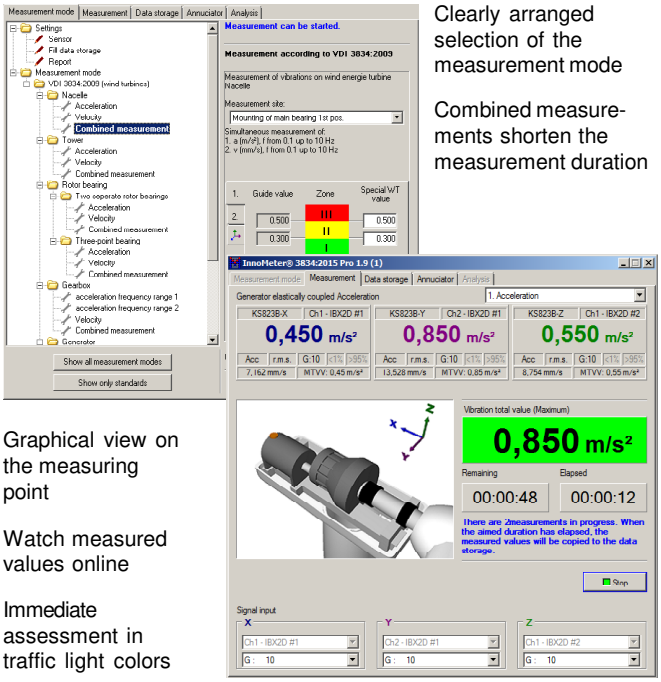
InnoMeter® 3834 1.9

Vibrations on Wind Energy Turbines



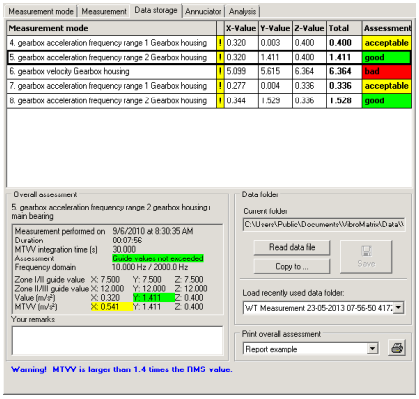
Clearly arranged selection of the measurement mode

Combined measurements shorten the measurement duration

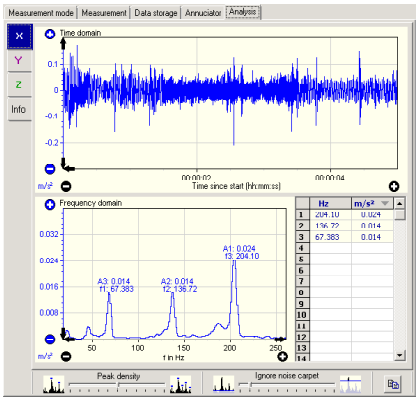
Graphical view on the measuring point

Watch measured values online

Immediate assessment in traffic light colors



Automatic data storage



Detailed signal analysis in Pro version

Application

The InnoMeter 3834 is designed for the measurement and evaluation of vibrations on wind energy turbines and its components acc. to VDI 3834.

By means of this instrument, vibrations of structural components like housing and tower, but also of machine components like rotorbearing, gearbox and generator can be assessed.

Therefore, a triaxial vibration sensor is mounted at specified positions. By means of a signal converter type InnoBeamer, its signals are transmitted to the computer (e.g. notebook) on which the InnoMeter 3834 is running.

Properties

The InnoMeter 3834 combines vibration measurement, assessment, presentation of the results incl. printing a report in one instrument. In addition, signals can be analyzed in detail in time and frequency domain in Pro version.

Results are assessed in traffic light colors already during the measurement. This assessment is based on reference values from VDI 3834, which can be also adjusted acc. to the plant. All measurements are transferred to the data storage automatically, which lists up the results in a clearly arranged table. You can look at each measurement in detail with all parameters once again. Furthermore, you can add your own remarks for each measurement.

Printing a report is carried out by mouse click. The report examples are freely adjustable, for instance with your own company logo.

WET vibration 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 carried out simultaneously instead of tediously one after another. This way, measuring time is halved without relinquishing precision and more turbines can be measured per day than with usual equipment.

The VDI 3834 recommends measurements under stable conditions. Who wants to evaluate it? The InnoMeter 3834 features an objective monitoring technology and automatically indicates instable operational conditions. Thus there is safety for comparable measurement conditions.

Technical Data

	InnoMeter 3834 Pro	InnoMeter 3834
Signal Processing		
Filter	Automatically adjusted: 0.1 .. 10 Hz, 10 .. 1000 Hz, 10 .. 2000 Hz, 10 .. 5000 Hz	
Measurands	Vibration acceleration in m/s^2, vibration velocity in mm/s	
Parameter	Interval rms value of vibration acceleration and velocity, stability criterion	
Measurement duration	Acc. to VDI: 1 min / 10 min depending on the measurement mode	
Graphical Presentation		
Numeric Display	5 digits: 0.001 .. 99999	
Refresh	1 .. 4 times per second (centrally managed in InnoMaster)	
Status Indicators	Sensor, measuring channel, measurand, parameter, gain, underload, overload, stability	
Data Acquisition. Storage and Presentation		
Measurement Modes	Assessment acceleration / assessment velocity for housing, tower, rotorbearing, gearbox, generator	
Measurement	- User guide - Choice of the measurement mode - Indication of elapsed and remaining measurement duration - Indication of the interval rms value for all axes incl. stability criterion - Indication of the vibration total value (maximum of the 3 axes)	
Data Storage	- Saving up to 100000 measurements per file - Indication of detailed data for the marked measurement - For each measurement, remarks can be noted - Save and reload measured values in CSV format - Printing reports about single event and about the complete data storage - Individual report examples can be configured	
Integrated Graphical Evaluations		
Analysis Single Event	- Signal course of vibration acceleration - Signal course of vibration velocity - Frequency analysis for vibration acceleration - Frequency analysis for vibration velocity - Amplitude list for frequency analysis	-
Event Annunciators		
Display	Display of total vibration value as well as evaluation of single measurement in traffic light colors	
Radio Switch	Binary signaling of single measurement's evaluation (good/bad)	
Digital Output	Binary signaling of single measurement's evaluation (good/bad)	
E-Mail	Transfer of total vibration value as well as evaluation of single measurement	
Miscellaneous		
Available as a Kit	VMSet-31	
General Functions	module is cloneable	

Changes without prior notice

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