



HKO
HEAT PROTECTION | TRUST THE EXPERTS

THERMAL INSULATIONS


TRUST THE EXPERTS

About HKO

HKO GmbH was founded in 1974 in Oberhausen. Originally, HKO GmbH focussed on providing heat protection products, primarily as replacements for asbestos fibres for use in industrial applications. After asbestos fibres were classified as a health hazard HKO began to concentrate on developing and establishing fibreglass products as a replacement for asbestos, and performed pioneering work in this area.

Over the past 30 years, our company, which started off with just 5 employees, progressed as an innovative developer and leading international manufacturer of future-oriented, sustainable speciality products for use in extreme temperature ranges. Our modern production facilities in Germany and China, our sales and engineering offices in France and the USA, as well as our large number of cooperation and distribution partners across the world are a reflection of our internationally-recognized expertise.





We are known not only for our high quality standards, but also for our intelligent advice and attentive professional service provided by our sales, technology, research and development experts.

Highly skilled and dedicated staff – a sure guarantee for intelligent solutions

YOUR NEEDS ARE OUR DRIVING FORCE

The number of patents we register and apply – which is well above the industry average – is further testimony of the close collaboration between our sales and technology departments. Provided with the latest laboratory equipment, our engineers and technician's passion for and knowledge about their work are a sure guarantee that our research and development work always yields results that will serve both the market and our customers efficiently for the long term. Our close partnerships with renowned universities and leading institutes further ensure that our research projects are highly diverse.

All of our production and engineering staff constantly participate in additional training – which is our way of assuring that our products are always of the highest quality and of protecting these quality standards in the future. Our innovative and modern production facilities and procedures are a sure guarantee that we are able to meet our customers' requirements with flexibility, in line with market requirements, and to offer them tailor-made solutions. Additionally, we are also very aware that efficient logistics and distribution services are also vital for long-term and consistently successful collaborations. As a result, we take great pride in our modern storage system, which is testimony to the fact that we always guarantee the availability of our standard products to provide reliable delivery of customer specific components and products. Our global logistics system enables us to deliver our products efficiently and rapidly to any place that our customers' may need them.

Our customers' needs are our driving force – for the present and the future. As one of our customers, you can depend on us as a reliable, trustworthy and solution-driven partner.

