LYC GROUP

LYC R&D ABILITY
PRODUCTS ADVANTAGE
Luoyang LYC Bearing Co., Ltd equipped with complete R&D institution (National Enterprise Technical Center), more than 500 research personnel, was honored with nationwide post-doctor scientific research center and key project center of Henan Province.
Technical center has 17 professional research center, develop all-dimensional technician research related with rolling bearings, including material, product design, cold and hot process technology, inspection, experimental technique and special equipment etc.

It develops more than 500 types of new products each year, and undertakes 3 or 6 national scientific research projects.
Bearing Research Center are engaged in bearing design, applied technology’s research and development. It can research and design rolling bearing of various structures based on customer’s requirement, equipped with advanced software of finite analysis software (PROE、ADINA、SOLIDWORKS、UG)。
In bearing design, LYC technical center independently developed advanced 3D CAD design software for rolling bearing design, realized intelligentize, automation and greatly improved the design efficiency.
“Rolling bearing applied technology thesaurus”, “Slewing bearing load curve”, “Bearing product electronic file management”, which were self developed by LYC, efficiently improved technician’s research and work efficiency.
Process lab are mainly engaged in bearing cold and hot process technology, measure technique research etc.
Process lab cooperated with Shandong University to develop the PLM integration system which is in advanced level in domestic bearing industry, realized optimization of bearing process design flow, product data’s unified management and share, and automation of process design, and greatly improved the quality and efficiency of process design.
There are more than 40 technical personnel in material analysis lab., mainly engaged in bearing materials research, failure mechanism, defect analysis and non destructive testing, advanced testing equipments are made in Germany, Italy, Sweden, Japan and so on, which provide a strong infrastructure support for material analysis.

OLYMPUS GX51
Inversion Metalloscope
The most advanced phased array flaw detector in the world can image the flaw’s position and shape inside the metal.
It adopted the latest UIS2 infinity optical system, vision is bright and clear. It is equipped with high precision objective lens, amplification factor is 50x to 1000x, extra-wide view can reach to 22 with comfortable observation and high image quality.

The equipment can automatically make single-point and multi-point measure, and can make measure impress drawing, realize measure visualization, and improve the accuracy.
Performance test center are engaged in the measure research and application for the dynamic performance of rolling bearings. It owns more than 50 testing machine with various types, which can make dynamic performance test including fatigue life, temperature rise, vibration and seals for general bearings, automobile bearings, wind turbine bearings, shield machine bearings and main bearings for medical equipment etc.
PERFORMANCE TEST CENTER

Wheel hub bearing performance and life tester

Cutch bearing performance tester
self developed testing machine for main bearings of wind turbine

largest pitch bearings testing machine in China.

self developed testing machine for gear box of wind turbine

self-developed testing machine for yaw bearing of wind turbine.
LYC has formed a group of superior products with high reliable and high technical content matched for wind turbine, precision machine tool, rolling mill, railway (passenger train, cargo and locomotive), vehicle, cement and mining industry, harbor machine and construction machinery industries.
LYC Superior Product

- Slewing bearing
- Rolling Mill Bearing
- Medical Equipment Bearing
- Precision Bearing
- Railway bearing
- Wind Turbine Bearing
- Automobile Bearing
LYC has more than 50 years successful experience in design and manufacturing of various kinds of slewing bearings up to 13.5 metres in diameter.

Base structures include:

Four-Point Contact Ball Slewing Bearing
Double-Row Ball Slewing Bearing
Cross Cylindrical Roller Slewing Bearing
Three-Row Cylindrical Roller Slewing Bearing
Double-Row Roller/Ball Combination Slewing Bearing
Applications include:

Marine Docks, Steel Industry, all types of mining applications, Cement Industry, Wind-Power Generation, Medical, and General engineering equipment with pivotal movement mechanisms etc.
900 ton crawler crane slewing bearing for SANY Group

60 Ton Pump truck slewing bearing for ZOOMLION Group

Continuous ship unloader slewing bearing for ZPMC
Rolling Mill Bearing

Sealed rolling mill bearing
Split bearing
CARB bearing
Sendzimir Bearing

Slewing bearing
Thrust spherical roller bearing
Thrust cylindrical roller bearing

Double row taper roller bearing
Four row taper roller bearing
Double row cylindrical roller bearing
Four row cylindrical roller bearing
LYC manufactured the China first four-row taper roller bearing 777/650 special for rolling mill.

Roll neck bearings 3-722 for cold and hot plate mill for 5Hi 1700 plate mill in WISCO 1700 (Wuhan Steel), reach the same quality level of imported bearings.

LYC’s bearings were installed in the High-speed wire mill in Maanshan Iron & Steel Company Ltd, reach the same quality level of imported bearings.

LYC’S bearings are installed on 2150 continuous casting and rolling sheet production line of Ansteel Group, import replacement for whole lines.
LYC is a qualified supplier for GE Medical I and Generation II CT, Generation 3rd CT Bearings.

These bearings have been provided on a regularly basis to GE. Especially the generation 3rd bearing’s precision can reach up to P2, rotation speed :0.5s/r, Noise value are less than 70 db, come up to world class.
LYC precision bearings are widely used in the domestic machine tool enterprises, and mainly mated with machine tool spindle.

The largest main shaft bearing ID has been up to 1250mm, run out up to 6μm and the accuracy up to P2.
LYC can manufacture approximately 200 types of railway bearings with precision level up to P4 grade. The main customers are locomotive plants, wagon works, wheel factories, vehicle inspection and maintenance units etc. In 2000, First Class F cargo train bearing exported to USA Cargo. Class E & F was certified by SKF Research Centre in 2001.
LYC is one of the few major Bearing Manufacturers’ who can offer the full range of Wind Turbine Bearings Including: Yaw Bearing, Pitch Bearing, Main Shaft Bearing and Gear box bearing for 600 KW, 660 KW, 750 KW, 1.5MW, 2.0MW, 2.5MW, 3.0MW, 3.6 MW and 5MW marine and land wind turbine.

LYC draft the China industrial standard of “rolling bearing wind turbine bearing” in 2006.
LYC can manufacturer auto bearing, wheel hub bearing for motor cycle, differential bearing for wheel hub, gearbox bearing. LYC is a regular supplier of Volkswagen, China FAW and China Second Automobile Company.
Thanks for watching

Look forward to cooperate with you