



Eickhoff uses SimulationX for torsional vibration analyses and testbench studies as part of the design process of wind turbines.

Eickhoff gearing equipment initially started as a supplier for their own machines and later also as independent supplier of gearing products for various industrial applications, offering a comprehensive gearbox engineering division and industry-oriented specialization. The company's expertise and its cooperation with other divisions ensure customer-oriented flexibility, combined with the strength of a medium-sized company.

During the development of reliable and inexpensive transmissions and components, Eickhoff's engineers rely on ITI's standard simulation tool SimulationX.



»SimulationX allows us to optimize the wind turbine's gearbox and drivetrain components to reduce dynamic loads, which in turn increases reliability and availability of the wind turbine.«

*Stefan Schemmert, Research & Development
Eickhoff Antriebstechnik*

Challenge

Developing reliable products

The reliability and availability of wind energy turbines is strongly linked to the main gearbox. Therefore advanced calculations and validation of the gearbox's dynamic behavior becomes more and more important.

Solution

SimulationX

Eickhoff uses SimulationX for torsional vibration analyses of turbine gearboxes. The SimulationX Power Transmission libraries allow for modeling detailed planetary gear stages, while versatile analysis methods help identify unwanted vibration resonances.

Benefits

Quick and reliable results

Virtual studies of the gearbox design parameters help the engineers optimize the system components and system reliability. Prototype testing and thus development costs are reduced significantly.