



Brandenburger

*“simply better  
insulated”*

Heat Protection Materials  
Slide-Bearing Materials  
Ablation Materials



[www.brandenburger-isoliertechnik.com](http://www.brandenburger-isoliertechnik.com)

# Brandenburger Isoliertechnik

Reliable - Trustable - Innovative

Your specialist for heat protection materials since 1939

Brandenburger Isoliertechnik GmbH & Co. KG is based in Landau in der Pfalz, Germany. The company is the leading developer and manufacturer of thermal insulation solutions for a wide range of industries and areas of application. With its slogan “simply better insulated”, the company has established itself as a specialist in heat protection systems, with a history of success going back more than 75 years. With numerous international partners, Brandenburger is always close to its customers worldwide.

Brandenburger Isoliertechnik GmbH & Co. KG is a member of the Brandenburger Group. The other division is Brandenburger Liner GmbH & Co. KG which makes an important contribution to environmental protection as an expert in manufacturing innovative pipelining systems for trenchless sewers.

Currently managed by the third generation of Brandenburgers, the human factor is at the centre of the family-run company’s philosophy. On the basis of open and honest communication culture, our qualified and highly motivated employees ensure sustainable success. For this reason, the Brandenburger Group strives to further qualify its personnel and offer career opportunities within the company to foster employee loyalty in the long term. The Brandenburger Group also supports young talents: Several trainees graduate from Brandenburger every year in various professions.

As a certified company, we are also aware of our responsibility for the environment. We design our workflows and production processes to be sustainable and environmentally friendly.





# Brandenburger Composites

Customized - Efficient - Durable

High-quality, reliable materials

Brandenburger composites are produced in our plant in Landau with best-quality raw materials. Our Brandenburger high-performance composites offer excellent properties and are especially suitable for use in thermal and mechanical high-stress applications. Our R&D department pushes forward the further improvement of our product portfolio and the development of new high-quality materials. Our specially developed testing procedures and application-oriented product tests ensure that our materials conform with your requirements.

## Product Groups

We set standards with our solutions!



### Heat Protection Materials

We develop and produce customized insulation solutions for almost any application.



### Slide-Bearing Material

Impact-resistant, pressure-resistant, temperature-resistant! These are just a few characteristics of our reliable sliding materials.



### Ablation Materials

These extremely resistant special products were developed specifically for the requirements of the aerospace and defence industry.



### Special Accessories

These useful aids facilitate installation, assembly and handling of our materials.



# Heat Protection Materials




High-insulating - Pressure-tight - Temperature-resistant  
Insulation solutions for almost any application

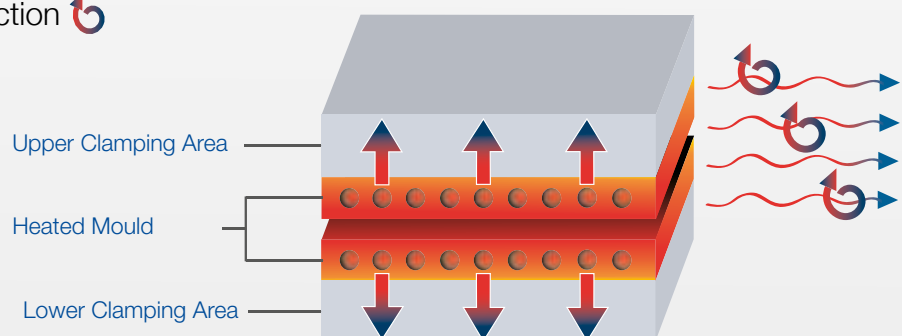
Heat protection materials from Brandenburger offers:

- excellent insulation effects
- very good mechanical strength
- good chemical resistance
- outstanding dimensional stability
- durability

Hence, our heat protection materials are used in all fields and applications with high requirements with regard to energy efficiency, process reliability, product quality and economy.

The high-quality materials ensure significant energy savings due to the considerable reduction of:

- thermal conduction 
- thermal radiation 
- thermal convection 



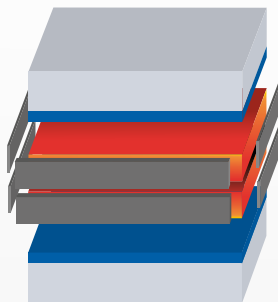
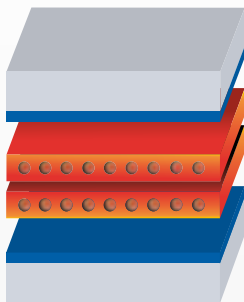


