



We pioneer motion

Reliability – Made by Schaeffler

Cost-effective wind turbines require reliable components. We offer the right bearing solution for every wind turbine and a comprehensive concept that further increases the reliability of rolling bearings in wind turbines – the Schaeffler Wind Power Standard.

The Schaeffler Wind Power Standard

- is the highest quality standard for products and processes.
- ensures optimum quality and reliability worldwide.
- indicates all bearings that have been developed and manufactured according to this new standard.



We have been a development partner for the sector for 30 years.
Use our engineering expertise!

www.schaeffler.de/windpower



SCHAEFFLER

The Schaeffler Wind Power Standard

We work closely with our customers and suppliers throughout the entire process chain to ensure that our high standards are met. We can thus ensure the highest level of quality and reliability, and provide the wind power sector with quality standards that we have already successfully established in the automotive and aerospace industries. Particular focus here is placed on:

- Defined change management
- Strict monitoring of quality
- Comprehensive documentation
- Selective supplier development
- Coordinated, transparent processes

In conjunction with our customers, we develop the best solution for every bearing position. Our FAG and INA products developed according to the Schaeffler Wind Power Standard are marked with the corresponding designation.

“Reliability – Made by Schaeffler” offers even more

In addition to the Schaeffler Wind Power Standard, we also offer additional measures for increasing the reliability of wind turbines.

Optimum design with state-of-the-art calculation and simulation programs

Our specialists have been working in close cooperation with wind turbine developers, manufacturers, and operators for more than 30 years. State-of-the-art calculation and simulation programs ensure that optimum designs for bearings for wind power applications are produced. The entire system is considered, from individual rolling bearings and their components and adjacent construction through to the entire power transmission system, which is displayed and optimized using multi-body simulation programs developed in-house.

Realistic tests on Schaeffler’s ASTRAIOS

One of the world’s largest, most up-to-date, and most powerful large-size bearing test rigs enables large-size bearings of up to 15 tons and with outside diameters up to 3.5 meters to be tested. ASTRAIOS simulates the real loads and moments that occur in a wind turbine. This means we are making a major contribution to shortening development times for wind turbines, as well as making the design process more reliable and increasing the cost-effectiveness and safety of these turbines.

Preventing white etching cracks (WEC) with Durotect B

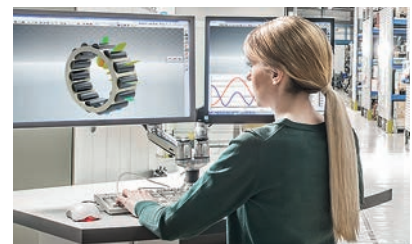
Schaeffler has comprehensive testing facilities for creating WEC, analyzing the causes, and developing solution concepts for reducing the risk of WEC. The solution that Schaeffler recommends is to use Durotect B coated rolling bearings. The advantages that our Durotect B coating system offers include increased protection against WEC, which has been statistically verified by extensive experience in the field.

High equipment availability due to condition monitoring

We offer products and services for all aspects of condition monitoring, e.g. remote monitoring and diagnosis, offline measurements, endoscopy, thermography, and torque measurement. This means the costs for maintenance activities can be reduced and the availability of wind turbines can be increased.



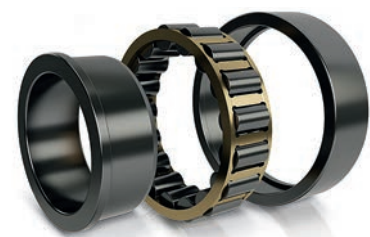
Strict monitoring of quality and comprehensive documentation



State-of-the-art software for optimum design of wind power bearings



Higher cost-effectiveness and safety due to realistic tests



Rolling bearings with Durotect B coating provide increased protection against WEC



Remote monitoring for higher system availability