Introduction

Automotive



Shipbuilding



Turbine Insulation

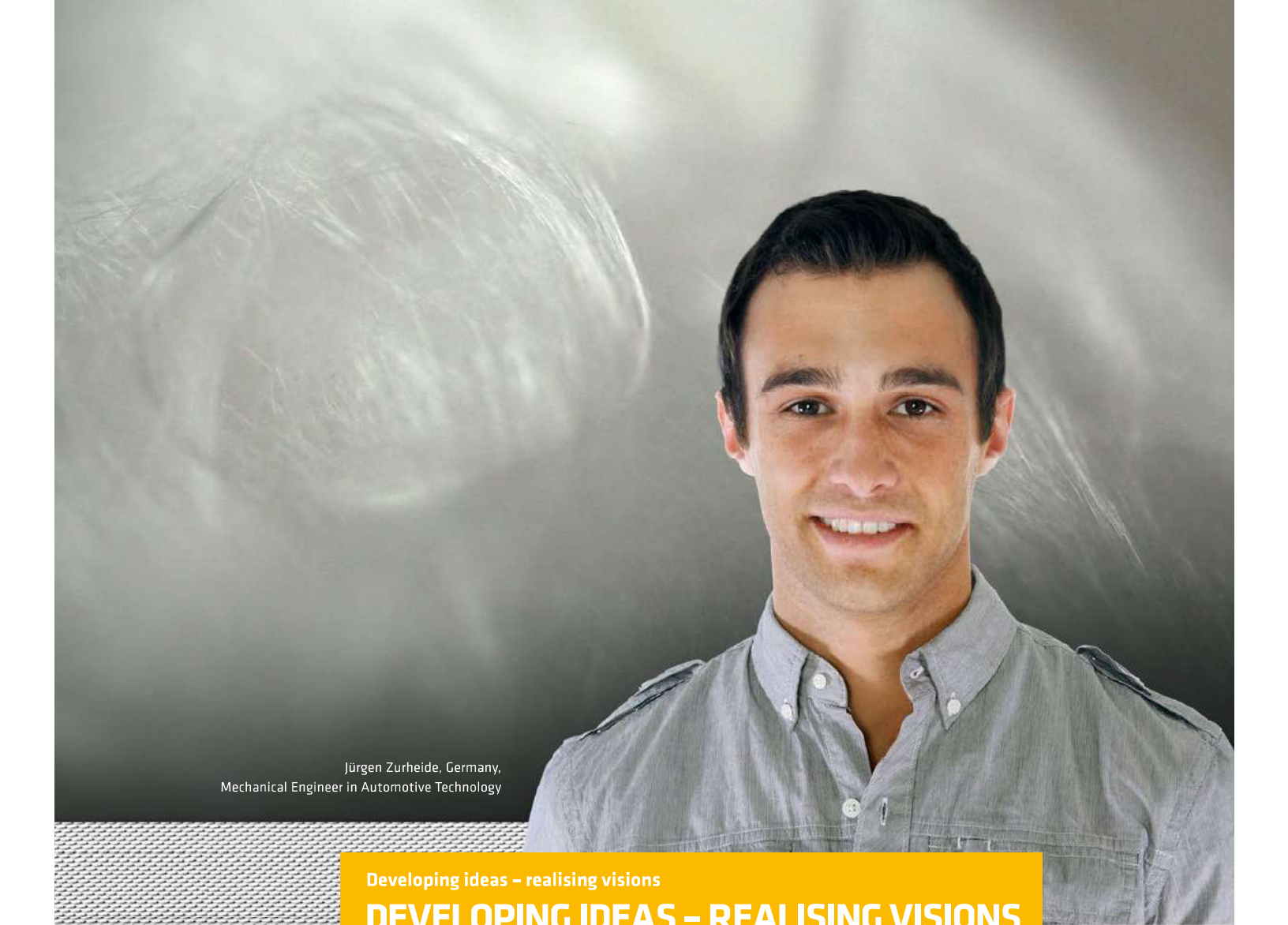


Thermal Process Plants



Furnace and Boiler Constructions





Jürgen Zurheide, Germany,
Mechanical Engineer in Automotive Technology

Developing ideas – realising visions

DEVELOPING IDEAS – REALISING VISIONS

Saving energy, generating process heat and shielding objects from heat and sound, are just a few of the requirements that we are challenged by on a daily basis.

