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Condition Monitoring

RELIABLE VENTILATION

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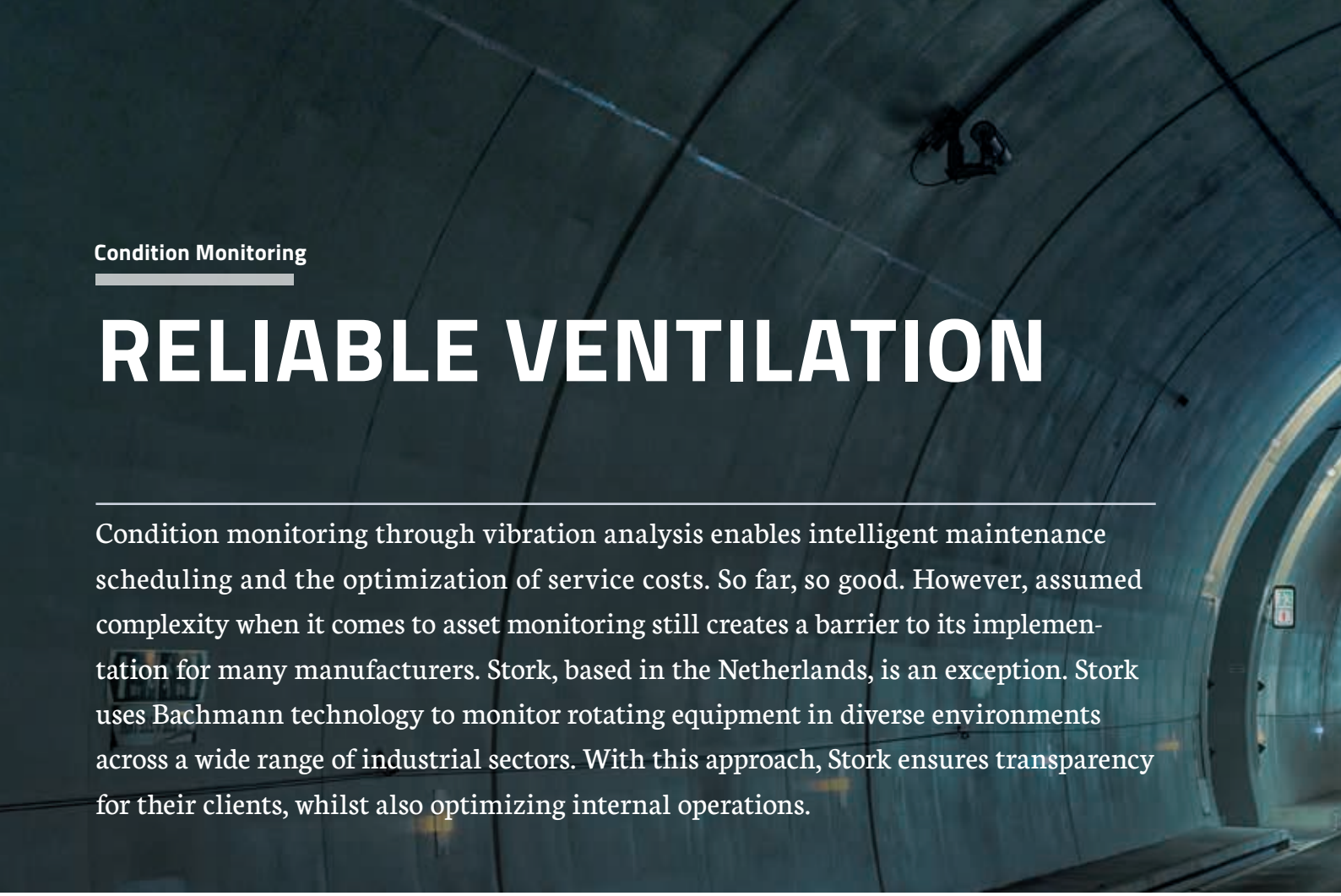

Condition Monitoring

RELIABLE VENTILATION

Condition monitoring through vibration analysis enables intelligent maintenance scheduling and the optimization of service costs. So far, so good. However, assumed complexity when it comes to asset monitoring still creates a barrier to its implementation for many manufacturers. Stork, based in the Netherlands, is an exception. Stork uses Bachmann technology to monitor rotating equipment in diverse environments across a wide range of industrial sectors. With this approach, Stork ensures transparency for their clients, whilst also optimizing internal operations.

Always on the Look-Out

Stork ensures the availability of critical equipment with its operations and maintenance service, as well as numerous in-house repair centers. The company strives to minimize client risk and to lower the cost of maintenance. To achieve this, they rely on highly trained staff with extensive experience, with working methods regularly scrutinized. “We aim for continuous improvement for our customers, which is why we are constantly seeking innovative processes,” explains Floor Beugels, Operations Manager for machine diagnostics, lubrication services, and non-destructive testing at Stork.

Higher Transparency – Lower Maintenance Costs

With Bachmann’s Condition Monitoring System (CMS), the international company now offers customers online monitoring of operating equipment. Applied for the first time in a tunnel ventilation system, Stork analyzes fan vibrations with Bachmann’s online CMS. Sensors at locations with a higher damage risk precisely record the behavior of individual components such as bearings. “In this way, the system provides asset transparency to our customers, and repairs can be carried out at exactly the right time. With condition-based and predictive maintenance, we reduce maintenance costs for our customers and maximize availability.” The operations manager is a fan of the online monitoring approach.

Above all, online monitoring also allows the reliable evaluation of older equipment: “When it comes to older assets, it is difficult to assess ‘normal’ vibration frequencies with individual measurements. You don't know how the equipment behaved when it was new,” says the technician. If continuous data were at hand, the signal trend would clearly reveal which frequencies are generally present, and which could indicate imminent failure.

Efficient Operation

In the past, service technicians made regular site visits, analyzed vibration signals with handheld devices, and then evaluated the results in the office. With this approach, the

STORK

– With around 18,000 employees in over 100 countries, the company serves more than 4,000 clients across 6 continents

– Stork provides customers with fully integrated solutions for operation, maintenance, modification, and assets integrity across a wide range of industries

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service team only collected a snapshot of an asset's condition. Detailed developments and incidents outside this snapshot could not be captured.

Online monitoring has helped the service organization significantly improve the efficiency of its operation. Technicians only need to visit the site if repairs are necessary. "Online monitoring saves our team an enormous amount of time. Our experts spend more time on data analysis – an additional benefit to our customers," says Floor Beugels.

A Compact System

The condition monitoring system was supplied from a single source: In addition to the MX200 processor, Fx220 Fastbus modules, AIC214 vibration sensor modules and BAM100 acceleration sensors, Bachmann also provided the 4G communication router. Based on data from a total of 14 sensors, Bachmann's WebLog Expert® delivers a clear picture of the system's overall health.

New Ideas

Floor Beugels is already thinking ahead: Not only does the CMS provide Stork with a more complete picture of asset condition, in future, sensor data from similar assets distributed worldwide could also be used for in-depth analysis. In addition, Stork wants to incorporate information from the Bachmann system into their Asset Performance Management 4.0 environment to train its algorithms.

Moving Forward Together

Stork encourages customers with critical and difficult-to-access systems to monitor their equipment online. There is no question about the solutions partner: "Bachmann has a wealth of experience in condition monitoring and the collaboration worked really well." Various other applications are already under discussion. For Stork, monitoring these new applications will require only minor adjustments to the setup. The operations manager is pleased: "The best thing is that all applications and assets are displayed by the software in the same, clear way."

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