BEARING CASING DAMAGE IDENTIFIED THROUGH REMOTE MONITORING

"The vibration data highlighted a developing defect, giving the site the information needed to investigate and take corrective action. Following the repair, the reduction in vibration response confirmed the improvement."

~AVT Reliability® Remote Diagnostics Centre

Routine vibration analysis highlighted bearing fault frequencies, prompting inspection and repair before the condition could develop further

AVT Reliability® supports a cement manufacturing site through an established Remote Diagnostics Centre (RDC) programme, using Machine Sentry® fixed sensors to provide regular condition data from monitored rotating assets.

By combining consistent data collection with expert vibration analysis, the programme is designed to identify changes in machine condition early and give the maintenance team clear information on

THE CHALLENGE

During a routine RDC review, AVT analysts identified vibration characteristics at bearing fault frequencies. The change in response indicated that a developing bearing-related condition required investigation.

Bearing defects can progress beyond the bearing itself if left unresolved, increasing the potential for secondary damage and more extensive repair requirements. Early identification gives maintenance teams an opportunity to investigate while the asset remains under controlled monitoring.

OUR APPROACH

Machine Sentry® Fixed (MSF-2) sensors and a Gateway provide condition data for remote review by AVT Reliability® analysts. During the scheduled monthly analysis, the vibration data showed excitation at bearing fault frequencies.

The site was advised of the developing condition so that the asset could be inspected and the source of the abnormal response confirmed.



OUR FINDINGS

Site inspection confirmed physical damage to the bearing casing, validating the condition identified through the vibration data.

Repair was required to prevent the defect from progressing further.



OUR SOLUTION

The site developed and completed an action plan to repair the damaged bearing casing.

Following the work, vibration response reduced, providing condition-based evidence that the intervention had improved the asset's operating condition.

FOLLOW-UP

AVT Reliability® continues to review the asset through the customer's monthly RDC programme.

Ongoing trending provides a baseline following the repair and allows any future change in condition to be identified and investigated at an early stage.

AT A GLANCE

Industry:	Cement manufacturing
Equipment:	Rotating equipment bearing assembly
Products:	Machine Sentry® Fixed (MSF-2) sensors and Gateway
Services:	Remote condition monitoring, vibration analysis and RDC support

Need help?
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