

Rollers
Assemblies & Carriage units
Steel balls
Deep groove ball bearings - DIN 625

SKT
Schwarzwälder
Kugel- & Rollentechnik

Rollers

Customized rollers for demanding applications

Discover our extensive range of high-quality rollers, specially designed to meet the different requirements of industrial and technical applications.

Our aim

Optimum, cost-effective solutions that meet the requirements of your business and meet a wide range of budgets. We offer customized solutions characterized by **maximum running comfort, durability, and exceptional load capacity**.

Variety of our rollers

Our **individual rollers** offer customized solutions in terms of geometry and attachments for every installation situation. Available in diameters from **3 to 100 mm**, they include a wide range of materials, including bearing steel, stainless steel, free-cutting steel, cold-formed steel, and different plastics, to meet the highest demands of various applications.

Plastic-sheathed ball bearings

Steel ball bearings

Soft rollers

Plastic turned parts

Bearings for wet areas

Slide bearings



Plastic sheathed ball bearings

Maximum running comfort to meet your requirements

For smooth running, low starting and rolling resistance, and comfortable rolling, ball bearings with a plastic coating are suitable, which protects the running rail or other system components.

A wide range of materials are available, including various types of POM, PET, PA, or TPE. These offer different characteristics and allowing us to specifically address each customer's requirements.

Optimized lifetime and wear, as well as reduced deformation under static load

The optimal geometry of the contact surfaces and the right choose of material significantly influence the lifetime and wear of the rollers, as well as **the deformation under static load of the plastic**.

The steel parts of the sheathed ball bearings can also be customized. This allows the realization of i**ndividual installation situations** and customer requirements.











Steel ball bearings

Heavy-duty solutions with a long lifetime

Pure steel ball bearings are typically used **as support rollers** and are characterized by **high load capacity, long lifetime, minimal wear, low starting and rolling resistance**.
The use of **double-row steel ball bearings** further increases these already high load capacities. A wide range of materials and grades are available, such as 100Cr6, free-cutting steel, brass, and different kinds of stainless steels.

Various **surface coatings** with varying thicknesses are available for corrosion protection.

The use of **special lubricants** can realize user-specific applications, such as high- and low-temperature applications or the food industry.

Custom product designs with our special ball bearings

The production of our special ball bearings is focussed with a maximum of flexibility, allowing for custom product designs that can be perfectly tailored to the specific installation situation. These can be assembled with **bolts or screw-on elements** if required. With an outside diameter **of 10 to approximately 100 mm**, our radial deep groove ball bearings are versatile useable and can carry both **radial and axial loads**.









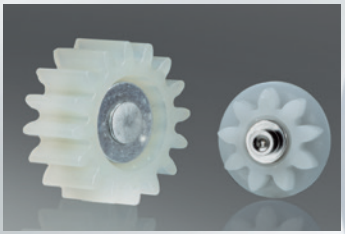


Slide bearings

Cost-effective support and guide rollers with perfected running comfort

Our slide bearings are used not only as **guide rollers** but also as simple **support rollers**.
The basis for the perfected running comfort and long lifetime is a specially developed bolt structure, which, in combination with special lubricants, allows the plastic roller to function optimally. Therefore, many of our customers rely on **SKT's "low-cost version."**

Our wide range of slide bearings
With **flexible design options** for plastic geometry, a choice of bolt types such as screw, rivet, or plug bolts, our slide bearings meet the highest demands. By using advanced materials and technologies, such as specially selected plastics, surface coatings, and lubricants, **we optimize friction and thus lifetime**.











