

A new, versatile and comprehensive handheld machine condition analyser is launched by SPM Instrument AB, Sweden. Called Leonova™ Infinity, it is fast, light and offers many analysis options. Leonova Infinity is sold according to the Pay for Performance concept, allowing users to fit functionality and price to maintenance strategy and plant equipment.

Leonova Infinity has a high definition colour touch screen, based on a Windows®CE platform. Its enhanced electronics feature multiple HW integrators to make use of the latest 400 MHz Intel® XScale® processor. The memory can be extended to 4 GB.

Leonova Infinity weighs 580 grams [20,5 ounces]. For condition monitoring, it measures and analyses shock pulses, vibration, speed, temperature and analog signals in voltage and current. In addition to single/

dual plane balancing and laser aided machine shaft alignment, options also include bump test, orbit analysis and run up/coast down vibration checks.

Two channel simultaneous vibration measurement provides the functionality for root cause analysis. The vibration frequency range includes DC, 0.5, 2, 10, and 100 Hz to 40 kHz, with optimized true zoom functions.

A vibration spectrum can contain up to 12800 lines and be displayed in Hz, CPM or orders. A new powerful processor, optimized algorithms and overlapping technique enable very fast processing and live spectrum display.

Time and frequency domain analyses are performed simultaneously. Pre-programmed symptoms for common machine faults are highlighted in the spectrum and individually evaluated.

Symptom evaluation is used with the SPM Spectrum™ technique, the result of an FFT analysis of the shock waves emitted by rolling element bearings. A match of the bearing frequencies in this spectrum instantly confirms the shock values obtained with the Shock Pulse Method® and thus the condition evaluation of the bearing.

For vibration analysis, Leonova Infinity uses EVAM® (Evaluated Vibration Measurement Analysis). EVAM combines vibration time record analysis and vibration spectrum analysis with machine specific statistical evaluations to supply easy to understand machine condition data.

Leonova Infinity works with SPM's condition monitoring software Condmaster®Nova. From the PC, the instrument is fully programmed to log measurements obtained with up to 8 different measuring techniques per point. Moreover, the results from up to the latest 100 measurements can be downloaded from PC to instrument. It can also be programmed via a contact free memory tag (CondID®), placed at the measuring location.

Measuring results are immediately evaluated and displayed against a green – yellow – red condition scale, providing an easy to grasp read-out of present machine condition and development trends.

Leonova™ infinity

