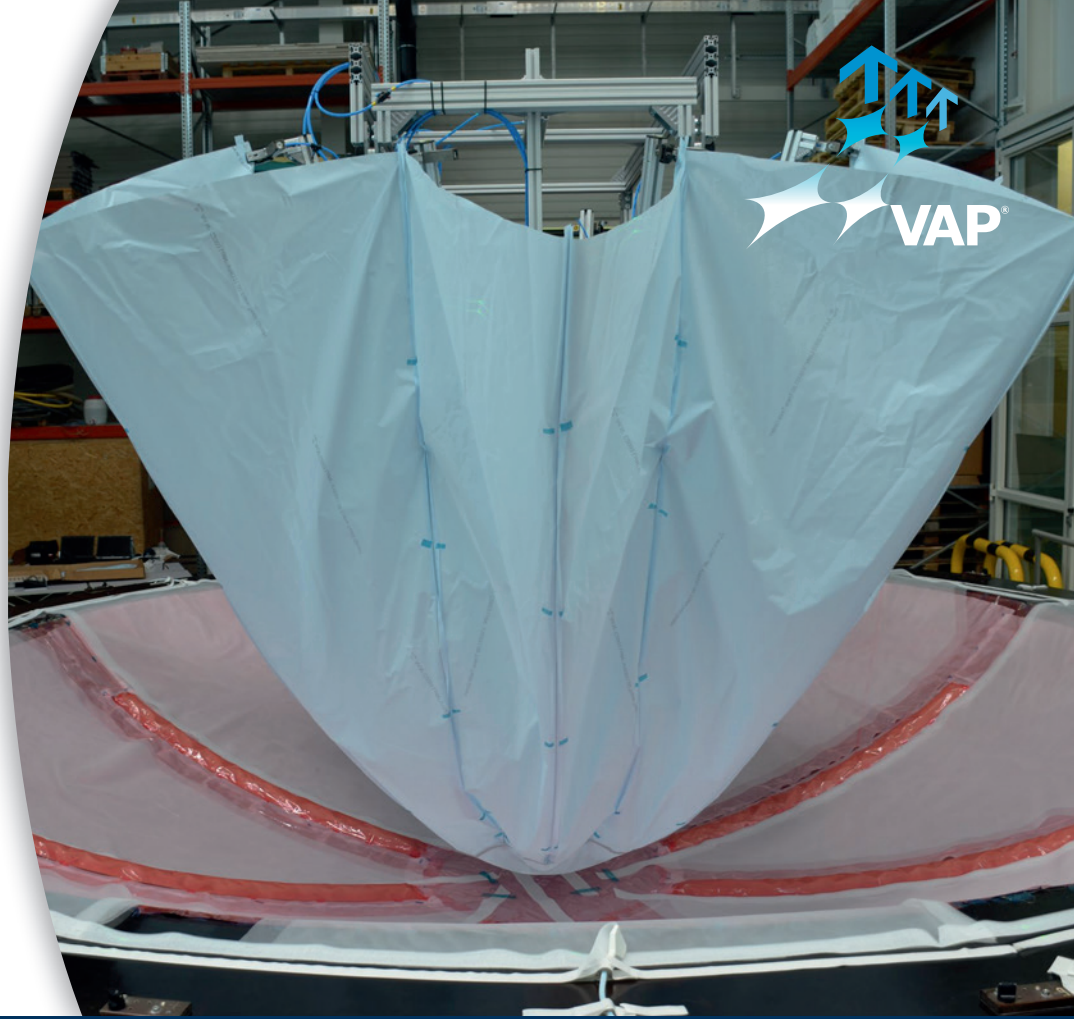
# VAP® 3D

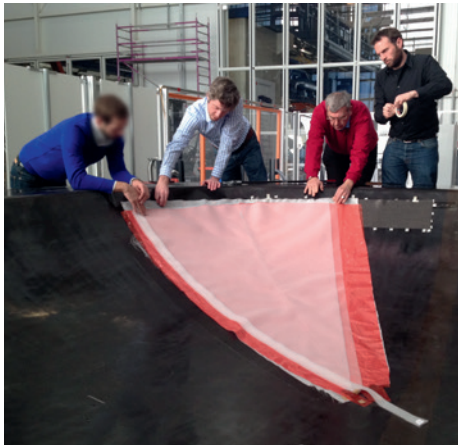
## RoCk project achievements

- New joining techniques for aviation-qualified materials
- VAP® 3D lay-up made to fit component shape
- Instant use, multi-layer VAP® material kit
- Automatic and precisely positioned stacking
- Successful fabrication of a 1:1 Airbus A350 pressure bulkhead demonstrator



## Solutions adapted to component form

As part of the AZIMUT and RoCk projects and working in response to calls for automated and optimized process chains, Trans-Textil and its partners have developed a new made-to-shape approach especially devised for large aviation structures that need to be fabricated in one integral process. Starting with the geometry data of the Airbus A350 pressure bulkhead, this involved compiling the layers in the VAP® lay-up into a VAP® 3D material kit made up of instant-use textile auxiliaries that have been tailored to the precise shape of the component mold. Only aviation-qualified materials combined in newly-developed cutting and joining techniques were used.

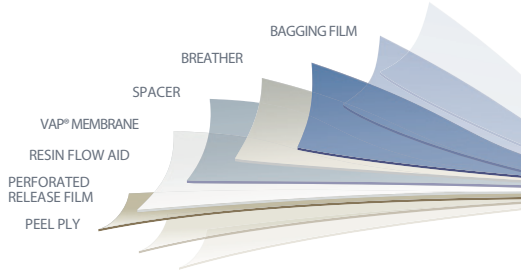


## Automated deployment

The large-scale, multi-layer made-to-shape solutions come with robot grip straps for swift, automatic and precisely-positioned layer stac–king in the mold. This almost entirely eliminates the need for laborious cutting work and other preparatory tasks such as joining, positioning, repositioning and fixing the layers by hand. The VAP® 3D material kit has already proved its worth in a trial involving a full-size Airbus A350 pressure bulkhead.

## Practice-oriented adaptation

Thanks to the applications engineering experience of the VAP® Network partners and their expertise in made-to-shape solutions, VAP® membrane systems proven in aviation and industrial applications as well as further textile components such as 01870 Flow Aid by Trans-Textil can now be adapted to specific individual requirements for component fabrication.

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