

**ADVANCED MATERIALS FOR A WORLD OF IDEAS** 

SAERTEX ensures you get the advanced material that precisely matches your ideas – no matter where you are or where you want to go. We are one of the world's leading manufacturers of textile reinforcements made of carbon, glass, aramid and natural fibers for lightweight construction. We offer know-how combined with products you can rely on from deep sea to space.



### PROCESS SUPPORT:

Expertise in switching from hand lay-up to vacuum infusion or RTM technologies ensures more efficient production and better component quality.

### ARAMID FABRICS IN CONTENDER SAILCLOTH®

Contender Sailcloth wanted to provide a sailcloth which is even lighter and simultaneously more stable, long-lasting and durable. To this end. Contender Sailcloth harnessed SAERTEX expertise to exclusively produce its laminated aramid fabric materials to its own specifications



We offer further outstanding material solutions for boatbuilding such as SAERfix, SAERflow or Flax NCFs.

### MARINE INDUSTRY

In boatbuilding applications, SAERTEX products help improve the energy balance of sailing yachts and motor boats. By using our fiber-reinforced composite materials, heavy metallic materials can be replaced, thereby achieving significant weight reductions and energy savings. The **Hainstaiger X1** is a revolutionary yacht constructed using SAERTEX carbon fabrics.



SAERTEX
and the
Hainstaiger X1



## LAND

### WIND ENERGY

We have been supplying our wind energy customers with textile reinforcement materials for ever-longer rotor blades and larger wind turbines for many years. Specialized SAERTEX products such as Easy Drape UD and Magic Flow UD offer solutions that meet increasing demands on rotor blades in terms of their stiffness, design and cost competitiveness.

In addition to standard and special function fabrics, we also offer the wind industry services such as cutting & kitting, prototyping and GL-certified laboratory testing.

Our global presence and flexible supply chain ensure that we can meet the needs of our customers worldwide, delivering efficient and reliable solutions wherever they are needed.

### **AUTOMOTIVE INDUSTRY**

SAERTEX has been a reliable supplier to the automotive industry for many years. We offer advanced multiaxial fabrics that are used in structural body components, doors, rear panels and B-pillars as well as in rims, wind deflectors, driver's cabs, suspension elements, superstructures and more.

- // High quality and expert know-how for high-volume series production
- // Class A carbon surface products especially for fenders, hoods, roofs
- // Product optimization through tailor-made solutions and width-adjustable machines



SAERTEX and Faurecia

**Faurecia** relies on the quality of SAERTEX fiberglass fabrics and uses them for the production of car body components.

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Our special products for the wind industry:

SAERfoam for Wind
 Magic Flow UD
 Steady Plus UD
 Easy Drape UD

### **TRANSPORTATION**

In the area of vehicles for ground transport such as trains, busses, trailers and trucks, SAERTEX products are used where high performance and low weight need to be combined.

### // DURABILITY:

Sandwich material concepts – including SAERfoam® as a substitute for wood – reduce moisture sensitivity and extend durability in vehicle applications.

#### // WEIGHT SAVING:

Composite materials enable lighter structures, directly translating to fuel savings.

### // USABILITY:

Products such as SAERcore offer excellent processability and ensure smooth, high-quality surfaces.



### CONSTRUCTION

SAERTEX materials have long been used in the construction industry where component weight is the decisive factor – especially for streets, bridges and other infrastructure elements.

### SAERFOAM® FOR FERRY TERMINAL

The objective for the newly designed ferry terminal in Toulor was to reduce the overall weight and build the lightest structure possible. A unique overhanging roof, based on a composite polyester sandwich system, was designed to complement the mainly metallic structure built by Transmétal Industrie. The material chosen for the roof structure was a composite sandwich using polyester resin multiaxial glass and a structural SAERfoam® core.

- Weight savingsLightweight construction
- Impact resistance

### SAERTEX AND THE PARADIS BRIDGE

The Paradis Bridge is the world's longest composite truss bridge and has redefined the future of bridge construction. SAERTEX provided the essential materials needed to manufacture the bridge elements.

