Product overview

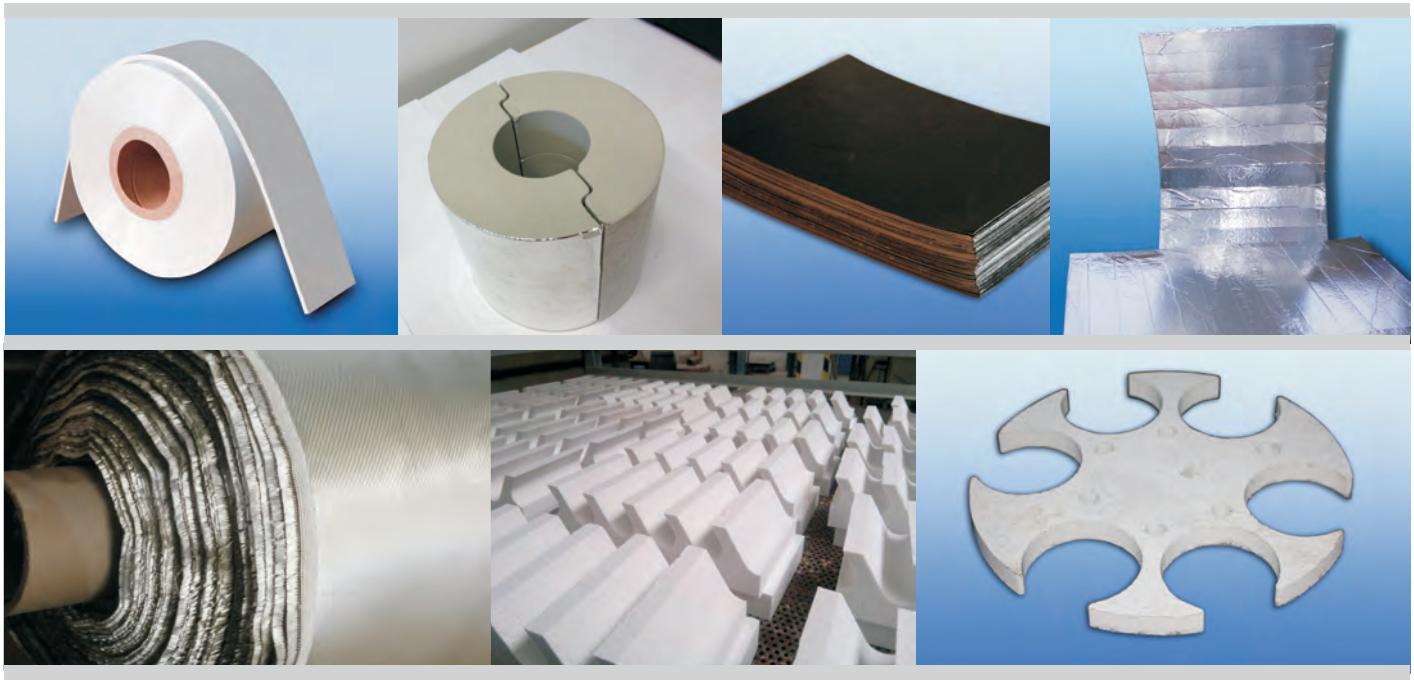
becker insulation

ABOUT BECKER INSULATION

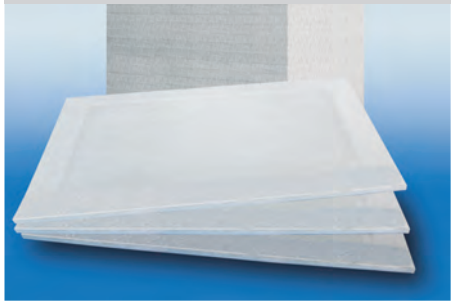
Becker Insulation is your expert in matters of high temperature insulation materials for constructions and industrial furnace builders. Due to our innovative and versatile range of high quality products, consisting amongst others of microporous materials, ceramic fibre products, furnace gaskets and our installation on-site, we have managed to become a well-known provider of efficient solutions.

Our company is able to develop within short custom specific products and to incorporate it into our production. Due to the high flexibility of our products and by our thoughtful logistic, we are able to produce and deliver even special products in a short term. With our customs-oriented solutions, we increase the efficiency of your constructions and reduce your cost.

