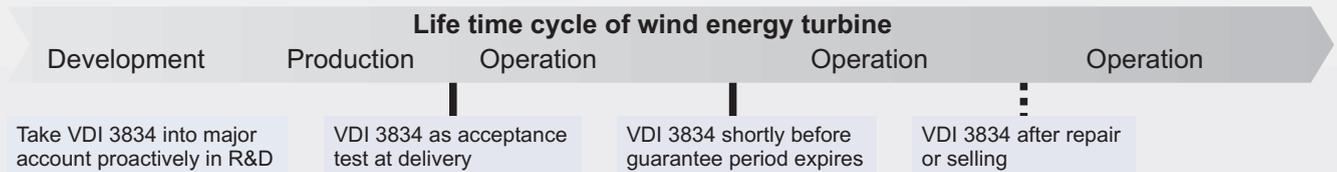


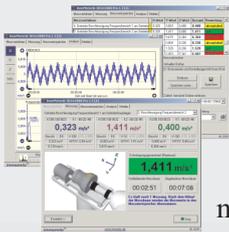
VDI Guideline 3834

Since 2009, there is a **technical guideline** for the measurement and evaluation of **wind energy turbines** and their components - VDI 3834. It allows to carry out vibration measurement with an automatically created result in traffic light colors in a very **simple** way.

Measurements acc. to VDI 3834 are not intended for permanent monitoring. Instead, a **complete evaluation** of the turbine is carried out with a mobile system at important points in time only.



Measurement equipment for VDI 3834

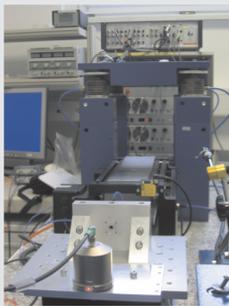


A complete measurement solution for VDI 3834 is provided in terms of the **VibroMatrix** system. By means of the program InnoMeter 3834, you are able to **evaluate** the vibrations of the VDI 3834-relevant components **nacelle, tower, rotor bearing, gearbox and generator**. The program combines vibration measurement, evaluation, presentation of results up to report printing in one instrument. The Pro-version additionally offers a detailed analysis of the signals in time and frequency domain. Results are already assessed in traffic light colors during the measurement. This assessment is based on reference values from VDI 3834, which can also be adjusted for individual plants. All measurements are transferred to the data storage automatically,

which lists the results in a clearly arranged table.

Measurements can be carried out especially quick and effective with the InnoMeter 3834 since it masters **combined measurements**: Measurement modes at the same measuring point can be carried out simultaneously instead of tediously one after another. This way, measuring time is shortened without relinquishing **precision** and more turbines can be measured per day than with usual equipment.

Proved precision



For industrial vibration measurement equipment, there is the new particularly low initial frequency of 0.1 Hz. It is derived from the low natural frequencies of towers and low speeds of typical WTs. With VibroMatrix, all components are adapted optimally so that the measurement chain in its entirety fulfils the 0.1 Hz. It is not sufficient to consider a single component only, for instance the sensor.

The precision of the whole measurement chain was measured and proved by an **accredited calibration laboratory** with a laser distance measurement system for lowest frequencies. Thus, the precision is traceable back to the Physikalisch-Technische Bundesanstalt (PTB) and provides you with **highest legal significance**.

Your choice: Integrated solution or extension for your own notebook



The InnoBeamer **C6_Fusion** combines everything in one instrument in a particularly compact way. 6 measurement channels are intergrated in a rugged case. They allow direct connection of two triaxial sensors. This way, measurement time is halved again. The measurement equipment is waterproof and dustproof all-over. The InnoBeamer C6_Fusion features a quick fastener for tripod mounting and thus permits to work ergonomically even during field work.

For operation with your own notebook, you use external measuring boxes, model InnoBeamer X2. They are connected and supplied completely via USB, and transfer measurement data with the same precision as the C6_Fusion.

