

# Optimise equipment and plant efficiency

SKF South Africa's Core Technologies and Services





Level 6  
BBBEE  
Rating



Bindt and  
MerSeta  
Accredited





# SKF solutions across the globe

**The SKF Group is the leading global supplier of products, services and solutions in six interrelated core technologies comprising bearings and units, power transmission, seals, mechatronics, services and lubrication solutions.**

As the world leader and innovator in bearing technology for more than 100 years, SKF has a unique understanding of rotating equipment and how machine components and industrial processes are interrelated, in every major industry worldwide.

This knowledge – coupled with our expertise in sealing solutions, lubrication systems, linear motion, machinery maintenance, mechatronics, and services – enables us to deliver real-world solutions that help maximize mechanical performance over the entire lifecycle of an asset.

As a result, SKF is your single source for off-the-shelf and customised technology products, solutions and services.

## Global resources, local deployment

SKF is represented in more than 130 countries and has 15 000 distributor locations worldwide. Our global footprint provides local access to our extensive range of technologies and services and ensures that you can benefit from local support.

Many of the core products and technologies covered in this brochure are available from your local SKF Authorised Distributor. Some of our more specialized products, systems and consultancy services are available by contacting your nearest SKF representative, or at our expanding network of SKF Solution Factories. Wherever and however we deliver them, SKF solutions can help your operation:

- Improve productivity
- Reduce maintenance costs
- Improve energy efficiency
- Optimise design
- Reduce time to market
- Reduce total cost of ownership

## SKF South Africa

**SKF South Africa, headquartered in Witfield, Boksburg, Gauteng, entered the South African market in 1914 and offers local industry a full range of solutions and services around its six core technologies. By utilising capabilities from all or some of the technologies, SKF develops tailor-made solutions for each customer segment and adds value by assisting customers to improve performance and reduce energy consumption and total cost of ownership.**

Only SKF South Africa can provide integrated bearing solutions to improve asset reliability. As the OEM for its products, SKF can combine unique bearing technologies, lubrication systems, sealing solutions and a wide range of mechanical engineering and asset management services to solve problems, enhance machine reliability and lower total cost of ownership. SKF is active in a broad spectrum of industries, offering industry specific solutions. Since 1914, SKF South Africa has developed unparalleled experience in serving local customers with solutions for African conditions.

SKF services its customers through a significant investment in central stock holding as well as stock strategically located at any one of our over 40 distributors throughout the region.

SKF's unique supply chain system connects local distributors directly to the SKF European Distribution Centre and to SKF factories abroad through the global SKF supply chain system.

The SKF brand is synonymous with quality and SKF South Africa is ISO 9001 certified. SKF South Africa is also committed to environmentally responsible growth as well as health and safety management and has attained both ISO 14001 and OHSAS 18001 certification.

SKF South Africa fully endorses the governments policies and practices in redressing the imbalances of the past and as such embraces the philosophy of the Broad Based Black Economic Empowerment Act (BBBEE). At present SKF South Africa's BBBEE status is that of a level 6 contributor.

Various of SKF South Africa's courses, as provided by the SKF Training Solutions, are now BINDT and merSETA accredited.

# Bearings, units and housings

Backed by more than a century of bearing expertise, SKF is the world leader in the design, development and manufacture of high performance rolling bearings, plain bearings, bearing units and housings. Our products help companies in countless industries extend equipment lifecycles, increase uptime, reduce maintenance and cut total operating costs.

## SKF bearings

Recognized worldwide for their superior quality and long service life, SKF ball, roller and plain bearings are the perfect choice for a wide range of applications. Depending on the bearing type, design and size, many SKF bearings are available in four performance classes: Standard, SKF Explorer, SKF Energy Efficient and SKF super-precision.

## SKF Explorer bearings

In response to the ever-demanding performance requirements of modern machinery, SKF developed the SKF Explorer performance class of rolling bearings. SKF Explorer bearings reduce environmental impact by enabling downsizing and reducing both lubricant and energy consumption. Just as importantly, SKF Explorer bearings can reduce the need for maintenance and contribute to increased productivity.

## SKF Energy Efficient bearings

To meet the ever-increasing demand to reduce friction and energy consumption, SKF has developed the SKF Energy Efficient (E2) performance class for rolling bearings. Bearings within this performance class are characterized by a frictional moment in the bearing that is at least 30% lower when compared to a same-sized standard SKF bearing.

## SKF super-precision bearings

Bearings in the SKF super-precision performance class are designed and manufactured for machine tools, centrifuges, printing presses and other applications that require a high degree of running accuracy and long bearing service life.

## SKF units and housings

SKF produces a wide range of ball and roller bearing units and housings to meet the needs of virtually any application. Bearing units, which consist of SKF bearings, housings, seals and lubricant, are pre-greased and pre-assembled for quick and easy installation.



# Power transmission

**Along with linking moving mechanical components, power transmission products play an important role in overall equipment performance. Backed by deep SKF knowledge about the interplay between bearings and transmissions, SKF Power Transmission products can help customers improve machine reliability and performance.**

SKF can offer more than other suppliers – a deep understanding of how bearings and power transmission products work together.

We apply this knowledge to help maintenance teams identify and solve transmission-related bearing problems, and choose the best products for a given application.

SKF Power Transmission products are supplied via our own sophisticated worldwide warehousing and logistics system, ensuring fast, reliable access to 30 000 products. This means customers can keep smaller, less costly parts inventories.

