

LYC[®]

— 中国·洛轴 —

转/动/中/国/ 推/动/世/界/
Rotating China Empowering the world



轨道交通轴承

Railway traffic bearings



中国最具影响力轴承品牌 中国最具市场竞争力品牌

The most influenced Chinese bearings brand

The most competitive Chinese bearings brand

洛阳 LYC 轴承有限公司作为国内专业轴承制造企业，是中国轴承行业规模最大的综合性轴承制造企业之一，可为用户提供各种结构类型、精度等级的滚动轴承，产品广泛应用到国内外各个领域。其中我公司研制的 YRT 系列精密组合轴承，经过多年来的试制、加工，现已经进入批量生产阶段。我公司拥有各种高精度的加工设备、完善的质保体系和先进的检测手段，现可生产内径从 $\Phi 80 \sim \Phi 1030$ 的 YRT 系列组合轴承和推力角接触轴承（787/系列），经过多年来不断的技术改进和质量提升，各项指标均达到国外先进产品的标准，产品精度已达到相当 P2 级同类轴承的精度水平。经用户常年使用验证，性能稳定可靠，产品已被国内外各机床行业广泛应用。

Luoyang LYC Bearing Co., Ltd as special bearing maker, it is one of the largest comprehensive bearing manufacturer in China, LYC can provide all kinds of bearings in different precision, the products are widely used in kinds kinds of fields worldwide. YRT series precise combined bearings have started lot production after trial-production and processed in the past year. our company has kinds of high precise machinery equipments, perfect QC systems and advanced inspection ways, LYC can make from inner dia from $\Phi 80 \sim \Phi 1030$ YRT combined bearings, after year's constant technology upswing and quality improvements, all index come up to international product standard precision & compressing precision, the products come up to P2 precision level. After users' validation for years, the products are world-widely used for machine tools.





LYC 轨道交通轴承研发实力

LYC Railway traffic bearings research and development strength

洛阳 LYC 轴承有限公司是铁道部批准的中国铁路轴承行业中规模最大、技术势力最强的专业研制生产铁路轴承的企业，具有 40 多年研发与生产铁路轴承的悠久历史，主要生产铁路客车、货车、机车、城市地铁及轻轨列车等专用轴承，年生产铁路轴承 30 万套。轴承产品的精加工工序全部采用国外进口的先进多功能数控复合设备，生产线整体实力达到国际先进水平。公司主导产品准高速铁路客车轴承、提速铁路货车轴承、重载铁路货车轴承、提速铁路机车轴承均为“高新技术产品”，其中准高速铁路客车轴承被列为“国家火炬计划项目”，并获国家优等品证书。

洛阳 LYC 轴承有限公司凭借雄厚的技术实力，承担了多项铁路轴承领域的国家重点项目，为振兴我国的装备制造业做出了非常大的贡献。

1、参加国家“七五”重点攻关项目《准高速铁路客车轴承研究》，研制出的准高速铁路客车轴承达到国际先进水平，成为我国高速铁路客车轴承的主要生产厂家之一。

2、2007 年参加国家科技支撑计划子课题《高速铁路客车轴承圆锥滚子轴承关键技术研究》，研制满足 250km/h~350km/h 行车要求的高速铁路客车轴承。

3、2009 年参加“863 计划重点项目”《大型高速铁路轴承试验台》，进行高速铁路轴承试验技术的研究和试验台的研发。



Luoyang LYC Bearing Co., Ltd. is one of the largest professional railway bearing enterprises approved by the Ministry of Railways with the most powerful technical strength. It has more than 40 years history in R&D and production of railway bearings. The main products is special bearings for passenger trains, cargo trains, locomotives, subway and metro light rail trains etc., and the annual productivity of the railway bearings is 300,000 sets. The finish machining processes of bearings wholly adopt the imported advanced multi-function numerical control composite equipment, and overall strength of production lines reaches the international advanced level. The leading products such as quasi-high speed passenger train bearings, speed cargo train bearing, heavy cargo train bearings, speed locomotive bearings are "high-tech products", in which quasi-high speed passenger train bearings are listed as "National Torch Plan Project", and obtained National Certificate of Superior Quality Product.

Luoyang LYC Bearing Co., Ltd. depends on its strong technical strength to undertake a number of national key projects in railway bearing fields, and makes large contribution to the revitalization of China's equipment manufacture industry.

1. Participate in national "Seven Five-year" key research project "Quasi-high Speed Passenger Train Bearing Research". The developed quasi-high speed passenger train bearing reached the international advanced level, and LYC has become one of the major manufacturers of high-speed passenger train bearing.

