

i-ALERT®

Case Study

i-ALERT® equipment health monitor Application: Oil & Gas

Company finds way to continuously monitor rotating equipment in widely dispersed locations.

Problem

A global Oil & Gas company has refineries and a fuel terminal distribution network of over 100 depots, diesel stops, service stations and marine facilities throughout Australia. Their Sydney-based reliability team is responsible for the hundreds of pieces of rotating equipment located at these sites. Team members needed to fly out twice per year to each site to get as many readings on as much equipment as they could. When at site, they would sometimes find that the equipment was unable to be run, so data could not be collected. Overall, this meant that the reliability program wasn't preventing unexpected failures as it was intended to do.

Benefits

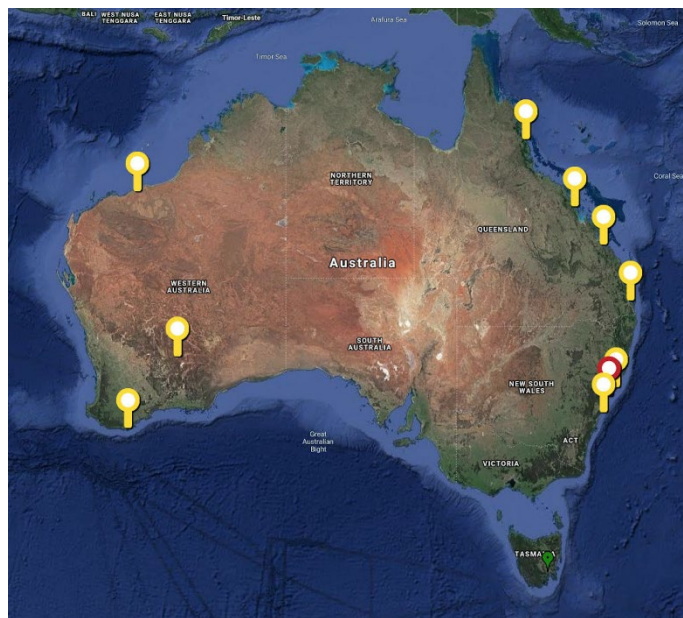
Unlike handheld data collection devices, the i-ALERT equipment health monitor provides an uninterrupted stream of time-stamped data. Each tiny sensor tracks tri-axial vibration, tri-axial kurtosis, temperature, and run-time hours 24/7/365. What's more, it is Bluetooth® Smart-enabled for easy data collection. Data can be uploaded to an i-ALERT Ai Platform, which allows a reliability team to monitor and manage all i-ALERT-enabled machines using a simple web interface from any location. Built-in analysis tools allow them to view and analyze FFT (Fast Fourier Transform) and TWF (Time Waveform) data sets to diagnose machine faults.



The i-ALERT® sensor records 3-axis vibration and temperature data every five minutes.

Solution

The company ordered a few trial i-ALERT sensors for a site that had been reporting unusual vibration in a piece of rotating equipment. After installing the sensor and collecting three days of vibration and temperature data, the reliability team was able to quickly diagnose an issue. They were so impressed, a nationwide rollout was authorized and they purchased sensors for all of their rotating assets. This investment eliminated the need to fly out to remote locations, saving substantial amounts of time and money. Even better, it has enabled a far more comprehensive and effective reliability program.



The i-ALERT Ai Platform enables the company to continuously monitor rotating equipment at sites across Australia from a unified web interface.

Part of the ITT Family