The SKF Power Transmission product range includes six main areas:

- Belts
- Pulleys
- Chains
- Sprockets
- Couplings
- Bushings and Hubs

## SKF Couplings

Suitable for many applications and environments, SKF Couplings cover a wide range of coupling types, sizes and capacity ratings. For large, heavy-duty applications, SKF Grid and SKF Gear Couplings provide optimum contact with the shaft, and can accommodate high torque values, reduce power loss and minimize the effects of misalignment.



## SKF Xtra Power Belts

Compared to standard wrapped belts, SKF Xtra Power Belts can deliver up to 40% more power and up to 40% longer application service life. The extended service life, combined with reduced downtime and maintenance, helps cut operating costs.

### Advantages

- Reduced pulley groove wear due to optimised cover fabric
- Up to 97% drive efficiency
- Oil- and heat-resistant, antistatic cover
- One-shot belt tensioning – no retensioning after initial run-in
- Smoother running and lower vibration levels
- Good resistance to shock loads

### Available profiles

- SPZ, SPA, SPB, SPC (ISO wedge standard)
- 3V, 5V, 8V (RMA standard narrow wedge)



## SKF FX Keyless Bushings

SKF FX Keyless Bushings are designed to secure gears, couplings and pulleys to a shaft using mechanical friction rather than using traditional keyways, splines or an interference fit. SKF FX Keyless Bushings are available in 16 different designs, enabling machine designers to match the best bushing solution to the application.



## SKF Xtra Chains

For most industrial applications, roller chains are one of the most cost- and energy-efficient ways to transmit mechanical power between two or more shafts. Robust SKF Xtra Chains improve on these standard chain benefits by delivering even better performance and longer service life.

The different types of SKF Xtra Chains are as follows:

- SKF Xtra Corrosion Resistant Chains
- SKF Xtra Strength Chains
- SKF Xtra Performance SLR Chains



## SKF Belt Frequency Meter

The SKF Belt Frequency Meter is one of the most accurate and reliable tools when it comes to measuring belt tensions. It consists of a hand-held meter which is attached to an optical sensor for measuring the belt tension. It is suitable for measuring the tension of V-Belts, Banded belts and timing belts.

The tool offers:

- A most precise way of measuring belt tension compared to other tools

- Quick and reliable tension checks, especially if more than one belt measured at a time
- Accurate, repeatable measurements
- Low risk of human error
- Suitability for use in a noisy environment



This solution offers the following benefits:

- alignment is done only once
- quick and reliable tension checks
- safe, simple and fast belt replacements

It provides better reliability for the whole belt drive, which results in:

- reduced cost due to prolonged belt life
- fewer time-consuming breakdowns
- less vibration and therefore higher efficiency

## SKF Belt Tensioner System

The SKF Belt Tensioner System is an innovative tool, which facilitates quick, easy belt drive maintenance and belt replacements.





# SKF Solution Factory

**SKF's value proposition is to offer its customers leading edge technology products and integrated solutions for reduced TCO and enhanced asset performance. SKF Solution Factory Africa allows us to deliver on this promise by integrating SKF technology products, service capability and industry / application knowledge to provide value adding solutions.**

To provide our customers with direct access to SKF's global capabilities, SKF has created a unique concept: the SKF Solution Factory. Here, under one roof, we offer a wide range of specialized services that draw on all of our core competencies and industry-specific knowledge.

At SKF Solution Factories, customers can solve difficult application challenges, consult with lubrication specialists and have a custom-machined seal designed and manufactured on the spot.

## Solution

Value creation by leveraging knowledge from SKF core technologies (bearings, seals, lubrication systems, mechatronics, services and power transmission), industry and application experience to offer customers integrated solutions.

## Factory

- Infrastructure, workshop facilities and equipment
- Specialist technical resources and applications
- Optimised business processes



## Seals, Power Transmission and Mechatronics Customisation Centre

The Seals, Power Transmission and Mechatronics Customisation Centre is where products are customised and augmented to customer specifications as part of SKF's value selling proposition.

## SKF Training Solutions

SKF's Training Solutions is an extension of the SKF Group vision, 'Equipping the world with SKF knowledge' and serves as a global vehicle to place knowledge into the hands of customers and employees. SKF's Training Solutions affirms SKF's philosophy of continued investment in people through training, irrespective of the economic climate.

## Maintenance Products Repairs Centre and Map Mobile

The Maintenance Products Repairs Centre is equipped to repair damaged bearing heaters and other maintenance products, whether still under warranty or not. The SKF MapMobile - the mobile maintenance products, laser alignment and condition monitoring demonstration and training vehicle, is used across the country to do training and product/solution demonstrations at customers' premises.





# Mechanical engineering

SKF has a team of qualified mechanical engineers and service technicians to provide value adding technical support and specialised installation and maintenance services to optimise the performance and reliability of rotating mechanical equipment.

## Mechanical Field Services

Specialised skills and equipment are required for the installation of large-sized and precision bearings. SKF has a team of service technicians that are experienced in the installation and removal of rolling bearings and associated components used in rotating mechanical equipment.

Our technicians have a comprehensive range of SKF Maintenance products and custom-designed tools at their disposal to facilitate easy mounting and dismounting.

### Services offered include:

- On-site mounting and dismounting of rolling bearings and associated components.



- Bearing replacement and reconditioning of rotating equipment in the service workshop at SKF Witfield.
- Periodic bearing inspection services on critical, high value bearing assemblies.
  - Wear trending
  - Visual assessment of bearing condition
- Lubrication servicing
  - Lubricant replacement / replenishment
  - Oil / grease analysis

## Application Engineering:

Our team of mechanical engineers are available to provide value adding technical support and ensure optimum performance of SKF's broad range of products and services.