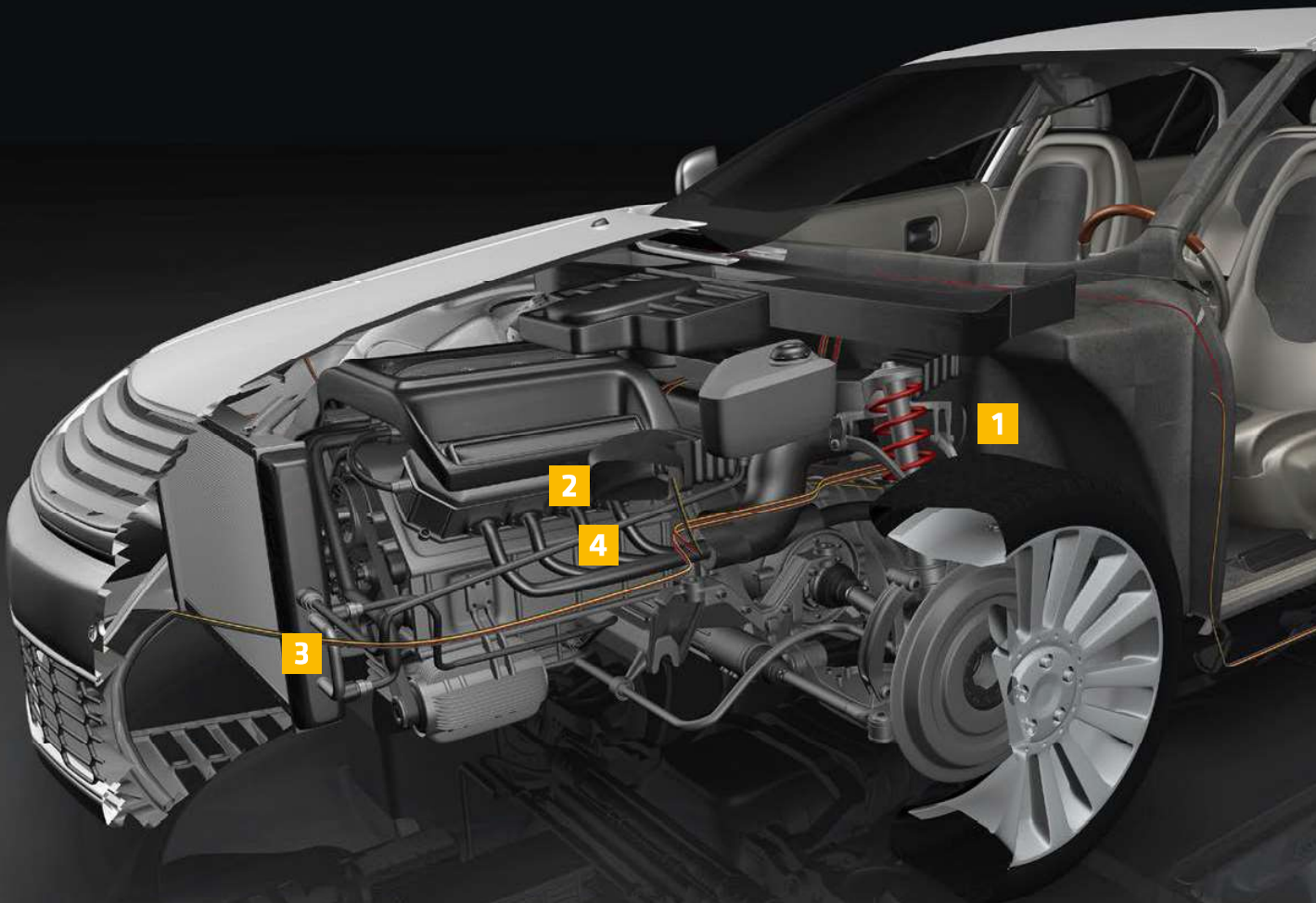
By offering products for special areas of application, we are enabling our customers to benefit from new products, technologies and raw materials that have been developed to the specific application and requirements needed.

In doing so, we are consistently meeting the ever-increasing demands of the market using our expert knowledge, experience and dedication.

We constantly move towards further perfecting our products, and prefer to work in close collaboration with our customers in order to surpass “ideal” whenever possible.

All of our projects are well planned and evaluated – assuring that the goals we set with our customers are perfectly met.

Developing ideas & realizing visions – together, we make things happen!



At present, we are witnessing a proliferation of innovative developments, use of the latest technologies and modern designs across all industries – but most notably in the automotive sector – which is currently subject to significant future-oriented processes of transformation and change.

High requirements – technical perfection

TECHNOLOGY – FUTURE – SOLUTIONS

This dynamic is also affecting the requirements for managing thermal energy inside vehicles. Stricter laws regarding noise emissions and lower emission limits call for solutions that can be achieved by making use of our wide range of high temperature resistant materials.

Whether intended for use in exhaust systems, metal engine housing or in heat shields for cables and hoses: Our needle & stitch-bonded needle mats, sleeves, coatings and glass yarns are environmentally safe, and will be perfectly adapted to your needs and requirements. Our materials are designed for use in temperature ranges between 300–1,100 °C. Not only do they distinguish themselves through their outstanding thermal insulation properties, but also offer high temperature resistance, excellent sound insulation properties, high acoustic absorption, vibration resistance, low shrinkage and outgassing behaviour, low fibre wear and the flexibility with which they can be fitted and removed.

- 1 Insulating material for splash protection shields
- 2 Insulating material for turbo chargers
- 3 Ready-made parts for lines and automotive wiring harness
- 4 Insulating material for manifolds
- 5 Components for heat shields
- 6 Insulating material for exhaust systems





