

Recypur successfully starts up a complete airlay line delivered by ANDRITZ

Recypur Eco SL in L'Alcúdia, Spain, has successfully started up a complete airlay line delivered, installed and commissioned by international technology group ANDRITZ.

The airlay line is designed for recycling of post-industrial and post-consumer foam and was developed specifically for the bedding and furniture industry, with material heights reaching 20 cm and densities of up to 120 kg/m³. Experimental tests carried out together with experts from ANDRITZ Laroche led to the conclusion that the mechanical method for recycling polyurethane is the most versatile and reliable.

With a capacity of 1.2 t/h, this airlay line enables Recypur to supply new mattresses made of industrial & post-consumer foam waste from old mattresses. This well proven process allows to reduce the environmental impact,

increase self-sufficiency and eventually reduce the use of polyurethane.

Such a set-up also allows multiple functional materials to be incorporated into the blend, such as flame-retardant, conductive and insulating fibers, among others. Thanks to this tailored approach, Recypur is now able to expand its diversification, innovation and reputation on the Spanish market.

The scope of supply includes a blending line with five feeders, an Exel 1500 for fine opening, an Airlay Flexiloft+ with 2.20 m working width, a recycling machine and an oven.

Airlay lines strongly support the circular economy and are part of ANDRITZ's comprehensive product portfolio of sustainable solutions that help customers achieve their own sustainability goals in terms of climate and environmental protection.

Tomás Zamora, Innovation Director, Recypur, comments, 'The treatment of waste being a major stake, we knew that we could rely on ANDRITZ's high level of expertise. They have fully supported our R&D team in their technical center by using 100% of the foam coming from

end-of-life mattresses and sofas. Thanks to this state-of-the-art new equipment, we have succeeded in finding the exact required solution for the mechanical recycling of mattresses. Now 250 kg of CO₂ are saved for each ton manufactured by our company as compared to manufacturing with virgin polyurethane'.

Recypur, based in the Spanish province of Valencia, is part of DELAX, a Spanish group specialized in manufacturing and commercialization of innovative beds and mattresses. This company is the first Spanish manufacturer of recycled flexible polyurethane foam cores from post-consumer foam waste.

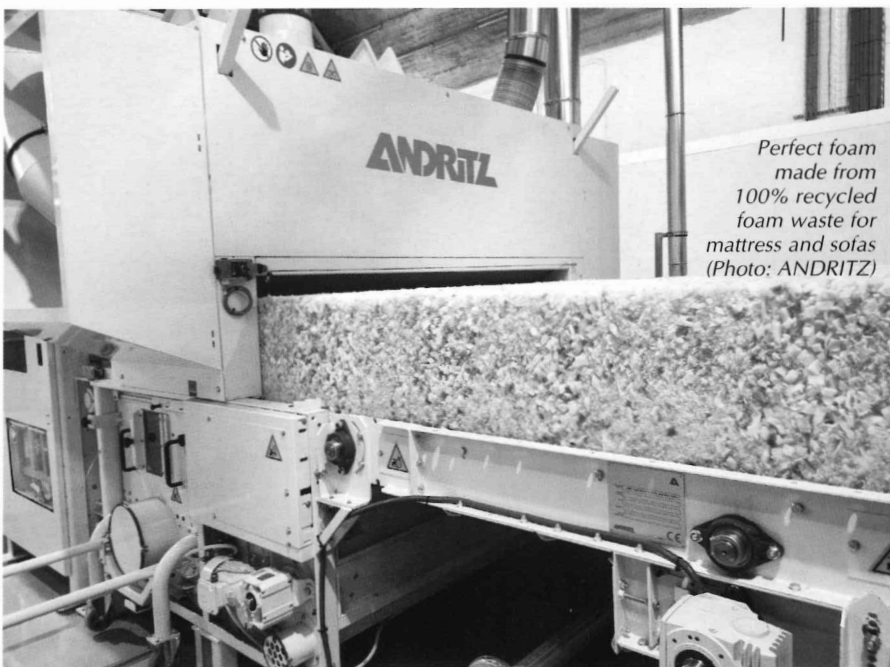
Digitalization and sustainability key to resiliency for Italian textile machinery sector

The objective critical issues faced by Italy as a whole throughout the course of 2021, primarily dictated by a pandemic that upset any and all pre-existing equilibriums, have not slowed or halted the Italian textile machinery sector.

Indeed, data presented during the annual assembly of ACIMIT, the Association of Italian Textile Machinery Manufacturers, held on 1 July proved decidedly positive, showing that in 2021 the sector recovered significantly compared to 2020, to the point of returning to pre-Covid levels.

Specifically, Italian textile machinery production amounted to 2.388 billion Euro (+35% over 2020 and + 5% over 2019), with total exports amounting to 2.031 billion Euro (+37% over 2020 and +9% over 2019).

