## RUBIX

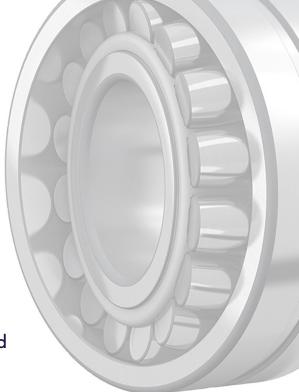
SKF Bearing
Solutions for...

# Construction & Aggregates



# Why Choose SKF?

Rubix has been supplying SKF bearings for decades and has an in-depth understanding of SKF's extensive product range. In fact, we are SKF's largest Authorised Distributor across Europe and have access to SKF's latest innovations.



#### **Extensive Product Range**

At Rubix, we have the widest range of SKF bearings stock in Europe. We know that time is money, and getting the bearing you need without delay is crucial to your operation.

#### **Product Availability**

As SKF's largest Authorised Distributor across Europe, we have an excellent relationship with the company and exceptional access to stock. But to ensure our customers' needs are met, we have made a massive investment in SKF stock, creating the fastest and most reliable supply chain in the industry. Our warehouses and branches now benefit from the widest range of SKF stock ever held, meaning our customers have even more choice and no delay, with same day delivery on stocked items.

#### Innovation at the Core

Integral to SKF's success has been its focus on delivering quality product and looking to the future with continual R&D and innovation.

To ensure we stay up to date with the very latest product developments and solutions, Rubix is an authorised member of the online SKF Distributor College, which our sales and engineering teams use to ensure they are in a position to provide you with the latest technical advice and product information. We also have a number of technical specialists on hand, whose in-depth technical knowledge is invaluable, be it in helping to identify potential cost and efficiency savings for customers or in finding solutions to specific customer challenges.

There are three key aspects you can trust SKF to deliver across its entire product range: quality, reliability and innovation.

All SKF bearings are designed and manufactured to the very highest quality, with considerable investment in R&D to meet the challenges faced by industry. When you buy an SKF bearing you can be assured of its optimal performance and long life far in excess of inferior. lower cost alternatives. With subsequent reduced maintenance and downtown due to unplanned failure, SKF bearings represent a highly cost-effective choice.

#### **Understanding Your Business**

At Rubix we have extensive experience of working with some of the biggest names in the construction and aggregates sectors. All across the UK, many businesses in the industry choose us for their industrial supplies and services because of our specific sector expertise.

We understand how important issues like availability, durability, health and safety and energy conservation affect businesses involved in construction and aggregates. We also understand how they impact you:



Remote Locations, especially when it comes to aggregates, are common in this sector, making next day part delivery unlikely. Businesses therefore need to ensure maximum bearing life to minimise costly downtime.



Operating Conditions are notoriously wet and dusty in construction and aggregates. Ingress of dirt and loss of grease from high pressure washdowns lead to insufficient bearing lubrication and indentations in the bearing raceways.



Health & Safety concerns are key in the construction and aggregates industries. The main cause of casualties occurs during maintenance and repairs, with maintenance on conveyors being one of the major culprits



Off-Road Construction Machinery may work at low speed, but quick reversals, abrupt changes in direction and frequent stopping and starting can have a detrimental effect on the lubrication of the

drivetrain system and its components.



Energy Conservation needs to be applied across all equipment and processes to reduce costs and improve sustainability.



We understand what impact these and other issues have on your requirements and how we can apply our expertise in your industry to provide you with the best parts, products and support.

For businesses with a need to keep production lines running 24/7/365, always having the right part at the right time is vital - and we're here to help.

#### SKF Construction & Aggregates Product Ranges

When it comes to bearings in the construction and aggregates sectors, like Rubix, SKF has a wealth of knowledge, translated into some of the most innovative and best quality products available. On the following pages we have highlighted some of the SKF solutions available, but there are many more. Talk to us to for expert advice on which product is best suited to your needs and budget.



## The Product Range



#### SKF Three-Barrier Solution

For highly contaminated environments, open bearings quickly become damaged from ingress of dirt. SKF's Three-Barrier Solution has been developed specifically for this type of environment and is especially suited to conveyor systems. It consists of a bearing housing — with labyrinth S seals (or Taconite seals for the ultimate protection), a lubricant to act as a contamination barrier and sealed spherical roller bearing. These three barriers protect the bearing from contaminants, leading to extended bearing service life on average three times longer than standard open bearings. Furthermore, its sealed nature means reduced lubricant consumption.



