

KNAUFINSULATION



Technical Solutions

***Power of insulation
in industry***

Build on us.

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

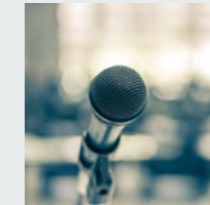
Energy efficiency

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.

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

2 BOILERS

Industrial boilers have to withstand especially high temperatures and 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.

4 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 for preventing overheating.

5 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.

6 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.

Applications

1 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.

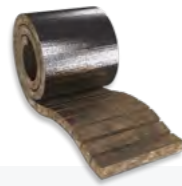
3 TANK WALLS & HEAT STORAGE

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

Knauf Insulation complete product portfolio for insulation in industry



LAMELLA MATS



Power-teK® LM 450-700/ALU

Power-teK® LM ALU are 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. MST: 450/550/640/700 °C.
Use: Tank roofs (LM 550)(4), Pipe insulation (1), Furnaces & other equipment (5), Tank walls & heat storage (3), Boilers (2)

WIRED MATS



Power-teK® WM 640/660/680

Power-teK® WM are Rock Mineral Wool mats 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. MST: 640/660/680 °C.
Use: Pipe insulation (1), Pipe elbows insulation (1), Furnaces & other equipment (5), Tank walls & heat storage (3), Boilers (2)

PIPE SECTIONS



Power-teK® PS 680, Power-teK® PS 700

Power-teK® PS are 1200 mm long circular-wound Rock Mineral Wool pipe sections with a slit on one side for easier installation. A supporting construction for the cladding is not necessary. MST: 680/700 °C
Use: Pipe insulation (1), Pipe elbows insulation (1)



Power-teK® PB 640/680 ALU

Power-teK® PB are pre-assembled Rock Mineral Wool pipe belts for use on pipelines with nominal diameters > 300 mm and for multi-layer installations with no need for a supporting structure. MST: 640/680°C
Use: Pipe insulation (1)



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. MST: 660 °C
Use: Cavities (confined spaces), Furnaces & other equipment (5), Tank walls & heat storage (3), Irregular shapes

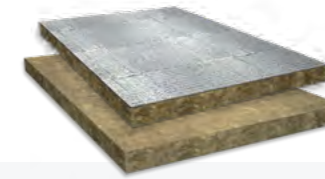
Power-teK® LW CRY

Power-teK® LW CRY is a loose Rock Mineral Wool without binder.
Use: Cryogenic applications (6)

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 (5), Tank walls & heat storage (3), Irregular shapes

BOARDS



Power-teK® BD 450-700/ALU

Power-teK® BD are Rock Mineral Wool insulation boards (available also in ALU version), optimised for high-temperature applications, with excellent thermal conductivity values. Depending on the density (50 to 150 kg/m³), compression resistances of up to 10 kPa are possible. MST: 450/550/620/640/660/680/700 °C
Use: Furnaces & other equipment (5), Tank walls & heat storage (3), Tank roofs (4)



Power-teK® BD 772/775/776/778

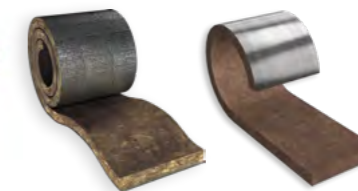
Power-teK® BD are Rock Mineral Wool insulation boards with high compressive strength and optimised for use on tank roofs, where walkability for maintenance purposes is also needed. For use on high-temperature tanks, they also feature excellent thermal conductivity values. MST: 450 °C
Use: Tank roofs (4)

MATS



Power-teK® FM 620/640/660/ALU

Power-teK® FM are non-combustible Rock Mineral Wool mats, (available also in ALU version), a universal solution for lining or multi-layer insulations and available for high-temperature applications. MST: 620/640/660 °C
Use: Pipe insulation (1), Pipe elbows insulation (1), Furnaces & other equipment (5), Tank walls & heat storage (3), Boilers (2), Irregular shapes



