# About SKF

In 1905, the young Swedish textile technician Sven Wingquist (Sven Wingquist) due to the textile machinery on the bearing damage caused by frequent troubles, invented the self-aligning double row ball bearings, bearing technology will be brought into the new era, SKF then in 1907 Year was founded. Founded only five years later in China set up the first office. SKF's history in China is a long history, as well as SKF China in Hong Kong Limited, and its 14 offices in China. SKF is actively seeking to develop any business in China, in order to further establish a production base and expand the Chinese market. SKF Group is the world's leading supplier of rolling bearings and seals, and its business scope includes bearing manufacturing and seal production and bearing-related tools to promote, to provide customers with a variety of solutions and services. SKF's business is divided into five sectors: Ministry of Industry, Automotive, Electrical and Electronic Services, Services, Aerospace and Steel. Each business unit serves the global market, with a focus on customers and industries related to its own business. SKF has paid great attention to product quality, technology development and market development from the outset. We have a dedicated research organization in the Netherlands. The Group has invested heavily in technical research and product development. SKF has invested 17% of its annual sales for research and development, Continue to obtain a variety of inventions and creation, an average of 2-3 new inventions and patents every day, in the field of bearing technology to create new standards, to the bearing market to launch new products. SKF Group's main strengths include technical support, equipment maintenance services, equipment condition monitoring and technical training. SKF is a global multinational company, has more than 100 manufacturing plants, located in the rest of the world. SKF has more than 40,000 employees worldwide, 8,000 offices, more than 130 countries with its own distribution organization, and more than 15,000 dealers and agents worldwide support. High-quality products, improve the global logistics system, a good after-sales service system, so that this multinational multinational SKF has become the world's bearing brand. SKF entered China in 1912 as early as possible, greatly expanding the sales trade business in China. SKF is committed to cooperation with the famous Chinese enterprises, has set up in 1994, SKF Bearing Co., Ltd., in 1996 set up the Beijing South Lucky Fu Railway Bearing Co., Ltd., in 1998 set up the Dalian Sike Fuwa Shaft Bearing Co., Ltd., established in 2001, SKF (Shanghai) Bearing Co., Ltd., expanded its business in China

SKF has been a leading global technology provider since 1907. Our fundamental strength is the ability to continuously develop new technologies – then use them to create products that offer competitive advantages to our customers.

We achieve this by combining hands-on experience in over 40 industries with our knowledge across the SKF technology platforms: bearings and units, seals, mechatronics, services and lubrication systems. Our success is based on this knowledge, our people, and our commitment to SKF Care principles.

The focus of SKF's technology development today is to reduce the environmental impact of an asset during its lifecycle, both in our own and our customers' operations. The SKF BeyondZero product portfolio is the latest example of what SKF has to offer in this area.

## SKF History

Reducing friction and cost. Saving energy and time. Explore the timeline below to see how SKF Knowledge has helped develop industries and improve everyday life since 1907. 1907

Aktiebolaget Svenska Kullagerfabriken founded on 16 February 1907. Sven Wingquist, inventor of the double-row self-aligning ball bearing, was one of the founding members and the first Managing Director. Axel Carlander was Chairman of the Board. The share capital amounted to 110 000 kronor. A patent application was filed on 6 June. Patents were eventually granted in ten countries. The first factory was built at Säve Strandgata, Gothenburg.

### 1908

Branch offices opened in Germany and France. Agents appointed in Finland, Switzerland, Belgium, Denmark, Austria and Australia.

## 1909

Subsidiary formed in New York - SKF Ball Bearing Co. A small workshop opened in Paris. Agents appointed in Italy, Argentina and Japan.

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# 2012

SKF Group acquired US-based General Bearing Corporations. SKF developed a range of Knowledge Engineering apps for the mobile market. A Guinness World record was set at Liseberg and SKF supported the Kim Källström Trophy during Gothia Cup. The integration and re-branding of SNFA was completed. SKF increased focus on sustainability and launched a aggressive climate strategy and a partnership with WWF to reduce greenhouse gas emissions. The BeyondZero concept was revealed with a portfolio of solutions with significant environmental benefits. SKF celebrated 100 years in China with new investments and inauguration of a new factory in Jinan, China.