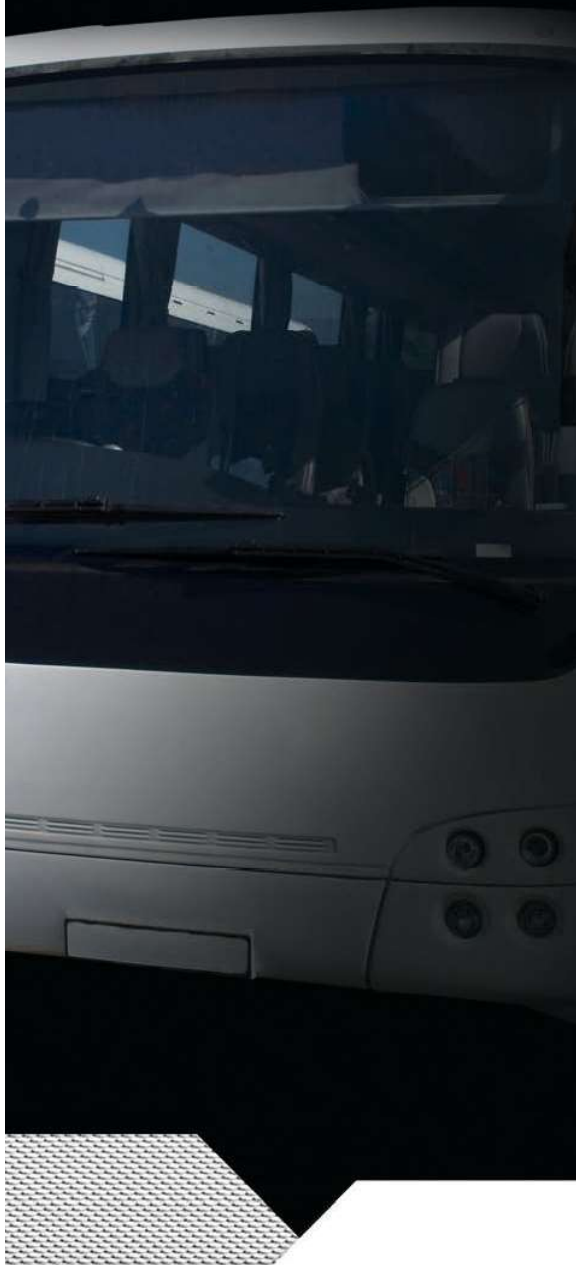
We keep things moving

MOBILITY & TECHNOLOGICAL PROGRESS

When it comes to our thermal insulation materials, one of our primary strengths is developing custom-designed and customer-specific products and solutions for any and all sectors and areas of application that involve thermal stress – including the automotive sector. So, if you are unable to find materials that are suitable for your requirements or application, then we would be happy to develop one!

No matter whether big or small, all motorized vehicles – from motorbikes or tractors to trains – require the use of highly heat resistant materials in order to ensure long service life and work without failure to ensure a vehicle's mobility.

Just give us your specifications – and we will do the rest!



Motorcycles



Construction Vehicles



Snow Mobiles





Making life safe

OUR INSULATION – PRODUCT ENGINEERING AT ITS BEST

On ships, fire protection is paramount and already plays a vital role right from the start of a ship's life – from conception to design. No matter whether a small yacht or a large cruiser – every ship is built starting with the hull. The welding work involved in building the hull alone poses a serious fire hazard. A ship's daily running requires regular maintenance and associated repairs which present numerous risks that can be minimised or removed by making use of our wide range of high quality materials.

Making your journeys safer – with our materials!

