





# Leak detection which prevents CUI



- Prevents risk of CUI (Corrosion Under Insulation)
- Detect, test and identify any fluids on pipe, in or under insulation.
- Drains moisture from the insulation system
- Contributes to HSE and plant integrity
- Prevents loss of insulating value
- Easy installation
- Maintenance free
- . Ex certified







### Danger

(Sea)water or moisture in insulation systems, in combination with temperatures from ambient to approx 170°C, can lead to serious Corrosion Under Insulation (C.U.I.) of pipes and equipment.

#### The problem

In most hot insulation systems, aluminium or steel cladding is being used. In these systems joints and seams are sealed to prevent water ingress or moisture to condensate in the insulation. Due to several causes water or moisture still gets in the

insulation and will cause deterioration of thermal properties and start corrosion (C.U.I.). Creating extra measurements is essential.

Also leakages from valves and flanged connections can cause these problems





#### The Solution:

H2Obvious is a permanent leak detector that responds to all non aggressive fluids. Installed in thermal insulated pipe or equipment it's primary function is to capture, indicate and identify fluids due to

- Water ingress
- Leakages
- Condensation

If the chamber/vial gets filled, indication for this can be shown by:

1. Orange float rises with flashing light (conductive fluid like water)

2. Orange float rises but with no flashing light (non-conductive fluid e.g. hydrocarbon)

In such an event the content from the vial can be taken for further analysis and appropriate action can be taken. Tests conclude that it detects presence of fluid in situations with fluctuating temperatures and cyclic vaporising and condensing within the insulation. Detection reaction times are in such a timeframe, making repairs possible before serious corrosion and high costs occur.

## Specification:

Power source: Lithium thionyl chloride

battery

Operational life cycle: 5 years

Min. operation time after

Activation (20°C): 7 days

Ambient service temperature: -40 °C to 80 °C

Water resistance index: IP66
Diameter: 35,8 mm
Weight: 60 gr.
Weather resistance: Excellent

Hazardous area product

marking: EEx ia IIC T4 (equipment)

EEx ia II (component)

Deluge test: Shell/ERA DTA01



H2Obylous

Model 1001 Water Detector

Serial number 2006/0000200

-40°C to +80°C)