It is our vision to be always the innovation oriented company, which offers you the service and added value, which you are looking for.



Microporous products



MB 1000, MBH 1000, MB 1000 Cloth, MB 1000 Pipe, MB 1000 57, MB 1000 OS, MB 1000 Tape

CNC processed parts

Performance to customers requests

Fiber products

Paper, modules, die cut pieces, blankets and wool, made of Alumina silicate, alkaline earth silicate and polycrystalline fiber

Vaccum shaped pieces

Classification temperatures 1100°C - 1800°C

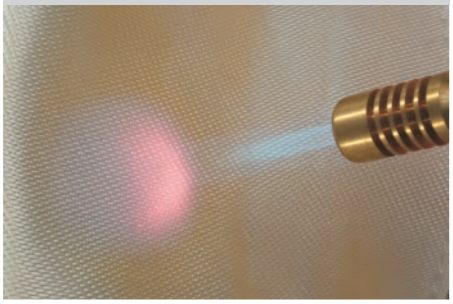
Gaskets

For industrial application made of high temperature- and EAS fiber wool

Insulation pillows

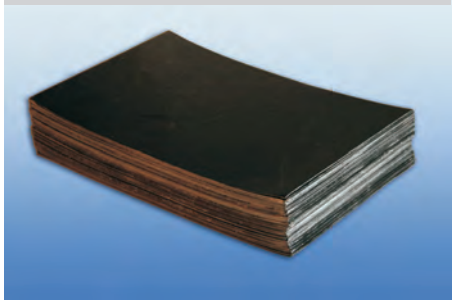
Launder cover and insulation jacketing

Textiles



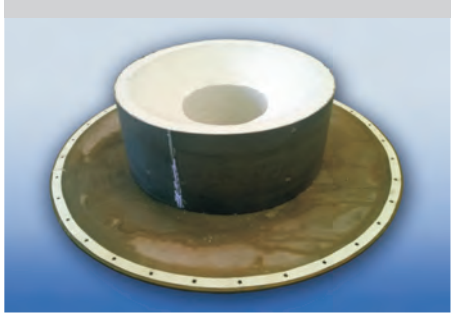
For application up to 1400°C

Graphite foils



In sheet and rolls, available from 0,1mm up to 3mm thickness. With- and without metal reinforcement

Installation



Engineering, installations and repair work

Anchoring systems

Refractory anchoring systems

MICROPOROUS PRODUCTS

MB 1000 Insulation boards and shaped pieces

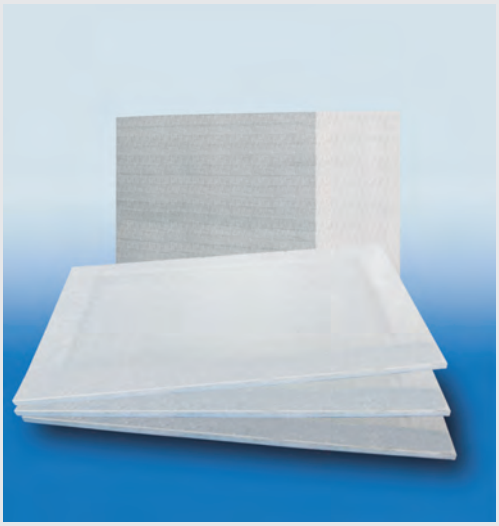
MB 1000 is a microporous thermal insulation board with lowest thermal conductivity resulting in excellent insulating properties. MB 1000 Board consists exclusively of inorganic, oxide substances. There is no diffusion upon air humidity (steam). Due to the best available insulation values at temperatures up to 1100°C, MB1000 and MB1100 are in use in all industrial areas.

