Focus on innovative nonwovens technology and sustainability

AUTEFA Solutions at Techtextil Frankfurt 2024

At Techtextil Frankfurt 2024, AUTEFA Solutions will present innovations in nonwoven technology with a clear focus on sustainability, including energy efficiency, fiber selection, life cycle management and emission reduction. As a leading supplier of turnkey nonwoven systems and machinery, AUTEFA Solutions offers needle punching lines, aerodynamic web forming lines, spunlace and thermobonding lines.

"Techtextil provides not only a platform for innovation and progress, but also a valuable opportunity to engage directly with customers. Through direct interaction, we not only learn about their current needs, but also lay the groundwork for future developments. We in particular are ready to highlight sustainable applications with our Airlay lines and demonstrate energy optimization in oven and dryer technology. In addition, we will emphasize our core competence in complete needle punching lines with specific features for geotextile, filtration, and artificial leather applications," explains André Imhof, CEO AUTEFA Solutions Austria and Switzerland.

The sustainable use of resources is a key challenge. Nonwovens technology originated from the concept of recycling to reduce manufacturing costs and process textile waste and previously unusable materials into fabric structures. With growing environmental awareness, there is an increasing demand for textile recycling solutions or the conversion of used textiles into new products (upcycling).

Nonwoven lines that mechanically, thermally, or chemically consolidate fiber webs can process almost all mechanically and chemically recycled fibers. Fibrous materials down to granulate can also be processed. The raw material is either from direct mechanical recycling or indirect mechanical recycling, e.g., using fibers from spinning. Applications range from artificial leather, filter media, trunk linings and headliners to geotextiles, floor coverings, insulation and soundproofing materials, and hygiene products.

The aerodynamic web forming machine Airlay V21/R - K12 from AUTEFA Solutions is the versatile solution for various recycling possibilities. The aerodynamic principle ensures a three-dimensional fiber orientation and total randomization. Airlay systems are characterized by highest product quality, economic efficiency, and reliability. During the process, the material is opened down to the individual fiber, which allows high flexibility in fiber selection and provides a solution even for very short fibers.

Media Information

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In principle, all known fiber types and their blends can be processed. The design of the Airlay V21/R - K12 FUTURA allows easy opening and quick access for cleaning and maintenance.

In combination with the AUTEFA Solutions Stylus needle loom, the HiPerTherm thermobonding oven or the V-Jet FUTRA spunlace machine, AUTEFA Solutions offers nonwoven lines from a single source. The products manufactured with these lines, such as linings and interior linings, cleaning and wet wipes, upholstery material and insulation, can be produced in a true closed loop concept. Fibers are often used up to four times in a product.

AUTEFA Solutions supports the principles of the circular economy by optimizing the entire life cycle of textile fibers through recycling and reuse, thereby reducing resource consumption