Technical cords and braids for **sealing and insulation**.
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 (100 °C for a short time)
Special SiO₂ 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
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 | 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 |
| Power industry                | Pipe insulation  
Protection for hoses and electricity cables  
Inspection hatches and door sealing |

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

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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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creating hightech solutions