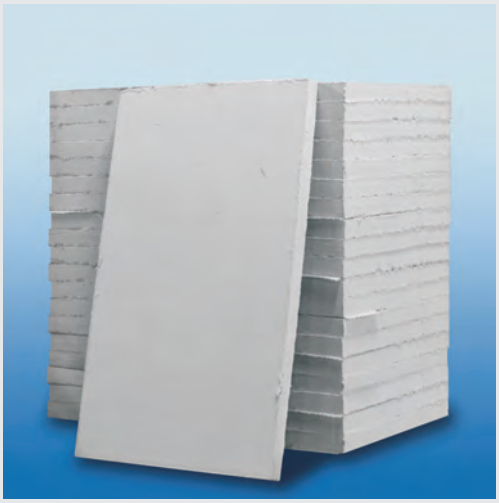
Our microporous boards and shaped pieces made of MB1000 and MB1100 have with 0.02W/mK @ 200°C and 0.033 W/mK @ 800°C the best possible thermal conductivity.

We achieve with thinnest possible insulation thickness the best possible thermal insulation.

MB 1000 reacts sensitively towards all wet materials such as water, oil, gasoline etc., as these materials destroy its pore structure. MB 1000 can be stored without shelf life limitation.

The material is available as a board, as a halfpipe and elbow, as well as lots of other shapes. We produce precuts and CNC processed pieces according to customs request.

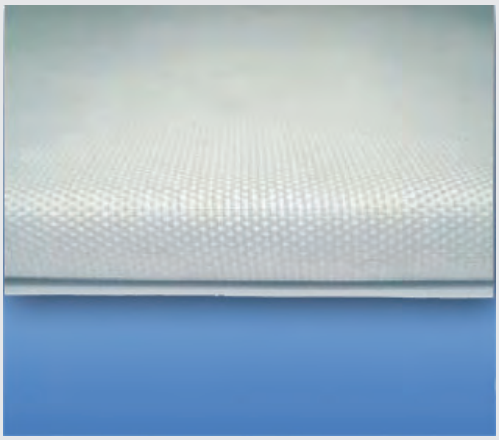




MB1000 Insulation board

Mb1000 is available with a cover of glass fleece, an aluminum foil, a PE-Foil and an heat resistant, protective coating.

MICROPOROUS PRODUCTS



MB1000 ISO-Cloth

Mb1000 ISO-Cloth is a high temperature resistant glass cloth covered, microporous board. Due to this cover, the boards are easy to handle and to install.
The handling is due to the cloth quite dust free.

Mb1000 ISO ISO -Cloth is noncombustible.

MBH 1000 Board

MBH 1000 is a hydrophobic microporous thermal insulation board with lowest thermal conductivity resulting in excellent insulating properties. MBH 1000 Board consists exclusively of inorganic, oxide substances. There is no diffusion upon air humidity (steam). MBH goes during the production process through a special treatment, which makes the material insensitive to water and humidity. MBH 1000 is due to this special process not influenced by water at all and is protected against water.

The boards are available alternatively with PE-Foil or aluminium foil covering.
Special shapes can be milled according to customer specifications.
MBH 1000 can be stored without shelf life limitation.

MBH 1000 is available with a covering of aluminum foil, PE-foil and glass fleece. Due to these coverings, the material is very easy to process and almost dust free.

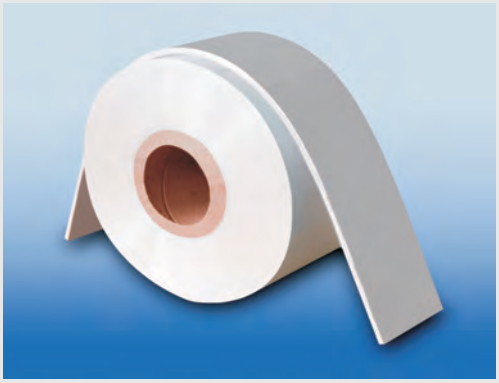
It is possible to have any castable refractory material in direct contact with the microporous material. Water cannot harm the microporous material. It is up to the core hydrophobic. As well cutting edges and boreholes are completely hydrophobic. With the use of MBH 1000, the formation of condensate does not cause any more problems.

The MBH 1000 insulation board is noncombustible

MICROPOROUS PRODUCTS

MB 1000 Pipe

Mb1000 Pipe is a microporous thermal insulation board with lowest thermal conductivity resulting in excellent insulating properties. These boards are bendable to the requested pipe diameter of 75mm or any bigger diameter.



MB 1000 57

MB 1000 57 is a microporous thermal insulation board with lowest thermal conductivity resulting in excellent insulating properties. MB 1000 57 Board consists exclusively of inorganic, oxide substances. This board is extremely flexible and is perfect for the use of any round surface.