Power-teK® CM 450/620/660 ALU

Power-teK® CM are highly flexible yet firm Rock Mineral Wool mats based on a special fibre orientation. On one side the mat is bonded to a tear-resistant, glass-mesh reinforced aluminium foil, offering a very good compromise of being flexible for installation and a very good level of compression resistance of the final installation. MST: 450/620/660 °C
Use: Pipe insulation (1), Pipe elbows insulation (1), Furnaces & other equipment (5), Tank walls & heat storage (3), Boilers (2), Irregular shapes



Power-teK® RL 220/ALU

Power-teK® RL are lightweight Glass Mineral Wool mats (delivered in rolls) available also in ALU version. With optimised thicknesses achieving up to 300 mm per layer, they deliver a cost-effective solution using minimised number of layers. MST: 220 °C
Use: Tank walls & heat storage (3)

Power-teK® PB 640/680 ALU: NEW LOGISTICS OPTIMIZED SOLUTION

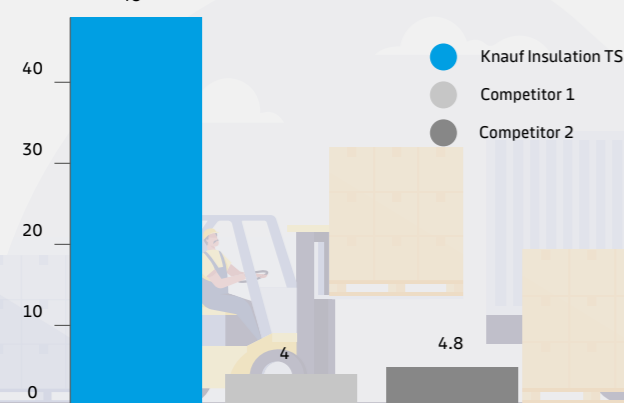
Efficient, economical and time saving solution especially designed for big diameter pipes (> 324 mm)



Job site logistics savings

Our product enables you to handle **10 to 12 times** more pieces per pallet on the job site, and up to 24 times more for larger dimensions, significantly streamlining your operations.

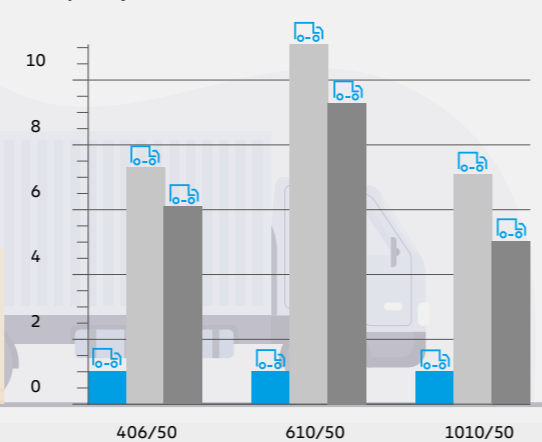
Meters of insulation on one pallet (e.g., 406/50mm)
48



Delivery logistics savings

We significantly reduce logistics costs by transporting **6 to 8 times more** items per truck than our competitors.

Number of trucks needed for transport of the same quantity of insulation material



OUR MINERAL WOOL PRODUCTS ARE PRODUCED WITH INNOVATIVE ECOSE® TECHNOLOGY

with **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



TIPCHECK ENERGY AUDITS

RECOGNISE UNEXPECTED SAVING POTENTIAL: APPLY FOR TIPCHECK AUDIT

Industry experience in general shows that in a typical European plant **2-10% 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

DOWNLOAD TENDER TEXTS



DOWNLOAD TECHNICAL DATA SHEETS



FOR A BETTER WORLD

Our products save energy, reduce emissions, and promote environmentally friendly, healthy, and safe buildings. For over a decade, we've focused on sustainability, reducing energy use and waste, embracing circular economy principles, and advocating for more sustainable practices. We've made significant progress, benefiting our company, communities, and the environment. However, sustainability is an ongoing effort, and we must continue to do more. That's why we've launched our new strategy, "For A Better World", building on our mission to lead the change in smarter insulation solutions for a better future.

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.

Premium member of



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