





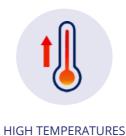






FTB - Flexible Thermal Blanket

FTB is a technical insulation blanket that insulates according to the system's operating and environmental conditions, all types of:



✓ Valves and filters	Expansion joint
✓ Flanges	✓ Pipelines
✓ Pumps	✓ Fittings

Why choose FTB

✓ Expansion vessels

Teknovis3's Flexible Thermal Blanket insulating mats provide real energy savings and reduced CO2 emissions.



Sustainable

FTB facilitates greenhouse gas emission reductions in the environment.



Simplicity

✓ Complex geometry machinery*

FTB is equipped with simple and fast locking systems that allow quick installation, operability, easy maintenance and inspection of the insulated components.



Saving

FTB ensures excellent energy savings and reduces maintenance and procurement



Microclimate

FTB is an insulating blanket that helps to reduce temperatures in working environments.



Safety

FTB reduces the risk of burns and temporarily contains accidental sprayouts of aggressive products while protecting plant staff.



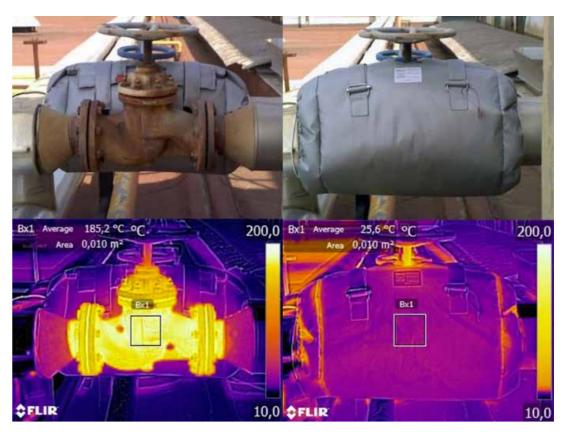
Legislation

FTB is produced both for standard sizes, according to the international EN and ASME directives, as well as customised for any irregular geometrical shape.

Energy Saving with Teknovis3 FTB

Thermographic scanning is a tool that allows an instantaneous infrared photography to be taken in the pre- and post-installation phases. Teknovis3 removable industrial insulation systems reduce waste heat by more than 80%, enabling energy savings and lower CO2 emissions.

Thermographic scanning







After 25,6 °C



^{*}turbines, compressors, internal combustion engines, intake and exhaust pipes, steel machinery, marine equipment in the engine room, etc.





Industrial insulation blanket for high temperature cycles

Industrial plants that use hot water, steam, diathermic oil or other fluids are considered as high temperature cycle plants. Industrial insulation with Teknovis3 solutions, is essential to guarantee energy savings and to reduce CO2 emissions, helping to achieve the environmental sustainability goals in the plant production processes and personnel safety.

✓ Hot / overheated water

✓ Steam

✓ Diathermic oil

✓ Other fluids

Applications



HIGH TEMPERATURES

20° C

650° C

Energy saving

3.324

MWh / year

© Money saving
99.722
€/year

Co₂ CO₂ Reduction

1.020

Tons / year

Trees Planted
40.820
Unit / year







Case History

The successes of Teknovis3 industrial insulation solutions are an evidence of effective energy saving and CO2 reduction. In particular we want to share the successful project of a company in Food sector with the following parameters:

- Items installed = 1332
- Plant operating hours = 8000 hours/year
- Average operating temperature = 160°C
- Annual energy cost = 30 €/Mwh
- The results achieved are equal to € 99.722 in annual energy costs and a reduction in CO2 emission of 1.020 tons per year, which is equivalent to 40.820 trees planted (considering one tree planted for every 25 kg of CO2 not released into the environment).









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Measure energy savings with Gaia E-Tracker System

Installing FTB with Gaia E-Tracker System, the innovative IoT technology patented by Teknovis3, it is possible to monitor and calculate real-time energy savings and CO2 emissions reduction.

Thanks to the constant measurement of the quality of the insulation level of industrial plants, Gaia is able to automatically calculate energy savings and the reduction of CO2 emissions, while monitoring the thermal load of a plant's fluids.



The advantages of Gaia e-Tracker System

Thanks to its high level of technological innovation and ease of use, Gaia offers numerous advantages to companies that want to reduce CO₂ emissions and to measure the level of energy savings.

- Automatic calculation of energy savings and CO2 emission reduction
- Data available directly on the Gaia device display and WebApp
- Useful tool for implementing the continuous improvement methodology in production processes
- Continuous thermal loads control
- Unlimited data storage capacity
- Easy installation
- Constant monitoring 24/24 h
- Usable on different types of insulations
- Data available for export from the WebApp

With the Gaia WebApp, data are translated into values

Developed by the Teknovis3 R&D Department, Gaia devices are being installed at different points in a plant and transmit data to the cloud.

An advanced algorithm processes the data and displays the results on a WebApp.





CO2 reduction: CO2 reduction trend



Thermal measurement: Temperature trend inside and outside the insulation