MB 1000 OS

MB 1000 OS is a microporous insulation panel which is due to the overstitching very flexible and has very low thermal conductivity figures, even in high temperature applications.
MB 1000 OS consists exclusively of inorganic, oxide substances.
Due to the overstitched pattern, the board is 3D flexible and can be used for most available shapes.
There is no diffusion upon air humidity (steam).

MB 1000 Tape

MB 1000 Tape is a flexible tape made of microporous material with lowest thermal conductivity figures, resulting in excellent insulating properties.

They are bendable for diameters from 50mm diameter and more.
MB 1000 Tape consist exclusively of inorganic, oxide substances.

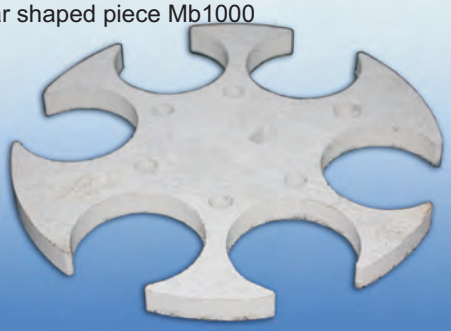
There is no diffusion upon air humidity (steam). MB 1000 Tape react sensitively towards all wet materials such as water, oil, gasoline etc., as these materials destroy its pore structure.

MB 1000 Tape can be stored without shelf life limitation.

CNC PROCESSED PIECES

Elbow-endpiece Mb1000

Star shaped piece Mb1000



Perforated board Mb1000

Spout brick made of FI26

Elbow-endpiece made of FI26

FIBER PRODUCTS

High temperature wool and EAS fiber materials as well as accessories

These products are for experienced users for thermal insulation, heat protection washer, gaskets and expansion gaps for temperatures up to 1600°C.

Characteristics:
- excellent thermal insulation properties
- resistant to most chemicals with the exception of hydrofluoric acid, phosphoric acid and strong alkalis
- low heat storage
- excellent thermal shock resistance
- good sound absorption
- light weight

Types of fiber:
- Ceramic fiber products up to 1425°C
- High temperature wool EAS fiber up to 1300°C
- PWC fiber up to 1600°C

Product overview:
- Bulk fiber
- Blankets
- Boards
- Paper
- Vacuum shaped pieces
- Die cut pieces
- Pre cuts, modules
- Gaskets, ropes and packings

Accessories:
- Refractory bricks
- Refractory Anchoring systems

High temperature wool

High temperature wool 1260°C / 1430°C

Spun or blown refractory fibers are made from aluminium silicate.

They are available for different application temperatures, up to 1430°C. They are used to fill hollow spaces in order to reduce the temperature loss..

FIBER PRODUCTS

Papers made of high temperature wool and polycrystalline wool

High temperature wool papers are made of aluminium silicate fiber.
They are made in a wet laid process with a latex binder system.
These papers are flexible, light weight and have an excellent thermal characteristic.
Classification temperatures go up to 1430°C
They have a good handling strength
Available on rolls in thicknesses from 1-10mm

Papers made of alkaline earth silica fiber
They well made in a wet laid process with a latex binder system.
These papers are flexible, light weight and have an excellent thermal characteristic.
They have a good handling strength
Available on rolls in thicknesses from 1-10mm
Classification temperatures go up to 1200°C

Papers made of polycrystalline wool have.
They are made in a wet laid process with a latex binder system.
These papers are flexible, light weight and have an excellent thermal characteristic.
They have a good chemical resistance
They have a good handling strength
No shot content
Classification temperature goes up to 1600°C
Available on rolls in thicknesses from 1-3mm

Blankets made of high temperature wool and polycrystalline wool

High temperature wool blankets are made of aluminium silicate fiber.
They are made in of spun or blown fiber, and keep the shape due to the needling process they are passing.
These blankets are flexible, light weight and have an excellent thermal characteristic.
Classification temperatures go up to 1430°C
They have a good handling strength
Available on rolls in thicknesses from 6-50mm

Blankets made of alkaline earth silica fiber
They are made in of spun or blown fiber, and keep the shape due to the needling process they are passing.
These blankets are flexible, light weight and have an excellent thermal characteristic.
Available on rolls in thicknesses from 6-50mm
Classification temperatures go up to 1200°C

