


POWER OF INSULATION IN INDUSTRY



Quality, cost cut and sustainability
assured by a wide range of Knauf
Insulation products

KNAUF INSULATION TECHNICAL SOLUTIONS

As a well-known insulation specialist in the process industry, HVAC and shipbuilding, Knauf Insulation has more than 40 years experience in insulation industry. We represent one of the fastest growing and most respected names in insulation worldwide.

As part of the Knauf Group, we specialize in the field of technical insulation and produce insulation materials designed for HVAC, the process industry and shipbuilding to provide exceptional energy savings. With our natural binding agent

ECOSE® Technology without the addition of formaldehyde, we reduce energy consumption during the production of our products and improve the energy efficiency of the final product. As a result, within the scope of our Power-teK®, Thermo-teK,

Fire-teK® and Sea-teK® segments, we offer the perfect product for every application in technical insulation and provide the best possible combination of energy efficiency, fire protection, sound absorption and sustainability.



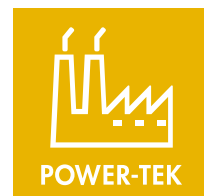
Thermo-teK

Sustainable and safe insulation materials for HVAC.



Fire-teK®

Optimal passive fire protection.



Power-teK®

Economical and efficient insulation for the process industry.

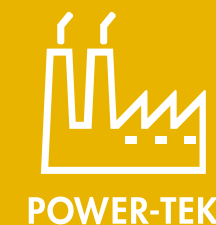


Sea-teK®

Marine certified insulation materials for shipbuilding.

INDUSTRIAL INSULATION

PERFECT SOLUTION FOR EVERY APPLICATION IN INDUSTRY



Reliable certified products:

These apply to our standard products



Recycling



Industry insulation relevant certificates:



COST-EFFECTIVE INSULATION IN INDUSTRY

INSULATION SOLUTIONS FOR INDUSTRY - POWER-TEK®

Excellent Mineral Wool insulation materials for lower heat losses, energy costs and CO₂ emissions, as well as for passive fire protection and sound insulation in power stations, process industry, food, paper, chemical and petro-chemical industry and plant construction.

Mineral Wool properties

Energy efficiency

The industry is changing rapidly and energy efficiency is high on the agenda as industries around the world look for ways to reduce their CO₂ emissions and energy consumption while remaining competitive (increasing energy costs are becoming a growing burden). The best answer to these changes is hardly complicated: just insulate. Our Mineral Wool products provide the optimal solution for every application and are therefore ideally suited for energy-conscious, cost-conscious and environmentally friendly use.



Sound insulation

Loud noises are generated by the operation of industrial pumps, machinery and installations. Good mineral wool sound insulation is especially important to ensure the absorption of sound waves in order to protect health and the environment.



Fire protection

Fire safety in industry is an essential part of any serious industrial plant. It considers not only the fire plan and procedures, but above all, it has to assure that only fire safe materials are used in all fields of assembly. Our Mineral Wool insulation materials, developed specifically for usage in process industry are all classified as non-combustible class A1 or A2 and have melting point of fibres > 1000 °C.

Applications

PIPE INSULATION

Pipelines enable the flow of energy and media between the various industrial plant components. Therefore technically adequate pipeline insulation is especially important in order to reduce heat losses, noise pollution and the risk of corrosion, as well as ensuring a constant process temperature and the necessary contact protection and fire protection.

BOILERS

Industrial boilers have to withstand especially high temperatures and

Power-teK products ensure:

- Maximum application temperature limit: up to 700 °C
- Fibre melting point > 1000 °C
- Up to 95 % cost saving in comparison with uninsulated equipments
- Maintenance-free, long life and high performance capability

pressures, with vibrations and fluctuating temperatures. They have the greatest impact on the efficiency of the entire power station. Two to three-layer insulation is therefore especially important. This reduces heat losses and therefore the energy consumption of the plant and provides the necessary contact protection.

FURNACES & OTHER EQUIPMENTS

Industrial furnaces operate at very high temperatures therefore their envelope can become extremely hot. Installation of the high temperature insulation will reduce the furnace temperature oscillation, increase energy efficiency and ensure safety of the operators against burns.

TANK WALLS & HEAT STORAGE

Heat storage tanks, hot water tanks and other vessels store the liquids at high temperatures, whilst other tanks need to protect stored content from overheating. Technically adequate tank insulation, which ensures excel-

lent thermal insulation performance, is necessary to increase energy efficiency by reducing heat losses and keep stored content at stable temperatures preventing overheating.

TANK ROOFS

Tank roofs usually need to be durable, walkable and at the same time well insulated. Application of industrial insulation with high compressive strength and excellent thermal conductivity is necessary.

