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

Damage and wear to electric motors usually go unnoticed. Windings are exposed to thermal stress, while imbalances and misalignments compromise safe operation. Early diagnosis using AI prevents impending failures.

The Hidden Risks of Engine Operation

Problems that develop unnoticed often come to an abrupt halt. Gradual damage to windings, bearings, or alignment often goes unnoticed for a long time, until it poses a serious threat to production, deadlines, and budgets.

Winding damage

Insulation problems caused by heat, moisture, or voltage spikes often lead to short circuits and unexpected failures. This results in costly downtime and high repair costs.

Bearing damage

Lack of lubrication, contamination, or overloading can cause bearings to wear out prematurely. Increased vibration and temperature often lead to serious consequential damage.

Imbalance & Misalignment

Even minor deviations in the powertrain can generate significant mechanical stress. This reduces the engine's service life and jeopardizes the entire system.

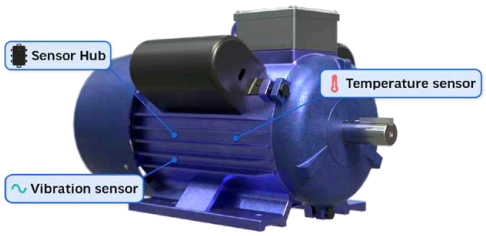
Our Solution

We listen to, monitor, and understand your engine.

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, loosening, gearbox damage, coupling problems, resonance, overload, lubrication problems, cooling problems, insulation aging, phase imbalance, rotor bar breakage, blockages, loss of efficiency, load jumps and instabilities, slip, control problems, torsional vibrations, belt slip, sluggish operation

Monitoring instead of downtime

When data is transformed into clear insights, the fear of downtime disappears. Predictive maintenance turns uncertainty into predictability and protects your motors before problems even arise.

Detecting winding damage early

By continuously monitoring temperature, electrical signals, and insulation condition, the AI detects even the slightest deviations in motor behavior. Critical issues become apparent before a short circuit or total failure occurs.

Preventing bearing damage

Vibration and temperature data provide early warning signs of incipient bearing wear. Maintenance can be planned proactively rather than having to react to unplanned downtime.

Always keep an eye on imbalance and misalignment

Sensors continuously monitor vibrations and mechanical anomalies in the powertrain. Any changes are automatically analyzed, allowing mechanical issues to be resolved before they cause further damage.

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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