Wind Power Supply

Ritbearing represents several premium European bearing manufacturers with years of experience supplying wind turbine original equipment manufacturers, and designing innovative solutions in support of operations and maintenance requirements of the evolving technology.



Our suppliers' ever growing stock will only allow for more

opportunities to support North America's growing dependence upon alternative wind energy. These brand options provide decreased costs on standard stock sizes, as well as shortage relief on hard to find bearings, leading to reduced turbine downtime and maintenance costs.



Specials & Obsoletes

Ritbearing has utilized input from turbine maintenance and operations engineers to offer standard bearings, obsolete bearings, and bearings with improved designed features to extend the life of critical turbine segments.

Improvements include

- Black oxide coated rings and rollers to reduce slippage, prevent smearing, and minimize roller skewing.
- Roller to flange contact surface drag reduction.
- Special internal clearance allowing resistance to damaging vibrations, heat, and seizure.
- Integrated bearings and modular planetary gear bearings.
- Special gearbox cage guided roller bearings to allow up tower repairs. This results in minimizing expensive crane costs required to remove large segments of the turbine transmission and leads to increased online operation.
- Stock plans and production runs are available for discussion.

Ritbearing

Ritbearing is an importer and wholesale distributor of a wide range of ball and roller bearings. Our products are sourced and qualified from quality conscious bearing facilities throughout the world.

Ritbearing's goal is to offer our customers the highest quality bearing products at a competitive price on a timely delivery schedule.

Ritbearing Corp., an ESOP company, has facilities in Georgia, Ohio and California to service your bearing requirements. We have a strategically placed sales force to cover all areas of the United States.

Our efforts focus on educating our customers on products Ritbearing can offer, developing solutions to current and future bearing requirements, and securing long term relationships with our customers.

Our staff at Ritbearing looks forward to learning more about your company and serving your bearing needs.

GEORGIA • OHIO • CALIFORNIA

800.431.1980

brgquote@ritbearing.com WWW.RITBEARING.COM



Ritbearing

WIND POWER PRODUCTS

Gearbox & Modular Bearings

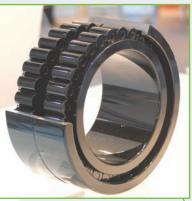
Brands:



Ritbearing can offer gearbox bearings to meet the varying operating conditions commonly associated with wind turbines. Some of the benefits that Ritbearing is able to offer include:

- Cageless full complement cylindrical roller bearings for low speed and high radial loads.
- Special cage retained cylindrical roller bearings which allow for replacement within the nacelle. Cage retained cylindricals for high speed.
- Full complement cylindrical roller bearings without outer ring can be used in modern gearbox applications. The bore of the gear forms the outer raceway, providing ready to install matched bearing sets.
- Black oxide coated rollers and rings that are designed to reduce the risk of slippage and minimize roller skewing.
- Four-point angular contact bearings used as the locating bearings.
- Integrated modular gear bearings have a MPB cage with holes and grooves for endoscopic inspection.
- Spherical roller bearings for ultra-high loads.





Ceramic & Insolated Bearings

Current insolated bearings are available with coated bearing rings and as hybrid bearings with ceramic ball and roller elements. This provides protection against possible current passage, and in turn eliminates premature generator bearing failure.

Brands:



The highly wear resistant layer consists of oxide ceramic and offers protection in a damp environment. Hybrid bearings with ceramic rolling elements grant a longer operating life when compared to all steel bearing designs. Additional sizes are available with special C4 internal clearances to allow for increased thermal expansion.



Main Shaft & Rotor Bearings







Bearing products include large double row tapered roller bearing sets and large spherical roller bearings.

Mainshaft Bearing Arrangement

- Locating and Floating bearing arrangement consists of spherical, cylindrical, or tapered roller bearings.
- Adjusted bearing arrangement contains two tapered roller bearings. The alternative arrangement comprises of a matched tapered roller and a cylindrical roller bearing.
- Black oxide coated main shaft input bearings available.
- Special internal clearances available to compensate for heat, slipping, skewing, and seizure.

Pitch & Yaw Bearings

Brand:





Ritbearing is committed to working with customers to develop slewing bearing solutions that optimize blade postioning pitch-control turbines. Iraundi single row and two row four point contact bearings are designed to accommodate powerful oscillatory movements and dynamic load cycles. Iraundi bearings withstand the continuous load changes resulting from pulsating loads.

Iraundi slewing bearings for yaw positions are designed to meet the relentless demands of wind turbines. Iraundi bearings, manufactured in Spain, are sealed, grease, and protected against corrosion.

Iraundi product features include:

- Capacity to produce both inner and outer ring gears.
- Multi row ball and roller designs.
- Double lip seals.
- Bearing coatings options are available for your application.

Iraundi bearings are fully customized to cover specific customer demands and are tailor made to provide longer bearing service and reduced maintenance costs.

