



TianJin SEMRI Bearing Pursue Excellent Quality
天津赛美瑞轴承 追求卓越品质



CORPORATE CULTURE 企业文化 >>>

我们的宗旨: 为我们企业创造价值, 承担家庭、企业、社会赋予的重大责任!
我们的经营理念: 1. 天道酬信; 2. 让销售和服务做为我们经营的DNA。
我们的核心价值观: 忠诚、学习、创新、守信!
我们的使命: 创建轴承行业的领军企业, 使我们的祖国富强!
我们的质量文化: 产品就是人品。
我们的核心人生观: 天道酬勤; 勤学、勤奋、勤俭。
我们都是平凡的人, 但是我们一定能造就出不平凡的赛美瑞!

Our tenet: to create value for our enterprise, to undertake great responsibility of family, enterprise and society!
Management philosophy: 1. Integrity; 2. Incomparable Service
Core Values: Fidelity, Study, Innovation, Keep Faith!
Our Mission: Creating the Industry Leader of Bearing, Make Our Country Prosperous and Strong.
Quality Culture: Product Quality is Same with Character.
Core Philosophy: God helps those who help themselves; Diligent, Hard-working, Thrifty.
We Are Ordinary People, But We Can and Must Create Extraordinary SEMRI!



ABOUT SEMRI BEARING

关于我们>>>



天津赛美瑞轴承科技有限公司赛美瑞主要生产各种滚子轴承和球轴承。我们有丰富的经验，公司的SEMRI品牌和TFN品牌的产品已销售到北美洲、南美洲、欧洲、大洋洲等130个国家和地区，亚洲和非洲。

在这20多年里，赛美瑞保持“质量第一，创新取胜，服务第一”为宗旨；“追求完美品质，创造一流品牌”为经营方针，推出品牌战略。我们拥有高精度的生产设备，生产技术可以替代世界名牌轴承为了满足客户要求。我们相信，我们的高质量的产品将满足越来越多的客户，同时也希望我们能建立长期持久的合作和友谊。

TIANJIN SEMRI BEARING TECHNOLOGY CO., LTD mainly produces all kinds of roller bearings and ball bearings. We have rich experience - SEMRI and TFN brand products have been marketed to over 130 countries and regions in North America, South America, Europe Oceania, Asia and Africa.

During these more than 20 years, SEMRI persists with "quality first, innovation win, service first" as purpose; "The pursuit of perfect quality, create first-class brand" as management policy, promoting the brand strategy. We have the high precision production equipment, for producing the bearings that can replace the world famous brand bearings in order to meet the clients' great demands.

We believe that our high quality products will be satisfied with more and more customers. Hope we can develop long and lasting cooperation and friendship.



ABOUT QUALIFICATIONS <<<关于资质





追求卓越品质
Pursuit of excellence

www.semribearing.com

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轴承的材料与分类

MATERIAL AND CLASSIFICATION OF BEARINGS

轴承分类 Bearing Classification

深沟球轴承	Deep groove ball bearings	调心滚子轴承	Spherical roller bearings
角接触球轴承	Deep groove ball bearings	圆锥滚子轴承	Tapered roller bearings
调心球轴承	Self-aligning ball bearings	滚针轴承	Needle roller bearings
外球面轴承	Spherical bearings	圆柱滚子轴承	Cylindrical roller bearings
轮毂轴承	Wheel hub bearings	推力滚子轴承	Thrust roller bearings

轴承材料规格 Standard bearing materials

RINGS&BALLS- SAE-52100 vacuum degassed,high carbon,chromium bearing steel is the standard material for precision bearing rings and balls.In applications where a corrosive enviromnt may be present,We recommend the use of AISI-440C martensitic stainless steel,440C is designated by "s" prefix in our part numbers.

