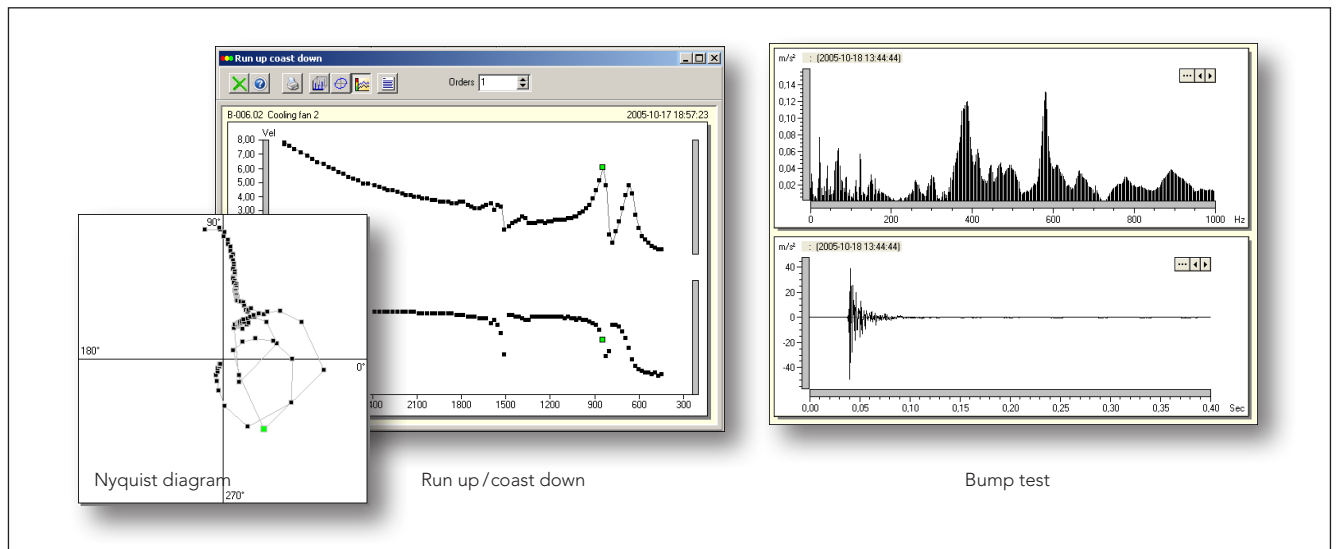


Condmaster® Nova - Run up/Coast down and Bump test



Run up / coast down measurements and Bump test are two vibration analysis functions offered with Leonova Infinity, for either limited or unlimited use. Run up / coast down is also available with online system Intellinova.

Run up/coast down

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 down.

For this test, both the signal unit and the display unit for the spectrum can be selected.

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.

A **waterfall diagram** can be viewed after the measurement is done. For each individual measurement, a spectrum can be called up.

A **Nyquist diagram** shows the phase angle and amplitude. A phase is a time delay expressed in degrees of rotation. Leonova Infinity calculates the time delay between the passage of the tachometer pulse and the peak of the frequency component of interest from the vibration transducer at the speed of rotation. The value presented is a relative angle, not an absolute, because there is no compensation for phase lag in the transducer or the electronic circuits.

Finally, the user can call up a **Bode diagram** 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 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).

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).

The spectrum can be stored as reference spectrum for any measuring assignment.

Ordering numbers

- | | |
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| MOD137 | Run up/Coast down and Bump test, unlimited use |
| MOD237 | Run up/Coast down and Bump test, limited use |