Assisted by SKF factories, development and research centres, and industry specialists across the world, services offered include:

- Product selection advice
- Advanced bearing life calculations
- Root cause failure analysis
- Lubricant selection and lubrication recommendations
- Mounting and dismounting guidelines for SKF products
- On site troubleshooting
- Design of bearing arrangements

# Project engineering

The SKF Project Engineering Department offers custom designed, value adding solutions that yield superior performance, improved reliability and optimised service life of rotating mechanical equipment. SKF has designed and manufactured specialised engineering products in South Africa since the early 1960's and we are the original equipment manufacturer of many specialised engineering assemblies used in critical equipment across a broad range of key local industry segments.

Our team of qualified mechanical engineers is available to assess problematic equipment and develop and implement customized solutions by integrating:

- Leading edge SKF products from our 6 core technologies
- Custom designed, locally manufactured SKF products to meet specific application requirements.
- Advanced design, industry and application knowledge.

- Comprehensive service delivery capability.

## SKF Project Engineering capability includes:

- Design and manufacture of specialised engineering components
- Reconditioning of worn or damaged equipment
- On site quality assurance assessment of shaft and housing seating's for critical equipment to assess whether they conform to the recommended dimensional, geometric form and surface finish specifications
- Customisation of standard SKF Products ie. Matched bearing sets, bearing modifications, special grease fills for sealed bearings, modification of housings to accommodate vibration sensors and temperature probes etc.

### Key products and solutions include:

#### Specialised housing assemblies for mill trunnions

SKF offers a comprehensive range of mill trunnion housing assemblies to accommodate large diameter spherical roller bearings.

Our standard design incorporates bearings with tapered bore mounted on tapered sleeves with oil injection features for ease of mounting and dismounting. Variants are available for bearings with bore diameters from 530 to 1 800 mm. A wide variety of alternative sealing arrangements are available to suit specific application requirements.

#### Complete kiln support roller assemblies.

SKF offers complete radial and thrust roller assemblies for rotary kilns. We have the experience and capability to optimize the design of the housing, roller, shaft, bearing arrangement and sealing arrangement for superior performance and service life. SKF also offers a reconditioning service for existing assemblies which become worn or damaged in service. Disassembly, assessment and assembly of the units is performed in our service workshop at SKF Witfield.



## Specialised housing assemblies for mill pinions

SKF offers a broad range of specialised mill pinion housing assemblies which have been developed to withstand arduous operating conditions at mineral processing plants. Variants are available for grease and oil lubrication which incorporate highly effective sealing arrangements offering superior contaminant inclusion and lubricant retention for oil lubricated assemblies. Our product range includes modified SNL housings, and locally manufactured SDJD and SDAF housings. Our larger housings are manufactured from spheroidal graphite ductile iron for increased strength and resistance to impact loading.



## Customised solutions for fans

Industrial fans are widely used in all industry segments. Typical operating conditions for many fans include high speeds, high temperatures from the process, unbalance and a heavily contaminated operating environment. This places high performance demands on the bearings, lubricants and sealing arrangements. SKF has developed customized bearing / housing assemblies for a broad range of industrial fans. These include dual bearing housing assemblies for smaller high speed fans, customized split SNL plummer block housing assemblies for grease lubrication and customized split SONL plummer block housings for oil bath or circulating oil lubrication.

## SKF WJSN and WJSD taconite seals

These locally manufactured taconite seals were specifically developed for bearing assemblies that operate in arduous operating environments locally in the mining / material handling industries where standard seals offer inadequate protection against contaminant / water ingress. They are widely used on pulleys for long overland conveyors and customer benefits include:

- Highly effective sealing performance.
- Increased bearing service life.
- Lower maintenance requirements.
- Reduced grease consumption.



## Other products and services

- Bearing / housing assemblies for crushers.
- Bearing / housing assemblies for paper-making machines.
- Bearing / housing assemblies for continuous casting machines.
- Bearing / housing assemblies for sugar cane knives and shredders.
- Bearing / housing assemblies for sheave wheels.
- Reconditioning of tapered journals.
- Adapter sleeves, withdrawal sleeves, lock nuts, sealing components, locating rings, skip guide rollers, raffinator assemblies for refiners etc.



# Spindle repair centre



As a world leader in bearings and bearing production, SKF operates more than 5 000 machine tools worldwide.

Thanks to our extensive knowledge of high precision bearing technology and of spindle engineering, SKF has developed the expertise for reconditioning spindles of all types used in a wide range of applications and industries.

In our state-of-the-art spindle repair centre, SKF reconditions and upgrades a large number of spindles for optimum performance. So, when it comes to maintaining, reconditioning and optimising your spindle, SKF can offer you a breadth of in-house capabilities, technology and global support that is unmatched in industry.

SKF provides you with a wide range of reconditioning services for machine tool spindles that have different:

- Design
- Brands
- Applications
- Technologies
- Defects and problems

SKF has a dedicated Spindle repair centre with the specialised tools and equipment to inspect, test, disassemble, assess, repair and test spindles. In partnership with local industry leaders, SKF is also able to offer static and dynamic balancing of components individually, and assembled.

Our state of the art test bench can be used to run spindles at a range of speeds for running in purposes. It is equipped with an SKF minimal quantity oil lubrication (MQL) system and an SKF IMX-S on line condition monitoring system.