STEEL NO.	CHEMICAL COMPOSITION%						
	C	Si	Mn	P	S	Cr	Mo
SAE 52100	0.98-1.1	0.15-0.3	0.25-0.45	<0.025	<0.025	1.3-1.6	--
AISI-440C	0.95-1.2	<1.0	<0.1	<0.04	<0.03	16-18	<0.75

RETAINERS-OTT standard bearing retainers are made form cold rolled carbon steel however,in cases of corrosive environment,misalignment,or high speed operation,stainless stell,nylons,or phenolic resins will be used upon request.

SHEET STEEL NO.	CHEMICAL COMPOSITION%						
	C	Si	Mn	P	S	Ni	Cr
JISG 3134 SPCC	<1.2	--	<0.5	<0.04	<0.045	--	--

SEALS&SHIELDS-OTT shields*also employ carbon steel as standard,and the option of AISI-300 stainless steel is available if^n needed.iPUF uses a variety of sealing materials to meet the requirements of high temperature operation and compatibility with greases.Buna Nitrilr is the standard material used,while fluorocarbon ,silicone,and teflon seals are commonly specified for high temperatures.

LUBRICANTS-OTT standard greases are supplied with shielded or sealed bearings as standard.Different types oil lubricao-txscan be supplied upon request and are standard for open bearings.

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深沟球轴承 Deep groove ball bearing



Deep groove ball bearing mainly bear radial load,also can bear a certain amount of the axial load. They are simple in design, non-separable,suitable for high and very high speeds and are robust in operation, requiring little maintenance.SEMRI supplies deep groove ball bearings with low friction factor and high limit-speed in many different designs, series and in a wide range of sizes. Used in precision instruments, low noise machine, automobile, motorcycle, and the general machinery and so on. It is the most widely used bearing type in the machinery industry.

深沟球轴承主要承受径向载荷,也可承受一定量的轴向载荷。结构简单,不可拆分,适用于高转速甚至极高转速的运行,而且非常耐用,无需经常维护。该类轴承摩擦系数小,极限转速高,尺寸范围与形式变化多样。适用于精密仪表、低噪音电机、汽车、摩托车及一般机械等,是机械工业中使用最为广泛的一类轴承。

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Self-aligning ball bearing 调心球轴承



Self-aligning ball bearings have two rows of balls and a common sphered raceway in the outer ring. Self-aligning ball bearing has two structures of cylindrical and tapered bore, the materials of cage are steel sheet, synthetic resin and so on. Its characteristic is spherical outer ring surface with self-aligning capability, and can compensate different concentricity and deflection caused by the error, but it shall not exceed 3 degrees between inner ring and outer ring. Used in Paper-making machinery, semiconductor, gear and other equipment.

调心球轴承是二条深道的内圈和滚道为球面的外圈之间,装配有圆球状滚珠的轴承。调心球轴承有圆柱孔和圆锥孔两种结构,保持架的材质有钢板、合成树脂等。其特点是外圈滚道呈球面形,具有自动调心性,可以补偿不同心度和轴挠度造成的误差,但其内、外圈相对倾斜度不得超过3度。适用于造纸机械、半导体、齿轮装置等设备中。

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圆柱滚子轴承 Cylindrical roller bearing



Cylindrical roller bearing belongs to separable bearing. Cylindrical rollers and raceway are line contact with low friction and high speed, can accommodate relatively heavy radial loads. This type of bearing contains Single, double and multi-row bearings, full complement bearings (without a cage) and split bearings. Used in large and medium-sized motor, locomotives, machine tool spindle, gas turbines, reducer, vibrating screen and lifting transportation machinery, etc.

圆柱滚子轴承属于分离型轴承。圆柱滚子与滚道呈线接触，摩擦系数小，高速运转，承受径向载荷能力较大。包括：单列、双列及多列圆柱滚子轴承，满装圆柱滚子轴承，剖分轴承。适用于大中型电动机、火车车辆、机床主轴、燃气涡轮机、减速机、振动筛以及起重运输机械等。

Thrust roller bearing 推力滚子轴承



Thrust roller bearings can accommodate combined loads, i.e. simultaneously acting axial and radial loads, but radial loads should not exceed 55% of axial loads. This type of bearing have low friction factor, high speed, and self-aligning. Mainly used in Heavy duty machine tools, High-power Marine gearbox, Oil drilling machine, Vertical machine and other machinery.