Soft rollers

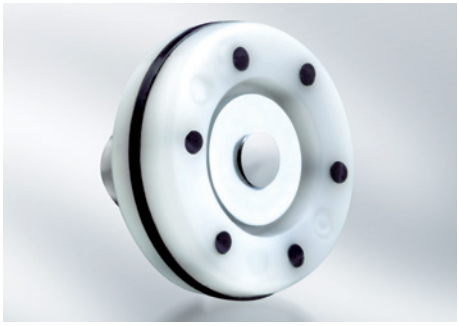
For minimizing rolling noise

Due to the increasing market demand for **low-noise rollers**, the so-called soft roller was developed, which corresponds to a two-component roller. Our soft rollers **reduce rolling noise to a minimum**. Here the hard core ensures optimal sliding properties on the bolt. Depending on the design, our soft rollers are used as **load rollers** or **guide rollers**.

Flexible design

With flexible design options for plastic geometry, a selection of various plastics in **different hardness levels**, bolt types such as screw, rivet, or socket bolts, and a diameter range **from 11 to 35 mm**, our soft rollers meet the highest demands for noise-reduced rolling.







Plastic turned parts

Innovative material solutions for technical challenges

Thanks to our extensive manufacturing possibilities, we are able to offer **customized plastic turned parts made from a variety of materials**.

Our customers use these as slide bearings, rollers, or even as plastic coatings for their own ball bearings. Our plastic turned parts are also used in a wide variety of applications.

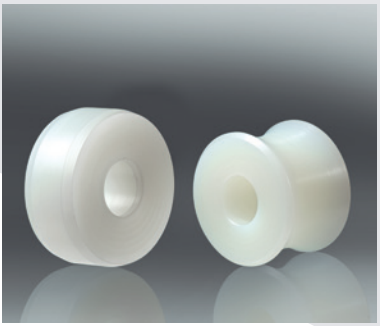
Our wide range

Our high-precision plastic turned parts are manufactured by using a flexible machine park that allows us to produce a wide range of products in diameters **from 3 to 60 mm and in a diverse selection of materials** (for example, various Types of POM, PA, PET or PEEK). We place particular emphasis on the quality and surface of our products to meet the highest standards.











Bearings for wet areas

Products with high corrosion resistance



Our bearings are used in various areas requiring **high corrosion resistance**. These include environments, where **moisture and water** are a constant presence. The combination of advanced materials such as plastics, brass, and stainless steels enables a wide range of applications and **ensures durability and reliability**.



Our wide product portfolio includes **slide bearings and plastic-sheathed ball bearings** specifically designed for use in high-moistness conditions.







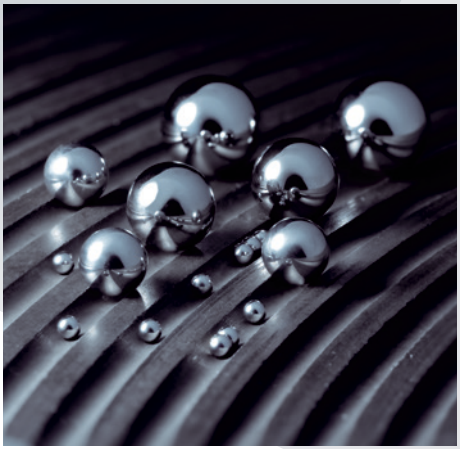


Steel balls

High-precision steel balls in sizes from Ø 0.500 mm to Ø 15,000 mm

Our wide range of steel balls

Our standard range includes ball sizes from **Ø 0.500 mm to Ø 15,000 mm in increments of up to 0.5 µ**. In order to be able to compensate for the finest tolerances, we are able to offer balls up to **quality class G05**. In summary, this ultimately guarantees the highest precision in your product.



High quality materials for precision steel balls

During manufacturing our steel balls, we attach particular importance to the selection of materials. Chrome steel **1.3505 – AISI 52100** and the stainless steels **1.3541 / 1.4034 – AISI 420C and 1.4125 – AISI 440C** are in focus of our production process. These materials not only **guarantee a long lifetime and reliability**, but also meet the highest quality standards to meet the different requirements of our customers. **Other materials** are also available upon request.

If balls are not in stock, we are usually able to deliver **within approx. 3 weeks** to maintain your production flow.