2. In 2007, LYC took part in the sub project of National Science and Technology Support Program "High-speed Passenger Train Bearings Key Technology Research of Tapered Roller Bearings", and developed high-speed passenger train bearing, which meet the running speed of 250km / h ~ 350km / h.

3. In 2009, LYC joined the key projects of "863 plan", "Large Test Bench for High-speed Railway Bearing", and began the research and development of test technology and test bench for high-speed railway bearings.



轴承三座标测量仪

Three Coordinate
Measure Equipment

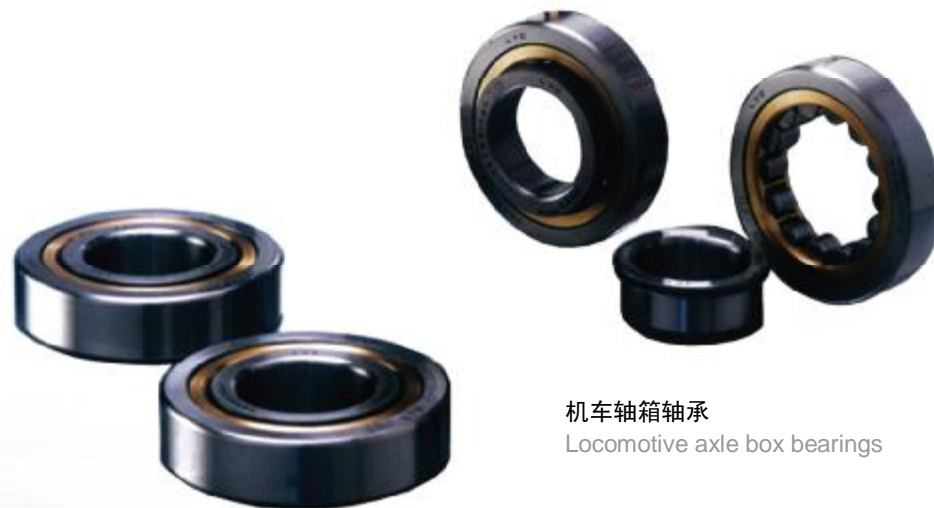


LYC 轨道交通轴承主要产品

Main products of LYC of Railway traffic bearings

应用范围 Applications

铁路货车轴承	Cargos train bearings
铁路客车轴承	Passengers train bearings
铁路准高速客车轴承	Quasi-high speed passengers train bearings
城市轻轨轴承	Metro light railway bearings
牵引电机轴承	Traction motor bearings
主发电机轴承	Main generator bearings
轴箱轴承	Axle box bearings
绝缘轴承	Insulation bearings



机车轴箱轴承
Locomotive axle box bearings

铁路客车轴承
Passenger train bearings



100 吨重载铁路货车轴承
100 tons heavy cargo train bearings





铁路客车轴承
Passengers train bearings



80 吨重载铁路货车轴承
Cargo train bearings



120 吨重载铁路货车轴承
120 tons heavy cargo train bearings



绝缘轴承
Insulation bearings



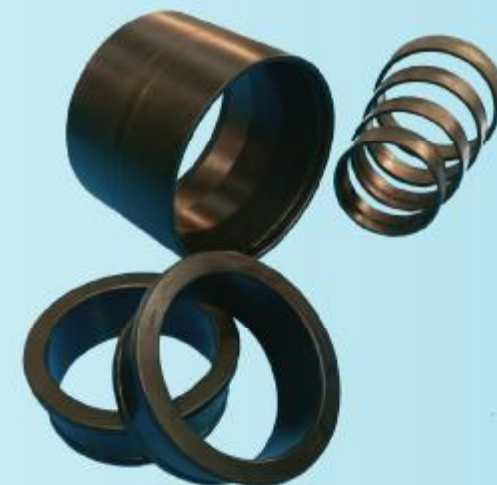
城市轨道交通轴承
Metro light railway bearings



机车轴箱轴承
Locomotive axle box bearings



试制的 250~300km/h 的高速铁路客车轴承
Trial produced high-speed passenger train bearings with the speed of 250 ~ 300km/h



出口美国及欧洲的提速重载货车轴承
Speed-increasing heavy cargo train bearings exported to the U.S. and Europe