1 Insulating material for exhaust systems

Needle mats, boards and fabrics for heat insulation and absorption

2 Insulating material for engine compartments

Needle mats, boards and fabrics for thermal and acoustic insulation

3 Insulating material for boat hulls

Fabrics with oil repellent finish



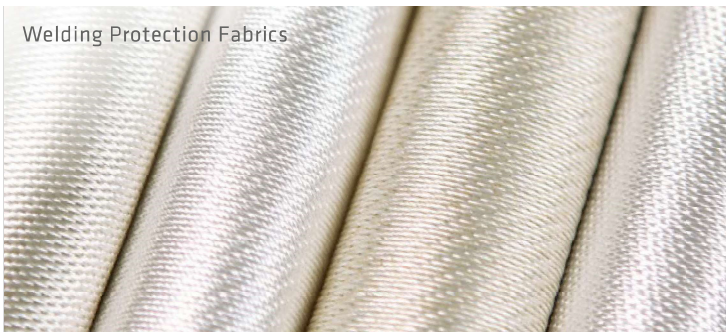
Needle Mats

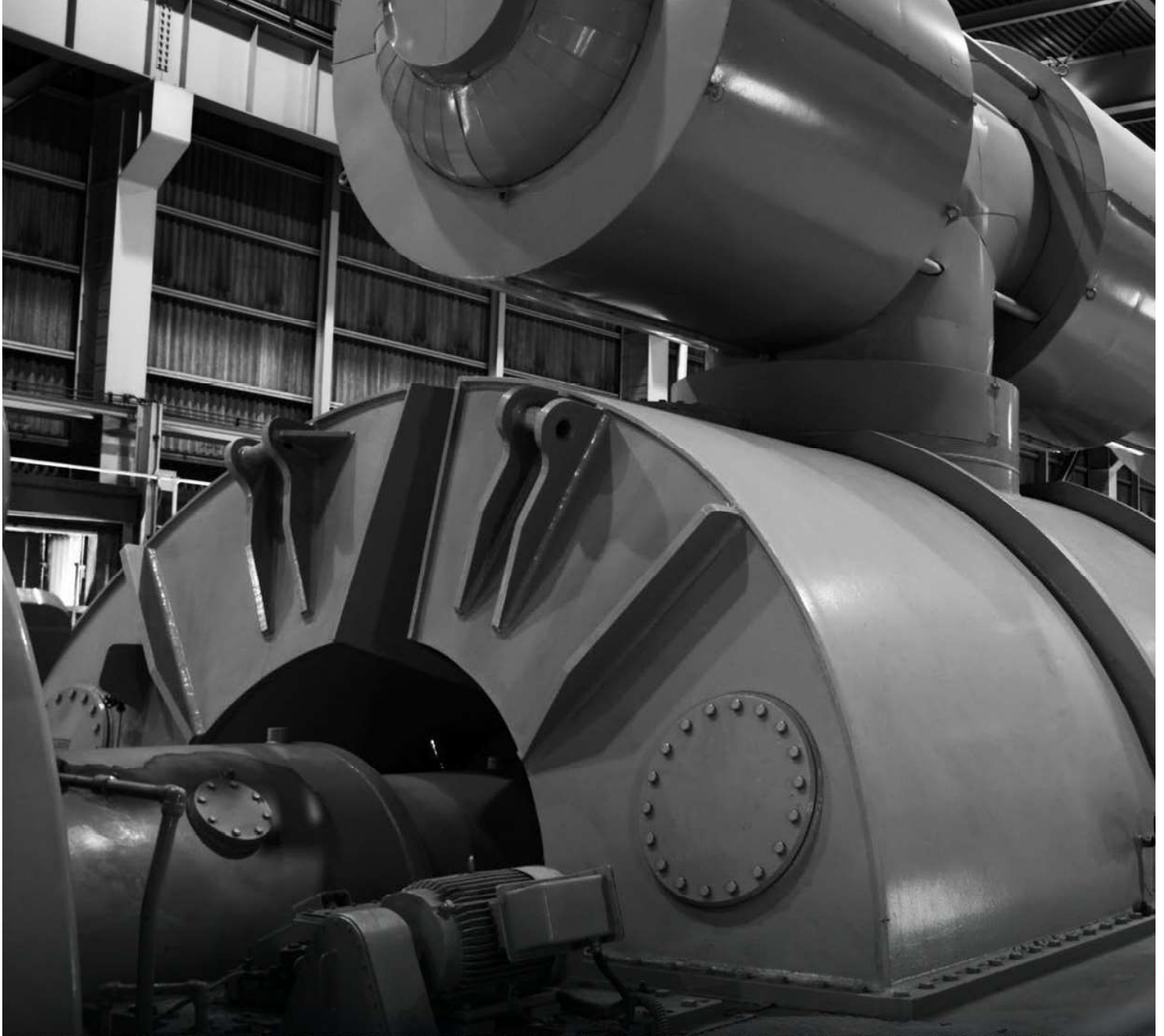


Insulation Fabrics with Approval of BG Verkehr



Welding Protection Fabrics





Our products – generating energy safely

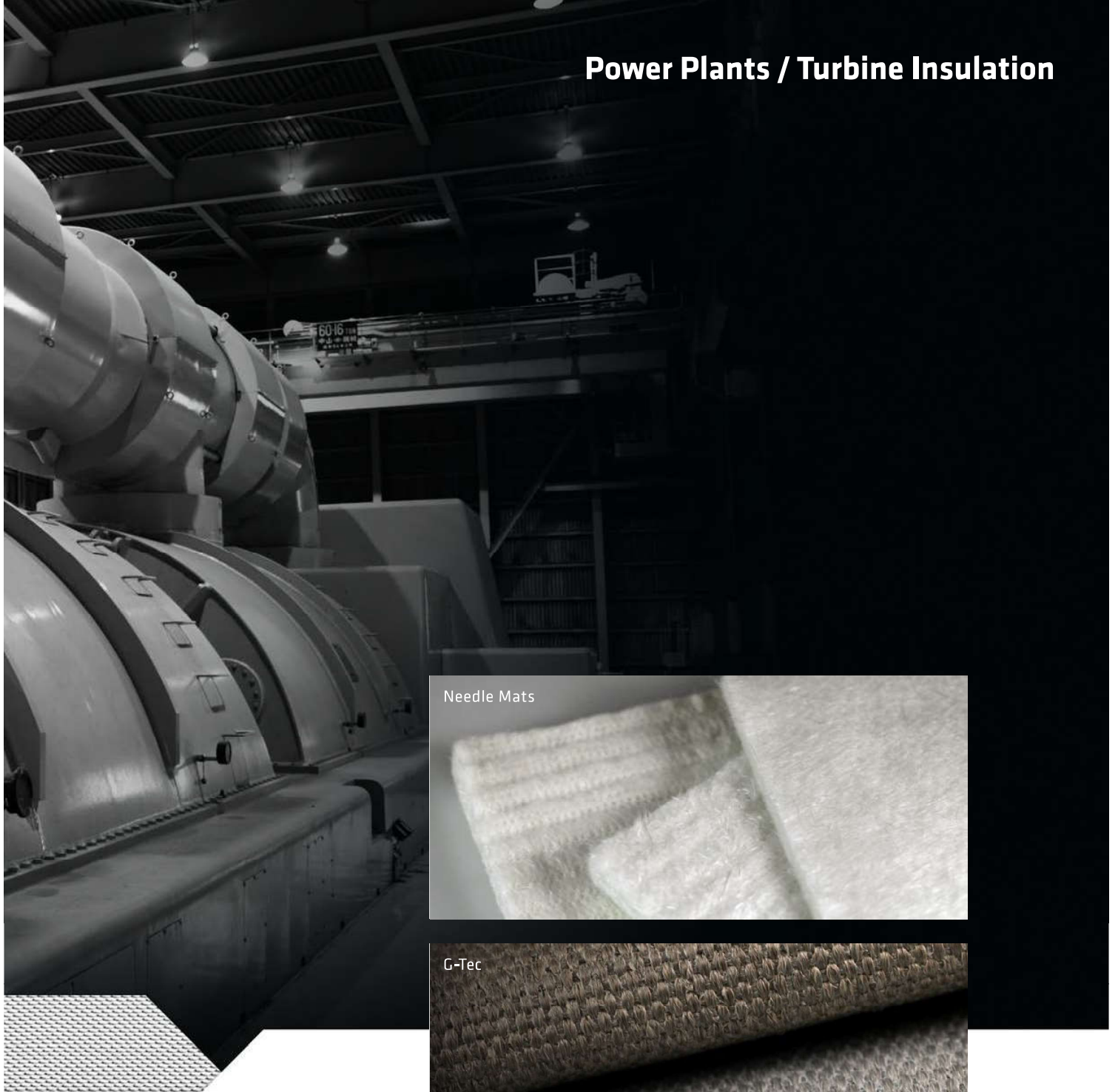
POWERFUL HEAT RESISTANCE

Our insulation materials distinguish themselves through their high vibration and heat resistance, long service life and, in particular, their wear resistance.

Due to the high levels of heat emitted by gas and steam turbines, it is absolutely vital that they are well insulated. When used in power plants, safety is always the first and foremost concern, which is why any insulation material used in these situations, has to be of excellent quality.

Thanks to their reliability and versatility, our high performance products, such as our needle mats, V4A reinforced fabrics and the G-Tec fabric, which has been specifically developed for insulating turbines, lend themselves extremely well for use as insulation materials in a range of different areas in power stations.