CRYOGENIC APPLICATIONS

Cryogenic pipe and tank temperatures can drop to -180°C. Adequate insulation is therefore necessary to minimize heat gain and ensure safe and efficient operations of the facility.

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KNAUF INSULATION COMPLETE PRODUCT PORTFOLIO FOR INSULATION IN INDUSTRY



LAMELLA MATS

Power-teK® LM 450-700/ALU

Power-teK® LM ALU are a Rock Mineral Wool Mats, consisting of individual mineral wool strips (lamella) that are bonded on one side to a tear-resistant, glass mesh reinforced aluminium foil with maximum service temperature of 450/550/640/700 °C.

Use: Tank roofs (LM 550), Pipe insulation, **Furnaces & other equipment**, Tank walls & heat storage, **Boilers**

WIRED MATS

Power-teK® WM 620/640/660/680

Power-teK® WM is a rock mineral wool mat with a stainless/galvanised-steel wire mesh and stainless/galvanised-steel stitching wire on one side, with or without ALU foil between the mesh and the mineral wool and with max service temperature from 620 to 680 °C, depending on density.

Use: Pipe insulation, Pipe insulation elbows, **Furnaces & other equipment**, Tank walls & heat storage, **Boilers**

PIPE SECTION

Power-teK® PS 680, Power-teK® PS 700

Power-teK® PS is a 1200 mm long circular-wound mineral rock wool pipe section with max. service temperature of 680/700 °C and slit on one side for easier installation. A supporting construction for the cladding is not necessary.

Use: Pipe insulation, Pipe insulation elbows

Power-teK® PC 600

Power-teK® PC 600 is a cut from block Rock Mineral Wool pipe section, slit on one side for easier installation, with density 80 kg/m³ and specially designed to be used on pipe lines, where DN > 300 mm.

Use: Pipe insulation

Power-teK® PB 640/680 ALU

Power-teK® PB is a pre-assembled Rock Mineral Wool pipe belt for use on pipelines with nominal diameters > 300 mm and for multi-layer installations with no need for a supporting structure.

Use: Pipe insulation

LOOSE WOOL

Power-teK® LW STD

Power-teK® LW STD is a loose Rock Mineral Wool without binder, used as universal solution for lining insulation in cavities (confined spaces) in various high-temperature and fire protection applications.

Use: Cavities (confined spaces), Furnaces & other equipment, Tank walls & heat storage, Irregular shapes

Power-teK® LW CRY

Power-teK® LW CRY is a loose Rock Mineral Wool without binder for cryogenic applications.

Use: Cryogenic applications

Power-teK® LW 020

Power-teK® LW 020 are loose Rock Mineral Wool flocks made of virgin mineral wool, suitable for insulation of confined spaces and specially designed for installation with blowing machines.

Use: Furnaces & other equipment, Tank walls & heat storage, Irregular shapes

BOARDS

Power-teK® BD 450-700/ALU

Power-teK® BD is a Rock Mineral Wool insulation board (available also in ALU version), optimised for high-temperature applications, with excellent thermal conductivity values and maximum temperatures up to 700 °C. Depending on the density (50 to 150 kg/m³), compression resistances of up to 10 kPa are possible.

Use: Furnaces & other equipment, **Tank walls & heat storage**, Tank roofs

Power-teK® BD 772/775/778

Power-teK® BD 772/775/778 is a Rock Mineral Wool insulation board with high compressive strength and optimised for use on tank roofs, where walkability for maintenance purposes is also needed. For use on high-temperature tanks, the product also features excellent thermal conductivity values.

Use: Tank roofs

ROLLS

Power-teK® FM® 620/640/660/ALU

Power-teK® FM is a non-combustible Rock Mineral Wool mat, (available also in ALU version) It is a universal solution for lining or multi-layer insulations and available for high-temperature applications with maximum service temperatures of up to 660 °C.

Use: Pipe insulation, Pipe insulation elbows, **Furnaces & other equipment**, Tank walls & heat storage, **Boilers**, Irregular shapes

Power-teK® CM 450/620 ALU

Power-teK® CM 450/620 ALU is a highly flexible yet firm Rock Mineral Wool mat based on a special fibre orientation. On one side it is bonded to a tear-resistant, glass-mesh reinforced aluminium foil. It offers a very good compromise of being flexible for installation and a very good level of compression resistance of the final installation.

Use: Pipe insulation, Pipe insulation elbows, Furnaces & other equipment, Tank walls & heat storage, **Boilers**, Irregular shapes

Power-teK® RL 220

Power-teK® RL 220 is a lightweight Glass Mineral Wool mat (delivered in rolls). With optimised thicknesses achieving up to 300 mm per layer, Power-teK® RL 220 delivers a cost-effective solution using a minimised number of layers. Outdoors It is usually used underneath additional cladding (weather protection).