Blankets made of polycrystalline wool have.
They are made in sol-gel process.
These blankes are flexible, light weight and have an excellent thermal characteristic.
They have a good chemical resistance
They have a good handling strength
No shot content
Classification temperature goes up to 1600°C
Available on rolls in thicknesses from 13-25mm

FIBER PRODUCTS

Felts made of high temperature wool

High temperature wool felts are made of aluminium silicate fiber.
They are made in a special process with a selected organic binders.
These felts are flexible, light weight and have an excellent thermal characteristic.
Classification temperatures go up to 1430°C
They are easy to cut
They have a good handling strength
Available on rolls in thicknesses from 3-25mm

Papers made of alkaline earth silica fiber
They well made in a wet laid process with a latex binder system.
These papers are flexible, light weight and have an excellent thermal characteristic.
They have a good handling strength
Available on rolls in thicknesses from 1-10mm
Classification temperatures go up to 1200°C

High temperature fiber modules are made from all 3 fiber types, aluminium silicate fiber, alkaline earth fiber and aluminium oxide fiber.

We produce modules with integrated anker and as well lining modules which can be glued on. They are specially designed for the thermal insulation requirements of industrial furnaces heaters and kilns.

Vacuum shaped pieces

Vacuum shaped products for applications up to 1800°C

Vacuum shaped products are made of high temperature wool, alkaline earth silicate fiber or polycrystalline wool for thermal insulation applications. With the addition of special refractory binders, they can be used up to 1800°C application temperature.

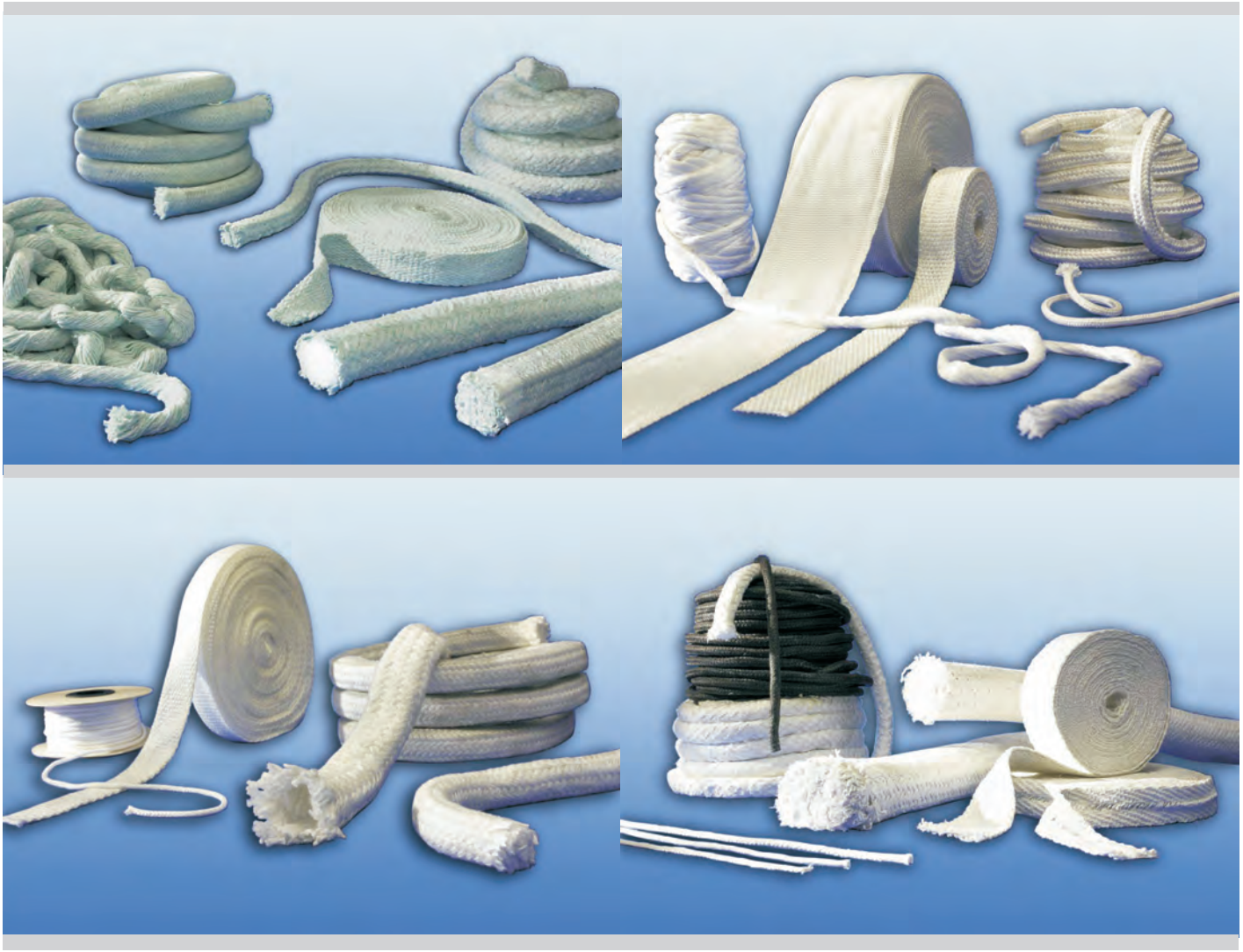
The versatile use of the shaped materials is enormous. The process permits to produce boards, pipes, conical shapes other complex geometrically shapes, i.e. burner blocks and carriers for heating elements. Vacuum shaped products are characterized by a strong surface, a high application temperature, and a very low thermal conductivity. Due to this, the application areas are getting more and more.

