

Trans-Textil: Aviation-qualified VAP® membranes

Together with its partners Airbus Deutschland GmbH and Premium Aerotec GmbH, Trans-Textil GmbH has successfully completed the process of qualifying its C2003 VAP® membrane system for use in aviation applications. In the process, the market has now gained a new high-temperature-resistant material for membrane-assisted vacuum infusion in the aerospace sector.

The C2003 membrane system is a complete new development by Trans-Textil, an EADS-licensed manufacturer of central components for the patented VAP® method, and as such is a further example of Trans-Textil's expertise in the production of high-performance technical textiles. The C2003 membrane system acts as a reliable resin barrier for vacuum infusion processes and ensures dependable air and gas evacuation over the entire surface of a mould. Developed for use with specific resin systems at defined temperatures (up to 190°) and tested under realistic process conditions in Trans-Textil's VAP® lab, the membrane system is already proving of value in the fabrication of aviation components.

Membrane solutions adapted to component form

C2003 also acts as the basis of the three-dimensional custom-shaped VAP® membrane systems developed as part of the AZIMUT and RoCK aviation projects. Custom-shaped system components facilitate lay-up handling and deliver significant time and costs savings in the fabrication of complex integral assemblies on the basis of tailor-made vacuum bags produced with the help of innovative joining techniques.

Following the official start of the RoCK project, Trans-Textil GmbH and its partners are now concerned with streamlining the industrial-scale VAP® process still further.



Fabrication of a pressure bulkhead by Premium Aerotec GmbH with a custom-shaped vacuum bag made of Trans-Textil's 3D aviation-qualified VAP® membrane system.