

Wind Energy

LYC -- Wind Turbine Bearing Standard Setter in China. Since 1997, LYC has been working on provide special and reliable solutions for wind energy industry.

JB/T 10705-2007 "Rolling Bearings Wind Power Generator Bearings"

GB/T 29717-2013 "Rolling Bearings Wind Power Generators Yaw and Pitch Bearings"

GB/T 29718-2013 "Rolling Bearings Wind Power Generators Main Bearings"

Services

1. Technical support: LYC engineers has a clear understanding about wind power bearing and the entire industry. They provide customers with support for all applications and design issues with computing service, mean that they need to have specific requirements for the industry. Together with our customers, together for their specific problems develop personalized solutions.

2. Maintenance Services: provide various types of maintenance solutions to reduce maintenance costs, prevent unplanned downtime increase machine utilization.

3. Bearing installation and removal services: installation is one of the key affecter bearing lifetime. Failure to use proper methods and tools to properly install bearings will reduce bearing lifetime. In all premature bearing failure, about 16% is due to improper installation or incorrect installation technology.

Quality Problems: LYC has a strong service team, feedback response to customer quality as fast as they can, the first time in person or remotely to help.

Why LYC

From 1997, LYC started developed 660 KW wind turbine generator bearings, passed national key technological achievement in 1999. Formulated national wind turbine bearing standard in 2012. All along, LYC is the wind turbine bearing leader in China.

Applications

<http://www.lycbearing.com/industry-solution/wind-energy/applications/>

Motor

Gearbox

LYC can develop and produce 1.5MW, 2MW, 3MW up gearbox FCL supporting bearings, precision up to P4 level. Gearbox has complex conditions, load, vibration, lubrication, temperature changing, through many years of experience LYC should be able to solve those question.

Yaw and Pitch

Yaw bearing is mounted on yaw structure of wind generator cabin base. It is used for adjusting the facing wind angle of the wind generator at proper time and transits thunders to the ground. It mainly supports axial load, radial load and tilt moment. The bearing is required to be tight sealed, high reliability, smooth rotation, strong stability, surface anti-corrosive, long life over 20 years and strictly start moment non loaded. This kind of bearing is normally designed four-point contact ball slewing bearing or double rows ball slewing bearings.

Pitch bearing is located on its oar system. It is used for adjusting the blade facing wind angle. It mainly supports radial load, axial load and tilt moment. The bearing is required to be sealed tightly, high reliability, smooth rotation, strong stability, surface anti-corrosive, long life over 20 years and

strictly start moment non loaded. This kind of bearing is normally designed four-point contact ball slewing bearings or double-row ball slewing bearings.

Main Bearing

Main bearing is required to be loaded heavily and be able to compensate the shaft's deformation. So the bearing should have good ability of alignment, higher load capacity and longer service life. It adopts spherical roller bearing with optimal design. For direct drive type or half direct drive type, most adopt double row taper roller bearing, mounted with negative clearance. It can be saved the main shaft room, as well have good stiffness.