#### SKF Explorer Spherical Roller Bearings

SKF Explorer Spherical Roller Bearings are ideally suited for operation in harsh conditions, including mining. They help cut costs and extend bearing service life thanks to their high radial and axial load-carrying capacity and low operating friction. They have recently been upgraded to feature even higher quality steel and an improved heat treatment, for an even better service life performance.

SKF Explorer Spherical Roller Bearings are available in many designs, series and sizes, with open and sealed variants. The sealed variant features contact seals fitted in recesses in the outer ring, which keeps lubricant inside the bearing and contaminants out. The resulting benefits include improved reliability and uptime, reduced noise and vibration levels and excellent wear resistance. A specialist version for vibratory applications, such as vibrating screens is available, which is proven to last twice as long as other screen bearings and also operate at lower temperatures.







#### SKF Bearing Housing and Roller Bearing Units

SKF offers a wide assortment of Housings built to exceptional standards to endure the extreme operating conditions found in quarries. SNL Plummer Block Housings are the most popular of these as many different models are available with a wide choice of seals, enabling the incorporated bearings to achieve maximum service life with minimal maintenance. SAF Pillow (Plummer) Block Housings are also popular when it comes to inch shafts. As with SNL Housings, they are very versatile, removing the need for expensive bespoke housings.

A very wide range of self-aligning and Roller Bearing Units can be accommodated within these Housings.



## SKF Explorer Cylindrical and CARB Toroidal Roller Bearings

SKF Explorer Cylindrical and CARB Toroidal Roller Bearings are compact and efficient solutions for planetary gearboxes. Both bearing types offer cost effectiveness and high load carrying capacity.

The Explorer Cylindrical Roller Bearings have design features — including a clever internal geometry and reduced friction roller end/flange contact - that result in a bearing that is lighter and more cost-effective, while offering outstanding performance and up to three times longer service life.

The CARB Toroidal Roller Bearing is a revolutionary bearing type that is self-aligning like a Spherical Roller Bearing, and axially free like a Cylindrical Roller or Needle Roller Bearing. It accommodates up to 3° of misalignment, housing seals permitting and also axial displacement within the bearing, without inducing internal axial loads with virtually no increase in friction. This eliminates the need to compromise between tight housing fit and axial freedom of the outer ring and can also help reduce maintenance needs for a wide range of quarry and mill machinery.



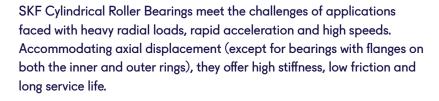


#### SKF Cooper Split Spherical Roller Bearings

Removing the need to dismount the drive coupling or the cantilevered drive to replace the bearing, thus avoiding realignment, SKF Cooper Split Spherical Roller Bearings can be easily and safely replaced in situ. This greatly reduces the safety risk to workers in mining and cement plants. It also makes for faster maintenance, reducing mean time to repair by two thirds.

SKF Cooper Split Spherical Roller Bearings are available in both sealed and open variants.

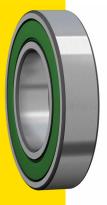






Cylindrical Roller Bearings are also available in sealed or split designs. In sealed bearings, the rollers are protected from contaminants, water and dust, while providing lubricant retention and contaminant exclusion. This provides lower friction and longer service life. Split bearings are intended primarily for bearing arrangements which are difficult to access, such as crank shafts, where they simplify maintenance and replacements.





#### SKF Deep Groove Ball Bearings

The most widely used bearing type, SKF Deep Groove Ball Bearings are available in an exceptionally wide range of designs, variants and sizes. However, they all have certain aspects in common in that they are suitable for high and very high speeds, are robust and require little maintenance.

SKF Low Friction Deep Groove Ball Bearings provide 30 % less frictional losses compared to conventional bearings, offering substantial energy savings and lower operating temperatures for industrial electric motors. A further key benefit, is their long service life which is attributable to their internal bearing design and special long-life, low-friction grease. This better protects them against contamination in harsh environments.



#### SKF Tapered Roller Bearings

With a wide range of designs to choose from, including double row models, SKF Tapered Roller Bearings are customisable to match your specific speed, load, contamination, temperature or vibration conditions. They feature a cup and cone assembly which accommodates combined (radial and axial) loads and can locate a shaft axially in both directions with a given axial clearance or a given preload. Their low friction during operation protects against excessive wear.





#### SKF Angular Contact Ball Bearings

SKF Angular Contact Ball Bearings feature inner and outer ring raceways that are displaced relative to each other in the direction of the bearing axis. This means that these bearings are designed to accommodate combined loads, i.e. simultaneously acting radial and axial loads.



