

Our services

- Development of binding in the weaving and braiding field
- Development of complex multi-dimensional fabric structures
- Processing of standard threads up to high-performance fiber materials, e.g. ceramic fiber rovings
- Qualitative and quantitative test methods for characterization of fibers, textile products and components
- Manufacture of samples

Machine park

- Variation braider
- Double rapier weaving machine with single-thread operation
- Jacquard weaving machines
- Shaft-rapier weaving machine
- Shaft-air-jet weaving machine
- Terry fabric weaving machine
- Leno weaving machine
- Ribbon weaving machine
- Semi-automatic hand weaving loom

Please feel free to contact us:

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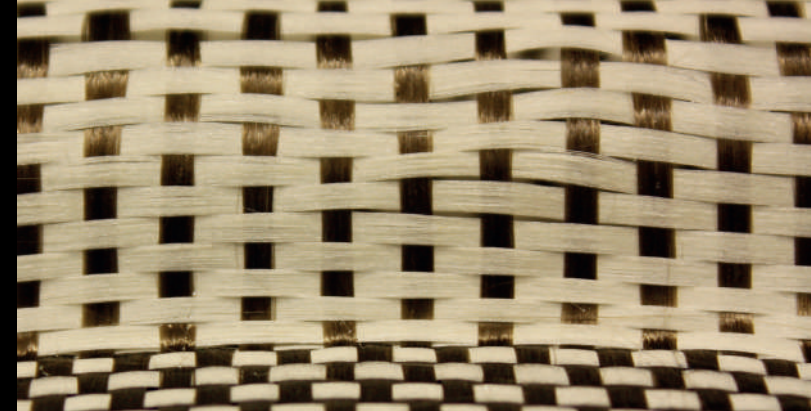
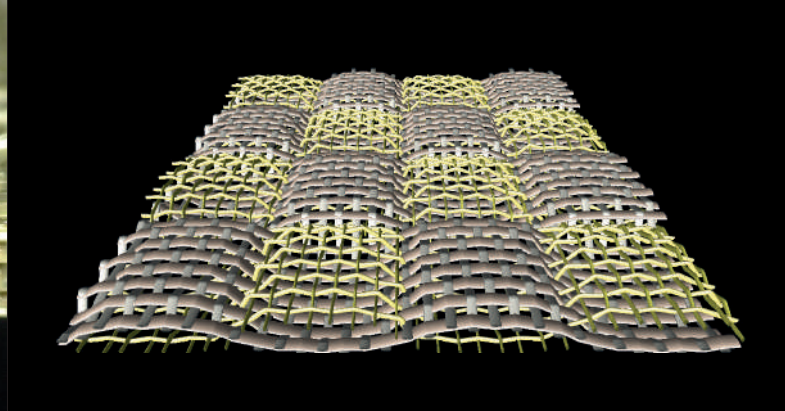
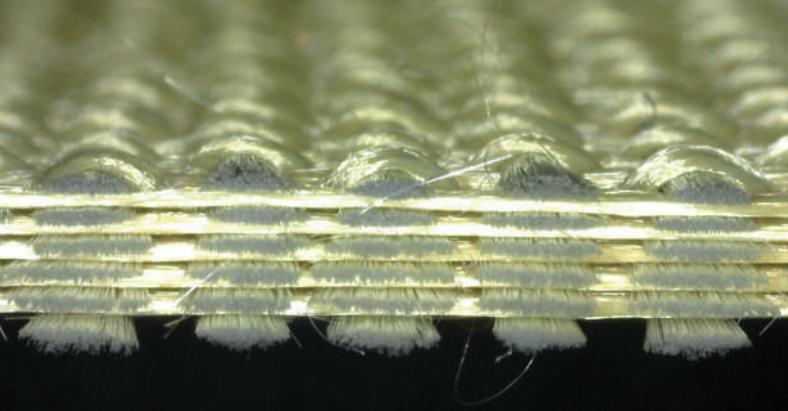
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Weaving and Braiding





Textil technical fabrication

The Fraunhofer-Center HTL has an application center in Münchenberg, the Application Center Textile Fiber Ceramics TFK. The TFK has developed from a cooperation between the Fraunhofer-Gesellschaft and the Hof University. There are many different types of machinery for textile manufacturing processes available on site.

The weaving area has a double rapier weaving machine with single-thread operation that offers a new option for the manufacture of fabrics. Textile processing of inorganic and carbon-based fibers is researched and developed on this weaving machine.

In the braiding area, variation braiding technology is used to manufacture very complex braids for diverse fields of application.

The focus of development in both areas concentrates on multi-dimensional textile preforms for load-conforming component design.

Double rapier weaving machine

- Designed for inorganic and carbon-based fibers in a broad fineness range
- Option for the manufacture of spacer fabrics and three-dimensional fabric structures
- Variably adjustable shed geometry for each individual warp thread
- Creation of complex motion profiles for gentle procession of highly-sensitive materials
- Gentle reed beat-up for minimization of machine damage
- Creel with tangential removable winding heads for rotation-free feed of the warp and weft materials
- Linear fabric take-off up to 3 m

Variation braider

- 4 x 4 horn gears arranged as a square
- Pitch size 120 mm
- Up to 32 carriers
- 24 pneumatic slider cams
- Separate control and programming of cams
- 9 core yarn feeds
- 16 filler yarn feeds

Possible braid types

- Tubular braids
- Square braids
- Variants of flat braids
- Spiral braids
- Core / shell braids
- Combinations among the types

Application examples

- Braided textile chain
- Braided rope ladders
- Knotless nets
- Component reinforcement
- Cable sheathing
- Safety technology
- Medical technology