- Lightweight constructionCorrosion resistance and minimal maintenanceShort installation time
- Increased design flexibility



SAERTEX and 'The Paradis Bridge



### SPORTS INDUSTRY

Unidirectional fabrics, stitchbonded mats (CSMs) and multiaxials from SAERTEX can be found in many types of sporting equipment.

### // ADAPTED COMPONENT RIGIDITY:

Multiaxial fabrics enable targeted control of component stiffness, e.g. for skis or snowboards.

#### // MAXIMUM STRENGTH:

Helmets with aramid reinforcement offer maximum breaking strength and an exclusive design with visible fibers.



## AEROSPACE INDUSTRY

SAERTEX products and SAERTEX know-how can be found in almost all sectors of the manned and unmanned aerospace industry – from airplanes to helicopters and more.

#### // INNOVATIVE TECHNOLOGIES:

Transparency and guaranteed quality thanks to our Smart Detect Control System to ensure the highest safety and production standards.

#### // EFFICIENCY:

Lightweight construction reduces fuel consumption and improves the environmental footprint.

### // STRONG CONSULTING EXPERTISE AND GLOBAL SUPPLY CHAINS:

As an independent player in fiber procurement and with strong supplier networks, we offer tailor-made solutions and maximum availability of the required materials.

With the introduction of a fifth rotor blade, the challenge of optimizing weight and efficiency reached a whole new level.

- // The use of carbon materials enables innovative rotor head design, resulting in less vibration and higher flight comfort
- // Significant empty weight reduction delivers increased useful load

### **SMART DETECT CONTROL**

SAERTEX® Smart Detect Control is a system for improving the quality of SAERTEX carbon-fiber materials. The SAERTEX® Smart Detect Control System looks into the structure of the non-crimp fabric, revealing gaps, undulations, and other potential deviations from the high-end specifications.

- // Continuous
- // Automated
- // Non-destructive

// In-line

SAERTEX components for the spacecraft market deliver top-performance in the manufacturing process – from satellites and rockets to defense systems.

### // RADIO WAVE TRANSMISSION:

UHMWPE multiaxials like Dyneema® ensure reliable signal transmission along with the highest mechanical stability.

### // HIGH TEMPERATURE APPLICATIONS:

Multiaxial fabrics for chemical vapor deposition processes or as carbon fiber reinforced carbon offer top performance under extreme conditions.







### YOUR WAY TO SUCCESS WITH SAERTEX



WITH US BY YOUR SIDE FOR FULL SUPPORT FOR YOUR COMPOSITE

### MATERIAL SPECIFICATION

- // Material selection
- // Material development
- // Laboratory testing

PROCESS DEVELOPMENT

- // Advisory service
- // Training

#### **SERIES PRODUCTION**

- // Kit cutting
- // On-site support
- // Reliable serial supply

YOUR VALUE-ADDED PROCESS

### KNOW-HOW AND INNOVATION ON A GLOBAL LEVEL

SAERTEX materials are currently used in more than 200 applications worldwide. Our specialists work hand-in-hand with you to ensure you get the advanced material that precisely matches your ideas. We enable your progress - directly on site at 14 locations on 5 continents.

### **FACTS & FIGURES**

### SUITABLE PROCESSES

Vacuum infusion, RTM, compression, winding, T-RTM, pultrusion, prepregging, hand laminating, etc.

### REINFORCEMENT MATERIALS

Glass, carbon or aramid fibers, special fibers

### MAX. WIDTH

3810 mm\*

### **RESIN COMPATIBILITY**

Epoxy resins, unsaturated polyester resin, vinyl ester resin, polyurethane, polypropylene, polyamide, caprolactam, etc.

### CERTIFICATES

Type approval DNV GL

### MAX. AREAL WEIGHT

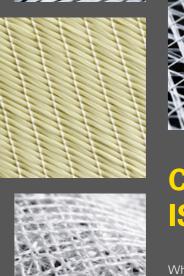
4000 g/m<sup>2</sup>

\*individual tapes on request





Whatever you have in mind, we have the right material for it. Thanks to our experienced application engineers and our in-house laboratory, we can quickly produce the ultimate material for your application at any time. Our individual solutions combine lightness, stability and economy: We have impressed our customers with over 3,333 customized SAERTEX products since 1982.









# AWORLD OF APPLICATIONS