## SKF offers state of the art

### Facility

- Dedicated and fully equipped spindle service centre
- Precision measuring and machining

### Vibration control

- Damage identification
- Final balance verification
- Full testing history and baseline vibration on IMX system

### Spindle upgrade

- Sealed and hybrid high precision bearings
- Lubrication and sealing systems
- Design improvements
- Testing facilities

### Knowledge sharing

- Worldwide SKF solution factory collaboration
- Over 12 000 documented cases

# Reliability services

**Thanks to a century of bearing manufacturing, plus hands-on experience in every major industrial application area, SKF has unmatched rotating machinery expertise. By combining this knowledge with the latest technologies, we can offer many specialized services and solutions to help you reduce Total Cost of Ownership, reduce maintenance, cut energy consumption and reduce environmental impact. SKF services range from training and logistics to full PdM service contracts with qualified manpower and technology to help maintain your plant – even remotely.**

## Reliability Maintenance Services

SKF Reliability Maintenance Services offer specialised machine maintenance services via skilled and experienced SKF Reliability Technicians to improve machine reliability and enhance plant performance and up time.

### Services offered include:

- Precision shaft alignment
- Precision geometric alignment

- Pinion / girth gear alignment
- Precision balancing
- Oil / grease sample collection and analysis
- Vibration data collection and analysis
- Machine reliability assessments

## Maintenance service contracts

**PdM Services:** SKF can provide the skilled workforce and associated technologies to perform Predictive Maintenance Services (PdM) at your plant.

**PRM Services:** Want to move from reactive maintenance to a Proactive Reliability Maintenance (PRM) programme? SKF can supply all necessary resources and manage the entire process.

## Remote Monitoring Service

With our web-enabled SKF Remote Monitoring Service, implementing a world-class predictive maintenance (PdM) programme for periodic or continuous monitoring of critical machinery is just an Internet connection away.

SKF Remote Monitoring Service combines SKF condition monitoring tools to collect data, SKF experts to analyse data and the Internet to communicate machine health status for informed decision-making. This service is ideal for plants with limited staff trained in predictive maintenance techniques, or operations with sites located remotely from a central facility. Benefits include:

- Capital investment cost savings
- Increased data integrity
- Expert SKF analysis and recommendations
- Global, 24/7 access to reports and data

## Training

SKF training programmes can give your staff the knowledge and hands-on experience to help your operation:

- Achieve higher levels of personnel and machine efficiency
- Determine and fix the root cause of machine and component problems
- Reduce accidental damage or under-utilization of equipment
- Increase machine uptime and productivity
- Enhance plant safety



# Condition monitoring technologies

With the right machine data – and the right tools to interpret it – you can optimise your maintenance programme for greater productivity and more effective asset lifecycle management. SKF has a complete, integrated range of condition monitoring tools and technologies to make it happen. SKF hardware and software is designed to make it easier to collect, analyse, use and share machine condition data.

Whether your maintenance programme is just getting off the ground or you are executing an enterprise-wide strategy to take it to the next level, SKF condition monitoring solutions can help: Minimize the risk of unplanned downtime, Improve operational efficiency, Reduce maintenance costs, Optimise manpower resources

## Basic condition monitoring products

Designed for experts and novices, this basic proactive maintenance equipment helps users spot-check machines and establish trends to identify problems early before they result in costly, unplanned downtime.

## Portable data collectors and analysers

The SKF Microlog series of portable data collectors and analysers can handle all tasks needed to perform predictive maintenance on a range of rotating machinery. Route-based systems are supported by SKF @ptitude Monitoring Suite software.

## Online surveillance and protection

Ideal for installation in unsafe or hard-to-reach locations, the SKF Multilog Series of on-line monitoring systems automatically collects vibration and process data 24/7, transmits data into the SKF @ptitude Monitoring Suite and alerts plant personnel to machine condition changes.

## Maintenance products

SKF maintenance products help achieve maximum bearing service life, optimise machine performance and improve machine and operator safety. Products include pullers, fitting tools, heaters, instruments, lubricants, lubricators and oil injection equipment.

## Shaft alignment tools

Shaft misalignment in rotating equipment generates loads and vibration that can damage bearings, seals and couplings, and increase energy consumption. SKF shaft alignment tools use advanced technologies to detect and correct shaft misalignment, quickly and easily.

## Wireless monitoring

Our market-leading portfolio of wireless condition monitoring solutions includes options for WiFi, wireless HART and Bluetooth. SKF wireless technologies are ideal for monitoring assets in hard-to-reach or hazardous areas, or locations encompassing large amounts of real estate, such as tank farms and refineries.





# Bearing remanufacturing



**SKF has established a state of the art Bearing Remanufacturing facility at our Witfield premises. This forms part of a global SKF project to offer quality remanufacturing facilities to service local markets.**

The centre offers the highest possible quality for remanufactured products using custom designed washing machines, polishing stands, measurement equipment, preservation machines and a cage sandblasting machine based on specifications from the SKF Industrial Service Centre in Steyr, Austria.

Today SKF expertly remanufacturers bearings that were previously destined for scrapping, thereby saving costs, raw materials and energy.

## Target market for remanufacturing

- Bearings removed from service for routine maintenance or other reasons which have operated for periods that are below their design life.
- High value bearings that have been stored for intervals that exceed the recommended shelf-life of the preservative.

