Balancing Airplane Propellers

People who love to fly appreciate the boundless freedom in the sky. However, unbalanced propellers can affect the pleasure negatively: The vibrations acting on the pilot are experienced in an unpleasant way, vibrating instrument needles require a higher concentration and, last but not least, machine parts wear off unnecessarily fast.

These unfavorable effects are remedied at special service points by balancing the rotors.

Metra's VMBAL Kit One is employed, a complete solution for Single-Plane-Balancing with all necessary sensors, measurement equipment and PC-software. Dynamic balancing offers an efficient way to balancing success based upon measurement results and calculations. The user does not need to take care of these calculations.

The user is guided through the balancing process by VM-BAL software. The system detects the unbalance and informs about necessary compensation measures. The optimum compensation method can be chosen according to the application. Fixed angle positions at the rotor can be calculated for attaching or removing weight using various methods. Thanks to the automatic rotation speed detection, the hands are free during the measurement.

The balancing system is very compact and can be carried as hand luggage.