DiloGroup’s In-house Exhibition on the occasion of Techtextil

Techtextil in Frankfurt is traditionally one of the most important show events worldwide for DiloGroup as a specialist for complete nonwoven manufacturing lines with a long-term speciality as provider of state-of-the-art needling lines. Also this year, Dilo and group members TEMAFA and Spinnbau were situated in hall 12, booth B81, their traditional location, adjacent to needle specialist Groz-Beckert as well as partners and competitors.

In addition to the four days in Frankfurt, Dilo had invited customers for a tour of DiloGroup’s headquarters in Eberbach on the Thursday as a supplementary event to demonstrate relatively shortly after ITMA 23 its range of latest machine and line innovations.

More than 80 interested visitors did choose to accept Dilo’s invitation to get on the shuttle bus and take the audio-guided tour through the company’s R&D and demonstration centres which had been specifically prepared by the deputy CEOs Rebekka and Riccarda Dilo and their strong team from the sales, R&D and technology departments.

The complete lines and individual machinery were on display in a space of approximately 3.100 m^2 to include the **MicroPunch S** research and demonstration line for needling lightweights in a range of 35 up to 160 g/m^2including the **MultiCard MCRR CC** with **FRS-P** feeder which was returned from ITMA and reinstalled for the product development of hygiene, cosmetic, medical and technical lightweight nonwovens. This line was accompanied by a **Hypertex line** for the production of lightweight sandwiches of reinforced nonwoven layers to increase strength and stiffness in MD and CD directions for use as needled filtration and roofing material as well as shoe and garment applications. The layered mesh of filament or yarn is laid inline between a base and a cover of pre-needled material with speeds up to ca. 40 m/min.

The MicroPunch S intensive needling line can thus be combined with the Hypertex process to include all areas of applications for lightweights needled from fine fibre.

Three buses had carried the seven groups of visitors to take part in machine demonstrations which processed the special fibre material until wind-up in the end-of-line section.

In Technology Centres I and II three complete nonwovens lines ran demonstrations including a 7 m wide needling line consisting of the **VQC Card (Quadro)**, the high speed **DLSC** three apron layer capable of ca. 200 m/min infeed speed and the 7 m wide pre-needler.

Also, the **HyperPunch** machine in 3.5 m was included in the demonstration.

At the aerodynamic web forming section **“additive manufacturing”** was on display through the **3D-Lofter** which comprises a series of individual web formers programmable to lay down additional fibre material. This either in an

1. **IsoFeed function** to improve the regularity of a flock matt to feed cards by up to ca. 4 - 5 % CV.

2. Reinforcement function of needled substrate used as car interior linings of deep moulded pieces in order to strengthen locations in the felt plain where stress or strain concentrations take place. Using this method, fibre savings can be achieved of approx. 30 – 40 %.

3. An additional feature of the **3D-Lofter** is the widely enlarged patterning capability of needled felts for automotive applications or wall and floor coverings. The 3D-Lofter offers sliding colours (**“Colour Slide”**), geometric patterns or inscriptions for achieving most modern design styles. **3D-Lofter** in combination with the **DI-LOUR process**, which was also demonstrated by the **DI-LOUR IV** double structuring system, is offering a **joint technology** which is particularly interesting for lightweight moulded car velours.

The interesting guided tours included enough time to get in depth insight of machines, technologies and textile products which also were on display and given as samples along with technical literature. The tours were concluded in a host and service area with finger food and beverages and with the related discussions of current needs and demands for preparing a more sustainable and successful future by innovations.

All the visitors from many countries including South America, Africa, Europe and China expressed their appreciation for a very interesting day at Dilo.


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DILO
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MICROPUNCH 5