## Suitable bearings

- Bearings with a bore diameter greater than  $\pm 250\text{mm}$  can generally be economically remanufactured.
- Small bearings can be accommodated but the price of the remanufactured bearing can be close to that of a new bearing.
- Bearings that can be non-destructively disassembled.
  - Spherical roller bearings and CARB bearings
  - Spherical and cylindrical roller thrust bearings
  - Single row angular contact ball bearings
  - Certain 4-row cylindrical, taper roller and slew ring bearings

## Detailed bearing assessment

Before any bearing is remanufactured it is assessed by a skilled SKF technician. A comprehensive bearing assessment report is compiled that includes:

- A summary of the condition of the components
- A description of any damage observed on components
- Measurements taken to assess dimensional accuracy of components and internal raceway and rolling element wear levels

## Customer Benefits

### Significant cost savings

- Remanufactured bearing cost is between 10 and 50% of the price of a new bearing

### Extended service life

- Removal of stress concentrations on internal surfaces prolongs residual bearing service life

### Risk minimisation due to:

- Optimised process
- Stringent quality control requirements, which are an integral part of the process
- Clearly defined acceptance criteria

### Short term availability

- Remanufactured bearings can alleviate production stoppages associated with extended lead times for certain large size bearings
- Lead times for remanufactured bearings vary from 1 day to three weeks, depending on the scope of work

### Suitability for long term storage

- Remanufactured bearings are preserved and wrapped according to stringent SKF global standards



# Lubrication solutions

Did you know that poor lubrication causes about 36% of all premature bearing failures? Along with helping to reduce premature bearing failures and machine downtime, proper lubrication can increase energy efficiency. At SKF, we can help you realize the true potential of lubrication.

SKF lubrication solutions range from specialized lubricants to state-of-the-art lubrication systems. Integrated SKF lubrication solutions combine our expertise in bearings, seals and condition monitoring with our tribology knowledge – the study of friction, wear and lubrication. You can also count on leading technical support and services, including management programmes to help with lubricant selection, lubrication planning and lubrication system condition monitoring – all from a single, reliable partner.

## Lubricants

SKF's vast experience in the development of rolling bearings forms the basis for the development of a specialised range of lubricants, the superior quality of which is obtained through continuous testing and research. A comprehensive range of SKF Greases is available to cover the specialised lubrication requirements of a broad range of industrial and automotive applications, which include the following conditions:

- Extreme temperatures
- High and low speeds
- Heavy loads
- Requirement for food compatibility
- Water resistance
- Pumpability



## Lubrication management tools

Developed to provide applications with the right lubricant at the right time, SKF lubrication management tools include:

- SKF LubeSelect, which assesses bearing operating conditions to determine the optimum grease
- SKF Grease Test Kit, to assess grease condition in the field
- SKF Lubrication Planner, to develop and manage a lubrication plan
- SKF LuBase, which provides details about 2 000+ bearing lubricants for comparison and selection purposes



## Automatic lubricators

From single-point to multi-point units, SKF automatic lubricators are an easy to use, cost-effective and reliable way to improve machine lubrication and save time on manual lubrication. Around-the-clock solutions, such as SKF SYSTEM 24 and SKF MultiPoint, provide consistent, controlled dosages of SKF lubricants, thereby minimising the risk of over- or under-lubricating.

## Manual lubrication

From grease guns and packers to pumps and meters, SKF manual lubrication tools include everything maintenance professionals need to help keep bearings supplied with the precise amount of contaminant-free grease.

## Lubrication services and support

SKF offers a wide and growing range of lubrication services, including centralized lubrication system installation, start-up and maintenance, oil and grease analysis and training. Using the SKF Client Needs Analysis - Lubrication Management, we can identify your plant's maturity with regard to lubrication practices and recommended actions for improvement.

# Lincoln Lubrication SA



**In February 2015 SKF's acquisition of South African-based lubrication specialist Lincoln Lubrication SA (Pty) Limited was approved and they now form part of SKF's Lubrication Systems core technology.**

Lincoln Lubrication SA specialises in Asset Protection Management with Full Circle Reliability. Our understanding of assets includes not only machines, and equipment, but also staff and their safety.

Lincoln Lubrication specialises in automated lubrication systems that can be fitted to any application, machine or piece of equipment. In addition to lubrication systems and equipment, Lincoln Lubrication also offers other asset protection management technology including hose reels, liquid Fast Fill, and fire suppression systems. As a complementary product, GreenLinc offers environmentally accredited spill kits.

The hose reel product line offers a complete range of hose and cable reels for any application, including bespoke hose reels for those unusual applications.

The fire suppression range specializes in superior AFFF systems for mobile and stationary equipment.

Fast Fill is a dry break rapid filling system for oils, fluids and diesel. Coloured coded, and non-interchangeable, oil nozzles and receivers for different functions virtually eradicate cross contamination.





# Sealing solutions

Being the world's only bearing company with seal manufacturing capabilities, SKF supplies a wide range of sealing solutions for rotating, reciprocating and static applications to industries worldwide. Innovative SKF sealing solutions help customers to increase productivity and process reliability as well as to reduce Total Cost of Ownership.

Based on extensive knowledge and experience in material technology, design and manufacturing processes, SKF offers standard seals and custom engineered sealing solutions in a broad range of elastomer, thermoplastic and thermoplastic elastomer materials. Our dedicated local teams of experts are there to solve your challenging application demands.

## Seals for general industrial applications

With a variety of designs and materials, SKF can offer shaft sealing solutions for almost any power transmission application. Examples include standard metric rubber outside diameter seals and low-friction seals with the SKF WAVE lip design. SKF also offers solutions with PTFE sealing lips, which can withstand aggressive environments, high temperatures and pressures, as well as dry running.



## Fluid power sealing systems

SKF offers a wide range of fluid power seals, designed to optimally work together in well-balanced sealing system solutions in a hydraulic cylinder. The assortment includes rod, piston and wiper seals as well as guides, O-rings and back-up rings. SKF fluid power seals are available in a multitude of materials to provide optimal compatibility with the various hydraulic fluids encountered in service.



## Seals for heavy industry applications

SKF seals for heavy industry are designed to work under tough operating conditions, such as high speeds and temperatures, while retaining the lubricant and excluding contaminants. Options include heavy-duty metal-cased seals, rubber outside diameter seals with metal inserts or fabric-reinforced and all-rubber seals.