Our materials and products come in a wide range of constructions and styles designed for fabricating insulation into all kinds of different parts and components, as well as heat shields and insulating sleeves. Our materials cover all areas of application – try us!



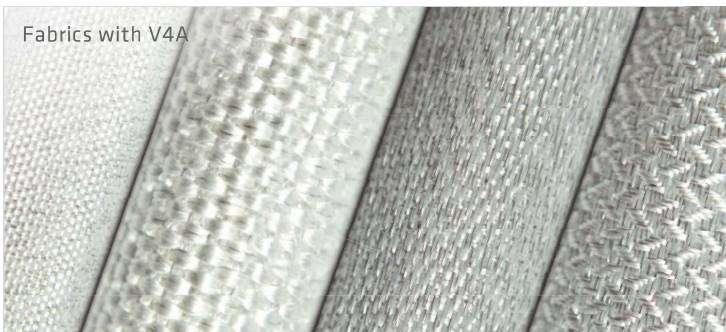
Needle Mats



G-Tec



Fabrics with V4A





Your insulation needs are important to us!

OUR INSULATING MATERIALS – MADE TO PROTECT

Thermal processing plants have to meet very high safety requirements. The thermal insulation and seals in these plants form a very important part of their safety. We offer a wide range of thermal insulation and seal materials.

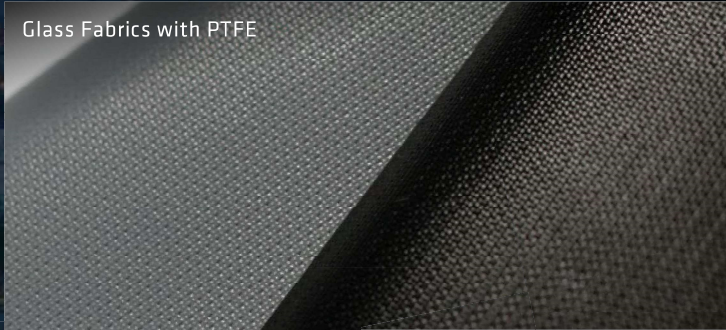
In order to achieve optimum results with our materials, they have to be precisely adapted to your specific needs and requirements. We have a long history of responding to the growing complexity of thermal processing plans by providing extremely high-quality products that are made to precise measure providing an optimum level of safety for your plants.

Our extensive product range includes solutions for all types of applications, including materials for thermal insulation and compensator construction. No matter what your needs and requirements – thanks to our know-how and experience, we are sure to have the right solution for you.

Thermal Process Plants

- Insulation of hydraulic lines, armatures and tanks
- Physical protection

Glass Fabrics with PTFE



Fabrics with silicone coating



Needle Mats



Woven Webbing





Your needs are our inspiration

HOT – HOTTER – HKO

Who better than the manufacturer himself to advise you on the best possible insulation solutions for you?

With more than 30 years of experience in the manufacture of glass and silicate, HKO is more than a competent advisor – and will also happily advise you on site. You've got the project – and we have the turnkey solution!

In order to be able to determine the correct, best and most suitable solution for your needs, we can also conduct a thermal study of your installation.

From the production to the finished solution – with us, your project is going to be in very safe hands!

Furnace and Boiler Constructions

Insulation Incubator



Filling of the furnace floor



Brick-lined furnace



Completed furnace



Needle Mats



Insulation Boards



Accessories



Insulation Block



Illustrated Brochure **Automotive** **HKO Defensor** **High-Temperature Sealings** **Fire and Heat Protection** **Personal Protective Equipment** **Product Index**