GASKETS

High temperature gaskets for applications like Industrial furnaces up to 1100°C.

We delivery gaskets in:
- high temperature wool
- in alkaline earth silicate fiber
- high temperature glass.

They are available twisted and braided and woven, as packing, ropes tapes. They can be reinforced with glass or metal wires
Tapes are available in 0.2 – 10mm thickness and 10-500mm width.
Ropes and packings are available from 3-80mm diameter in round and square.



INSULATION PILLOW

Insulation pillow

All types of fabric are available as raw material. Additionally you can get the fabric in 600g/m² and in 1220g/m² in a thermically pre-shrunk version. All other types are available on request.

Cover panel for channels

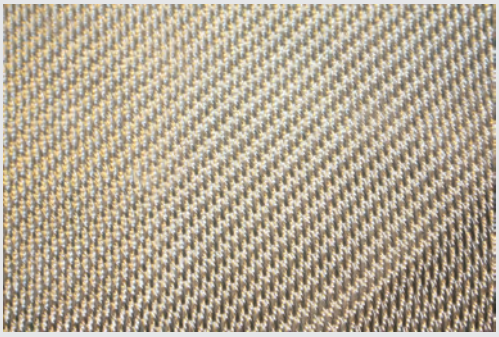
This coating protects the fibres against mechanical load under temperature.

FABRIC

Silica textiles are very resistant against corrosion and most of chemicals. Due to their outstanding electrical insulation ability they remain very flexible, soft and smooth even at high temperatures.
(They stand out due to their outstanding electrical insulation ability and they remain very flexible, soft and smooth at high temperature.)

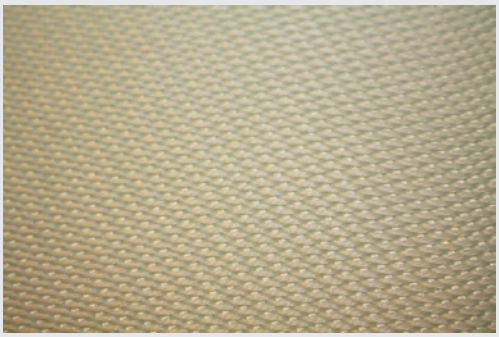
Furthermore textiles of silica have an outstanding ability at temperature variation. They resist against molten metals,like Aluminium, they are resistant against flying sparks and beads of perspiration and also direct beaconing. Silica fabrics will often be used as a filter at the production of iron casting materials. They are applicable as follows:

- Welder safety cloth
- Heat protection curtain
- Range of compensator
- abherent in the range of glass/ ist resistant against liquid glass