推力滚子轴承用于承受轴向载荷为主的轴、径向联合载荷，但径向载荷不得超过轴向载荷的55%。此种轴承摩擦因数较低，转速较高，并具有调心性能。推力圆柱滚子轴承主要用于重型机床、大功率船用齿轮箱、石油钻机、立式电机等机械中。

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调心滚子轴承 Spherical roller bearing



Spherical roller bearings have two rows of rollers, a common sphered outer ring raceway and two inner ring raceways inclined at an angle to the bearing axis. Such bearings mainly have aligning function and bear radial load, but also can withstand axial load in either direction. With high radial load capacity, Spherical roller bearings especially apply to working under heavy loads or vibration, but can not bear the pure axial load.

In addition, this type bearing with better impact resistant ability, used in Papermaking machinery, Deceleration device, Railway Spindle vehicles, Rolling mill gear box bearing, Rolling mill rolls, Crusher, Vibrating screen, Printing machinery, Woodworking machinery, Various industrial reducer, Vertical seat-aligning bearing.

调心滚子轴承是在有二条滚道的内圈和滚道为球面的外圈之间，组装着鼓形滚子的轴承。调心滚子轴承具有两列滚子，主要具有调心功能和承受径向载荷，同时也能承受任一方向的轴向载荷。有高的径向载荷能力，特别适用于重载或振动载荷下工作，但不能承受纯轴向载荷。

此外，该类轴承具有较好的抗冲击能力，适用于造纸机械、减速装置、铁路车辆车轴、轧钢机齿轮箱轴承座、轧钢机辊子、破碎机、振动筛、印刷机械、木工机械、各类产业用减速机、立式带座调心轴承。

Tapered roller bearing 圆锥滚子轴承



Tapered roller bearings have tapered inner and outer ring raceways and tapered rollers. They are designed to accommodate combined loads, i.e. simultaneously acting axial and radial loads, but Radial loads mainly. The axial load carrying is up to angle of outer ring raceway, capacity the axial load carrying capacity of angular contact ball bearings increases with increasing angle. According to rows of bearing rollers, these bearing are divided into single row, double rows, four rows and other different structures.

Tapered roller bearings are widely used in automotive, mill, mining, metallurgy, plastics machinery and other industries.

圆锥滚子轴承称为分离轴承，轴承的内、外圈均具有锥形滚道，主要承受以径向载荷为主的径向与轴向联合载荷。轴承承载能力取决于外圈的滚道角度，角度越大承载能力越大。该类轴承根据滚子列数分为单列、双列、四列等不同的结构。适用于汽车、轧机、矿山、塑料机械等行业，应用范围广泛。

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DEVELOPMENT GOAL

发展目标 >>>

赛美瑞轴承与未来同行

SEMRI Bearing and future peers



www.semribearing.com

Customer hotline

客服热线 022-23853626

角接触球轴承 Angular contact ball bearing

Thrust ball bearing 推力球轴承



Angular contact ball bearing can withstand radial load and axial load simultaneously, as well as the pure axle loads. They have higher limit speed. The axial load carrying capacity of angular contact ball bearings increases with increasing contact angle. High precision and high speed bearings usually take 15 degrees contact Angle. Retainers are made of brass, synthetic resins etc. Widely Used in Machine tool spindle, High frequency motor, Gas turbine, Centrifuge, Oil pump, Roots blower, Air compressor, Transmission, Printing machinery.

