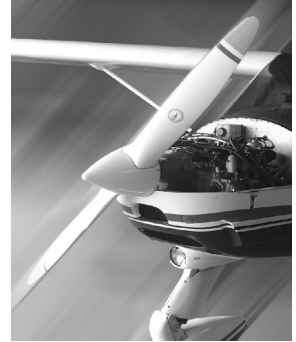


Balancing Propellers



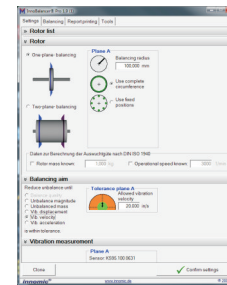
More running smoothness and comfort – less wear

Eliminate vibrations quickly and precisely by dynamic balancing



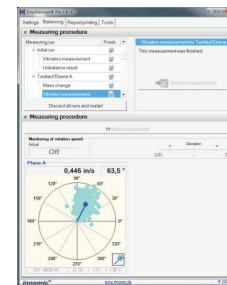
With the **VMSet-A01P** in one kit you hold all components needed for dynamic propeller balancing in your hand. The kit contains the measurement conditioner Innobeamer LX2, an accelerometer, a speed sensor, cables and accessories. The software **InnoBalancer Pro** guides you step by step towards your goal and documents the results in one immediately printable report.

Turn your notebook into a precise vibration measurement system !



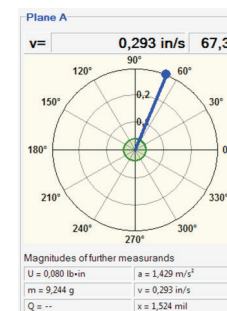
Mounting and setup

The vibration transducer is mounted directly at the gearbox output. The reflection foil on the spinner plate is used as reference to determine the unbalance position by the optical speed sensor. Both sensors are directly supplied with electricity by the Innobeamer LX2, which is connected to the computer via USB. In the balancing software InnoBalancer Pro the balancing radius and the method of correction are chosen. Fixed places or the entire circumference can be used for the correction. The tolerance limit of a permissible residual unbalance can be defined freely. These data can be stored in a database for each rotor.

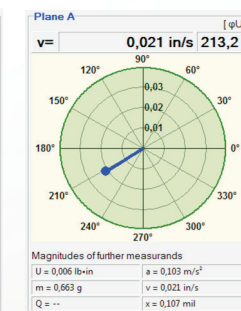


Measure and correction

With the initial unbalance run the vibrations caused by unbalance are measured. In a second test run, the vibration behaviour is selectively modified by mounting a test weight at a known position. Using the data of both measuring runs, the software **InnoBalancer Pro** calculates the exact position and the amount of mass needed for the compensatory measures. These are clearly represented in a polar graphic.



Before



After

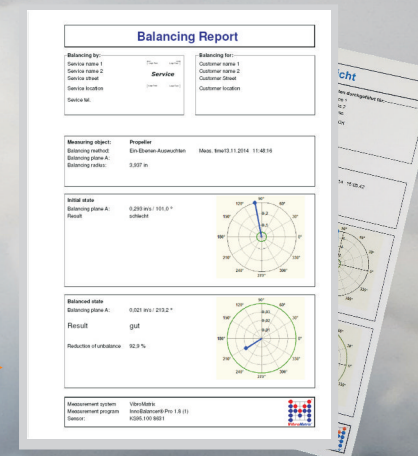
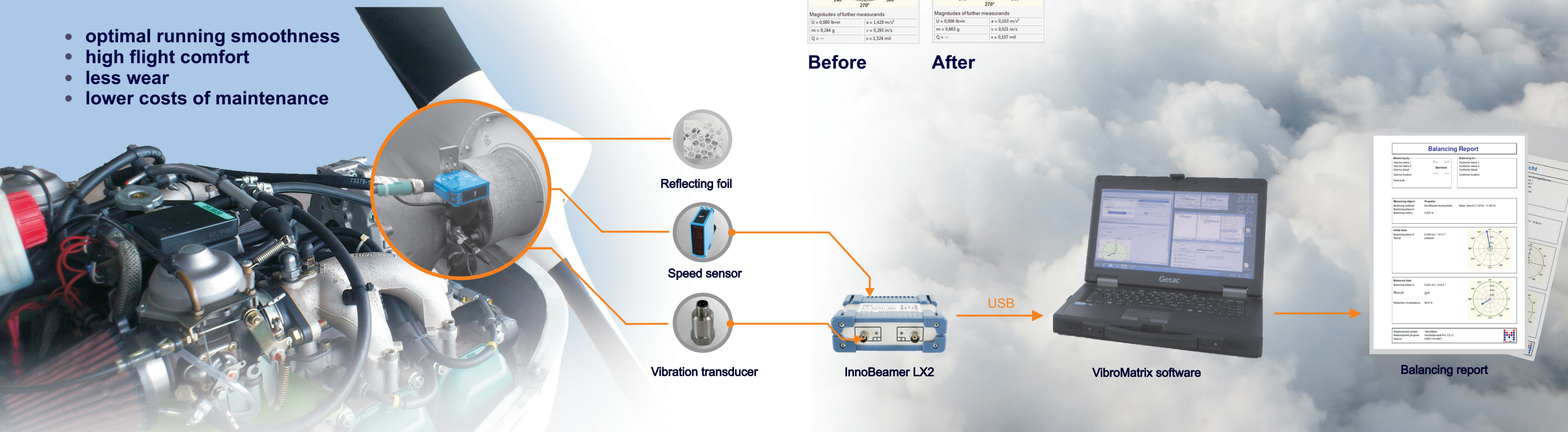
A result to be proud of

Field balancing reduces the unbalance to a tolerable level and results in excellent smoothness. All balancing runs can be saved as a file for each aircraft. The results are documented along with polar graphics and can be printed on pre-configured reports immediately.

Why dynamic balancing ?

Tried and tested in regional and corporate aircraft for years, dynamic balancing of propellers with the InnoBalancer Pro can be equally applied for ultralight and sport aircraft. Despite precise manufacturing, overhaul and static balancing, the mounted propellers often produce considerable vibrations at operation speed. These are caused by tolerances in the assembly as well as by mounting and assembly parts. By dynamic balancing with the **InnoBalancer Pro** those influences are taken into account, so that a significant reduction of the vibrations in operation mode can be achieved. Premature wear of engine and avionics can be avoided. The new smoothness ensures more comfortable flights, the better readability of the instruments increases safety.

- optimal running smoothness
- high flight comfort
- less wear
- lower costs of maintenance



Balancing report

Minimum system requirements

- Microsoft Windows 8, Windows 7, Windows Vista or Windows XP (32-bit or 64-bit editions)
- 1024 MB RAM, 100 MB free hardware drive space
- 1.024 x768 or higher screen resolution
- USB 2.0

Components of the Balancing Kit VMSet-A01P

- 1 x InnoBeamer LX2 incl. USB cable
- 1 x Industrial accelerometer KS80D
- 1 x Sensor cable i120-5
- 1 x Clamping magnet i532
- 1 x Mounting stud i564
- 1 x Photoelectric reflex switch + cable 5m
- 1 x Magnetic stand for reflex switch
- 1 x Precision scale
- 1 x Angle meter
- 1 x InnoBalancer Pro software