## Application areas

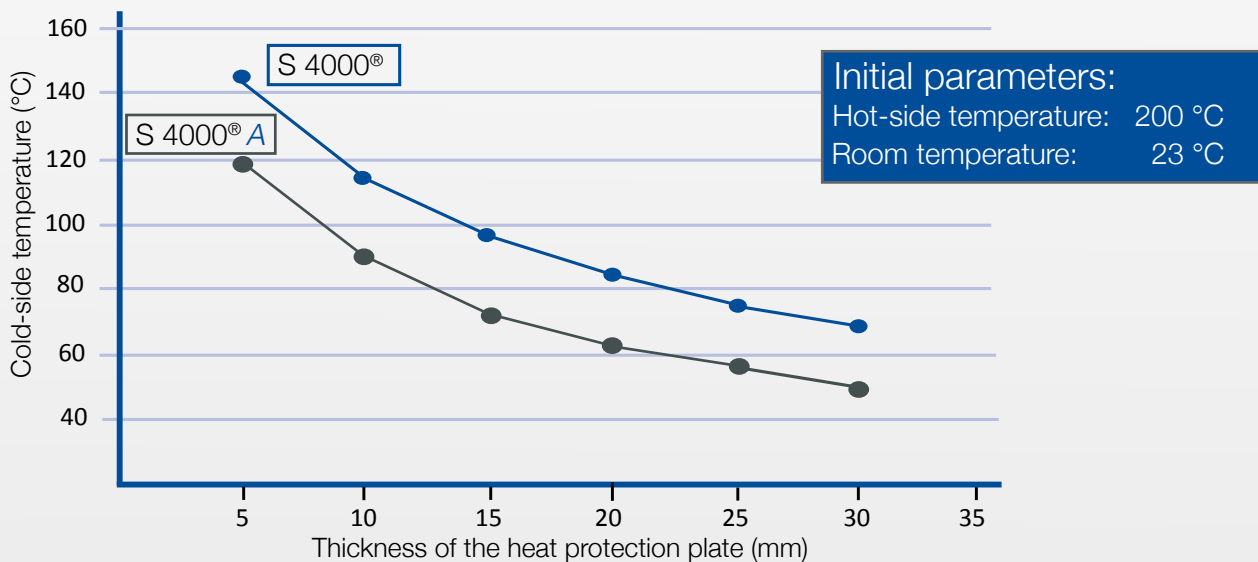
Brandenburger heat protection materials are used preferably as:

■ Pressure plate insulation

■ Exterior insulation



## Insulation effect





# Slide-Bearing Materials

Shock-resistant - Durable - Temperature-resistant

Especially for use at high temperatures and pressure loads

Due to the usage of high-class material components, the products of the BL<sup>®</sup>-series possess the following characteristics:

- excellent sliding behaviour
- high mechanical strength
- low abrasion
- good emergency running properties
- coefficient of expansion similar to that of steel
- low swelling behaviour

Brandenburger slide-bearing materials are often used in:

- submersible motor pumps
- rotary compressors
- textile driers
- general mechanical engineering
- wagon and rail vehicle construction





## Products of the BL<sup>®</sup>-Series

Shock-resistant - Durable - Temperature-resistant

Slide-bearing materials for extreme loads

### BL<sup>®</sup> 30

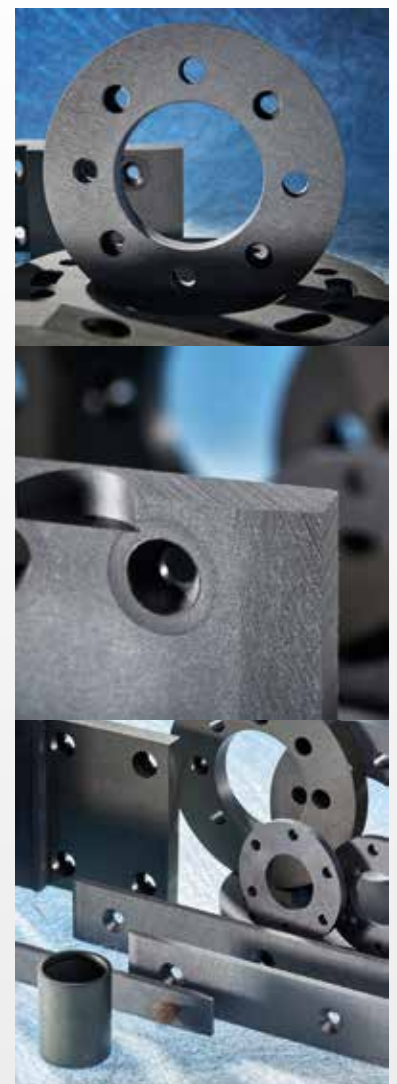
is preferably used as a mechanically and thermally loaded sliding element in general machinery and plant engineering.