# 2013

SKF acquired Blohm + Voss Industries GmbH and Kaydon Corporation and divested metallic rods operation to Precision Castparts Corp. For the 14th year in a row, SKF was listed as one of the world's most sustainable companies by both the Dow Jones Sustainability World Index (DJSI) and the Dow Jones Sustainability Index for Europe. At Hannover Fair 2013, SKF presented a selection of products and integrated solutions under the theme "Release the Power of Knowledge Engineering".

### 2014

SKF invested in two new Global Technical Centres in Europe and one in United States. The SKF Documented Solutions Programme celebrated 10 years of confirmed customer savings. The cooperation with Gothia Cup was extended and SKF sponsored the finals arena. Two acquisitions were made: GLOi and Hofmann Engineering North America. SKF invested in a Kaydon production facility in Brazil. SKF took the nest step in Smartifying the industry by utilizing smart phones and tablets in the industrial arena. Alrik Danielson was appointed as new

President and CEO as of 1 January 2015, succeeding Tom Johnstone, and a reorganization of SKF was done in connection to this.

With the development of SKF, derived from the following agents in these areas: skf bearing Kuwait, skf bearing Paraguay,skf bearing Philippines,skf bearing Peru, skf bearing Oman,"skf singapore","SKF bearings",skf bearing,skf bearing UAE, "SKF bearing",skf bearing Malacia, skf bearing Uruguay,skf bearing Saudi Arabia, skf bearing Mexico,skf bearing Chile,skf bearing Indonesia,skf bearing Venezuela, skf bearing Sweden,skf bearing distrbutor,"skf supplier",SKF Singapore,"bearing skf", "skf bearing supplier",skf bearing Argentina,"skf company",supplier skf, skf bearing Bolivia, skf bearing Brazil,"bearings skf", skf bearing Thailand, "skf distributors","skf online", "skf sweden",skf bearing Colombia,"skf bearing company","suppliers skf","distributors skf"

SKF Table , more details as follow: Ball bearings Roller bearings Bearing accessories Engineered products Track runner bearings Super-precision bearings Plain bearings Bearing units Bearing housings Ball bearings SKF ball bearings come in a wide variety of types, designs, series, sizes, variants and materials. Depending on the bearing design, SKF ball bearings are available in four performance classes. SKF Standard SKF Explorer SKF Energy Efficient SKF Super-precision

Designation

Deep groove ball bearings

Angular contact ball bearings

Self-aligning ball bearings

Thrust ball bearings

### **Roller bearings**

SKF roller bearings come in a wide variety of types, designs, series, sizes, variants and materials. Depending on the bearing design, SKF roller bearings are available in four performance classes.

SKF Standard SKF Explorer SKF Energy Efficient SKF Super-precision

Designation

Cylindrical roller bearings

Needle roller bearings

Combined needle roller bearings

Combined cylindrical roller/taper roller bearings

#### **Bearing accessories**

As a complement to our bearings SKF supplies a wide assortment of bearing accessories like adapter sleeves, withdrawal sleeves and lock nuts.

Adapter and withdrawal sleeves are used to locate bearings with tapered bore on plain or stepped shafts. They facilitate bearing mounting and dismounting and, in many cases, simplify bearing arrangement design.

Lock nuts are used to locate bearings and other components onto a shaft or adapter sleeve and facilitate mounting and dismounting. SKF supplies a wide assortment of lock nuts. SKF lock nuts are easy to install, do not damage the shaft and provide effective locking.

Since seals and bearing housings are in separate sections, the accessories covered in this section include the sleeves and lock nuts used to locate and lock bearings in position on a shaft. Bearing accessories

Sleeves

Adapter sleeves

Withdrawal sleeves

Engineered products

These bearings have standardized dimensions but incorporate special features for specific applications. Properly applied, these bearings make costly customized bearings unnecessary, and they can also greatly reduce lead times since they are generally available from stock. To search for products by designation or dimensions, please use Product search (on the right). Engineered product types include:

Hybrid deep groove ball bearings with ceramic balls and rings of bearing steel These bearings have good emergency running properties and can cope with extreme conditions and high speeds. Their inherent resistance to the passage of electric current means that they are ideal for electric motors and electrically powered tools. INSOCOAT® bearings

These bearings have an insulating coating of aluminium oxide on the external surfaces of the inner or outer ring. They can be used in difficult electrical applications with no additional design requirements and they can also be a drop-in replacement for conventional bearings in existing

applications.

