

vombaur
pioneering tech tex

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Certified acc. to
DIN EN ISO 9001:2015



MEMBER OF
TEXTATION
GROUP

stutz-design.com 04/22

Carbon U profil



COMPOSITE TEXTILES

Seamless. Lightweight.

vombaur
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High-tech textiles for
challenging applications

SEAMLESS

High performance tapes and high tenacity components

Composites made of seamless wovens by vombaur are used wherever low weight and high strength are required – from flat wovens through UD tubes to preforms.

Individual solutions

Our narrow textiles made of high-performance fibres are woven individually – in collaboration with you – for the specific task in hand and on looms specially developed for the purpose.

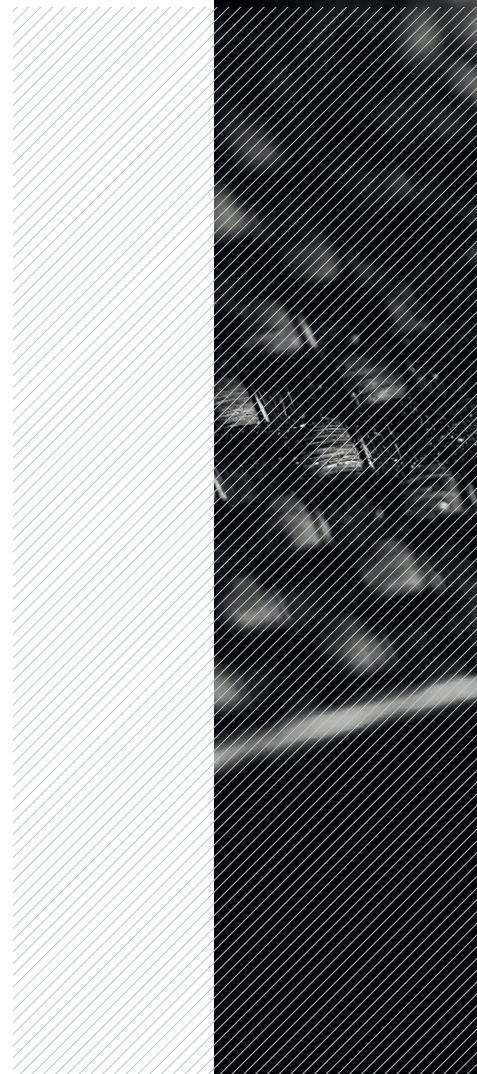
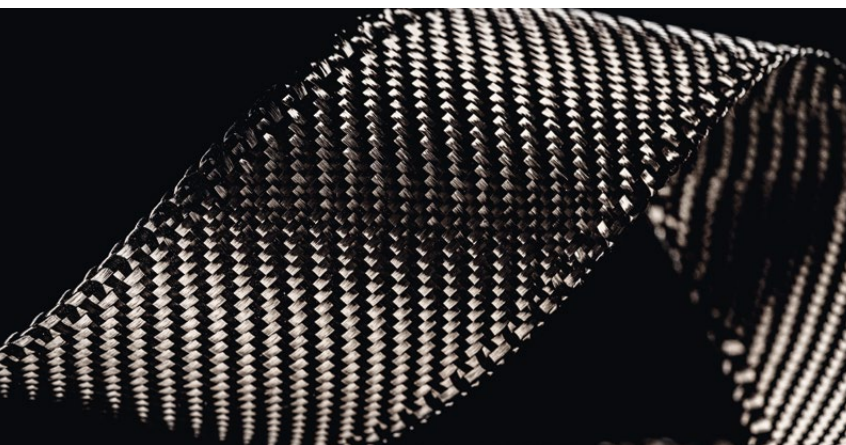
For challenging applications

Our composite textiles handle challenging applications in safety-sensitive industries such as automotive, aviation or construction. For you and your lightweight engineering projects.

