



Services

Textile Testing Methods

- Determination of size content acc. to DIN EN 1007-1
- Determination of linear density acc. to DIN EN 1007-2
- Determination of filament diameter and cross-section area acc. to DIN EN 1007-3
- Determination of tensile properties of filaments at room temperature acc. to DIN EN 1007-4
- Determination of the tensile properties of fibers within a multifilament tow at room temperature acc. to DIN EN 1007-5

Technical Facilities

In our technical facilities, we provide the equipment of traditional textile production processes such as weaving, braiding, warp and weft knitting as well as nonwoven production.

Material Valuation

- Analysis via Digital Microscopy
- Differential Scanning Calorimeters (DSC)
- Infrared (IR) Spectroscopy

Please feel free to contact us:

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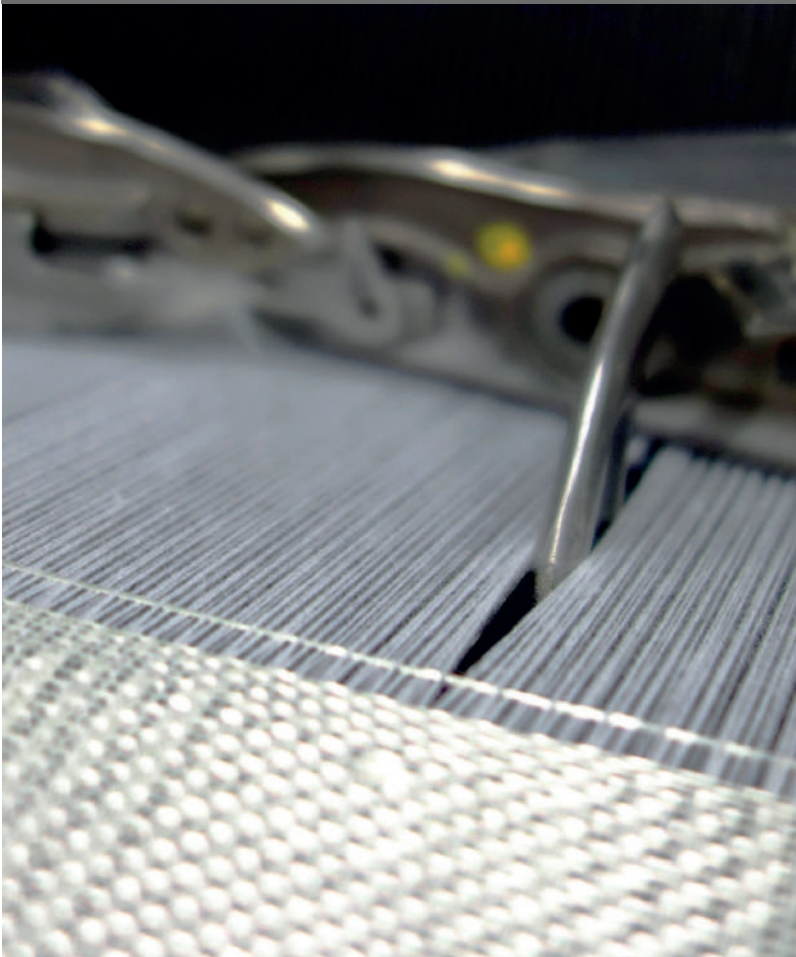
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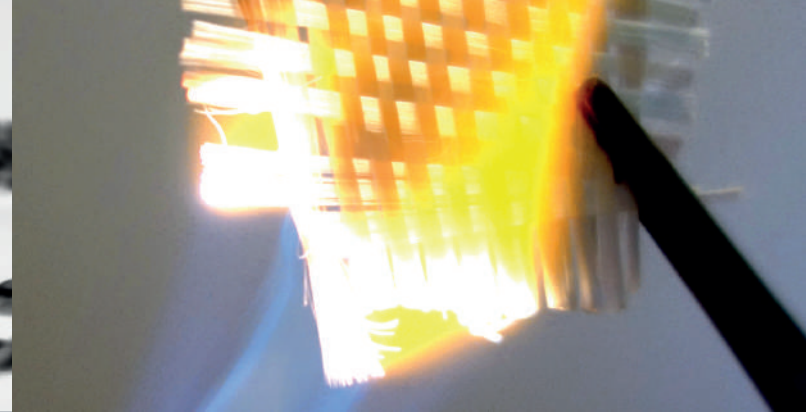
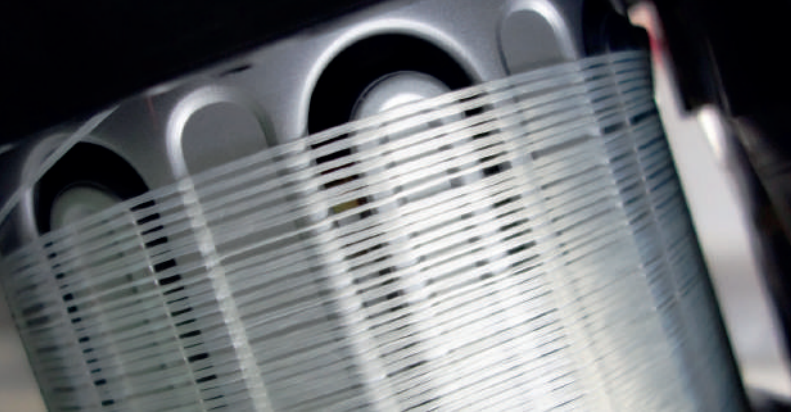
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Textile Ceramic Fiber Processing





Overview

In Münchberg, Fraunhofer-Center HTL has the Application Center for Textile Fiber Ceramics TFK. The Application Center TFK arose from a cooperation between Fraunhofer and the University of Applied Sciences Hof. Machines for traditional textile production processes such as weaving, braiding, warp and weft knitting, and nonwoven production are available on site.

The Application Center TFK applies textile processing techniques from conventional fibers to ceramic, carbon and glass fibers. Thus, it produces semi-finished textile products and end products. This enables projects and services for the development of ceramic fiber composites across all process stages from the fiber to the finished CMC component.

Ambition

The processing of textile fibers into 2D and 3D structures has progressed rapidly in the last decade with the introduction of new technologies. These innovative production processes are now being transferred to inorganic fibers to open up new applications.

For ceramic reinforcing fibers, the biggest challenges to commercial success are the high costs of fibers and processing steps. The Application Center TFK is working on the development of cost-effective procedures suitable for serial production for processing inorganic fibers into load-adapted 2D and 3D structures.

Services

The Application Center TFK is able to examine, test or process ceramic fibers such as SiC- and Al_2O_3 - as well as carbon-, glass- and basalt fibers for a huge variety of purposes.

Focused dialogues identify the customers' requirements and objectives and define the common approach. Upon request, the customer receives an investigation report and / or a presentation of the results and its interpretation. If required, customer-specific solutions are developed and joint research and development projects are initiated.

In addition, we provide training courses and seminars on textile processing methods.