



# LEONOVA<sup>®</sup>

DIAMOND



PORTABLE INTELLIGENCE

# CONDITION MONITORING AS YOU HAVE NEVER SEEN IT

## BEARING MONITORING WITH SPM HD®

SPM HD is a new achievement in condition monitoring technology and a groundbreaking solution to problems involving condition measurement on low speed machinery.

The method is a patented evolution of the well known and reliable True SPM® method, commonly recognized as the best method for measuring bearing condition on rotating machinery. Requiring little input data, the method measures signals from rolling element bearings and instantly evaluates the condition in intuitive green - yellow - red condition codes.

Where established methods fail, SPM HD detects deteriorating bearing condition and incipient failures with impressive accuracy and exceptional prewarning times. The perfect companion to vibration analysis, SPM HD can be used successfully on all types of machinery with rolling element bearings.

## HIGH-PERFORMANCE VIBRATION ANALYSIS

Leonova Diamond® provides razor-sharp spectrums even where signals are weak and low in energy content. The need for gain adjustments has been designed out, giving an excellent signal-to-noise ratio; a decisive advantage where weak signals are present among stronger signals, such as in gearboxes.

The instrument offers advanced and innovative order tracking functionality. Thanks to careful engineering and optimal use of digital technology, the powerful HD Order Tracking enables more precise measurements and more detailed spectrums than ever before.

The EVAM® measuring technique supplies pre-programmed evaluation models for time and frequency domain parameters. Measurement data processing, machine fault symptom computation and trending is all done in the instrument.



Ex version available



4.3" TFT colour display with automatic back light

Programmable function keys

One hand operation, right or left

Accepts IEPE standard vibration transducers

Carbon-fiber-reinforced enclosure, IP65

Exchangeable Li-Ion battery pack for min. 16 hours normal use

RF transponder for contact free measuring point identification, read and write functions in connection with CondID® memory tags

Drop test 1 meter according to IEC 60079-0

Weight approx. 800 g

Three channel simultaneous vibration monitoring

Frequency range DC to 40 kHz

Dynamic range >100 dB, 24 bit AD

Up to 25600 line FFT spectrum

Pre-fault symptoms for spectrum analysis

Waterfall, phase and real time spectrum

Simultaneous recording for up to 50 hours

Enveloping, true zoom, synchronous measurement

Stroboscope input/output for rpm measurement

Download thousands of measuring points

Current and voltage input, 0–20 mA / 0–10 V

Motor current analysis

Speed measurements 1–120 000 rpm

Stethoscope function, earphones

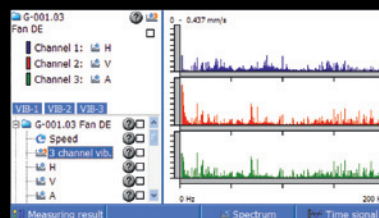
Automatic transducer line test

Voice recording of comments

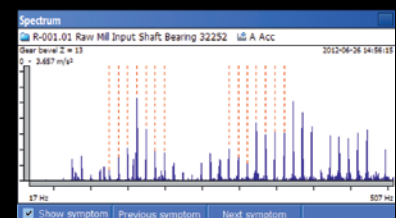
Language selection



Band alarms in SPM HD spectrum



Tri-axial vibration measurements



Spectrum with gear symptom

