

HEAVY LIFT VESSEL - CONDITION MONITORING DURING OCEAN TRANSIT



Implementing proactive asset management and remote diagnostics to ensure maximum reliability and availability of critical equipment during international transit.

“The ability to act on real-time data while underway made all the difference. We avoided delays and ensured safe operations.”

— Project Lead, AVT Reliability®



THE CHALLENGE

A semi-submersible heavy lift vessel operating between Rotterdam and Mozambique relies on three ballast pumps for safe loading and unloading operations.

Failure of any pump mid-transit could result in significant delays, safety risks, and operational disruption

OUR APPROACH

AVT Reliability® provided a full implementation and training program over two days. The Machine Sentry® system was installed onboard, including mobile and fixed sensors.

Measurements were taken during the voyage, with remote analysis performed by AVT experts. The system monitored vibration, temperature, and other key indicators, allowing real-time insights and decision-making.

OUR FINDINGS

During remote monitoring, one of the ballast pumps showed abnormal vibration behavior.

AVT Reliability® flagged the anomaly and opened an action note. The crew responded immediately, conducting inspections and repairs while still at sea.

Follow-up measurements confirmed the pump's condition had improved significantly, and the action was closed in the Machine Sentry® system.

THE SOLUTION

The crew carried out targeted inspections and repairs based on AVT's findings. No unnecessary replacements were made only components showing wear were addressed.

This demonstrated the precision and cost-effectiveness of the program. Verification measurements confirmed optimised performance.

FOLLOW UP

Upon arrival in Mozambique, spare parts were ordered for future maintenance (only those subject to wear).

This highlights the program's strategic value: combining user input with expert diagnostics to achieve maximum reliability at minimal cost.

AT A GLANCE

INDUSTRY: Maritime / Heavy Transport
PROCESS: Gas compression and cooling
EQUIPMENT: Ballast pump operation during cargo handling
PRODUCTS: Machine Sentry® Sensors
SERVICES: Remote diagnostics, on-site training

Need help?

Contact our experts

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