Composite textiles by vombaur

- > seamless
- > lightweight
- > high tensile
- > energy-saving
- > capable of bearing extreme loads
- > drapable
- > dimensionally stable

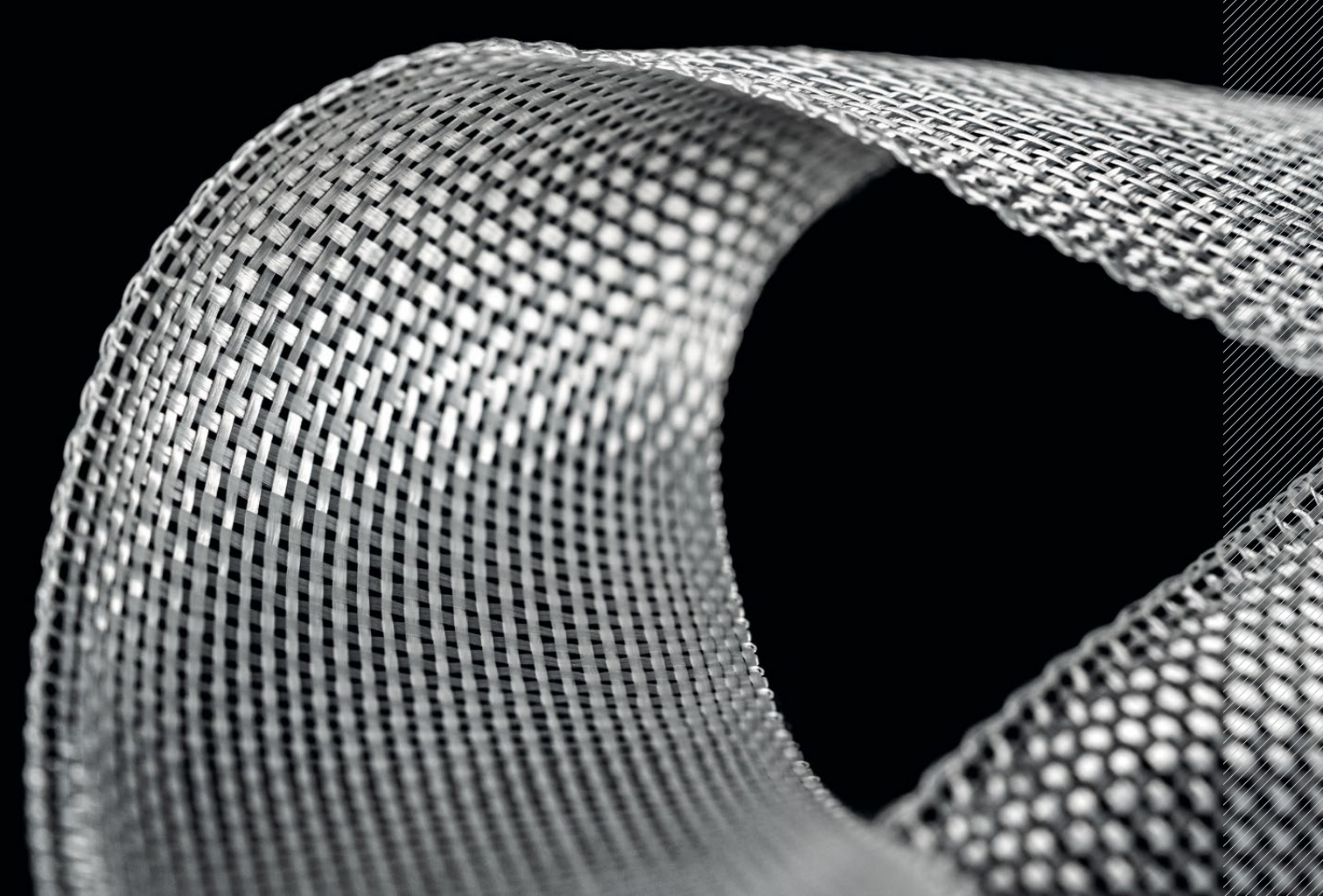
Woven tape made of carbon
with two identical selvages





EXTREMELY
STRONG
LIGHTWEIGHT

Double-wing hollow chamber structure
made of carbon in plain weave



Woven tape made of continuous glass fibre in plain weave

PREMIUM

High-performance tapes for challenging applications

Working with you and for you, we develop woven tapes from carbon, aramid, glass, flax, cordenka or hybrid materials, among others. These high-tech tapes handle challenging applications. Shape, fibre, weave type and thread density are defined precisely for each application, as are all properties.

