

# Technical cords and braids for **sealing and insulation.**

GASKETS

TECHNICAL TEXTILES

EXPANSION JOINTS

INSULATION

NEW MATERIALS



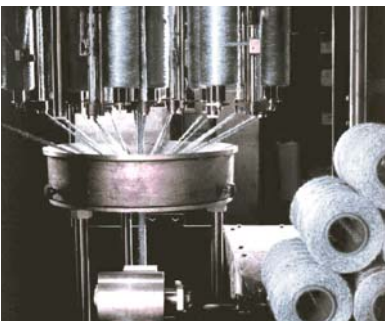
creating  
hightech  
solutions

# Technical cords and braids

As a major supplier of technical textiles for use in gaskets and thermal insulation we help our customers to increase their competitive edge over their competitors.

Frenzelit has been developing and manufacturing textiles which are capable of withstanding high temperatures for more than 50 years. We listen to customer requirements, and give pro-active support throughout the development, sampling and manufacturing processes.

Your advantage: You, the customer, benefit not only from our technical knowledge but also from our decades of experience in application engineering.



There are four technical cord and braid product lines offered by Frenzelit, each with different temperature limits and numerous product types – perfectly adapted to their particular application.

## Innovations made by Frenzelit

Continuous improvement is essential in order to remain competitive in today's market. Frenzelit has extensive research and development facilities where new products are fully tested prior to introduction to the marketplace. Where customers provide time constraints we are able to offer timely customer support to ensure solutions are found and new technologies are implemented on time and within budget. These are the outstanding features of "innovations made by Frenzelit".

## Application areas

Optimum raw material processing makes sure that cords and braids from Frenzelit have consistently high sealing and insulating properties.

The extensive range means that the products can be put to many different uses in all application areas.

The appropriate product line is chosen according to the original temperature and the particular application. It is more and more frequently the case that standard products are replaced by special versions with properties that are developed together with the customer.



# Product lines

## isoTHERM® ST

Application temperature limit  
**1050 °C** (1100 °C for a short time)

Special SiO<sub>2</sub> glass fibres that withstand high temperatures are the basic material for these products.

Their characteristic properties are low thermal conductivity, minimum heat storage and absolute incombustibility.

isoTHERM® ST does not irritate the skin, is absolutely harmless to health and has excellent chemical resistance properties.

- Filament diameter 6–9 µm
- Incombustible (based on DIN 4102)
- Loss due to shrinkage < 3 %



## isoTHERM® 800

Application temperature limit  
**700 °C** (800 °C for a short time)

The products are based on textured special glass and can be identified by their light green colour. Extremely textile properties even at high temperatures are their particular characteristic.

isoTHERM® 800 is absolutely harmless to health, withstands high temperatures and has excellent chemical resistance properties.

- Filament diameter 6–14 µm
- Incombustible (based on DIN 4102)
- Loss due to shrinkage < 3 %



## isoGLAS®

Application temperature limit  
**450 °C** (550 °C for a short time)

E-glass is the basic material. Texturing guarantees a large storage volume and thus good insulation properties.

isoGLAS® products are extremely textile and harmless to health.

- Filament diameter 6–11 µm
- Incombustible (based on DIN 4102)
- Loss due to shrinkage < 1.5 %



## novaTEX® GOLD

Application temperature limit  
**450 °C** (Decomposition temp. 650 °C)

High-performance fibres with outstanding properties form the basis for this product family.

The main characteristics of novaTEX® GOLD are high strength and excellent wear properties combined at the same time with high temperature resistance.



Do you have any questions about your application?

The technical textiles information service will help you:

[textile@frenzelit.de](mailto:textile@frenzelit.de)

# Product types

## Cords



**Features:** Round, left/right twisted strands, knitted sheath (depending on the product line and dimensions), dimensionally stable, elastic and tear-resistant

**Product lines available:** isoGLAS®, isoTHERM® 800, isoTHERM® ST

**Dimensions available:** 3 - 30 mm

## Packings



**Features:** 2/3-diagonally braided, square, rectangular or round (braided sleeving) for static applications

**Product lines available:** isoGLAS®, isoTHERM® 800, isoTHERM® ST, novaTEX® GOLD (The isoGLAS®, isoTHERM® 800 and isoTHERM® ST product lines can also be supplied in a round version as well as with a flexible fibre filling)

**Dimensions available:** Square 5 - 60 mm, round 6 - 50 mm (novaTEX® GOLD, square 5 - 12 mm)

## Sleevings



**Features:** Braided, flexible, wall thicknesses 3 - 6 mm (depending on the dimensions)

**Product lines available:** isoTHERM® 800, novaTEX® GOLD

**Dimensions available:** 6 - 50 mm inside diameter

## Knitted ropes



**Features:** Round, dimensionally stable, highly flexible, adaptable

**Product lines available:** isoGLAS® (can be supplied with a flexible fibre filling too)

**Colours available:** White, black

**Dimensions available:** 6 - 20 mm

Different grades, versions and dimensions as well as finished parts are available on request.

# Application areas

## Heating and air conditioning

- Heating pipes
- Heating cables
- Heating blankets
- Heating mats
- Heating jackets
- Heating covers
- Heating blankets
- Heating mats
- Heating jackets
- Heating covers

Sealing in furnace and boiler manufacturing:

- Boiler doors
- Furnace doors
- Chimney doors
- Chimney pipes
- Inspection flaps
- Hatches
- Panelling

## Process industry

- Sealing for the steel industry:
- Moulds
- Continuous casting
- Chamber frames
- Tanks
- Feed tubes
- Charging cars
- Telescopic pipes
- Substructures
- Furnace sleeving
- Zinc strippers
- Protection for hoses and electricity cables
- Sealing for the aluminium industry:
- Crucibles
- Smelting furnace lids
- Distribution channels
- Casting furnace spouts
- Transport rollers for the glass industry

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Sealing for the aluminium industry:

- Crucibles
- Smelting furnace lids
- Distribution channels
- Casting furnace spouts

Transport rollers for the glass industry

## Power industry

- Pipe insulation
- Protection for hoses and electricity cables
- Inspection hatches and door sealing

Pipe insulation

Protection for hoses and electricity cables

Inspection hatches and door sealing

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# Good for people and environment.

Frenzelit has obtained certification that the company complies with the requirements of both ISO/TS 16949 and ISO 14001. This means complete transparency in all areas and a high degree of security for our customers.

## Quality management

ISO/TS 16949

## Environmental management

ISO 14001

## Further sealing and insulating products from Frenzelit

### Technical needlemats

for thermal and acoustic insulation and the filtration industry



### Technical tapes and woven fabrics

for sealing and insulation



### novaSEAL®

Boiler and tank rings



### Tadpole tapes, wound packings and layered tapes

for sealing applications



### Solutions

for acoustic and heat insulation



### Thermal blankets

to protect people and property



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NEW MATERIALS

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 **Frenzelit**

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