LYC 轨道交通轴承优势

Advantages of LYC Railway traffic bearings

- | 2007 年“LYC”品牌被国家商务部评为“中国最具市场竞争力轴承品牌”；公司连续四年被认定为“中国工业行业排头兵企业”。
- | 09 月 9 日至 23 日，在江苏省扬州市举行的全国滚动轴承标准化技术委员五届五次会议上，我公司作为第一起草单位起草的轴承行业标准《滚动轴承 提速铁路货车轴承》和参与起草的《滚动轴承 提速铁路机车轴承》、《滚动轴承 提速铁路客车轴承》顺利通过了终审。
- | 公司铁路大修轴承通过铁道部生产认证。
- | In 2007, "LYC" brand is named as "the most competitive bearing the brand in China" by state Commerce Department; LYC has been recognized as "pioneers in China's industrial field" for 4 consecutive years.
- | At Fifth Session of the Fifth Congress of National Standardization Technical Committee for rolling bearings held in Yangzhou City, Jiangsu Province, the bearing industrial standard "Rolling Bearing Speed Cargo Train bearing", of which LYC is as the first drafter, and "Rolling Bearing Speed Locomotive Bearing", "Rolling Bearing Speed Passenger Train Bearing", of which LYC involved in the drafting, successfully passed the final audit.
- | LYC's overhaul railway bearing passed the production certificate of Ministry of Railways.



- | 09年9月LYC公司承担的“十一五”国家科技支撑计划重点项目——高速铁路客车轴承研制取得实质进展。
 - | 09年公司成功研制出了铁路货车轴承外圈超声波探伤系统，并通过了铁道部专家组的现场验收，提高了铁路货车轴承套圈内部的检测质量，探伤工艺技术处于国内领先水平，为快速扩大LYC市场份额铺平了道路。
 - | 09年LYC保持器公司成为全国铁路产品密封罩授权供应商（全国仅4家）
 - | LYC公司被中国机电工业装备维改协会中国基础件行业分会评为《中国机械基础件行业科技创新装备精良特优企业》。
 - | 09年国家质检总局核准LYC出口产品实施直通放行，将彻底省去口岸二次申报的通关环节。
 - | 为使铁道部的“装备保工艺、工艺保质量”的理念落到实处，为今后产品质量的持续提升创造了条件；09年10月13日，国家铁道部行检组对LYC公司生产的铁路货车新造、大修轴承进行检查，检查结果表明，LYC公司铁路轴承实物质量全部达标合格。
 - | 近年LYC铁轴公司通过省高新技术企业复审。先后开发出准高速铁路客车轴承、森吉米尔轧机轴承、地铁和城市轻轨列车轴承、重载货车轴承等新产品，不仅实现了国产化替代，填补国内空白，而且部分产品还被评为省级新产品和国家级新产品，形成了企业的优势产品群，提升了企业的竞争力。
-
- | In September 2009, the "Eleventh Five-Year" National Science and Technology Support Program key project committed by LYC – research of high-speed passenger train bearing gained substantial progress.
 - | In 2009, LYC successfully developed the ultrasonic flaw detection system for outer ring of cargo train bearing, and passed the site acceptance of Expert group of Ministry of Railways. It improves internal testing quality of the cargo train bearing rings, and the domestic leading flaw detection technology paved the way for LYC's rapid expansion of the market share.
 - | In 2009, LYC press cage plant became the national authorized supplier of seal cover for railway products (only 4 manufacturers domestically)
 - | LYC was named as "Distinguished enterprise with Technology Innovation and Well-equipment in basic machinery parts industry in China" by Basic parts branch of China Machinery & Electric Industrial Equipment Association.
 - | In 2009, AQSIQ approved the implementation of direct release for LYC export products, and it will completely avoid the second declaration of port clearance link.
 - | The implement of Ministry of Railway's concept of "equipment guarantees the technology, technology ensures the quality" established the conditions for continuous improvement of the product quality in the future.
 - | On October 13, 2009, the industrial inspection group of Ministry of Railways inspected LYC newly produced cargo train bearing and overhaul cargo train bearing, and inspection results show that the quality of all the LYC railway bearings achieved standard.
 - | In recent years, the new product development strategy of LYC railway bearing plant passed provincial review of high-tech enterprises, and LYC has successively developed new products such as the quasi-high speed passenger train bearings, Sendzimir rolling mill bearings, subway and metro light rail train bearings, heavy cargo train bearings etc. It not only realized the localization substitution, and filled the domestic gaps, but also some of the products are rated as the state-level and provincial level new products. The formation of the advantage products group improved the competitiveness of enterprises.