However, these results do not cancel the obstacles that companies are still facing. Looking to the near future, expectations are for a rather uncertain outlook, as underscored by ACIMIT President Alessandro Zucchi: '2022 remains a year replete with unknown



Perfect foam made from 100% recycled foam waste for mattress and sofas (Photo: ANDRITZ)

factors, starting with the Russian-Ukrainian conflict, along with the persistence of the pandemic, which seriously risk delaying expected growth consolidation for businesses in the sector. Difficulties in finding raw materials and components negatively affect the completion and fulfilment of orders

the aim of facilitating integration with the operating systems of client companies (ERP, MES, CRM, etc.).

A green soul

Combining production efficiency and respect for the environment: a challenge ACIMIT has made its own and which it



processed as far back as 2021. To boot, rising energy costs and inflationary trends affecting numerous commodities are depressing overall business confidence. So the outlook for the sector is not so good.'

As such, the two cornerstones through which ACIMIT aims to support the Italian textile machinery sector are digitalization and sustainability.

4.0: The textile machinery sector looks to the future

The road to digital transformation has already led numerous manufacturers to completely rethink their production processes, rendering them more efficient and less expensive. The digital world is moving ahead at a decisive rate in the textile machinery sector, where the buzzwords are increasingly, for instance, the Internet of Things connecting to a company's ecosystem, machine learning algorithms applied to production, predictive maintenance, and the integrated cloud management of various production departments. It is no coincidence that ACIMIT has focused decisively on its Digital Ready project, through which Italian textile machinery that adopt a common set of data are certified, with

promotes among its members through the Sustainable Technologies project. Launched by the association as early as 2011, the project highlights the commitment of Italian textile machinery manufacturers in the area of sustainability. At the heart of the project is the Green Label, a form of certification specifically for Italian

textile machinery which highlights its energy and environmental performance. An all-Italian seal of approval developed in collaboration with RINA, an international certification body.

Global shipments of new textile machinery

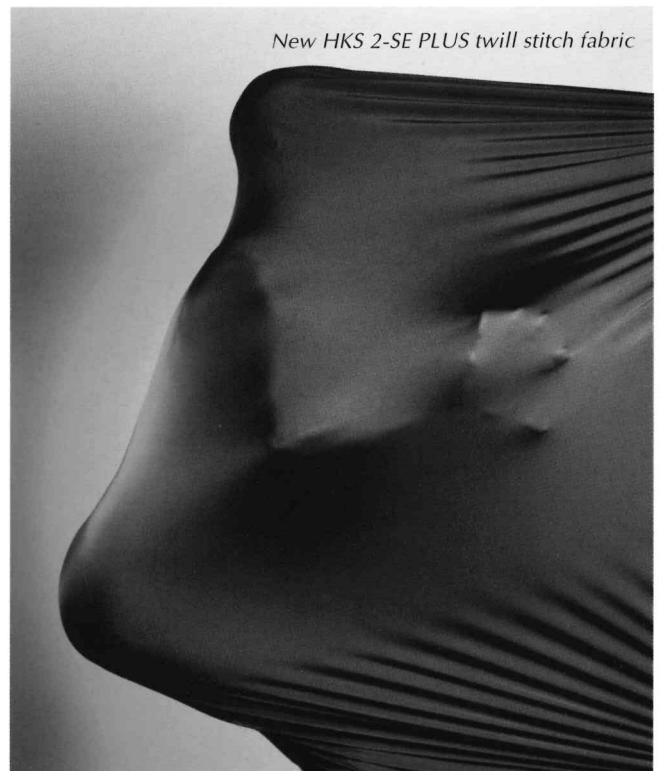
In 2021, global shipments of spinning, texturing, weaving, knitting, and finishing machines increased sharply compared to 2020. Deliveries of new short-staple spindles, open-end rotors, and long-staple spindles rose by +110%, +65%, and +44%, respectively. The number of shipped draw-texturing spindles surged by +177% and deliveries of shuttleless looms grew by +32%. Shipments of

large circular machines improved by +30% and shipped flat knitting machines registered a 109%-growth. The sum of all deliveries in the finishing segment also rose by +52% on average.

These are the main results of the 44th annual International Textile Machinery Shipment Statistics (ITMSS) released by the International Textile Manufacturers Federation (ITMF). The report covers six segments of textile machinery, namely spinning, draw-texturing, weaving, large circular knitting, flat knitting, and finishing. The 2021 survey has been compiled in cooperation with more than 200 textile machinery manufacturers representing a comprehensive measure of world production.

More lapping variety, more shape power

At the end of last year, Karl Mayer added the HKS 2-SE PLUS to its range of products for processing elastane; the first trials were completed shortly afterwards to test the new patterning possibilities it offered. Thanks to a modified knitting motion, the newcomer can not only implement conventional elastic locknit and 1 x 1 counter lappings, but twill stitch



New HKS 2-SE PLUS twill stitch fabric