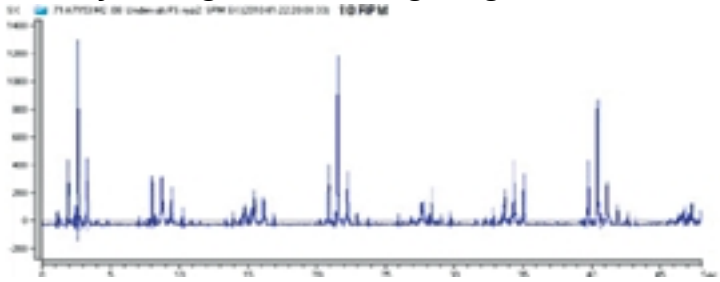
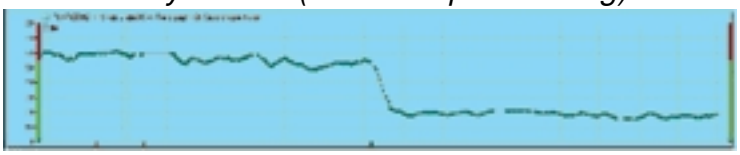
See what you might be missing long before 'too late.'



Time signal from a 10 RPM bearing showing "inner raceway" failure (4 months pre-warning)



SPM®HD Overall Trend Graph before and after bearing replacement (click to enlarge)

Rolling element bearings (also known as anti-friction bearings) are found throughout industry. Due to their construction, metal fatigue eventually causes every one of these bearings to deteriorate and fail, taking critical equipment and processes down with them.

For many decades, companies have used vibration analysis to monitor equipment condition. While a successful Condition Monitoring program can aspire to predict and therefore prevent all "unplanned" failures, in light of their very low energy content, low-RPM applications (i.e., under

50 RPM) have traditionally been some of the most difficult to monitor. An answer to this dilemma has been the “Shock Pulse Method.” Developed and patented in 1969, this technique has been widely used to successfully monitor rolling element bearing condition ever since. And, just as technology has advanced, so has the Shock Pulse Method.

Most recently, SPM Instrument has released SPM®HD (SPM High Definition). Particularly well suited for low-RPM applications, this new technology can be utilized on rolling ele-ment bearings throughout the range of 1-20,000 RPM. According to SPM, with damage indications and pre-warning times up to 16 months in advance of failures, the product is providing never-before-seen detail in the time signal and FFT. In many cases, low-RPM bearings are typically very large—*or of a specialty type where replacement bearings can be many months out from delivery.* In those cases, long pre-warning times are especially important.

Improvements to the Shock Pulse Transducer, advanced algorithms to filter out irrelevant signals and advanced sampling times, including better data acquisition, provide sharp time signals and crisp, detailed spectrums.

SPM®HD is currently available from SPM Instrument in the Intellinova line of continuous monitoring products. **MT**

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For more info, enter 30 at www.MT-freeinfo.com