

# A tradition of stitchbonded nonwoven innovation

At the exhibition booth, the manufacturer will be showing the model of a seat consisting only of nonwovens, from upholstery to fabric cover.

In Mittweida, Germany, Tenowo Mittweida GmbH operates a modern production facility for innovative nonwovens made from carded fiber web for automotive and specialty applications. With special machines based on the Malimo stitchbonding technology, fibers are processed into textiles known by the names of Malivlies, Maiiwatt and Multiknit.

## Malimo: Revolutionary technology

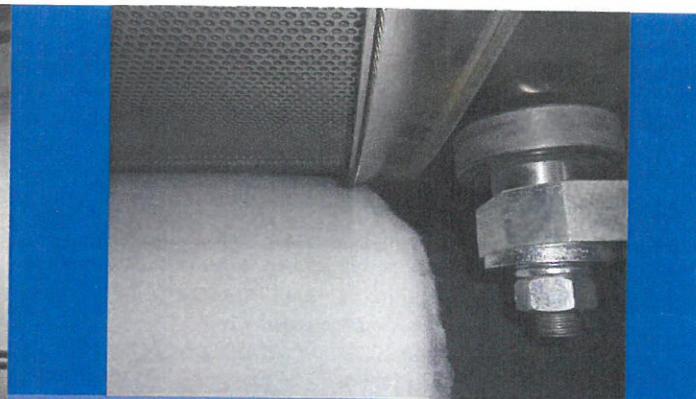
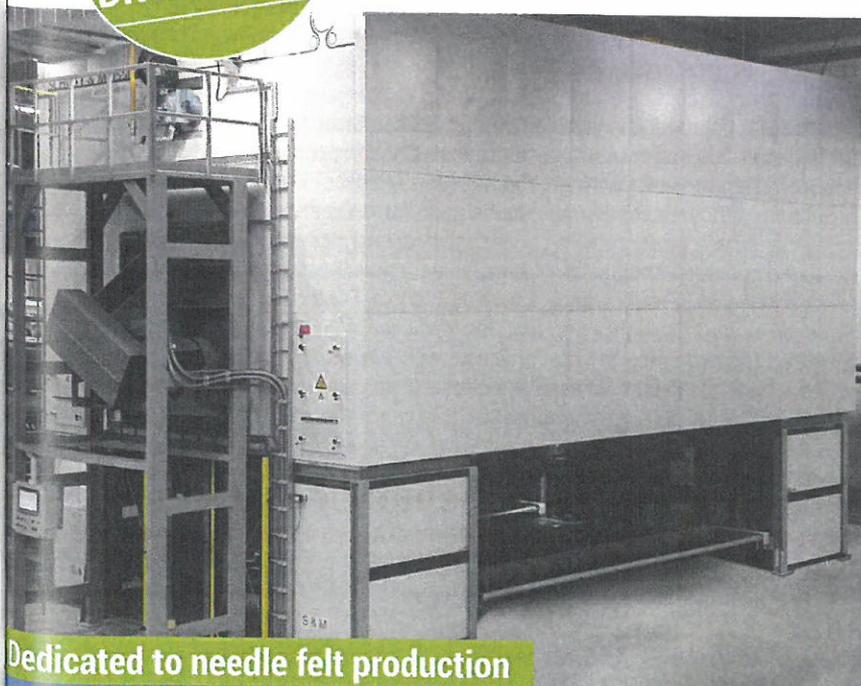
The Malimo stitchbonding method was born in the German state of Saxony. In the post-war era, Heinrich Mauersberger developed a method for processing fibers into textiles. Over the years, this method served as basis for other varieties in engineering. In the mid-1980s, the GDR already had more than 25 companies

producing more than 150 million square meters of stitchbonded fabric and nonwovens for consumer and industrial goods. The technology revolutionized the textile industry in the GDR. Malimo products could be found in almost all private households. In 1990, more than 3,500 Malimo stitchbonding machines were in operation in 40 countries around the world.