## SKF machined seals and customised sealing solutions

Independently of improving an existing design or creating a new solution, SKF can help analyse the application requirements and then select/create the optimal sealing solution. Thanks to SKF SEAL JET manufacturing processes for machined seals, customers benefit from high flexibility and short delivery times for customised sealing solutions.



## SKF SCOTSEAL

Designed for hub bearing arrangements typically found on commercial and off-road vehicle axles, SKF SCOTSEAL is a robust, customised sealing unit. All three different designs – Classic, Longlife and PlusXL – install easily and accommodate all driving conditions.



## SKF Mudblock



SKF Mudblock cassette seals are radial shaft sealing units developed for heavy-duty applications in harsh environments. All SKF Mudblock seals are designed with an integrated wear sleeve, but can

have any one of a number of sealing lip and auxiliary lip configurations. Their geometry provides excellent lubricant retention and optimum protection against water, dust, mud and other contaminants.

## V-ring seals

V-ring seals are all-rubber seals for rotating shafts. Featuring a conical-shaped sealing lip joined to the body with a resilient “hinge,” V-ring seals install directly on the shaft and rotate with it, retaining lubricants and excluding water spray and solid contaminants. They can also act as a grease valve. SKF offers V-ring seals in different designs, materials and sizes to meet most application requirements.



## SKF SPEEDI-SLEEVE

SKF SPEEDI-SLEEVE is a well-proven solution to fix worn shafts within minutes, providing an excellent sealing surface without having to disassemble the shaft or change the seal dimensions.

The sleeve combined with an SKF radial shaft seal provides an enhanced sealing system, resulting in a consistent and increased operating durability. This improved service life predictability assists with maintenance planning. For large shafts, SKF can also offer wear sleeves for heavy industrial applications.



## Metal face seals

SKF metal face seals HDDF are designed for severe operating conditions at relatively low circumferential speeds. HDDF seals consist of two identical metal sealing rings and two similar Belleville washers. Originally developed for off-road and tracked vehicles, the seals are also suitable for other applications exposed to sand, soil, moisture and more.



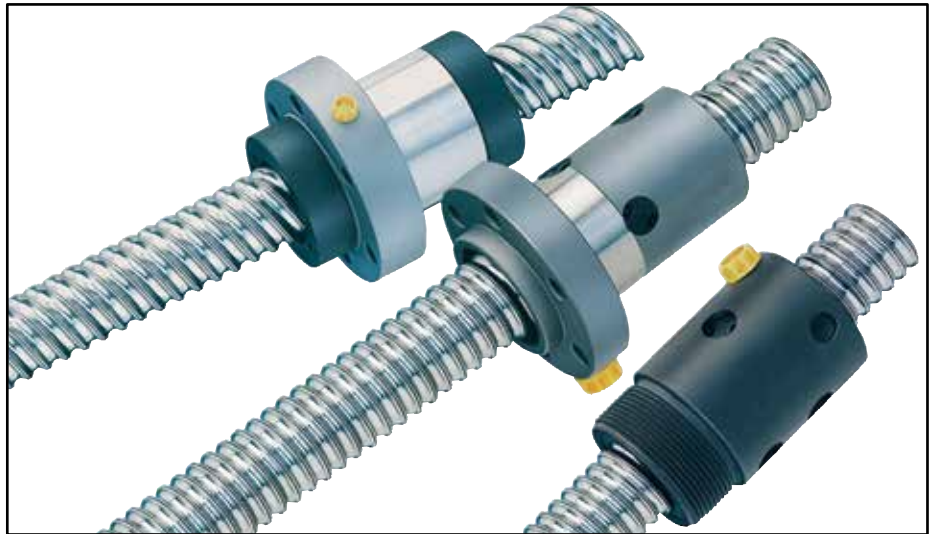
## SKF Trackstar seals

SKF Trackstar seals are track pin seals designed for oil-lubricated, off-highway track chains. Installed on the pin connecting a pair of chain links, SKF Trackstar seals feature a rubber energizer and a polyurethane sealing ring. There is also a heavy-duty design including a metal reinforcement ring moulded into the polyurethane sealing ring, providing additional rigidity for severe operating conditions.



# Linear motion solutions

By including SKF knowledge in the development of complex mechatronics solutions in the early stages, SKF can help the customer build in great energy efficiency by reducing friction, lowering weight and maximising the energy reducing capabilities of mechatronics thanks to a cost effective approach in integrating the SKF competencies to become an embedded partner and a maximum degree of system integration that respond to constantly changing, challenging specifications according to the technology shift.



## Benefits to the customers:

- Reduce engineering, procurement, assembly and manufacturing time.
- Reduce the number of suppliers.
- Reduction of the total cost of ownership (TCO), principle based on a win-win cooperation.

## Guiding solution benefits

Shaft guidings:

- Economical, unlimited stroke, self-alignment feature, adjustable preload, high sealing performances, corrosion-resistant versions.

Profile rail guides:

- Unlimited travel, high rigidity under heavy loads in all directions and reliability.

- Precision rail guides:
- Modular range, limited travel, high precision, high load carrying capacity and stiffness.

## Driving solution benefits

Ball screws: Several recirculating systems are available, high precision to cover most requirements, backlash can be reduced or eliminated.

- Roller screws: Far beyond the limits of ball screws, ultimate precision and rigidity, high speed and acceleration, backlash can be reduced or eliminated.
- Miniature ball screws: Very compact.
- Large ball screws: Very fast and long lead.
- Ground ball screws: More rigidity and precision.





**The base of the SKF linear motion technology is provided by proven standard components for various applications.**

## Solar tracking and building automation

SKF's solar positioning systems enable maximum power generation from the solar panels by accurately and efficiently moving the panels. In building automation, where limiting the impact of the sun is also an issue, SKF offers a wide range of actuators for applications such as window blinds.