Woven tapes by vombaur

- > as 0/90- and UD wovens
- > up to 350 mm width, custom-made products up to 950 mm
- > no trim edges, no fraying
- > also with two identical woven edges
- > also with elastic weft
- > powder-coated
- > non-woven coated
- > as individual or standard solutions

CARBON TAPE

UD tape made of carbon fibres: Various widths and various grammages

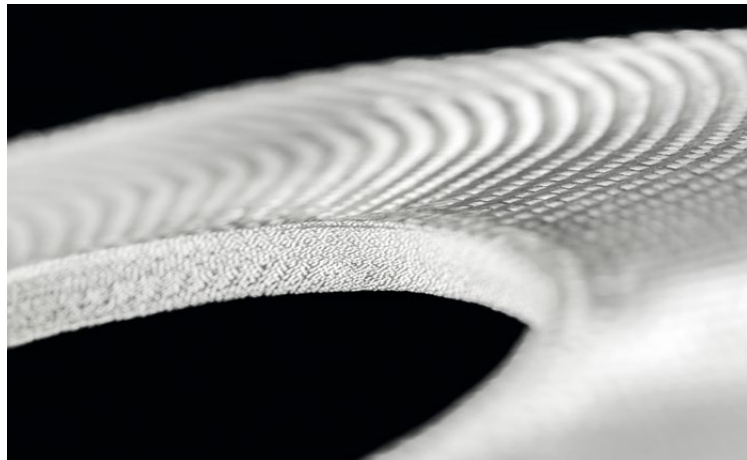
□ Binding with CO-polyester, epoxy powder or non-woven possible



GLASS SPIRAL TAPE

Spiral tape made of glass fibres: Various internal and external diameters possible

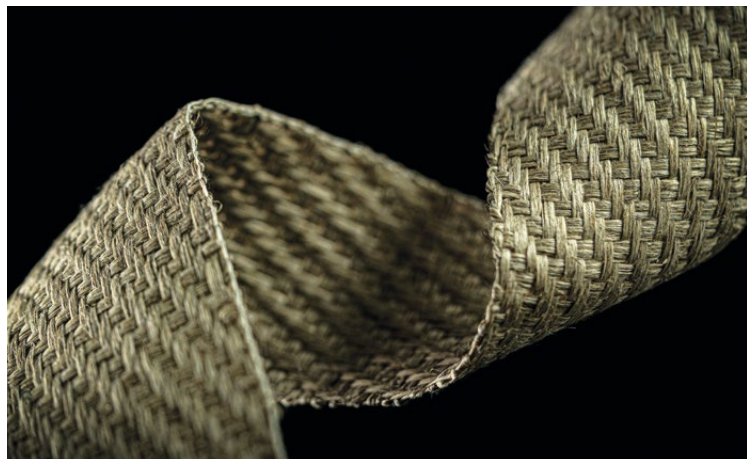
With compacted number of layers for high fibre volume content



FLAX TAPE

Lightweight, high tensile and biologically degradable flax tape with twill weave

□ In combination with bio-resin systems, flax tapes form the basis for a completely sustainable composites solution.



STABLE

No seam, lightweight, high strength

High-tech components with woven fabrics by vombaaur: stronger than metal, as light as plastic. Our seamless woven composite textiles are made from high-performance fibres and used in high tensile composite materials.

