

INCREASED DOUBLE WALLED TANK SAFETY WITH IIOT

OIL & GAS INDUSTRY

AT A GLANCE

Installing smart sensors in sumps and between storage tank double membranes gave this American operator a double layer of 24/7 protection against environmental damage and costs, while slashing inspection spend.



CHALLENGES

01. Traditional manual inspections can't identify when one of the membranes in a double membrane storage tank is breached.

02. If the second layer is breached, damaging product leaking into the sumps can be hard to detect before it reaches environmentally catastrophic levels.

03. Travelling to the site is time-consuming, and on-site inspections can only lift the lid on sumps to check if they hold any product. Weekly inspections may not spot a leak until more than six days of product has escaped.

KEY METRICS



75% Cut

In on-site inspections, saving travel time and costs.



24/7 Monitoring

Leak detection Monitoring thanks to sensors & IIoT.

The data provided is based on customer feedback regarding the use of our IIoT solution in specific scenarios. While we strive for accuracy, results may vary based on individual circumstances.

SOLUTION

- » Smart sensor solution was identified at the design stage, and the tanks were fitted with inter-membrane conduits to accommodate the sensors.
- » Sensors were also situated in sumps, eliminating the need for operators to come out for weekly checks.
- » This gave the operator peace of mind, as a leak through one or both membranes would be detected within minutes.

BENEFITS



Less sump manual inspections, saving travel and costs.



Leak risk and cleanup costs drastically reduced.



Enhanced safeguards for the environment against harmful products leaks



Early Warning of a failure of the first membrane allowing prompt action.