

MULTIAXIAL FABRICS

MADE OF GLASS, CARBON AND ARAMID

Innovative and tailor-made: **SAERTEX®** non-crimp fabrics (NCFs) made from glass, carbon, aramid and natural fibers such as flax and basalt are available in more than 3,333 fabric designs. By combining different fiber types, areal weights and fiber orientations, specific mechanical properties can be achieved. SAERTEX products are individually configured for our customers and optimally adapted to a range of processes: infusion, RTM, pultrusion, prepreg, compression, etc.

✓ **Fiber, weight and orientation are ideally adjusted**

Fiber type, areal weight and orientation are tailored to match specific load requirements. Available fiber orientations include 0° as well as angle configurations from $\pm 22.5^\circ$ to $\pm 90^\circ$.

✓ **Straight fibers for optimum mechanical strength**

Absorption of the highest possible loads through straight fibers. Reduced component weight while maintaining equal mechanical properties or even a higher component load with the same component weight.

✓ **Excellent drapability and permeability**

The drapability of the SAERTEX fabric is tailored to customer requirements and exhibits outstanding permeability. Specially developed and optimized for infusion processes.

✓ **Cost savings due to fewer layers**

High areal weights reduce the number of layers required, minimizing lay-up effort and thus lowering overall manufacturing costs.

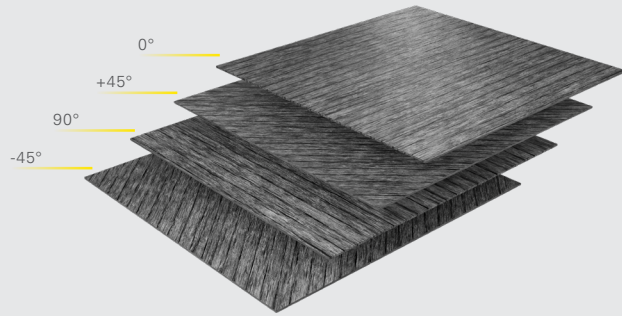
✓ **Resin compatibility**

SAERTEX fabrics are compatible with all common matrix systems: EP / UP / VE / PUR / PP / PA and caprolactam.

✓ **Individual configuration – tailored to your process**

Available with reinforcement threads, mats, veils or other functional layers. Custom configurations can be engineered to meet specific application and manufacturing requirements.

Structure of the **SAERTEX®** NCF system

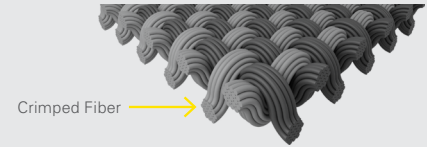


Comparison between NCF and woven textile

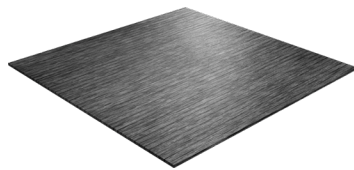
Non-crimp fabric



Woven textiles

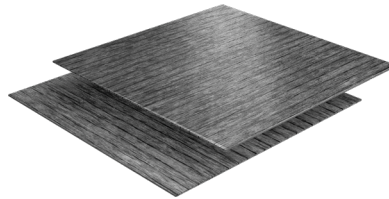


BASIC CONSTRUCTIONS



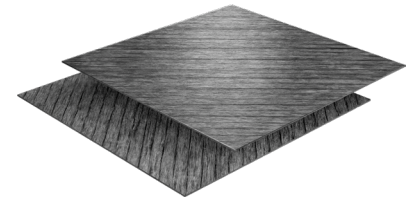
Unidirectional fabrics

Construction: 0° or 90°



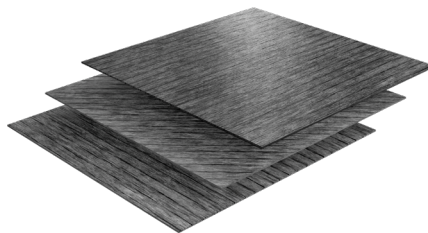
Bidirectional fabrics

Construction: 0°/90°



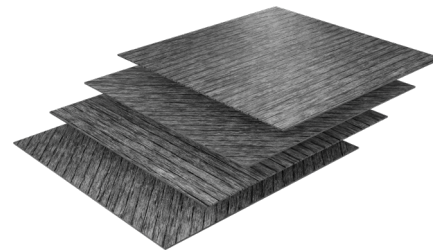
Biaxial fabrics

Construction: ±45°



Triaxial fabrics

Construction: ±45°/0° or 90°/ ±45°



Quadraxial fabrics

Construction: ±45°/90°/0°

FACTS & FIGURES

Suitable methods

Infusion, RTM, Compression, Winding, SMC, T-RTM, Pultrusion, Prepreg, Hand laminating, etc.

Reinforcement materials

Glass, Carbon, Aramid fibers, natural fibers such as Flax, special fibers such as Basalt or Dyneema, Hybrid fabrics

Resin compatibility

Epoxy resin, Unsaturated Polyester resin, Vinyl Ester resin, Polyurethane, Polypropylene, Polyamide and Caprolactam, etc.

Certificates

DNV type approval for Glass and Carbon fabrics

Max. surface weight

117.7 oz/yd²

Max. widths

150 in, individual tapes on request



Product availability and specifications may vary by region. Please contact us for details.

Visit our website for more information.

REINFORCING YOUR IDEAS