Bearings for exteme temperatures

Bearings with graphite-based lubricant effective in temperatures up to +350 °C, making these products very suitable for kiln trucks, roller hearth furnaces, and bakeries.

NoWear® bearings

These bearings have been surface treated to withstand arduous operating conditions such as zero or very light loads or boundary lubrication conditions.

Bearings and bearing units with Solid Oil

For applications where conventional grease or oil lubrication methods are not adequate or practical.

Polymer ball bearings

These bearings are resistant to corrosion and to many chemicals. They are lightweight and quiet running. Polymer ball bearings require no lubricant.

SKF DryLube bearings

These bearings are filled with a dry lubricant, based on a graphite or molybdenum disulfide and a resin binder. The dry lubricant provides the rolling elements and raceways with lubrication in temperatures up to +350 °C.

Overview of Engineered products

Backing bearings for cluster mills

Sensor bearing units

Hybrid bearings

**INSOCOAT** bearings

Bearings for extreme temperatures

Track runner bearings

Track runner bearings are designed to run on all types of tracks and to be used in cam drivers, conveyor systems, etc. These bearings have a thick-walled outer ring, which enable them to accommodate shock loads, while reducing distortion and bending stresses.

The outer ring running surface is crowned as standard. This is beneficial for applications where angular misalignment relative to the track may occur or where edge stresses need to be minimized. With the exception of single row cam rollers, track runner bearings are also available with a cylindrical (flat) outer ring running surface.

SKF supplies track runner bearings greased, sealed and ready to mount.

SKF supplies track runner bearings in many different types and designs, and for a wide variety of operating conditions and applications. The assortment comprises:

cam rollers (fig 1), internal design based on ball bearings

support rollers (fig 2), internal design based on needle or cylindrical roller bearings

cam followers (fig 3), internal design based on needle or cylindrical roller bearings

To search by product designation or dimensions, please use Product search below. Or, see the Product tables in the left column.

fig 1

fig 2

fig 3

# Super-precision bearings

Machine tools and other precision applications require superior bearing performance. Extended speed capability, a high degree of running accuracy, high system rigidity, low heat generation, as well as low noise and vibration levels are just some of the challenges. Rolling bearings for general industrial applications can only partly fulfill these requirements. Therefore, SKF manufactures a comprehensive assortment of super-precision bearings. SKF super-precision bearings help original equipment manufacturers and end users to further optimize performance parameters of their equipment and applications. The benefits differ depending on the bearing series and applications but include high speed and load carrying ability, long bearing service life, long maintenance intervals and low energy consumption. Typical applications for super-precision bearings are: metal cutting and woodworking machinery spindles other machine spindles (e.g. balancing machines) high speed rolling mills printing machinery precision ball screws live centres high speed turbochargers vacuum pumps racing cars boat gyrostabilizers machine components for the semiconductor industry To search by product designation or dimensions, please use Product search below. Or, see the Product tables in the left column.

Designation Overview of super-precision bearings

Angular contact ball bearing 718 series

Angular contact ball bearings 70-719 D series

Angular contact ball bearings 72 D series

High-speed angular contact ball bearings E design

High-speed angular contact ball bearings B design

High-speed cylindrical roller bearing N 10

Cylindrical roller bearing NN 30

Double direction in the BTW series

Double direction in the BTM series

Angular contact thrust ball bearings

SKF Super-precision Bearing Lubrication Unit Improved reliability, profitability and reduced environmental impact with the new SKF Superprecision Bearing Lubrication Unit.

NitroMax steel

To enable longer bearing service life and reduce the costs associated with downtime, SKF has devel

Plain bearings

Many applications require spherical bearings that are suitable for oscillating movements and that can accommodate misalignment. Rolling bearings only partly fulfil these requirements as they are generally designed for continuous rotation and can only accommodate limited misalignment. Therefore, SKF manufactures spherical plain bearings, rod ends and bushings to provide an economical solution to these challenges.

