

SEVERE FAULTS CAN BE HIDDEN IN PLAIN SIGHT

GRUNDFOS **iSOLUTIONS**



UNCOVER OVERLOOKED FAULTS AT AN EARLY STAGE

Thanks to a continuous digital monitoring solution, Elite helped the water and power facility avoid hundreds of thousands of dollars in replacement and labour costs, fines, and fees associated with rental chillers.

The state-of-the-art chilled water facility serves the Midwest region, and is managed by the regional water and light board. The board committed to zero downtime and wants a continuous level of deep actionable diagnostics and alerts. At the plant, the board invested in a maintenance service agreement from a leading chiller OEM and in the continuous digital monitoring solution through Elite Lubrication Specialities.

Using these diagnostics, the Elite Lubrication Specialties team immediately uncovered a critical severe radial imbalance issue in a chiller. The board's service contractor inspected their own data source, the chiller control panel, and, unfortunately, disagreed with the continuous digital monitoring findings.

The situation

Elite Lubrication Specialties used a continuous digital monitoring solution to uncover a severe radial imbalance issue in a chiller at a critical water facility.

The outcome

The advance notification allowed plant operators to reduce the load on the problem chiller until it could be repaired, resulting in huge savings.

\$250,000

REPLACEMENT COSTS AVOIDED

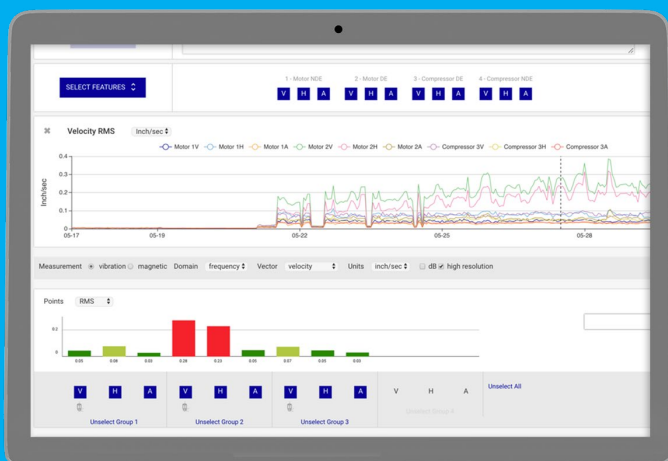
FULL DIAGNOSTIC CONFIDENCE

Due to the criticality of the plant, Elite Lubrication and the board contracted a third-party vibration analysis company to conduct an independent analysis. The company determined that the severe fault was diagnosed correctly, and that the service company had missed the diagnosis.

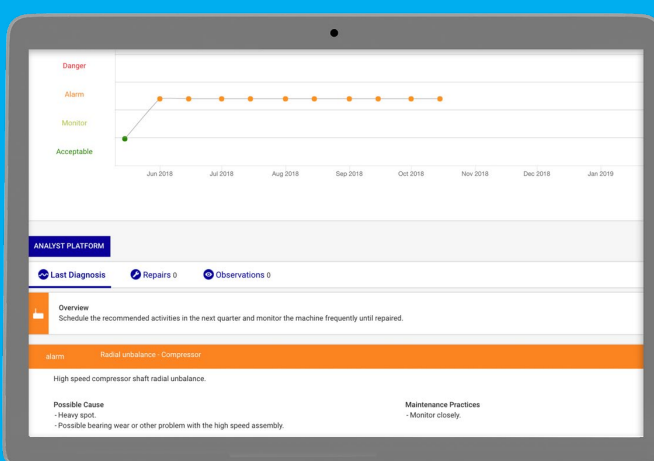
Thanks to these insights and advance notifications, plant operators were able to change how the chillers rotated through periods of lower demand to reduce load on the problem chiller until the issue was resolved, saving valuable resources and reducing the risk of catastrophic failure until the repair was executed.

Today, the solution is used throughout both the chilled water plant and the nearby cogeneration power plant (a 100 MW facility).

MACHINE HEALTH DIAGNOSTICS AND TREND GRAPHS



The advanced vibration analyst platform



Machine health trend showing actionable diagnostic alert