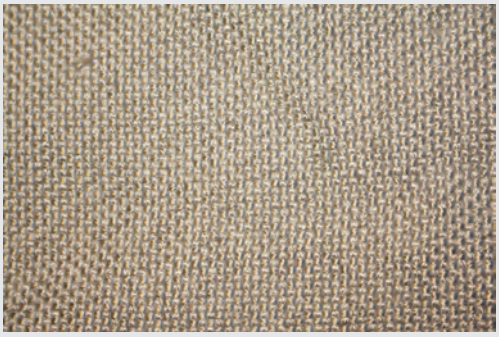
Raw cloth

All types of fabric are available as a raw material HTfinish up to 1100°C. Additionally you can get the cloth of 600g/m² and 1220g/m² in a termically pre-shrunk version. All other types are available on request.



HT finish up to 1100°C

This coating protects the fibre against mechanical load under temperature.



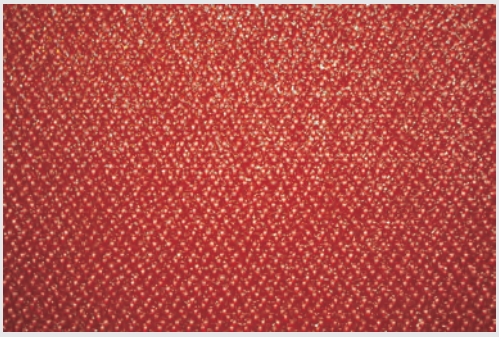
Wire-reinforced fabrics

This cloth is reinforced with V4A wires and therefore it is very good mechanical loadable.

FABRIC

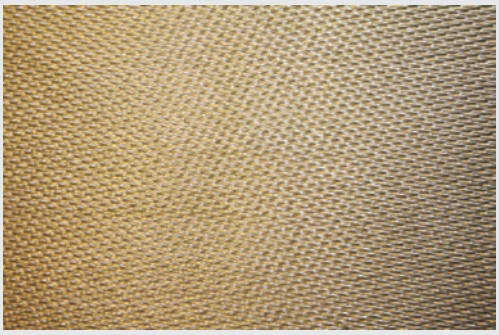
Polyurethan-coating

For our cloth in 600g/m² and 1220g/m² you can get a 1 and 2-side PU-coating as a standard cloth. All other types of fabrics are available on request.



Silicon-coating

For our cloth in 600g/m² and 1220g/m² you can get a 1 and 2-side Silicon-coating as a standard cloth. All other types of fabrics are available on request.

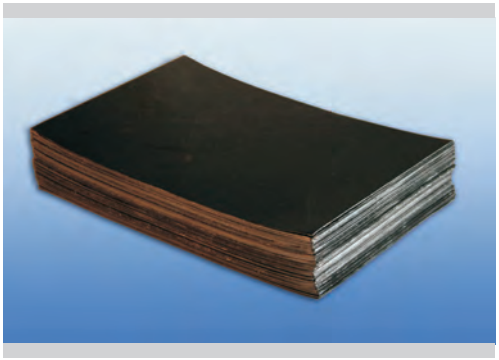


Vermiculite-configuration

For the following cloth you can get the 1 or 2-side vermiculite-configuration as a standard product: 400g/m², 600g/m², 1220m². All other types of fabric are available on request.

FOILS OF GRAPHITE

Graphite is the most stable modification of carbon. It`s colour goes from bright grey to dark grey or black, often with brilliancy of metal.