Assemblies & Complete Carriage Units

Customized design - lower costs

Our assemblies and carriage units can be customized with **soft rollers, ball bearings, or slide bearings**. As well, different rollers can be **combined in one product**, for example, if support and guide movements are required in one carriage.

We offer a wide range of **base bodies**: from stamped and zinc die-casted parts to plastic and milled versions.



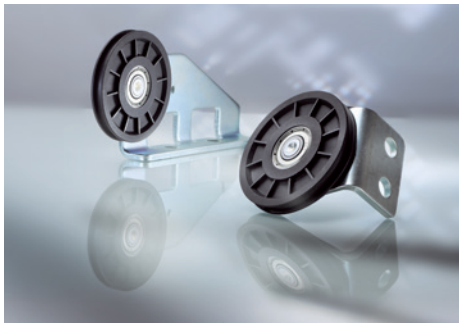






Customized final assembly and service

We manufacture customized carriage designs according to your specifications. Our experienced specialists carefully assemble and inspect them during the final assembly process, and if necessary, package them in the appropriate batch sizes. With our range of services, from small to large series, you receive **ready solutions from a single source**, eliminating an additional assembly step in your workflow and positively affecting the final price.



Discover our wide range of assemblies

With the diverse options we can **individually meet almost all technical and physical requirements**. This allows us to find solutions for demanding requirements regarding **robustness, high load capacity, corrosion resistance, weight, complex geometries, and design**.







Deep groove ball bearings - DIN 625

Deep groove ball bearings in various designs

With the technical expertise of a manufacturer

Our decades of **experience in manufacturing special designs** of a wide variety of ball bearings helps us leverage this advantage profitably for you.

The production steps are the same as those we use in our own production. Therefore, it is easy for us to establish specifications for the production of these standard bearings, ensuring **high quality and reliable function throughout their lifetime**.

Designs and bearing series

We offer a wide range of standard bearings to meet your requirements. Depending on the type, designed with solid outer and inner rings, mounted with simple shields or seals, our deep groove ball bearings are robust and easy to maintain. All of our series can **accommodate axial and radial forces**.

Miniature deep groove ball bearings

Deep groove ball bearings with a bore diameter of < 10 mm are classified as “miniature bearings.“



Deep groove ball bearings

Larger bearing series with a bore diameter ≥ 10 mm are referred to as standard deep groove ball bearings.



Ball bearings with flanges

Deep groove ball bearings with flanges have a shoulder on the outer ring, allowing them to be secured axially against displacement.



Thin-section ball bearings

Thin-section ball bearings are particularly characterized by their small cross-sections and low weight, which means that weight-saving and space-optimized designs can be realized with these bearing variants.