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### Technical Features

- » up to 6.500 working width
- » pin system for maintaining width
- » calender for surface treatment

**Stitchbonded products for Techtexsil 2017**

Erzeugnisse aus Nähwirkvliesstoffen zur Techtexsil 2017



Quelle/Source: Tenowo

Before German reunification, the company now known as Tenowo Mittweida used to be a production facility of VEB Wäscheunion Mittweida – the stitchbonding unit producing consumer goods, e. g. household textiles. Specialization in nonwovens for technical and automotive applications served as the basis for the foundation of Techtex GmbH Vliesstoffe Mittweida in 1991. To this day, products for technical applications, such as additional carpet backing or foam replacement for seats, are at the core of the company's stable business development.

For 25 years, the Mittweida company has been part of the Hoftex Group. Under its roof, the long-standing textile company gathers the business units Hoftex (yarn production), Neutex (decorative fabrics), and Tenowo, the biggest business unit. Tenowo stands for the development and production of innovative nonwovens for various industrial and automotive applications and interlinings. Various locations in Europe, Asia and America produce needlebonded, thermobonded and binder nonwovens, as well as hydroentangled nonwovens, high loft products and nonwovens made from recycled carbon fibers. Tenowo Mittweida GmbH completes the large product portfolio with stitchbonded technology.

**Nonwovens from Mittweida**

The range of nonwoven production methods within the Tenowo Group allows for the development of individually customized solutions for automotive applications such as nonwoven textiles for ceilings and decorative purposes, backing for mats and floor covering as well as foam replacement for seats and nonwoven covers. The nonwovens from Mittweida are characterized by their special properties thanks to the production method. Properties include

high longitudinal strength, surface resilience, padding effects, pressure elasticity or stability. The use of various raw materials and blends and the conversion of nonwoven textiles make it possible to meet specific customer requirements. Uses for nonwovens based on the Maliwatt technology include carrier material for adhesive tape. Multiknit nonwovens are used for making car seats.

**Well-prepared for the future**

avr talked to Dr. Elmar Wind (photo p. T 33, left), Factory Manager for Tenowo Mittweida GmbH, about the company's development of stitchbonding technology – with the upcoming Techtexsil in mind, of course.

**Dr. Wind, please tell our readers a little about your career.**

Dr. Elmar Wind: Until 2011, I studied chemical and process engineering at TU Graz in the Paper and Pulp Technology Department, finishing my extensive education with a doctorate in printing technology. After several positions with the Austrian engineering specialist Andritz AG, I last worked there as Director Product and Process Management Tissue & Drying. In the summer of 2015, I joined Tenowo GmbH in Hof. Since July 2016, I have been the Factory Manager at the Mittweida location.

**The demand for nonwovens from Mittweida is constantly increasing. Could you tell us what Tenowo is doing to meet that demand?**

Dr. Elmar Wind: In 2015, we installed two production lines at the factory in Moschendorf/Hof, which is a production facility of Tenowo Mittweida GmbH, where we now produce Maliwatt nonwovens in multi-shift operations. Last year, Tenowo Inc. in the US installed an-

other stitchbonding line, which now replaces time and resource-consuming transports from Mittweida to our customers in the US and Mexico. We are currently modernizing our decorative fabric production so we can continue offering decorative fabrics of the best possible quality to the automotive industry. Another 14,000 m<sup>2</sup> of factory floor space is planned on an adjacent property that we acquired. We are also planning to raise a new administrative building and technical center on the current premises.

**An in-house technical center will offer your customers many possibilities for process modification and product development. Where do you see the focus of the technical center?**

Dr. Elmar Wind: We are planning to equip the lab with fiber preparation technologies, carders and lappers, ending with several stitchbonding machines. To ensure seamless product development, there will also be mechanical and chemical treatment machines available in the technical center. Apart from our development of nonwoven products, we also want to develop our machine technology and thus the Maliwo technology. With this technical center, we want to enable Tenowo Mittweida and our customers to test new raw materials, products and methods, so that they can make use of innovative stitchbonded nonwovens to be well prepared for the future.

**Which products is your company going to present in Frankfurt?**

Dr. Elmar Wind: At the booth, we will show the construction of a seat (photo), which consists completely of nonwovens, from upholstery to cover fabric. Our Multiknit product is used as a functional upholstery material with fibers made from recycled PET bottles, while printed Malivlies is used for decoration. Added to that are new stitchbonded nonwovens with treatment effects for innovative technical applications, such as interiors. For the home textile segment at Techtexsil, we will present printed Malivlies material with interesting visual and functional effects. |

techtexsil

Tenowo  
Hall 3.0  
Booth E42