#### SKF ConCentra Roller Bearing Units

ConCentra are proven, reliable, and "shaft-ready" minimal-maintenance bearing units for conveyors and other applications that are subject to contaminants, heavy loads, shock loads, and low maintenance priority.

Maintaining a 360° concentric grip around the shaft, SKF ConCentra Roller Bearing Units offer a highly reliable, time-saving alternative to sleeve-mounted bearings in split housings that require assembly. SKF ConCentra Roller Bearing Units are factory-assembled, sealed and greased for maximum service life. They require far less time and skill to install than a split pillow block housing assembly. Installers simply slide an SKF ConCentra Roller Bearing Unit onto the shaft and tighten the screws to lock it in place. It's fast and helps provide proper alignment while reducing the risk of assembly-related contamination and mounting errors. Because SKF ConCentra Roller Bearing Units can be mounted quickly, they help maintenance teams save valuable time.



#### SKF Y Bearing Units

SKF Y-Bearing Units are ready-to-mount and ready-to-use solutions equipped with a superior sealing system. This system provides reliable protection against moisture and contaminants, plus exceptional lubricant retention.

The SKF Y-Bearing and Y-Bearing Unit assortment is extensive. It includes a wide range of housing designs and materials, and a variety of Y-Bearings with locking mechanisms and seals suited to different requirements. It is available in ISO and JIS specification.





#### SKF Four-Point Contact Ball Bearings

With small axial clearance and high stiffness, these bearings offer increased reliability and productivity for transmission, steering brake and clutch applications in mining and mineral processing machinery.

A number of optimised design features enable SKF Four-Point Contact Ball Bearings to run longer and more reliably, while reducing heat, noise and vibration levels. These include: manufacture from extremely clean steel that has undergone a unique heat treatment to provide outstanding strength, stiffness and wear-resistance; an improved lighter brass cage to reduce inertia forces and provide better ball guidance; a shoulder recess on the inner ring which provides additional lubrication improvements; and a redesigned raceway shoulder transition makes the bearings capable of carrying increased thrust loads.



## SKF Explorer Steel/Steel Spherical Plain Bearings

Suitable for use on plant machinery where there are low to moderate levels of contamination, Explorer Steel/Steel Spherical Plain Bearings are robust and virtually maintenance-free for reduced costs and optimised field performance.

Their robustness derives from corrosion resistance, heavy-duty triple lip sealing and a relubrication-free design with a steel/steel sliding combination.

They are initially lubricated and sealed to eliminate the need for relubrication. This generates significant savings by reducing maintenance costs and grease consumption. These bearings also improve reliability by eliminating failures due to missed lubrication intervals and improper lubrication practices.





## Thin Section Tapered Roller and Angular Contact Ball Bearings

SKF's Thin Section Bearings have a space-saving design that enables compact solutions. The Thin Section Tapered Roller Bearings are designed to accommodate heavy axial loads and peak loads, making them ideal for wheel drive units. With inner and outer ring raceways that are displaced relative to each other in the direction of the bearing axis, the Thin Section Angular Contact Ball Bearings are designed to accommodate combined loads, i.e. simultaneously acting radial and axial loads, making them suitable for use with crawler drive units.



#### **Cutter Bearings**

SKF Cutter Bearings are specifically application-engineered to support cutter head wheels as they carve through rock and soil. High quality profile rollers help these taper roller bearings deliver high shock resistance and high load carrying capacity for maximum uptime.



#### **SKF Slewing Bearings**

SKF Slewing Bearings come in many different designs, for everything from mini excavators to stackers and giant shovels, but all are designed with a high carrying capacity and high resistance to overturning moments. Slewing Bearing design types include:

- Double row ball bearings
- 4-point contact bearings
- Crossed roller bearings
- Wire race bearings
- 3-row and double row cylindrical roller bearings
- Cylindrical roller and ball bearings
- Special bearings



### **RUBIX**

## For all your SKF bearings needs, and more.

RUBIX is SKF's largest Authorised Distributor across Europe. We have the widest SKF product range, exceptional availability, in-depth knowledge and technical expertise. Talk to us to find out how we can help improve your production facilities with SKF bearings best suited to your needs and budget.

Of course, our product range goes far beyond bearings. We offer more than 5 million different product lines - 500,000 of which are in stock at any one time, all available 24 hours a day, 365 days a year. Available via our centrally-located National Distribution Centre in the Midlands, plus a network of branches across the UK, we'll get it to you on time, every time.

With our specialist expertise, international strength and local presence - combined with our thorough understanding of the food & drink industry - we are ready to become your parts and products partner.





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