LYC 轨道交通轴承获得部分荣誉证书

part of the certificates gained by LYC Railway traffic bearings



主要铁路车辆轴承		主要铁路机车轴承	
轴承型号	应用场合	轴承型号	应用场合
352226X2-2RZ	敞64型重载提运货车轴承	NJ2232WB	新型机车轴箱
353130B	80吨重载货车轴承	NJ2232WBY	
352132	100吨超重载货车轴承	NU2232WB	
42724QT	铁路客车轴承	NUHJ2232WB	
152724QT	铁路客车轴承	NUHJ2232WBY	
NJ3226X1	120Km/h铁路客车等级轴承	NUHJ2232WBY1	
NJ3226X1K1	120Km/h铁路客车等级轴承	E32426QTY	牵引电机
NJP3226X1	120Km/h铁路客车等级轴承	4E42328EQT	牵引电机
NJP3226X1K1	120Km/h铁路客车等级轴承	E32330E0TU	牵引电机
352132A	120吨重载铁路货车轴承	NU313Q/P63S0	液力传动箱
LY-Z027	250~300km/h的高速铁路客车轴承	NJ313EQ/P63S0	
NJP3226X1K2	120Km/h铁路客车等级轴承	NJ315EQ/P63S0	
NJP3226X1K2	120Km/h铁路客车等级轴承	NH318EQ/P69S0	牵引电机
42724QTK	普通铁路客车等级轴承	NU318EQ/P63S0	辅助传动箱
152724QTK	普通铁路客车等级轴承	NJ2320EQ/P63S0	液力传动箱
42724QTK1	普通铁路客车等级轴承	NU224EQ/P53S0	液力传动箱
152724QTK1	普通铁路客车等级轴承	NU2938Q/P53S0	液力传动箱
		NU328FQ1/P69S0	车轴齿轮箱
		NU1044Q/P63S0	车轴齿轮箱
		NU1048Q/P53S0	液力传动箱
		QJ313QN2/P63S0	液力传动箱
		QJ315QN2/P63S0	液力传动箱
		QJ318QN2/P63S0	辅助传动箱
		QJ328QN2/P63S0	车轴齿轮箱
		QJ1044QN2/P63	车轴齿轮箱
		QJ1048QN2/P63S0	
		QJ220Q1N2/P63S0	液力传动箱
		QJ214Q1N2/P63S0	



LYC 轨道交通轴承专业检测设备

LYC Railway traffic bearings specialized testing equipment



轴承直线凸度测量仪

Bearing Linear protruding Degree Measuring Instrument



CDW900 磁粉探伤机

CDW900 magnetic flaw detector



自行研制的国内领先水平的超声波探伤设备

Self-developed Domestic Leading ultrasonic testing equipment



轴承动态测量仪

Bearing Dynamic Measurement Instrument



泰勒表面轮廓仪

Talor Contourgraph from UK



测量用自动记录网路传感器

Automatic Recording Network Sensor for Measurement



立式光学镜

Vertical Optical Microscope



投影测长机

Projection Metroscope



轴承挡边角度测量仪

Bearing Flange Angle Measuring Instrument for



光谱仪

Spectrometer



金相显微镜

Metallurgical Microscope



LYC 轨道交通轴承装备能力

LYC's Equipment Capacity for Railway Traffic Bearings

1. 从日本“NTC”公司引进的 SDG-5R 双端面磨床 (加工产品平面度 $1\mu\text{m}$)
2. 从日本“TOYO”公司引进的 T-127CNC 外滚道、挡边磨床 (加工产品圆度 $1.5\mu\text{m}$)
3. 从德国“THELENHAUS”公司引进的 RM360/420C1 超精机床 (加工产品表面粗糙度 $Ra0.04\mu\text{m}$)
4. 从日本“TOYO”公司引进的 T-237CNC 内滚道与挡边复合磨床 (加工产品圆度 $0.72\mu\text{m}$)
5. 从日本“KOYO”公司引进的 KC-500A 外径磨床 (加工产品圆度 $1.5\mu\text{m}$)

1. Double-side grinding machine SDG-SR imported from Japan NTC company. (flatness of processed product within $1\mu\text{m}$)
2. Outer raceway & flange grinding machine T-127 CNC imported from Japan TOYO company. (Roundness of processed product within $1.5\mu\text{m}$)
3. Superfinishing machine RM360/420C1 imported from Germany THELENHAUS company. (surface roughness Ra of processed product within $0.04\mu\text{m}$)
4. Inner raceway & flange grinding machine T-237CNC imported from Japan TOYO company. (roundness of processed product within $0.72\mu\text{m}$)
5. Outer diameter grinding machine KC-500A imported from Japan KOYO company. (roundness of processed product within $1.5\mu\text{m}$)



轴承外圈生产线
Bearing outer ring production line



轴承内圈生产线
Bearing inner ring production line



磨加工生产线



滚子生产线
Roller Production Line



滚子检测线
Roller Inspection Line



先进的退磁清洗设备
Advanced Demagnetization Cleaning Equipment



先进的热处理设备（爱协林转底炉）
Advanced heat treatment equipment (Aichelin rotary hearth furnace)



激光打标机
Laser Marking Machine



轴承装配生产线
Bearing Assembly Line