

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

The existing hard wired sensors were becoming frayed and weathered. Collecting readings through the thick fan cowling and 6 meters away on the gearbox could potentially prove problematic for wireless sensors. Test to be conducted.



OUR APPROACH

Our objective was to find a wireless solution that would enable vibration readings to be collected, eliminating the requirement for hard wired sensors.

The powerful new MSF2 sensors have the ability to connect through the large 5 inch thick fan cowling to the sensors on the gearbox.

We set out to prove the concept by placing a sensor just inside the open hatch of the cowling and then walking around the other side so that we were double the required distance, providing optimal conditions for a test run.



OUR FINDINGS

The sensors immediately connected and with the extended distance of the test scenerio we were confident that once the fan cowling was closed and the fan was back in commission, we would be able to stand safely outside, 6 meters from the gearbox and collect clear vibration readings.

This opportunity greatly broadens the scope of condition monitoring for the client.



“ 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

Using the MSF2 sensors we could eliminate the wiring issues that our customer had experienced over the years and increase the amount of data collected, from one reading per month to one reading per day.

Fitting 2 sensors on each of their 7 gearboxes will provide an excellent overview of all assets and help them to stay ahead of asset wear.

FOLLOW UP

AVT Reliability® will continue to support the customer with their condition monitoring program, providing assistance to interpret results and consultancy to continually make improvements to asset reliability and plant safety.

AT A GLANCE

CLIENT	Ineos
LOCATION	Grangemouth
INDUSTRY	Chemical/Pharmaceutical
PROCESS	Cooling water and recycling it around the plant, keeping critical equipment temperature down.
EQUIPMENT	Cooling Fan Gearbox
PRODUCTS	Machine Sentry® Online Machine Sentry® 2 Sensors Machine Sentry® Mobile ADA (Automated Diagnosis Assistant)
SERVICES	Condition Monitoring Support

Need advice?
Contact our experts

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