Use: Tank walls & heat storage

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TIPCHECK ENERGY AUDITS

RECOGNISE UNEXPECTED SAVING POTENTIAL:
APPLY FOR TIPCHECK AUDIT

Industry experience in general shows that in a typical European plant **10-19% of insulation is not sufficient, damaged or missing.**

As many as 3 out of 4 TIPCHECK clients immediately invest or plan to invest in the recommended insulation solutions after a TIPCHECK audit.

Taking into account the very short payback periods, an improved insulation is a very attractive investment. Participate and co-create your new greener environment. Apply for a TIPCHECK audit and get ahead of the competition and in line with the 2050 net-zero EU agenda at the same time.

Our **certified TIPCHECK auditors** will help you to recognise the savings potential of your plant.

APPLY HERE:



Insulation of one industrial valve

DN: 150
Working temperature: 150 °C
Saving potential in one year:
10.000 kWh = 900 m³ gas
Insulation costs: 250 - 300 EUR
Amortization time: < 1 year

Insulation of one HVAC valve

DN: 150
Working temperature: 90 °C
Saving potential in one year:
4.600 kWh = 415 m³ gas
Insulation costs: -ca. 166 EUR
Amortisation time: ca. 1,5 year

KNOWLEDGE PLATFORM

Join Exper-team and use a knowledge platform and know-how transfer for all areas of technical insulation.
From experts for experts!



TENDER TEXTS SAVE VALUABLE TIME



DOWNLOAD TECHNICAL DATA SHEETS



POWER-TEK PB SYS WM1 NEW KNAUF INSULATION SYSTEM WITHOUT SUB-CONSTRUCTION



Efficient and economical with a quick payback for insulation of pipe works with diameter bigger than DN 300.



BENEFITS:

- Price ✓
- Installation time ✓
- Logistic ✓
- No thermal bridge ✓
- Compressive strength ✓

HEAT LOSS*
SAVING UP TO
21 %

SAVINGS
IN LOGISTIC
UP TO**
80 %

INSTALLATION TIME***
SAVINGS UP TO
23 %

OUR MINERAL
WOOL PRODUCTS
ARE PRODUCED
WITH INNOVATIVE
ECOSE®
TECHNOLOGY



SPECIFIERS CAN
TRUST OUR
SUSTAINABLY
DEVELOPED PRODUCTS
AND INSTALLERS
BENEFIT FROM
USER-FRIENDLINESS.

- BINDER WITHOUT ADDED FORMALDEHYDE**
- NATURAL LOOK**
- TECHNICAL PERFORMANCE**
- ENVIRONMENTALLY FRIENDLY**



FOR A BETTER WORLD

Our products save energy, cut emissions and are designed to make sure buildings and applications are good for the environment and keep people healthy, safe and well. Across our company, we have been working on sustainability for over a decade. We have focused on zero harm, reducing our energy use and emissions, recycling our production waste, incorporating circular economy principles and constantly campaigning for better and more sustainable buildings and applications. Over the past decade, we have achieved great things and we are proud of how we have changed our company, helped our colleagues, communities and customers and reduced our impact on the environment. But sustainability is a process of continuous improvement. We must do more for our people and our environment. That's why we've created our new sustainability strategy. We call the new strategy 'For A Better World' because it builds on the success of our mission statement: "Our vision is to lead the change in smarter insulation solutions for a better world."



LIVING WITH A GREEN HEART

LIVING WITH A GREEN HEART

The "Living with a Green Heart" initiative promotes a comprehensive approach to sustainable development with **emphasis on societal and social sustainable development**, placing an informed individual at the forefront of sustainable transformation of society. "Living with a Green Heart" presents a unique story and approach that encourages companies, organisations, and individuals to:

- ✓ Create sustainable products and solutions which can transform grey cities into green oasis, build safe and comfortable homes and lead to a better world for all of us.
- ✓ Lead social sustainability actions, cocreating a more informed and kinder future for ourselves and those that come after us.
- ✓ Build a friendlier and more responsible environment for employees at all levels and in all aspects, appreciating the diversity and improving our relationships, as well as the way we work, collaborate, and coexist within our environments.

CONTACTS

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Premium member of



COMPANY PROFILE

Knauf Insulation is one of the most respected names in the insulation industry worldwide with over 40 years of experience and still growing fast. Over 6.000 employees in more than 40 countries and 29 manufacturing sites. Being part of the family-owned Knauf group, Knauf Insulation Technical Solutions provides solutions for customers' requirements in industry, marine applications, heating, ventilation and air conditioning. A profound market understanding and insulation know-how enables us to provide a broad range of products to meet your specific needs.

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