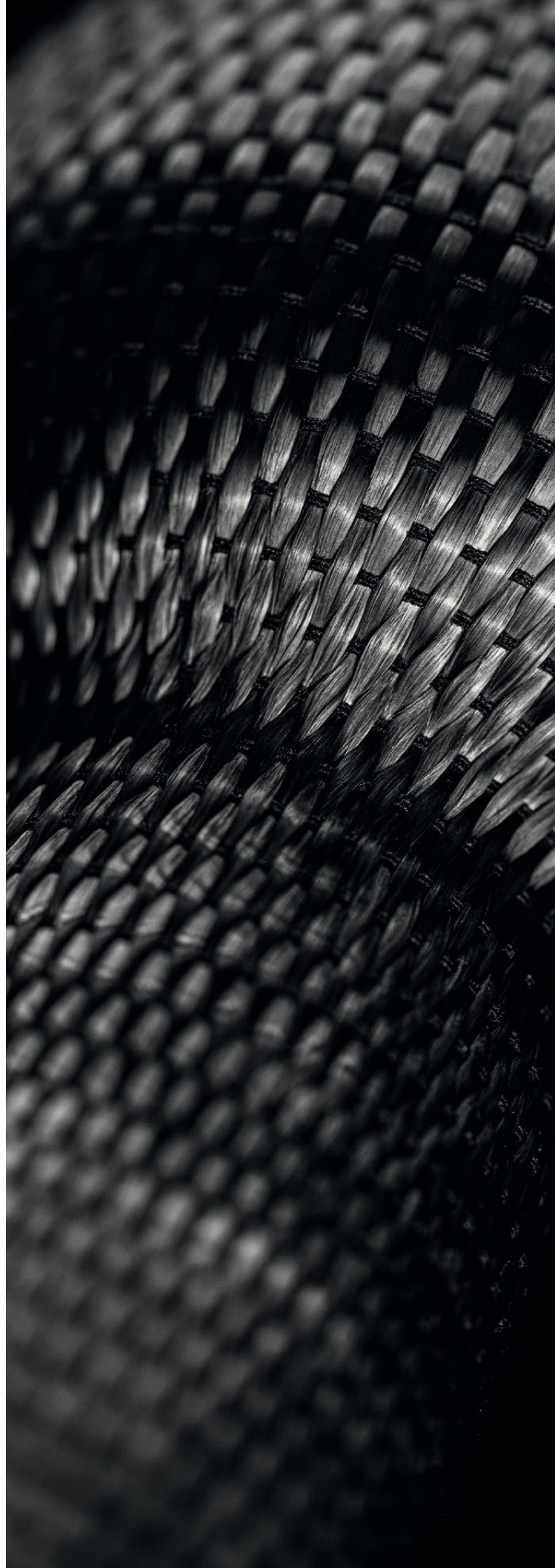
High tensile lightweight components


We weave the fibres to create seamless round or shaped products. This ensures the incredible strength and impressive burst strength of our composite textiles.

Composite textiles by vombaaur

- > seamless
- > lightweight
- > high tensile
- > energy-saving
- > capable of bearing extreme loads
- > drapable
- > dimensionally stable

□ Taffeta, twill or satin: with the right weaving technique we ensure optimal distribution of forces.





No assembly
seams, therefore
no unwanted
break points or
delamination



Composite textiles by vombaaur:
High-tech components for challenging applications

PERFECT FIT

Safe and individual

Aviation, automotive, mechanical engineering, electronics, medical technology and much more – there are many industries where components need to be equally lightweight and loadable. You can rely on our high-rigidity composites.

□
Tailor made
woven solutions
for composites
with high stiffness

Reliable components for a wide variety of industries:

- > Propeller and wing reinforcements in aircraft
- > Transport rollers
- > Wind turbines
- > Brake and grinding discs
- > Machine components
- > Skis and snowboards
- > Prostheses and orthoses
- > Refurbishment of chimneys and bridge columns
- > and much more

Expandable
carbon tubular



ABUNDANT

High performance materials for high performance products

The basis of our composite textiles: high performance materials. The mechanical, chemical and thermal requirements of the component determine the choice of raw materials. For our round woven sleeves and woven 3D textiles, we choose the basic material or material combination that best meets the respective requirements. For certain applications we coat our tapes with powder or non-woven material. Among other things, the powder coating ensures increased dimensional stability, while the non-woven coating provides specific adhesive properties.

Composite textiles made of high-tech fibres

- > Carbon
- > Glass
- > Aramid
- > Flax
- > Cordenka
- > Basalt
- > Hybrids
- > and others

Do you need a narrow textile made of a different material? Please feel free to contact us.

