

EADS Deutschland GmbH is the developer and patent owner of the VAP[®] process, and authorizes its use via a technology licensing program. The VAP[®] process, VAP[®] membrane systems and related components are protected under international law to the benefit of VAP® users and their

The extensive proprietary rights held by EADS and Trans-Textil cover all application areas.

Cassidian, the Global Security Division of FADS. issues license for VAP[®] use in the aerospace sector.



Trans-Textil GmbH is an EADS-authorized manufacturer of aviation-qualified VAP® membrane systems and other track-tested textile auxiliaries devised for use in VAP[®] vacuum infusion technology.

Produced under close quality control, its VAP® membrane systems are suited for specific resin systems and temperature variants.

Trans-Textil also produces three-dimensional VAP[®] membrane systems adapted to component form for particularly economical and reliable fabrication.

shaped to fit specific components

VAP[®] licensing in non-aerospace sectors

> Multifunctional textile solutions



As a lean integrator (interface between development, production and in-service support), ACENTISS offers aerospace engineering services that cover the complete life cycle of flying

Its competencies range from specification, conception, detail design and calculation through experimental qualification and certification support to the planning and implementation of maintenance and repairs in the operational phase of aircraft.

ACENTISS plays an important role in product incubation processes by providing specific know-how in the areas of structural engineering, certification and MRO (maintenance, repair and overhaul).



With over 25 years of plastics processing perience. Composyst GmbH offers end-to-end consulting services and production support in such areas as project management all the way to production readiness, innovative materials and process aids.

One of its main areas of emphasis concerns con ception services and production advice in the fabrication of high-quality large and complex fiber-reinforced composites according to the VAP[®] Vacuum Assisted Process.



Flugzeug-Union Süd GmbH, Ottobrunn, a fullvowned EADS subsidiary, is a VAP® Alliance member authorized to distribute licensed auxiliary vacuum materials and equipment components under the registered VAP[®] trademark and the protected VAP[®] logo. As a VAP[®] partner we supply store and deliver commissioned VAP® materials i line with customer requirements for deployment in the patented VAP® Vacuum Assisted Process.

These blades are used for production of wind turbine blades and composite components for the aerospace and automotive industry.

Patent holder

▷ VAP[®] technology licensing in the aerospace application sector

- Aviation-gualified VAP[®] membrane systems Specification, conception, layout, detail > Three-dimensional VAP® membrane systems design and calculation
 - Oualification and certification support
 - ▷ In-service support
 - ▷ VAP[®] licensing in the aviation sector

- ▷ Manufacturing concepts, tool planning
- Production support
- Auxiliaries & materials
- ▷ Prototype construction & contract production
- Instruction & training

- ▷ Tailored commissioning
- > Delivery of VAP[®] approved auxiliary materials
- > Delivery of equipment components

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Gerster TechTex

Gerster TechTex specializes in near-net-shape reinforcement textiles for the composite market as well as flow aids for use in the VAP® vacuum infusion process.

Its portfolio includes flow channels, resin distribution media, reinforcement materials such as 2D, 2½D and 3D preforms, and cord and unidirectional gussets.

> Near-net-shape reinforcement textiles

www.gerster-techtex.de info@gerster-techtex.com

> VAP[®] flow aids

VAP[®] in aircraft manufacturing



VAP[®] technology

VAP® out-of-autoclave vacuum infusion technology enables economical serial production of complex integral aviation components according to stringent guality requirements. The process involves use of aviation-gualified semipermeable membrane systems for removal of air and gas from the matrix material both during and after resin infusion, resulting in minimal porosity, a precisely achievable fiber volume content and high process stability.

VAP[®] is an established production process originally developed in the aerospace sector.

VAP[®] Center of Excellence for aviation applications

The Center of Excellence for VAP® use in aviation applications is a community of specialized companies offering core competencies along the component production chain in the areas of engineering, project planning, aviation-qualified VAP® membrane systems and further materials, process introduction, production support, contract manufacturing and component qualification. The Center of Excellence is thus able to provide international customers a raft of end-to-end services and aids for all areas of VAP[®] implementation and product realization.