### BL<sup>®</sup> 30 GG

was especially designed for use as rotor blade in compressors and vacuum pumps.

### BL<sup>®</sup> 70

is approved for use as sliding rail or sliding layer for transport and conveyor systems.





# Ablation Materials

## Heat-resistant - Robust - Self-extinguishing

Special products for the defence and aerospace industry

Brandenburger ablation materials were especially developed for applications with extremely high thermal loads. These special materials possess the following characteristics:

- Resistant against temperatures up to 3500 °C
- High heat transmission resistance
- Good erosive resistance to highly accelerated particles which occur in the exhaust plumes of rocket engines
- Not flammable and self-extinguishing
- Good tolerance to double-base and composite propellants
- High mechanical strength

Selected application areas of Brandenburger ablation materials are:

- Insulation of rocket engines
- Combustion and object protection in the action range of exhaust plumes of rocket engines
- Protection of thermally highly stressed parts of submarine rescue systems





## Products of the S 5000<sup>®</sup>-Series

Heat-resistant - Robust - Self-extinguishing

Ablation materials for extreme thermal loads

### S 5000<sup>®</sup>

resists extreme thermal loads up to 3500 °C. Hence S 5000<sup>®</sup> is ideally suited for combustion and object protection in the action range of exhaust plumes of rocket engines.

### S 5000<sup>®</sup> *Prepreg*

is the processable version of S 5000<sup>®</sup>.





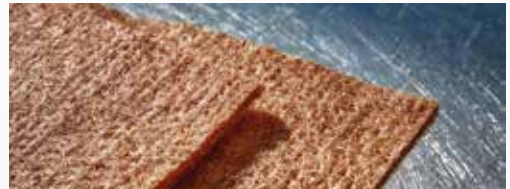
# Special Accessories

Useful - Easy - Practical

Important aids for assembly, mounting and handling

## AE 2000 N

Compensation inlay to improve parallelism.



## High-temperature magnetic clamp

For easy mounting and dismantling of exterior insulations.



## Threaded bushes

Make mounting our materials easier.



## Mounting and ceramic non-adhesive paste

Supports slippage and provides corrosion protection.



## Isoflex glue

Non-combustible adhesive for mounting heat protection materials.





## Finishing Methods

Protective - Precise - Safe

Meet the highest requirements

### Premium Finish

This finishing method can be applied to all compression-proofed heat protection materials and increases the parallelism of our composites up to 0.02 mm related to a thickness tolerance of +/- 0.02 mm.

Features:

- Highest-fitting accuracy of the heat protection plate
- Increase of dimension precision of the overall structure
- Optimized quality in the production of precision components



### FP-BRA Coating

FP-BRA coating protects the heat protection plate against aggressive substances, e.g. hydraulic oil, release agents and steam.

Features:

- Extension of durability
- Improvement of sliding behaviour
- Reduction of adhesion tendency
- Easy cleaning of the surface





# Application Examples

## Applications - Branches - Industries

The suitable material for almost any application

### Insulation solutions for the plastics processing industry

Brandenburger heat protection materials are perfectly suited for use in:

- plastic injection moulding machines
- heated presses
- blown film machines
- extrusion lines
- foaming units
- tools and moulds
- thermoforming machines



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### Insulation solutions for the rubber processing industry

Brandenburger heat protection materials are especially used in:

- rubber injection moulding machines
- rubber vulcanization presses
- tire-curing presses
- conveyor belt presses
- tools and moulds



© PETA GmbH



## Application Examples

### Insulation solutions for the woodworking industry

Brandenburger heat protection materials are used in:

- short-cycle presses
- continuous wood presses
- single opening presses
- multi-daylight presses



### Slide-bearing materials

Brandenburger slide-bearing materials are often applied as:

- sliding elements for machines and textile driers
- slide bearing in cold pilgering machines
- axial and radial bearing in submersible pumps



### Ablation materials for the defence and aerospace industry

Brandenburger ablation materials are implemented as:

- insulation of composite / double-base rocket engines
- deck protection of navy ships in the vicinity of missile systems
- protection of thermal high-stress components in submarine rescue systems





# Brandenburger - Your Expert!

Experienced - Reliable - Trustable

Passion for composites since 1939

We offer you

## Consulting and service

Our experienced and competent team is ready to assist you with questions about our high-performance materials and offer you technical support at the highest level. Our sales engineers are looking forward to working with you on the perfect solution for your application – on site at your plant if you prefer.



