

RELIABILITY SUCCESS STORIES

Best practice condition based maintenance in action.



INEOS CHEMICAL PLANT - MSF2 SENSORS

Working to achieve a safer environment with improved access to collect readings from plant machinery using the new MSF2 sensor, supported by Machine Sentry®



THE CHALLENGE

Is it possible to mount the wireless MSF2 sensors on a furnace fan and collect readings on an isafe tablet from ground level, reducing the need for personnel to climb multiple floors to access the assets?



OUR APPROACH

The furnace fan in question was presenting a fault, creating an ideal opportunity to test out the new MSF2 sensors.

Sensors would be placed on the fan bearing housing and set to collect readings every 12 hours for one week.

The following week, we would attempt to pull the collected readings onto the tablet from ground level.

After some old school mathematical calculations we worked out that we would be attempting to collect readings 36m (118 feet) below the sensors.



OUR FINDINGS

One week later, we returned to site and began collecting readings. The tablet successfully connected despite the distance thanks to the powerful range capabilities on the new MSF2 sensors.

We analysed the readings and discovered that the fan bearings were in need of replacement, likely causing the fault discovered previously.



“ This is the kind of approach that will help us all drive forward to a more reliable and predictable operation of our plants. ”

THE SOLUTION

With easy access to asset readings our customer can stay informed and ahead of the curve, with early warning of asset condition deterioration.

In the case of the faulty furnace fan, a quick and exact analysis of the results has enabled our customer to plan in and calculate the cost of the remedial works involved in replacing the fan bearing.

FOLLOW UP

AVT Reliability® will continue to support the customer with their condition monitoring program, advising additional sensor placement on the motor and bearings, providing increased opportunities to collect real time data and monitor ongoing machinery health.

With ongoing assistance to interpret results we can support our customer to continually make improvements to asset reliability and plant safety.

AT A GLANCE

CLIENT	Ineos
LOCATION	Grangemouth
INDUSTRY	Chemical/Pharmaceutical
PROCESS	The Ineos plant supplies plastic products and gas.
EQUIPMENT	AC motors, pumps, gearboxes, compressors
PRODUCTS	Machine Sentry® Online Machine Sentry® 2 Sensors Machine Sentry® Mobile ADA (Automated Diagnosis Assistant)
SERVICES	Fault finding and condition monitoring support

Need advice?
Contact our experts

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