1. Graphite foils and Graphite sheets

1.1 Graphite foils
on rolls and in sheets

1.2 Graphite sheets with metal reinforcement
interlocked and glued from 0.1 up to 3mm thickness

1.3 Gaskets and seals
are produced regarding to customers' requests

1.4 Expandable graphite foil
are available without and with textile lining, adhesive or plastic lining

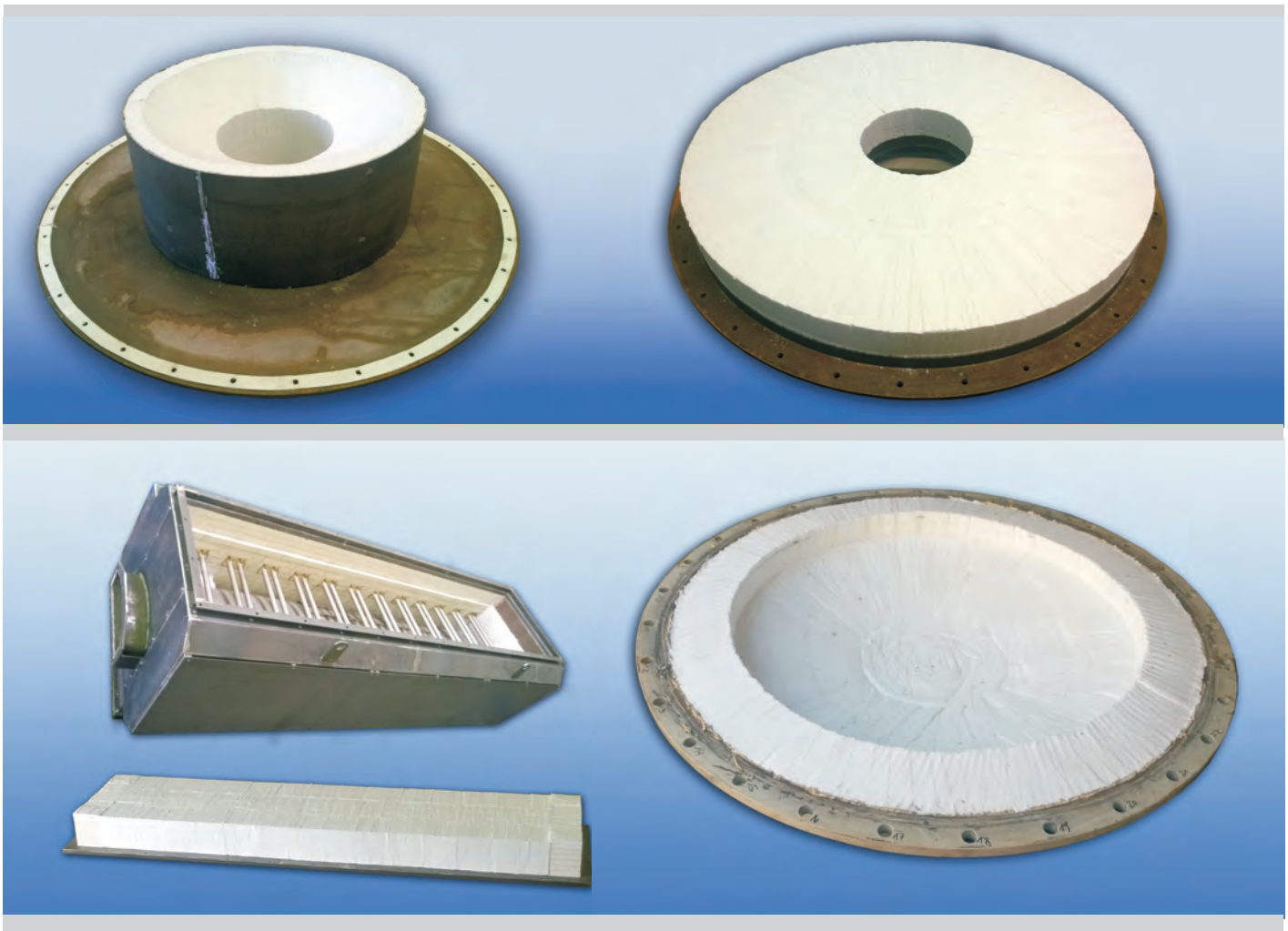
1.5 Graphite foils with high resistance against oxidation
and little loss of weight at high temperatures and pressure

MONTAGE

Engineering, installation and projects

We offer the service starting with the engineering up the installation for new devices, for restructuring or repair.

We are your competent partner at your side. We are looking forward to help you regarding the efficiency of your consisting or scheduled thermal equipment. We are offering the thermal heat transfer calculations for your project and support you with our installation team – in your company our in our production facility.



Fastening systems

Suitable for all our products, we also supply the corresponding fastening systems, such as;
Insulation pins, anchors systems, clips from different heat-resistant materials and cup locks.

We are as well offering the suitable glue and mortar for your refractory products necessary.

Heat resistant stain less steel bayonet pin

Module anchor

Bayonet pin with cup lock

Heat resistant stain less steel threaded studs

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