

Jürgen Hanel
A.Monforts Textilmaschinen GmbH & Co. KG

New modular coating head for roll to roll process

Textile high-tech products are able to contribute an important effect to production, transport and storage of energy. For example, carbon composites components allow a reduction in weight und thus help to save fuel. Textile filters can be used at high process temperature and improve recycling process heat. Textile gas storages are used for collecting and storing methane in biogas plants. Smart textiles can contain sensors or electrical conductors to be used as a basis liner for DSC solar cells. The wide range of technical textiles in energy applications is as different as the necessary coating method for production. The German textile machine manufacturer A. Monforts Textilmaschinen has developed the modular interchangeable coating system called Montex - Allrounder©. This new patented machine concept gives the advantage for a quick and easy process engineering and makes it easy to adapt the coating method to the requirements of the final product. This new patented machine concept offers the way to integrate a wide variety of coating, printing and other innovative application methods. The position of the coating head directly within the fabric infeed of the tenter gives the shortest possible distance between tenter infeed and the coating head, which is essential for high quality results of the coating process. There will be individual modules available for knife and slot die coating as well modules suitable for flexo, gravure and rotary-screen printing. The integration of special modules, such as powder scattering and spraying is also possible. The modular coating head can be exchanged with very low efforts. The modules are carried, cleaned and moved with a special designed wheeled undercarriage. For the handling of fabric treating with organic solvent and even toxic solvents, there is a unique advantage that the operator of the machine stands safe outside of the solvent enclosure.