

HyperLine and AlphaLine main focus of Dilo Group

Dilo Group is international specialist for nonwovens machinery including opening, blending, carding, crosslapping and needling. Their textile machinery and complete nonwoven lines are renowned worldwide for highest productivity, reliability and production efficiency. Together with their partners they also provide complete lines including other bonding technologies like thermo-bonding, water-entanglement and chemical bonding. The range of nonwoven products manufactured on Dilo lines include floor coverings, mattress and upholstery materials, medical, cosmetic and hygienic products, wipes, technical felts for cars, filtration material, geotextiles and roofing material, sound and heat insulation material, paper machine felts, synthetic leather.

On the occasion of Techtex in Frankfurt (Hall 3, booth H31), DiloGroup (DiloTemafa, DiloSpinnbau, DiloMachines and DiloSystems) will inform visitors about installations for the production of needle felts and nonwovens technologies for technical applications in the automotive industry, for geotextiles, filters and insulation applications as well as composite material

More than 160 complete production lines engineered and delivered by DiloGroup are in operation worldwide. At the upcoming Techtex, our main focus will be the new HyperLine consisting of VentoFeed, DeltaCard, HyperLayer and Hyperpunch needling technology. The new card feeding system VentoFeed is a universal card feeder characterized by continuous feeding even at high throughput speeds for short fine fibres as well as for longer and coarser fibres. The HyperLayer crosslapper achieves web infeed speeds of up to 200 m/min. Such infeed speeds, combined with highest layering precision to give straight web edges and precise overlapping, eliminate restrictions in crosslapper output and web quality.

New standards for high speed pre needling are set by the Hyperpunch technique using a DBF batt feeding system and EPMC technology. Increases in productivity together with high web uniformity are an important prerequisite of the new Hyperneedling technology for "intense needling". The term "intense needling" means an extreme increase in needle and penetration density with a simultaneous reduction of the fibre transport per stroke. This results in excellent entanglement of individual fibres in the web, high resistance against abrasion forces and best surface quality without markings.

Hyperneedling is realized by the newly developed Cyclopunch units with approx. 20.000 needles/m/board. The needle barb is adapted to the fibre fineness in order to transport only one single fibre.

A new kinematics moves the needle on a circular path resulting in an increase of throughput speed to more than 100 m/min. The Hyperneedling process allows production of light-weight felts made from fine fibres at an area weight as low as approx. 30 g/m² with high throughput speeds.



Hyperneedling product.

These products are used in the fields of medicine, hygiene, synthetic leather, interlinings and filter media.

In addition Dilo will promote the new AlphaLine. This cost-efficient production line is designed for medium throughput speeds up to 80 m/min. and represents a compact and economic solution for universal web forming and consolidation tasks. Its components are AlphaFeed, AlphaCard, Dilo-Layer DLA and the Alpha model series of needle looms.



The new AlphaLine by Dilo Group.

The Dilo Textile Technology Centre offers three complete production lines to help customers choose the most suitable machines and components. Furthermore, these lines are used for the research and development work of Dilo clients.

The visitors can obtain latest information and details about Dilo production programme at Techtex at booth No. H31 in hall 3.0.

Courtesy: OSKAR DILO Maschinenfabrik KG, Germany. ♦



Hyperlayer.