## Healthcare

In the healthcare community, motion, comfort and safety are three key parameters. SKF actuators conform to industry standards such as UL to provide our customers with reliable and smooth operation. From hospital beds to wheelchairs to patient lifters,

SKF offers a complete line of solutions for the movement of healthcare products.



## Off-highway

Harsh working conditions and heavy loads put great strain on today's off-highway equipment. By offering advanced application competence along with a wide range of innovative and sustainable solutions, SKF can help your equipment survive this tough environment.



## Food and beverages

SKF actuators meet the functional requirements of food equipment such as lifting, tilting and positioning. Designed to work in this demanding environment, our actuators conform to the industry needs for hygiene and process reliability.



## Factory automation

Competitiveness in factory automation entails a permanent productivity improvement process. In the search for more efficient solutions, many manufacturers have successfully turned to SKF for assistance. Our competences combined with a wide range of products are the right solution for the application.



# SKF Authorised Distributors



SKF South Africa has dedicated Authorised Distributor networks for the industrial, lubrication and agricultural aftermarket.

Our authorised distributor networks deliver a valuable mix of resources to SKF customers across South Africa and the neighbouring countries. SKF Authorised Distributors combine local knowledge, infrastructure and capability with support from expert SKF application Engineers to offer our customers the highest level of service.

SKF serves the industrial aftermarket exclusively through Authorised Distributors that are geographically situated to better serve the needs of the customers. The Authorised Distributors are linked directly to the SKF systems and operate as an extension of SKF.

## SKF Authorised Distributors



When you purchase your bearings from an SKF Authorised Distributor, you can do so with confidence, knowing that you have access to expert advice, plus the assurance that you will avoid the problems associated with counterfeit bearings. In addition to supplying genuine SKF bearings, your SKF Authorised Distributor can provide you with seals, lubrication, linear motion, power transmission, services and related products.

## SKF Lubrication System Partners



SKF South Africa has a dedicated Lubrication Systems Partner network.

## SKF Certified Maintenance Partners



SKF Certified Maintenance Partners (CMP) are SKF Authorised Distributors who have received advanced machine reliability

training to help you monitor machine operation, predict machine failures and uncover hidden cost-saving opportunities. Using a range of proprietary SKF tools and analysis software, they collect and analyse much more machinery and process data than most predictive-maintenance service providers.

## SKF Agricultural Distributors



To better assist end-user customers in the agricultural industry, SKF has dedicated Agricultural Distributors around the country.

## SKF Documented Solutions Program

Using web-based software that calculates the expected value of a machine solution, the SKF Documented Solutions Program lets you see how SKF technologies can benefit your unique situation. The program calculates total cost reductions in areas such as energy, lubrication, inventory, warranty costs, manpower, machine life, reliability, output and quality, equipment downsizing and over 250 others.

The program can also generate specific solutions for targets identified by the SKF Client Needs Analysis – a program that compares a company's own operating information to global best practices in order to identify the most promising areas for improvement.

## SKF Logistics Services

SKF South Africa's central warehouse is located at SKF's Head Office in Witfield, Boksburg.

This warehouse services 44 local Distributors (Industrial, Lubrication and Agricultural) as well as 7 Distributors located in Namibia, Mozambique, Zambia, Zimbabwe, Swaziland, and Botswana.

The Logistics Department handles over 39,000 stock items and the central warehouse offers a 24/7 breakdown service.



SKF have a number of international distribution centres that are located in Belgium, Singapore and the USA. Factory warehouses are located in Sweden, Germany, Italy and France.

One core advantage of these international distribution centres is that one can check availability of products and place necessary orders on-line, thereby saving time and money.

## SKF Certified Electric Motor Rebuilders

For many companies, electric motor failures cause a continual cycle of costly repairs and unplanned downtime – factors that can hurt the bottom line. SKF Certified Electric Motor Rebuilders apply exacting standards and specifications to enhance motor reliability, and performance thereby increasing profitability.



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Witfield Head Office  
 4B Saligna Street, Hughes Business Park,  
 Witfield, Ext. 30  
 Boksburg, Gauteng  
 SKF Witfield +27 11 821 3500

**Agricultural Distributors:**

Afgri SA +27 12 643 8000  
 Bolt and Engineering Supplies – Mpumalanga +27 13 243 3199  
 Bolt and Engineering Supplies – Rustenburg +27 14 594 2182  
 Bolt and Engineering Supplies – Klerksdorp +27 18 469 6300  
 Bolt and Engineering Supplies – Welkom +27 57 353 2758  
 Bolt and Engineering Supplies – Limpopo +27 14 763 6717  
 Bolt and Engineering Supplies – Steelpoort +27 13 230 3820  
 Groep 5 – Hoopstad +27 53 444 1681  
 Metal Events – Boksburg +27 11 397 2180  
 West Cape Bearings and Transmission – Cape Town +27 21 9826224

**SKF Lubrication Systems Partners:**

Arnschell Hydraulics – Port Elizabeth +27 41 453 4103  
 Engineering & Hydraulic Services – Brits +27 12 252 0701  
 FloSolve – Alberton +27 11 389 5300  
 Industrial Fluid Solutions – Witbank +27 13 693 3775  
 Louberg Services t/a Louberg – Cape Town +27 21 951 1060  
 Product Lubrication Technologies +27 11 804 0844  
 Record Engineering – Kathu +27 53 723 1245  
 Ro-Li Lubrication Systems – Durban +27 31 465 6603

