Wind turbine vibration monitor

Some structural parts oscillate, move or vibrate in a wind turbine. And it is important to monitor the tower, blades, nacelle, main bearing and gearbox are some of the main components. If above components oscillate, vibrate too much or if they break loose and create large shocks, that will endanger the wind turbine or cause severe damage. Therefore, as the important part of the wind turbine safety chain, monitoring must be taken seriously.





Advantage:

Multi-integrated sensors.

SSD Safety Shock Detection.

TFD Tower Frequency Detection.

FFT-analysis for condition monitoring.

Professional technical support.

Main task

Monitors tower, blade and shock vibrations, all in one monitor.

Monitors torsion between the gearbox and the generator including simple gear mesh.

Monitoring of differential nacelle vibrations .

Tracks tower resonance frequency through a built-in dual band ZOOM FFT for monitoring of looseness or cracks in cement towers.

Provides time critical "raw" data to the controller for tower damping loops.

Secures redundancy through separate failsafe system fail and alarm relays, also operating if the turbine controller is out of operation.

Offers full access to readouts and configuration (parametration) through the CANopen, Modbus,

Profibus or Ethernet interface, and/or analog outputs.

GL



With many years of experience of our engineers, we help customers to optimize the protection of the wind turbine both in projects for new wind turbines and in design improvements in existing wind turbines. We are the professional partner offer the solution regarding your requirement. More details of the system please contact us by email: info@derzmann-tech.de.

5