角接触球轴承可以同时承受径向载荷和轴向载荷，以及纯轴重。他们具有较高的极限转速。接触角越大，轴向承载能力越高。高精度和高速轴承通常取15度接触角。保持架的材质有黄铜，合成树脂等。广泛应用于机床主轴，高频马达，燃气轮机，离心，机油泵，罗茨鼓风机，空气压缩机，传动，印刷机械。

Thrust Ball Bearings are manufactured as single direction or double direction thrust ball bearings. They are designed to withstand thrust load under high speed operation, i.e. the shaft washer, housing washer(s), ball and cage assembly(s) can be mounted separately. In addition, the bearings can accommodate axial loads only and must not be subjected to any radial load. Mainly used in crane hooks, immediately centrifuges, jacks, low-speed reducer, etc.

推力球轴承分为单向或双向推力球轴承。采用高速运转时可承受推力载荷的设计，由推力球轴承由座圈、轴圈和钢球保持架组件三部分构成。成。另外，这种轴承可承受轴向载荷，但不能承受径向载荷。主要用于起重吊钩，立即水泵，立即离心机，千斤顶，低速减速器等。

外球面轴承 Pillow block bearing



Pillow block bearings, in fact, are variations of deep groove ball bearings. Its characteristic is spherical outer ring surface. It can be equipped to self-aligning capability when it is put inside the bearing housing. Because of low precision and rough structure, pillow block bearings have priority to be used in simple equipment and spare parts, such as agricultural machinery, transportation systems and construction machinery.

外球面球轴承实际上是深沟球轴承的一种变型，特点是它的外圈外径表面为球面，可以配入轴承座相应的凹球面内起到调心的作用。因为精度不高，结构粗糙，外球面轴承优先适用于要求设备及零部件简单的场合，例如用于农业机械、运输系统或建筑机械上。

Automotive bearing 汽车轴承



Automobile bearings mainly include wheel bearings and clutch bearings. The main role of wheel bearings is bearing weight and providing accurate guidance for wheel rotation. It can both bear axial loads and radial loads, it is a very important spare parts. Also, clutch is very important as hub bearings. Clutch bearings installed between the clutch and the transmission. The wheel bearing and clutch bearing are both very important parts for all cars.

汽车轴承包括轮毂轴承和离合器轴承。轮毂轴承的主要作用是承重和为轮毂的转动提供精确引导，它既承受轴向载荷又承受径向载荷，是一个非常重要的零部件。离合器分离轴承安装在离合器与变速器之间。轮毂轴承和离合器轴承对于车来说是非常重要的组成部分。

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陶瓷轴承 Ceramic bearing



Since it has the excellent properties that metal bearing can't reach, Ceramic Bearings are very popular in the world of new material because of Anti-corrosion, Resistance to high temperature, super strength. It consists of ZrO₂, Si₃N₄, SiC. Widely used in Medical equipment, cryogenic engineering, Optical instruments, high-speed machine tools, high-speed motor, printing machinery, food processing machinery.

陶瓷轴承由于其具有金属轴承所无法比拟的优良性能，抗腐蚀、耐高温、超强度等在新材料世界独领风骚。有氧化锆 (ZrO₂)、氮化硅 (Si₃N₄)、碳化硅 (SiC) 三种陶瓷材质。应用于医疗器械、低温工程、光学仪器、高速机床、高速电机、印刷机械、食品加工机械。

Needle Roller bearing 滚针轴承



Needle bearings are installed with thin and long cylindrical rollers (roller diameter $D < 5\text{mm}$, $L/D \geq 2.5$, L is length of roller). In spite of their low cross section, needle roller bearings have a high load carrying capacity. Therefore, they are extremely suitable for bearing arrangements where radial space is limited. Application: Automobile, Motorcycle, Cycle, Electric tool, Spinning machine, Agriculture machine, Industrial sewing machine, Engineering machinery and etc.

滚针轴承装有细而长的圆柱滚子(滚子直径 $D < 5\text{mm}$, $L/D \geq 2.5$, L 为滚子长度)。尽管具有较小的截面，轴承仍具有较高的负荷承受能力，特别适用于径向安装尺寸受限制的支承结构。适用范围：汽车、摩托车、自行车、电动工具、纺织机械、农业机械、工业缝纫机、工程机械等。

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