CONDITION MONITORING EXPERTISE FOR EVERY INDUSTRY

RELIABLE ONLINE AND PORTABLE SOLUTIONS

BEARING MONITORING WITH SPM HD®

FIRST CLASS VIBRATION ANALYSIS

SPM®

condition monitoring solutions

Early fault detection and data evaluation for condition based monitoring is our core business. SPM covers every aspect, from portable instruments and permanently installed warning devices to large-scale, online monitoring systems controlled by our own software, Condmaster®Ruby.

Portable instruments

VibChecker is a compact-sized instrument for vibration measurement according to ISO standard. Green - yellow - red LEDs indicate vibration severity and a real time FFT spectrum is produced.

BearingChecker is a small, lightweight instrument for fast measurement and evaluation of bearing condition. It also measures temperature and can be used as an electronic stethoscope for detecting machine sound irregularities.

Leonova Diamond is a rugged and user friendly instrument for rough industrial surroundings. It provides a powerful combination of well-proven measuring techniques such as SPM HD® for rolling element bearing analysis and advanced vibration analysis for general machine condition. It also includes modules for balancing, laser alignment, orbit analysis and much more, all in one instrument.

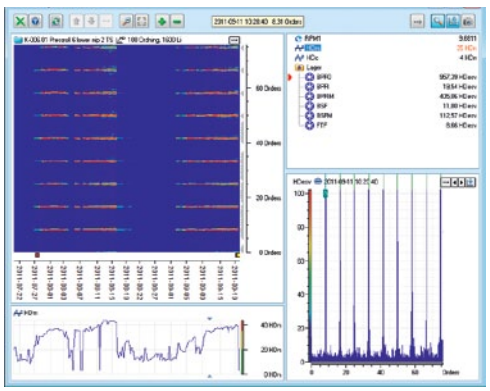
LineLazer is the shaft alignment kit for Leonova Diamond, containing crafty technical innovations to increase accuracy and ease of use.

Leonova Emerald is sibling to Leonova Diamond and the perfect wear-and-tear choice for powerful analysis and troubleshooting in machine condition monitoring. This multifunctional and durable instrument simplifies the management of extensive measuring routes and large amounts of measurement data.

SPM HD

All instruments are available in IS version.

The Condmaster® software



Condmaster®Ruby is the powerful heart of an SPM condition monitoring solution, containing the expert knowledge needed to evaluate machine condition. The software collects and stores data from all SPM handheld and online measuring devices, for evaluation and presentation. Condmaster® Ruby is modular in design, allowing customized solutions and flexibility to select the functionality required. It supports every preventive maintenance activity, such as time planning, trend graphics, statistics and reports. Interaction with other maintenance software, access via Internet and alarm via e-mail and SMS are options.

The software contains an extensive bearing catalogue and evaluation models for vibration, shock and lubrication analysis. Pre-programmed symptoms make it easy to pinpoint machine fault signatures in spectrum graphs.

Online condition monitoring

Intellinova® is an online condition monitoring system where well-proven methods and modern technology meet to ensure the highest possible uptime of critical assets. This powerful and multifunctional online system implements farsighted solutions, ensuring a durable and scalable system.

Intellinova is a highly flexible solution that can be tailored to the various needs of many different customers and industries. The system is compatible with other products from SPM and may therefore be integrated with existing solutions. Intellinova comes in different shapes and sizes, from portable to industrial enclosures for the measuring and control units for shock pulse, vibration and/or analogue measurement. As the Intellinova units work independently, any number may be installed. Intellinova is robustly designed in every aspect, made for harsh environments and long-term use.

Intellinova®Compact is fully compatible with it siblings in the Intellinova family of online systems and can be run in an integrated system or as a stand-alone unit.

Wind turbines, pumping stations and auxiliary equipment are a few examples where Intellinova Compact is the ideal condition monitoring solution. Implementing the SPM HD measuring technique, it is also the appropriate choice for low speed applications such as agitators, crushers, conveyors or cranes etc.

SPM HD

Stand-alone units

MG-4A is a stand-alone continuous monitoring unit employing the two most reliable methods for automatic condition monitoring: shock pulse and vibration severity measurement.

MG-4A is ideal for automatic surveillance of unmanned machines such as pumps, fans and conveyors. MG-4A can also be connected to LAN networks via Modbus RTU.

CMM consists of one and two channel modules measuring shock pulses on bearings, vibration severity according to ISO recommendations and temperature. Measuring results are output as analogue 4 - 20 mA signals, sent to display units with relay functions and/or to a PLC or other computerized monitoring and control system. The CMM modules are also available for 19" rack mounting.

Accessories for every need

Installation accessories and an extensive line of transducers are available for tough environments. Selecting the right transducer for your application is crucial to measurement accuracy. The field data collected are only as good as the transducer used for measurement.

Shock pulse transducers used for bearing monitoring. SPM offers a complete line of shock pulse transducers with several adapters and tools for installation.

SOLID transducers are high performance vibration transducers for a large variety of applications. **SOLID transmitters** provide a 4-20 mA output signal that can be transferred to common process control systems.

Measuring techniques

SPM measuring techniques provide straightforward information about developing machine faults including indication of severity. If the expected machine fault is defined, it is easy to pick the monitoring method that provides the fastest, cheapest, and most reliable result.

Shock Pulse Method®

SPM's original Shock Pulse Method is the most successful and accurate measuring technique for rolling element bearings. Throughout the bearings' lifetime, this method gives reliable information on the mechanical state and lubrication condition of the bearing.

SPM HD®

SPM HD (Shock Pulse Method High Definition) is a further development of the original Shock Pulse Method for reliable diagnosis of the operating condition of rolling element bearings. Capable to reliably measure machine condition in the 1 - 20.000 RPM range, the method brings to light machine problems which are impossible to monitor with traditional vibration measuring techniques.

EVAM® Vibration Analysis

EVAM (Evaluated Vibration Analysis Method) produces up to 25600 line spectrums with true zoom, and provides predefined machine 'fault symptoms' and trending. Difficult problems can be handled where other measuring techniques cannot give a clear answer.

Vibration measurement ISO 2372, ISO 10816

The method requires little input data and is very efficient to detect the most common machine faults such as imbalance, structural weakness and loose parts.

Balancing

One and dual plane balancing according to ISO 1940-1 standard, guiding the user with suggestions for correcting the imbalance.

Orbit Analysis

Simultaneous measurement with two vibration transducers gives a descriptive graph of the movements of the shaft´s centreline in journal bearing machines.

Shaft Alignment

For corrective maintenance and root cause elimination, horizontal and vertical shaft alignment is fast and easy to apply.

Service and support

SPM solves maintenance problems, across the world and in all branches of industry. We provide all the technical service, support and training you may need to become your own condition monitoring expert.

We have the organization and the know-how to increase the availability and profitability of your production equipment. Qualified sales and service representatives in more than 50 countries look forward to helping out.

SPM Academy

Qualified training in condition-based preventive maintenance aimed at enabling participants to measure, evaluate and make decisions on their own.

SPM Academy trains executives, supervisors, production personnel and maintenance personnel who are involved in different ways in mechanical condition monitoring. The objective is to secure and make production more efficient. In cooperation with Mobius Institute, SPM provides ISO certified vibration analysis training. SPM Academy offers standardized courses as well as customized training.