

# Heat Protection Thermal Insulation



# Introduction

## In 2018, Saint-Gobain ADFORS acquired the German company HKO Heat Protection Group.

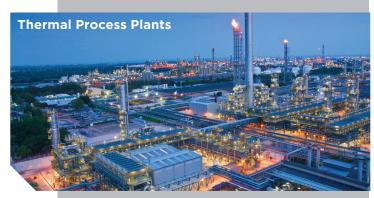
HKO was founded in 1974 and has secured an international presence as one of the largest suppliers of heat protection and thermal insulation products in the world. HKO designs, produces, and distributes a complete range of high temperature thermal insulation and fire protection solutions made from various types of synthetic fibers.

With our combined expertise, we are able to offer a wide range of narrow textiles, sealings, packings, fabrics, needle mats, 2D and 3D die cut parts and custom-made fabric solutions to suit your high temperature needs for the construction, industrial and automotive markets.



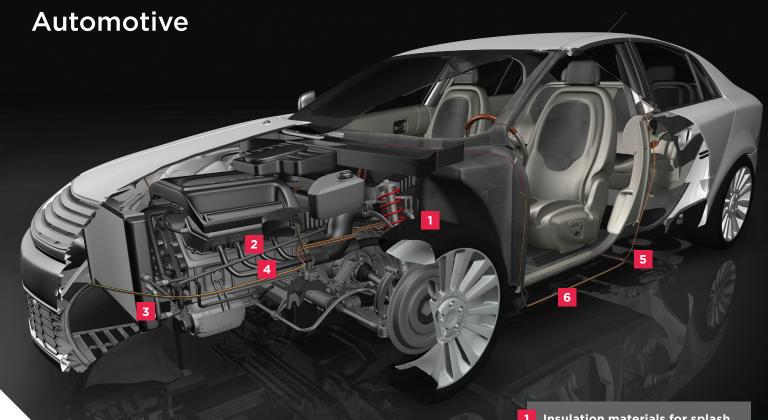






## **Markets**

- Automotive
- Shipbuilding
- Turbine Insulation
- Thermal Process Plants



Our needle & stitch-bonded needle mats, sleeves, coatings, and glass yarns are environmentally safe and can be used in exhaust systems, metal engine housing, or in heat shields for cables and hoses. Customized solutions are always available.

Our materials are designed for use in temperature ranges between 500 - 2012 °F (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 behavior.

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



Molded Parts / Ready-made Fabric Parts



**Ready Made Sleeves from Fabrics** 



# Shipbuilding



Insulation materials for exhaust systems

- 2 Insulation materials for engine compartments
- **3** Insulation material for boat hulls

# On ships, fire protection is paramount and plays a vital role right from the beginning of a ship's life.

Every ship is built starting with the hull - from small yachts to large cruiser ships. The welding work involved in building the hull poses a serious fire hazard. A ship's daily running requires regular maintenance and repairs which presents numerous risks that can be minimized or removed by using one of our high quality materials.





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

## Due to the high levels of heat emitted by gas and steam turbines, it is vital that they are well insulated.

In power plants, safety is always the first concern, which is why any insulation material used has to be of excellent quality.

Our high performance products, such as our needle mats, V4A reinforced fabrics, and the G-Tec fabric are specifically developed for insulating turbines and can be used in different areas in power stations.

Our materials and products come in a wide range of constructions and styles. They are designed for fabricating insulation into different parts and components, as well as heat shields and insulation sleeves.





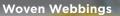
Fabrics with V4A

# **Thermal Process Plants**

#### **Glass Fabrics with PTFE**

Fabrics with Silicone Coating





# Thermal processing plants have to meet very high safety requirements.

Thermal insulation and seals in processing plants have high safety requirements. In order to achieve optimal results with our materials, they have to be precisely adapted to your specific needs and requirements, which we have a long history of developing.

Our product range includes solutions for all types of applications, including materials for thermal insulation and compensator construction.

# Locations



## **HEAD OFFICE**

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