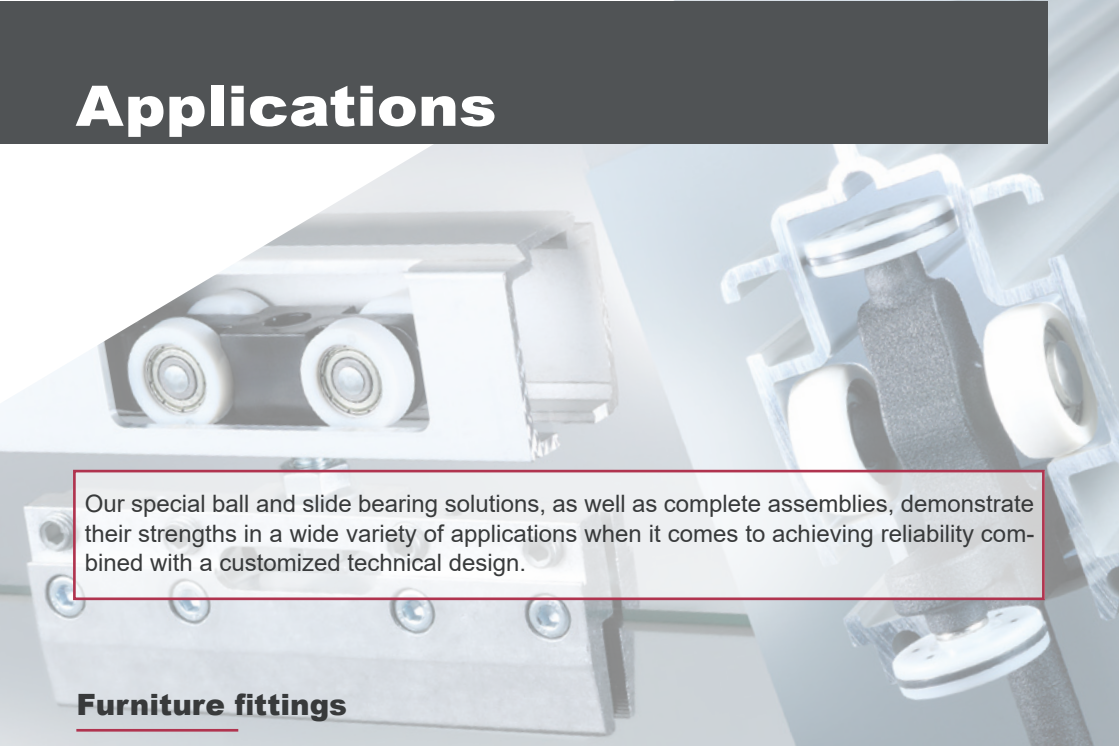


Double-row ball bearings

Double-row ball bearings have two rows of balls and are used for higher loads. The second row of balls can significantly increase the already high load ratings of single-row versions.



Applications



Our special ball and slide bearing solutions, as well as complete assemblies, demonstrate their strengths in a wide variety of applications when it comes to achieving reliability combined with a customized technical design.

Furniture fittings

We offer high-quality rollers and assemblies tailored to the specific requirements of the industry.



Fittings for building technology

SKT offers durable and reliable solutions that are perfectly tailored to the requirements of modern fittings for the building industry.



Sanitary

SKT offers a wide range of specially developed rollers, ball bearings, and slide bearings that are precisely tailored to the requirements of sanitary engineering.



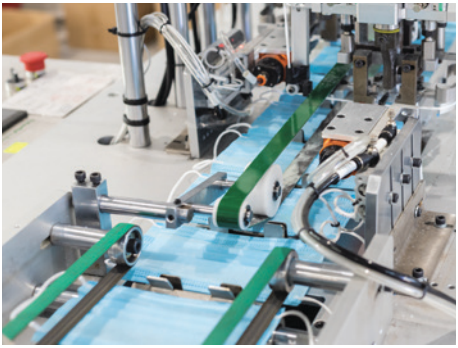
Intralogistics and conveyor industry

Durable SKT components for maximum resilience and efficiency. Our products are designed to function reliably even under the toughest conditions.



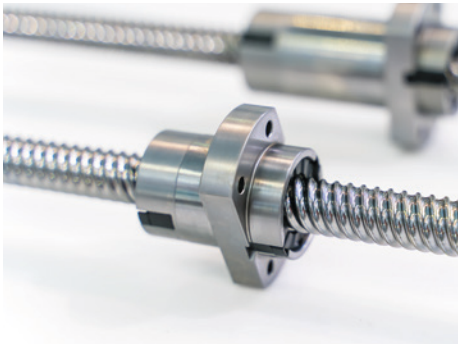
Machine- & Plant Engineering

High-quality SKT components for precise movements under high loads.
By using high-quality materials, our products ensure smooth and precise movement.



Ball technology

Ball technology, and thus the steel ball, is an indispensable component of modern mechanical engineering and automation solutions. It enables low-friction movements, high precision, and contributes to the longevity of systems and machines.



**SKT Schwarzwälder Kugel- &
Rollentechnik GmbH & Co.KG**
Unterm Dorf 184
D - 78144 Schramberg - Tennenbronn

+49(0)7729/887- 0
info@skt-gmbh.de
www.skt-gmbh.de

SKT
Schwarzwälder
Kugel- & Rollentechnik