

More than just listening: The digital sense for your drive.

The causes of drive failures often remain hidden for a long time. Bearings wear out, electrical faults develop, and misalignments put a strain on the system. Without early diagnosis, these problems frequently lead to unplanned downtime.



Hidden Risks in the Drive System

A single malfunction can throw production, deadlines, and budgets into disarray. What starts as a minor issue often ends up causing costly downtime and unnecessary stress for the entire team if not addressed through targeted maintenance



Bearing damage

Wear on bearings and gearboxes is one of the most common causes of failure in industrial drives. Insufficient lubrication, contamination, or overloading can lead to vibrations, increased temperatures, and unplanned downtime.



Electrical faults

Isolation problems, winding damage, or voltage spikes often cause gradual, hard-to-detect failures. Without early diagnosis, there is a risk of costly total losses.



Misalignment

Misaligned couplings and stressed components generate additional forces in the system. The result: increased wear, higher energy consumption, and a shorter service life.

Our Solution

We listen to, monitor, and understand your drive system.

We collect and combine extensive operational and condition data to provide comprehensive condition monitoring, and we integrate our maintenance solution into your system on a customized basis.

Possible sensors



Acceleration



Temperature



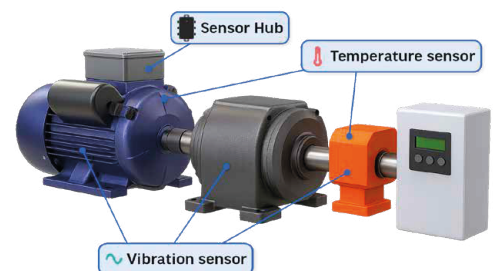
Electricity



RPM

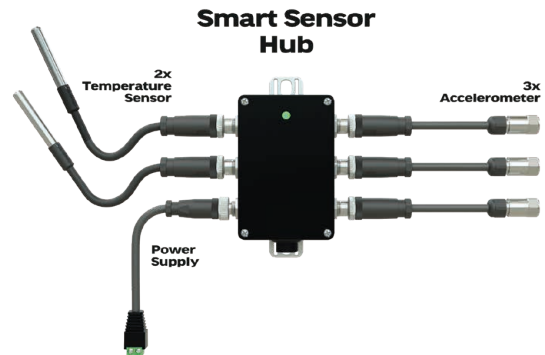


Torque



Detectable damage

Bearing damage, imbalance, misalignment, looseness, gear failure, coupling failure, resonance, overload, lubrication problems, cooling failure, insulation aging, phase error, lack of stiffness, eccentricity, blockage, loss of efficiency, load cycling, slippage, control error, torsion, sluggishness, load instability



Risks become predictability

What used to lead to unexpected downtime can now be identified early on and managed effectively. With intelligent sensors and AI, uncertainty gives way to a proactive maintenance strategy that prioritizes safety, efficiency, and control.



Detecting bearing damage early

By continuously monitoring vibration and temperature, the system detects incipient bearing and gearbox wear long before a failure occurs. Maintenance can be scheduled rather than reactive, and unplanned downtime is significantly reduced.



Preventing electrical failures proactively

Sensors and AI analyze electrical parameters, insulation conditions, and load profiles in real time. Critical changes are detected early on, allowing damage to windings or insulation to be identified and repaired before it leads to a total failure.



Continuously monitor misalignment

By analyzing vibration patterns and operating data, the system reliably detects misalignments and mechanical stress. Corrections can be made in a timely manner, thereby reducing energy losses and extending the service life of the components.

Find the right solution with our workshop

Getting started with predictive maintenance often raises many questions. What should be monitored, which technologies make sense, and is it even worth the effort? **Our workshop** will help you answer these very questions and find a clear direction for your project.



Machine & Plant Workshop

Let's work together to design the best predictive maintenance solution for you.



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