**Authorised Distributors:**

African Compass Trading +27 82 418 0825  
 Bearing Boss – Phalaborwa +27 15 781 2477  
 Bearing Centre – Blantyre, Malawi +265 1 87 0 775  
 Bearing House PTA – Rosslyn +27 12 541 2281  
 Bearing Services – Alrode +27 11 864 7660  
 Bearing Services – Bethal +27 17 647 2731  
 Bearing Services – Durban +27 31 468 6568  
 Bearing Services – East Rand +27 11 397 6384  
 Bearing Services – Lydenburg +27 13 235 3909  
 Bearing Services – Middelburg +27 13 246 1442  
 Bearing Services – Mandini +27 32 456 1436  
 Bearing Services – Nelspruit +27 13 753 3911

Bearing Services – Pietermaritzburg +27 33 394 6626  
 Bearing Services – Polokwane +27 15 293 0086  
 Bearing Services – Richards Bay +27 35 789 9520  
 Bearing Services – Springs +27 11 362 4365  
 Bearing Services – Witbank +27 13 697 1414  
 Bearings & Transmission Services – Newcastle +27 34 312 1276  
 Bearing Warehouse – George +27 44 875 9211  
 BMG Botswana – Gaborone +267 397 2273  
 BMG Beira +258 823 081 335  
 BMG Maputo +258 217 52 899  
 BMG Nacala +258 265 20369  
 BMG Tete +258 843 018 694  
 BMG Swaziland – Matsapha +268 2518 5110  
 BMG Oranjemund +264 63 234 327  
 BMG Swakopmund +264 64 419 555  
 Bolt & Engineering – Klerksdorp +27 18 469 6300  
 Bolt & Engineering – Kathu +27 83 631 0459  
 Citi Bearings – Roodepoort +27 11 760 1692  
 Citi Bearings – Rustenburg +27 14 592 8265  
 Citi Bearings – Vereeniging +27 16 454 6400  
 Citi Bearings – Wadeville +27 11 873 8527  
 DB Mining – Namibia +264 64462738  
 Eagle Construction – Lichtenburg +27 18 632 5354  
 Eagle Construction – Welkom +27 71 670 0903  
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 Fincham Industrial – Port Elizabeth +27 41 453 2065  
 JRK Investments – Botswana +267 390 8822  
 Lephalale Supplies – Ellisras +27 14 763 3869  
 Lincoln Mozambique LDA – Mozambique +258 842987416  
 MCL Engineering Products – PE +27 41 401 7600  
 National Bearing Distributors +27 11 397 6377  
 Oculus Mining & Rail Supplies – Botswana +267 3182539  
 Record Engineering Sales – Kimberley +27 53 831 2088  
 Record Engineering – Kathu +27 53 723 1245  
 REVCO – Zimbabwe +263 4743118  
 Top Class Bearing Systems – Montague Gardens +27 11 045 8700  
 West Cape Bearing and Transmission – Brackenfell +27 21 9826224  
 West Cape Bearing and Transmission – Paarl +27 21 862 0460  
 West Cape Bearing and Transmission – Saldanha +27 22 714 1134

**SKF Linear Platform Distributor:**

Braddick Engineering – Pretoria +27 71 607 6706

**SKF Seals Platform Distributor:**

Innovative Sealing Concepts +27 11 397 2302

**SKF Baker Instrument Distributor:**

HV Test +27 11782 1010

**SKF Online Condition Monitoring Distributor:**

Instrusol +27 78 279 8951

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 Lincoln Lubrication SA – KZN +27 31 502 2894  
 Lincoln Lubrication SA – Mokopane +27 15 491 8194  
 Lincoln Lubrication SA – Witbank +27 13 690 2587  
 Lincoln Lubrication SA – Kuruman +27 53 712 1338  
 Lincoln Lubrication SA – North West +27 79 944 9340  
 Lincoln Lubrication SA – Vaal Triangle +27 82 895 9053

**Lincoln Lubrication SA – Distributors:**

Atlas Motors Engineering – Swaziland +268 4224105  
 Droplex Industrial Systems Ltd – Kenya/Uganda +254 722474431  
 E L Hydra-Bar +27 43 743 6357  
 Esayas Kidane – Ethiopia +251114668598  
 Feil Farm Engineering Industries Limited – Uganda +256414340640  
 Fincham Industrial +27 41 453 2065  
 Fluid Management Services – Zambia +260 977771214  
 Greasing Systems and Lubricants – Queensburg +27 31 464 5474  
 Henri Fraise Fils Et Cie – Madagascar +261 334300148  
 HGS Burkina S.A.R.L. – Burkino Faso +226 75975644  
 HGS Limited – Ghana/Guinea/Mali +233 303310422  
 HGS Limited – Tarkwa +233 246435922  
 HGS S.A.R.L. – Cote D'Ivoire +225 21266435  
 ISA Limited – Tanzania +255 787996282  
 J M Johndre Plant CC +27 15 781 1382  
 JTF / Terranova – Angola +244923316006  
 JTF / Terranova – South Africa +27 82 458 9018  
 Kistal Equipment Supplies Ltd – Nigeria +234 8033638055  
 KMS Enterprise Sarl – Cameroon +237 33601041  
 Lincoln Lubrication Mozambique Lda +258 25220610  
 Melcom – Mauritius +230 2084873  
 Mine Machines (Pvt) Ltd – Zimbabwe +263 977827  
 Minequip – DRC +243818151582  
 Minetech (Pty) Limited – Botswana +267 2412725  
 Namibian Lubrication Systems – Namibia +264 64400090  
 Steelburger Enterprises – Lydenburg +27 13 230 3292  
 Ultra-Flow Eng Services CC +27 21 551 7496

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