Illustrated Brochure



Automotive



HKO Defensor



High-Temperature Sealings



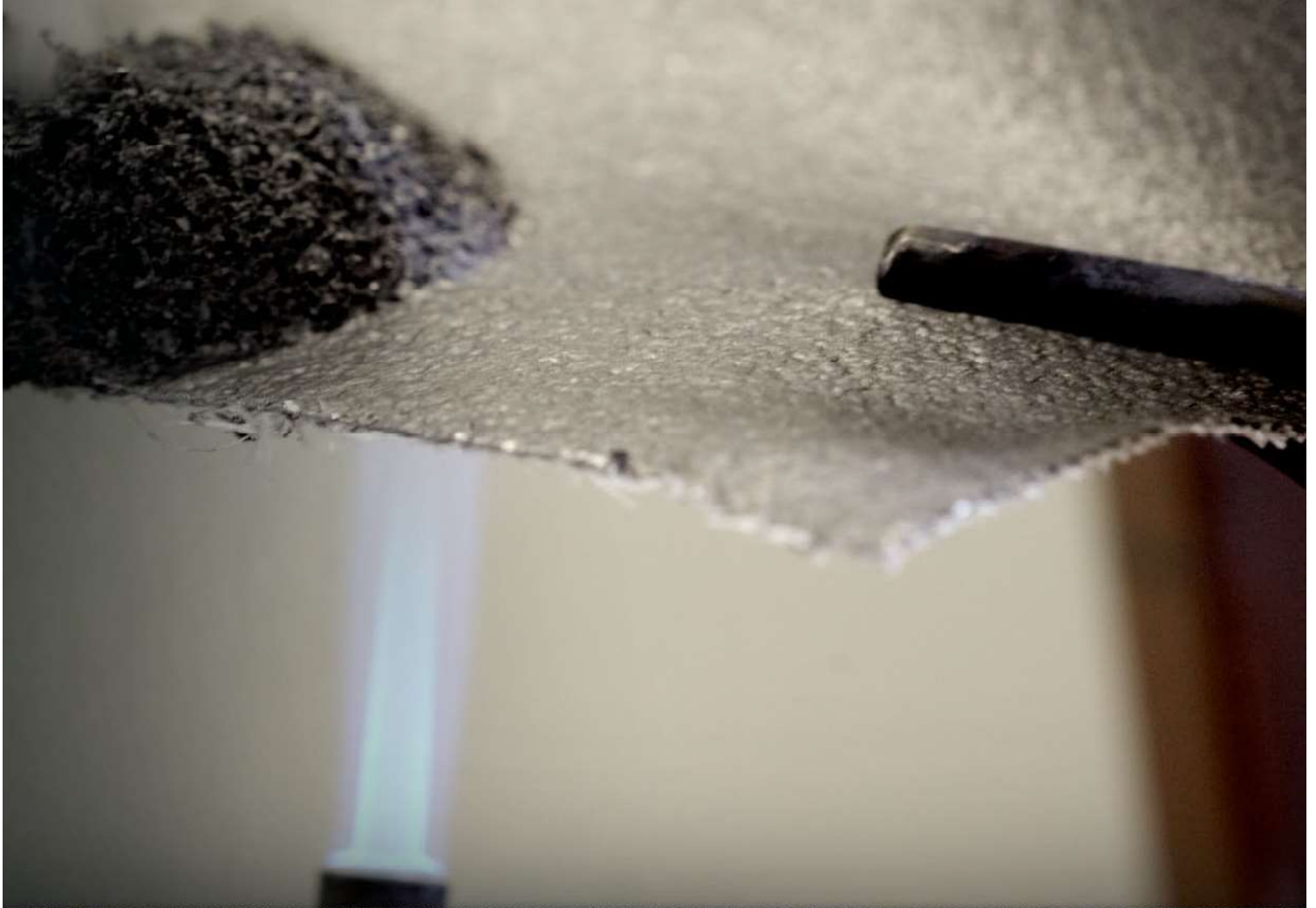
Fire and Heat Protection



Personal Protective Equipment



Product Index



We are there for you!

TRUST THE EXPERTS!

HKO Heat Protection Group is an expert in all matters related to thermal insulations, high temperature seals and fire and heat protection.

Our illustrated brochure provides a brief overview of our company, products and areas of operation. The product index offers an overview of the variety of our products and our production possibilities.

In addition to this brochure, more detailed information on the individual areas we operate in can also be found in two additional brochures:

- Sealing materials for use on movable and stationary interfaces, to prevent the passage of fluids and gasses, and the loss of heat.
- Textile solutions for preventing and reducing the creation, spread and effects of fire and major heat.

Two further brochures inform you in detail about products for the automotive industry and personal protective equipment.

Please do not hesitate to contact us for further information, including information on other areas of application, or for advice – including if you would like to arrange for us to come and visit you on site or if you would like to visit us at one of our production facilities.