreaSAFE® respirators are made of a unique nanofiber membrane. Their ultralight construction allows comfortable and long usage. Active silver enables distinctive and highly effective antimicrobial features to prevent viruses and bacteria growth. The absence of breathing valve enables respirators BreaSAFE® safely protect both the user and its surrounding. Thanks to carefully selected components respirator can be sterilized, thus extended life and safe wear is guaranteed over several days (up to two weeks depending on wearing conditions and a proper care). All this makes it an absolutely unique product on the market with excellent quality-performance-price comparison. Proudly developed and made in the Czech Republic.





THE VERY FIRST COTTON SURGICAL MASK WITH REMOVABLE FILTER CERTIFIED AS CE MARKED MEDICAL DEVICE



During the pandemic, Maglificio Po (Turin, Italy) and Tessitura Pertile (Chieri, Italy) created the very first **surgical mask in pure cotton** with replaceable SMS filter made out of an entirely Italian production chain, in collaboration with Ahlstrom Munskjo (Mathi, Italy).

They are washable masks, long lasting and **certified as Medical Device - type I and II surgical masks** with **CE mark** and for which we have also filed a patent application for the originality of the creation.

It is a solution that fits four fundamental needs: the **safety** of wearing a CE medical device certified as surgical mask: the **health** of the wearer of the mask, whose skin is not in contact with the plastic of the filter (potentially very allergenic if continuously worn for long time) but with the cotton that covers it which is GOTS and OEKO-TEX certified; **environmental sustainability**, as the removable filter (being 100% polyester) can be disposed of separately, while the cotton mask has a very long life; very significant **economic savings**, since the cost of refill filters is much lower than the price of disposable surgical masks.

The mask is elegant and stylish, available in 6 colors, it can be printed and it is currently the only Medical Device certified and CE Marked alternative to disposable surgical masks.





ENVIRONMENTALLY FRIENDLY REUSABLE PROTECTIVE TEXTILES

SACHSEN!TEXTIL

SACHSEN!TEXTIL e.V.

A consortium of Saxon companies has brought reusable workwear onto the market that is suitable for clinics and care. The surface material for this is supplied by VOWALON Beschichtung GmbH, Treuen. It is bacteria and virus-proof, resistant to hydrolysis, steam sterilisable, washable at 95 degrees Celsius, disinfectable and resistant to blood, urine, oils and fats. The PUR coating applied to a breathable fabric is biocompatible according to DIN EN ISO 10993-5/- 10). The knitted cuffs, which enclose the wrist tightly and elastically, come from Strumpfwerk Lindner GmbH, Hohenstein-Ernstthal. Cutting and finishing are carried out at Friedrich Seidel GmbH, Treuen OT Schreiersgrün. The fashion producer known under the label "seidel" uses sewing threads from Alterfil Nähfaden GmbH, Oederan.

"Of course this environmentally friendly reusable textile is more expensive to purchase than a disposable textile one-way model. But after only about 10 cleanings and reuses the the alleged price advantage of the disposable version no longer exists - then the returnable packaging users already in the profit zone", explained seidel managing director Axel Seidel. Added to this are the guaranteed high quality and delivery reliability of the companies working closely together in the region.





VIRUS AND BACTERIA REPELLENT REUSABLE FACE MASKS FOR MASS PRODUCTION

SACHSEN!TEXTIL

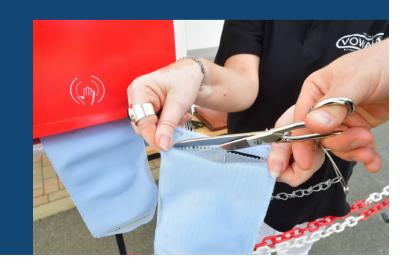
SACHSEN!TEXTIL e.V.

A Saxon group of companies has developed reusable face masks that repel viruses and bacteria for large-scale production: The textile base material that lies against the wearer's face is produced on the warp knitting machines of Spiga Spitzen- und Gardinenfabrikation GmbH, Flöha OT Falkenau.

Fixation, moisture-regulating and antibacterial finishing are carried out at Textilausrüstung Pfand GmbH, Lengenfeld/Vogtland. In a coating process, VOWALON Beschichtung GmbH provides the masks with a virus repellent "outer skin" - certified according to DIN EN ISO 10993-5/-10).

The optimal hold on the head of the wearer is guaranteed by the fact that the "ear loop" is already incorporated. Additional tapes or similar are not necessary. As Spiga's managing director Nico Mach explained, in the manufacturing process mouth-nose masks must not be treated with substances that are harmful to health; i.e. they must be free of harmful substances.

In addition, it must be ensured that no pieces of fibre or particles come loose and can enter the respiratory tract, even when worn for long periods. The masks offered under the "Spiga Care" label are a resource-saving and at the same time cost-effective alternative to disposable masks.





NEW TECHNOLOGY WITH VIRUCIDAL ACTION DEVELOPED BY THE SERGE FERRARI GROUP





Member of:

The Serge Ferrari Group has successfully developed a virucidal technology for composite materials, which reduces viral load of coronaviruses by 95% after 15-minute contact time, and by 99.5% after one-hour contact time, compared to an untreated membrane. This technology was tested by Virhealth, a laboratory specialising in virucidal and bactericidal testing of decontamination/disinfection technology.

When applied on membranes, this technology could contribute, along with other sanitary preventive measures, to make surfaces safer in facilities open to the public or with heavy footfall, including healthcare facilities, schools, day nurseries, as well as offices, retail businesses, cultural institutions, leisure facilities and public transport vehicles.

A technology based on silver particles

Relying on the properties of silver particles, the Serge Ferrari R&D teams have developed a technology capable of eliminating coronaviruses. To achieve this result, they have worked on and evaluated a variety of technologies applied to the Group's products to prevent fabrics from becoming propagation sources for viruses and bacteria, thereby contributing to reduce the risks and pace of contamination.

Thanks to this new technology, the Serge Ferrari Group will market fabrics with antiviral properties for medical applications: modular structures for patient care (fully equipped field hospitals, rapid-deployment tents, etc.) or for temporarily increased storage capacity in hospitals, indoor fittings (partition screens, blinds for hospital room windows), medical equipment (washable mattresses, stretchers, upholstery for medical furnishings, etc.) and individual protective gear (jumpsuits).

In addition to these applications, Serge Ferrari's technology could also provide a valuable contribution for materials used in facilities open to the public or with high footfall, including schools, day nurseries, as well as offices, retail businesses, hospitality establishments, event venues and public transport vehicles.





Advanced Textile Materials



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