SKF Spherical plain bearings, rod ends and bushings are produced in various designs and with different sliding contact surface combinations. Each design and combination has characteristic properties which makes it particularly suitable for certain applications.

To search for products by designation or dimensions, please use Product search, below. Catalogue

Products Spherical plain bearings

Radial spherical plain bearings requiring maintenance

SKF Extended Life Plain Bearings

Angular contact spherical plain bearings

Trust spherical plain bearings

Bearing units

SKF provides different types of bearing units that are ready-to-mount bearing units, which are greased and sealed, and are able to compensate for misalignment of the shaft with respect of the housing.

You can find the products you need by:

• Designation or dimensions: Fill in Product search on the right

• Type: Use the Product tables link on the left .

Catalogue

Ball bearing units Ball bearing units general

Roller bearing units

#### Bearing housings

An SKF Bearing housing, together with appropriate SKF bearings constitute economic, interchangeable bearing units that meet the demand for designs that are easy to maintain. As a leading supplier of rolling bearings, SKF also produces bearing housings in a wide range of designs and sizes that are based on experience collected in all industrial areas. Among others, SKF bearing housings have the following advantages large assortment of design and sizes high quality of bearing housings design and manufacturing worldwide availability You can find the products you need by: Designation or dimensions: Fill in Product search on the right Type: Use the Product tables link on the left

Catalogue

Split plummer block

SNL plummer block housings series 2, 3, 5 & 6

SNL plummer block housings series 30, 31 & 32

SONL oil lubricated plummer block housings

SAF pillow (plummer) block housings

SDAF pillow (plummer) block housings

One-piece plummer Flanged housings Take-up housings Bearing housings

New bearing housings

New SE plummer block housings SE plummer block housings are a new generation of SNL housings New SED large bearing housing

SED plummer block housings for spherical roller bearings for shaft sizes from 430 to 900 mm.

SNLN 30 plummer block housings

SNLN 30 plummer block housings are split and replace old SN 30 housings.

#### SKF product application range

First, smelters, mines, steel rolling mill machinery and equipment endurance bearings. Second, power plants, gas engines, electrical plant power equipment, high demand bearings. Such equipment for the continuous operation of the bearing force, assembly and disassembly, inconvenience to change, so the requirements of the bearing quality is very stable, wearresistant pressure. General manufacturers to use more imports, such as Sweden SKF, Germany FAG, Japan NSK, KOYO and other brands.

Third, printing, packaging machinery, food machinery, special bearings and spherical bearings. Fourth, plastic, chemical fiber machinery, film stretching, special bearings and high temperature bearings.

With the development of science and technology, such machinery and equipment continue to improve, changing with each passing day; some foreign, domestic soon, with its associated bearings also innovation. Conveyor belt part of the Dongguan TR and Nanan Taiwan-funded FS brand of spherical bearings, easy to install, nice, easy to replace, favored by the users. Some important parts of the host using imported bearings. At the same time, the joint bearings, one-way bearings, rail bearings, needle roller bearings, BOPP, PVC stretch film equipment drying box in the high temperature bearings.

Fifth, toys, watches, electronics, audio and video equipment fine axis zero.

Sixth, textile, dyeing, footwear, tobacco machinery used bearings.

Such bearings small and exquisite, efficient and durable, requiring high speed, low noise, nonstrength factory can not be manufactured. Because of its special equipment, different design, the use of bearings are not the same, generally can not prepare the spot, and sometimes easy to find (only often customers have to understand, to prepare for emergency), it is recommended that the best users Do with a prepared one, to avoid downtime to be expected, affecting production.

Seventh, beer, beverage equipment, pharmaceutical equipment selection bearings. Eighth, broken, ceramic machinery, fine chemical machinery used bearings.

Such equipment work environment is poor, more water mist, moisture, dust, acid and other effects, requiring a strong bearing seal, Shantou adequate and reasonable, it is best to timely add grease. The company has a standing spot, especially large UC series bearings (such as: UCFS318 to UCFS328, RME100, RME090S, etc.) and three types of spherical roller bearings, the full range, for selection.