## Machining

Drilling, milling, machining, grinding – these are just a few of the processing methods that we use to produce a customized solution. From a standard cut part to components with highly complex geometries – we prepare our materials specifically to meet your requirements.



## Research and development

Our R&D department focuses on the further improvement of our products and the development of new high-quality materials. We collaborate closely with customers, suppliers, universities and testing laboratories. Our specially developed testing procedures and application-oriented product tests ensure that our materials conform with your requirements.



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# Brandenburger



Consulting + service



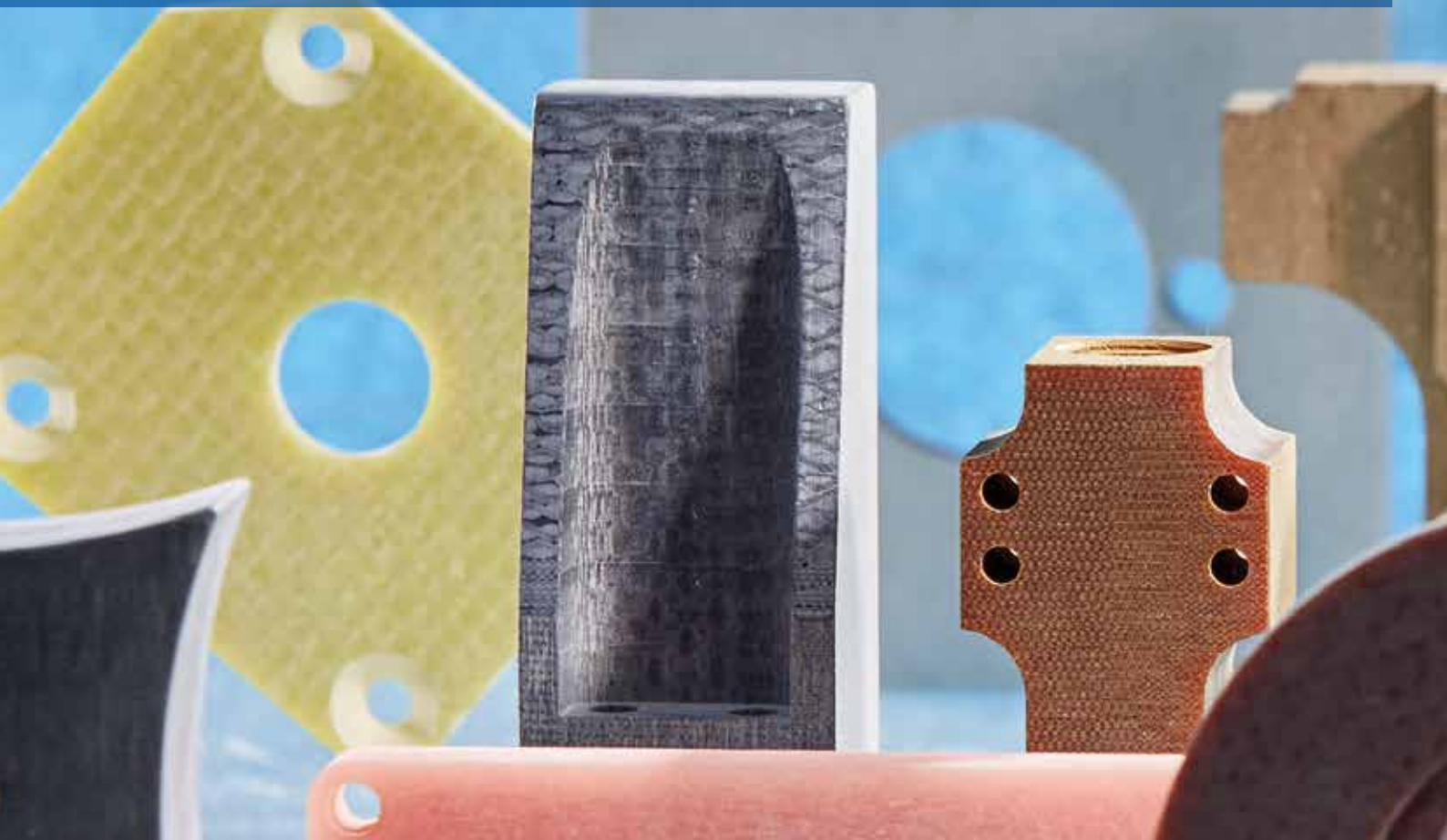
Production + machining



Finishing



Research + development



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