

# FTB pH-i

Flexible Thermal Blanket pH indicator



## FTB pH-i

FTB pH-i is a thermal insulation blanket with pH indicator on 1-14 range. It is made of innovative high performance materials which insulates all kind of elements, on hot and cold lines.



HIGH TEMPERATURES



COLD



CORROSIVITY

## Why choose FTB pH-i

Teknovis3's FTB pH-i thermal insulation solution is the high quality solution that gives long lifetime even when there is a danger of fluid leakage.



### Sustainable

FTB pH-i supports the reduction of greenhouse gas emissions into the environment.



### Simplicity

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



### Saving

FTB pH-i provides excellent energy savings and reduces maintenance and purchasing costs.



### Microclimate

FTB pH-i is an insulating blanket that helps to reduce temperatures in working areas.



### Safety

FTB pH-i reduces the risk of burns and temporarily contains leakages of aggressive fluids protecting plants personnel.



### Legislation

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

✓ Checks the acidity/alkalinity of any fluid leakage

✓ Easy to assemble and disassemble, even where access is reduced

✓ Maintenance time and costs reduction for the plant

✓ It can be used in areas with danger of explosion

✓ In case of leakage of aggressive fluids, dangerous for people and for the plant integrity it acts promptly on the basis of the indicated pH level

## The FTB pH-i solution's features

### Check pH level quickly and easily

The image above shows a detail of FTB pH-i, for a 2 ways valve, with the pH indicator windows through which to check the pH of the fluid leakage, if it is present. In case of leakage, the pH indicator will be colored based on the degree of acidity/alkalinity of the leaked fluid.

### Recognizable from other insulation systems

The orange stripe used by FTB pH-i makes it easily recognizable as a specific thermal insulation blanket for applications on systems with the possibility of fluid leakage.



## FTB pH-i for plants with corrosive fluids

Industrial plants using corrosive fluids have high security standards to maintain. In such a context, industrial insulation, through Teknovis3's customized solutions, allows easy inspection, maintenance and resistance of the product with specific compositions. This enables them to achieve an increased safety level and to reach their sustainability goals.

- ✓ Corrosive fluids
- ✓ Acids

## FTB pH-i 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



CORROSIVITY

### Applications



HIGH TEMPERATURES



## FTB pH-i for cold or low temperature cycles

Industrial plants that use cold or refrigerated water, glycol or other fluids are defined as low temperature cycle plants. Industrial insulation, using Teknovis3 solutions, is essential to ensure energy savings and CO2 emissions reduction and to help achieving environmental sustainability goals in production processes.

- ✓ Cold water
- ✓ Refrigerated water
- ✓ Glycol
- ✓ Other fluids

### Applications



COLD



## Measure energy savings with Gaia E-Tracker System

Installing FTB pH-i 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

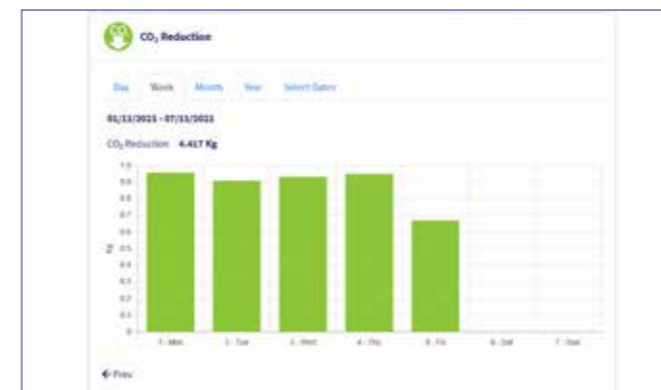
Thanks to its high level of technological innovation and ease of use, Gaia offers numerous advantages to companies that want to reduce CO2 emissions and to measure the level of energy savings.

- 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

