



SPIRAL/SHAPE RIBBON

NEAR-NET-SHAPE PREFORMING

The spiral and shape ribbon is our award-winning product for manufacturing endless s-shapes or closed frames. Individual reinforcement of curved shapes is offering new potential for optimization and design freedom, especially for the composite market. The ribbon with its woven structure has a constant width and variable curvature. The variability of fibre directions can be used for a better correlation between fibre orientation and load path and a minimization of waste.



PRODUCT VARIATION

The weave construction adapts to the requirements and specified radii and furthermore can be set up as hybrid construction with different fibre materials. Additional processed fibre sensors are able to monitor structural health during product lifetime.

- width 40 – 280 mm
- min. radius 50 mm
- mass per area from 400 gsm
- max. dimensions 2.000 x 2.000 mm
- material Carbon-, Glass-, Aramid-, Sensor fibres (variation possible)
- fibre orientation 0°/90° (biax); 0° (UD)





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ADVANTAGES

- Near-Net-Shape manufacturing of s-shape preforms with constant and variable radiuses
- Adjustable drapability (depends on weaving construction)
- Fibre orientation follows load path
- Less cutoff
- Hybrid construction possible (Carbon-, Glass- and Aramid-fibre)
- Fixed selvedges due to reversing weft
- Endless shapes or closed frames possible

TARGETED APPLICATIONS

- Brake disk / grinding disk
- Frames (door, window)
- Aircraft seating
- Reinforcement of stringer framework
- Cavity reinforcement

With over 135 years of experience in textile manufacturing Gerster TechTex has established the development of technical textiles for composites. Several technologies at our main location in the heart of South Germany are used for special made-to-order products and ensure high production volumes “made in Germany”.