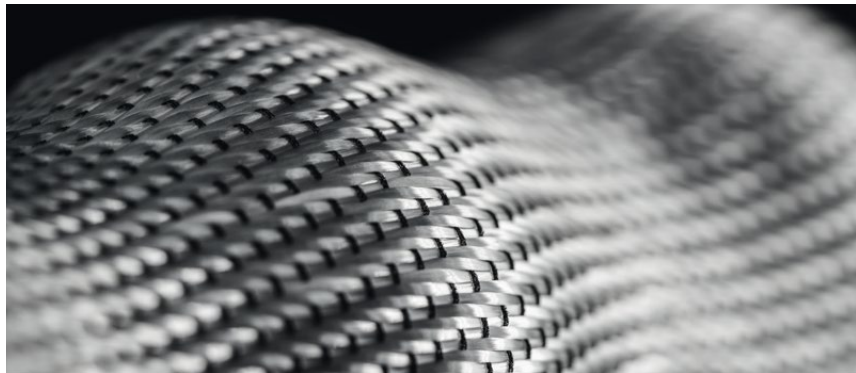
Powder-coated composites increase dimensional stability, generate specific adhesive properties and ensure precise die cutting of light-weight woven fabrics.

Powdered
carbon-aramid tape

IN SHAPE

Huge variety of shapes

Individual products and processes require individually shaped components: our composite textiles are seamless and form woven. We offer flat woven fabrics, round woven tubulars, 3D woven fabrics, spiral woven fabrics and preforms in the most diverse geometries.



Seamless, round-woven, expansible glass fibre tubular

The perfect fit for any application

- > Round woven tubulars with elasticated weft
- > 3D wovens: Profiles in T, double T or star shape, hollow chamber structures, omega profiles
- > Preforms with an unusually high fibre volume content

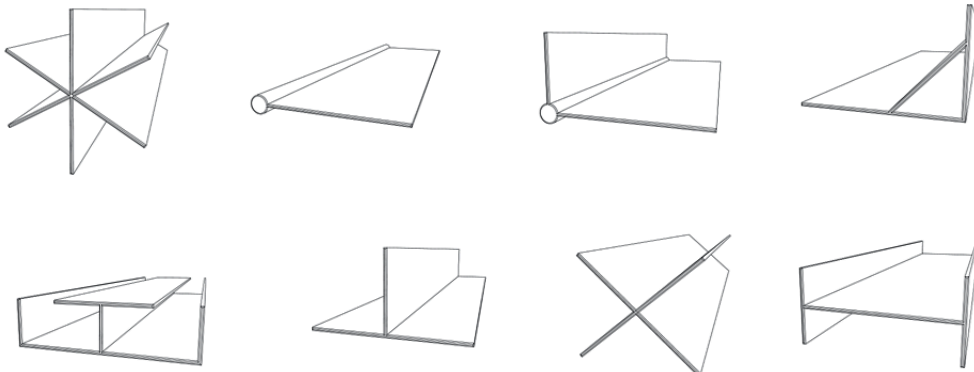
0°-Orientation of the reinforcing fibre over the entire length of the component, independent of the varying diameter

Fibre orientation in x, y and z direction up to a width of approx. 400 mm

Force transfer in all directions

Up to 65 % fibre volume content

3D woven composite textiles in seamless standard and custom shapes



CUSTOMISED

We are your development partner.

Your requirement drives our product development: depending on what your component has to achieve, we select and combine the materials, the woven fabric type, the weaving technique and the finishing.

As a kit

We prefabricate our composite textiles for you, and you receive a kit with all the textiles that you need at your line station – cut to length for a perfect fit and individually composed.

Composite textiles to your specifications

MATERIAL	Carbon, aramid, glass, flax, cordenka, basalt, hybrid materials
FINENESS	Carbon: 1 K to 48 K Glass: 11 tex to 1200 tex
FIBRES	Multifil, twisted
WIDTH	Standard: up to 350 mm Custom-made products: up to 950 mm
WEAVING TECHNIQUE	Needle or shuttle technology
3D PROFILE AND CHAMBER SYSTEMS	T, double T, star shape, hollow chamber structures, omega profiles
BINDING	Taffeta, twill, satin, special bindings
FINISHING	Powder-coated, non-woven coated, hot melt adhesive component
CUSTOM MANUFACTURE	With two identical selvages, with elasticated weft
ASSEMBLY	Preform, delivered as kit, custom designs

Round woven
6-chamber profile, carbon



SEAMLESS
PROFILE
PREFORM