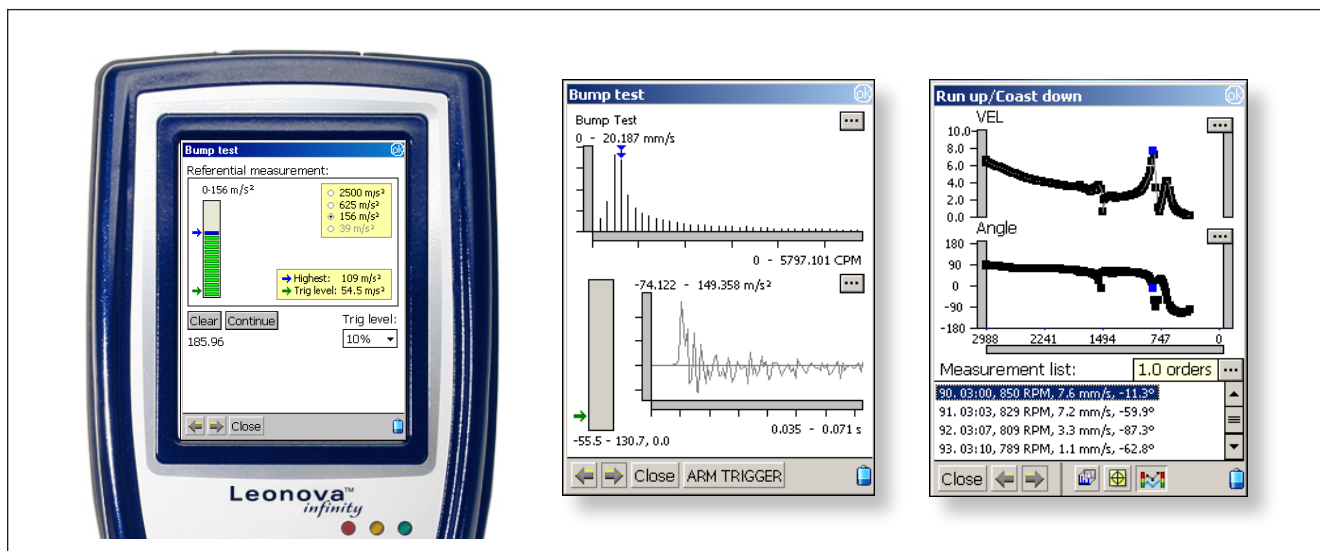


Leonova™ Infinity – Run up/coast down and Bump test



Run up / coast down measurements and Bump test are two vibration analysis functions offered with Leonova Infinity, for either limited or unlimited use. The bump test is employed to check out the typical vibration response of a machine structure at standstill, by hitting it e. g. with rubber mallet (bump test). Run up/coast down records the changes in vibration while the machine is run up to operating speed or after it has been shut off and is slowing to a stop. Both functions are selected from the menu of an ordinary vibration measurement assignment.

Run up /coast down

For this test, both the signal unit and the display unit for the spectrum can be selected. Leonova Infinity uses both digital and analog integration, so the signal unit can be set independent of the transducer type used.

The measuring interval can be either time based (interval in seconds) or speed based (interval in rpm). The speed range is also chosen, e. g. 400 to 3000 rpm.

The first result is a list of the numbered measurements, showing rpm and RMS vibration value. The date and time of the first measurement are displayed.

For each individual measurement, a spectrum can be called up. Another list and diagram show the phase angles in degrees. Finally, the user can call up diagrams for vibration amplitude and angle, showing all measurements in time sequence. In all diagrams, a blue dot shows the position of the measurement marked on the list.

Bump test

The user sets the measuring range in Hz, which automatically sets the sampling time, e. g. 0.20 seconds for 2000 Hz/400 lines. A pre-triggering time, 5% to 25% of the sampling time, is also chosen.

The gain level is set by hitting the machine frame with varying force. The peak amplitude of the measured signal is displayed (velocity in mm/s) and a trigger level can be set to 1% – 90% of the amplitude.

The actual test returns an FFT spectrum and a time signal (sampling time plus pre-triggering time).

Technical data

Run up/coast down

Frequency limit, lower:	0.5, 2 10 or 100 Hz
Frequency limit, upper:	1 to 9999 orders
Measuring interval:	speed or time based
Measurement windows:	Rectangle, Hanning, Hamming, Flat Top
Spectrum lines:	400, 800, 1600, 3200, 6400, 12800
Spectrum types displayed:	linear

Bump test

Frequency limit, lower:	2 Hz
Frequency limit, upper:	100, 200, 500, 1000, 2000, 5000, 10000, 20000, 40 000 Hz
Spectrum lines:	400, 800, 1600, 3200, 6400, 12800
Spectrum types displayed:	linear
Pre-trigger time:	5%, 10%, 20%, 25% of sampling time
Transducer types:	Vibration transducer SLD144 or IEPE* (ICP®) type transducers with voltage output

* Integral Electronic PiezoElectric

Ordering numbers

LEO137	Run up/coast down and Bump test, unlimited use
LEO237	Run up/coast down and Bump test, limited use

