Exceptional protection and longer life

- with sealed SKF Explorer spherical roller bearings

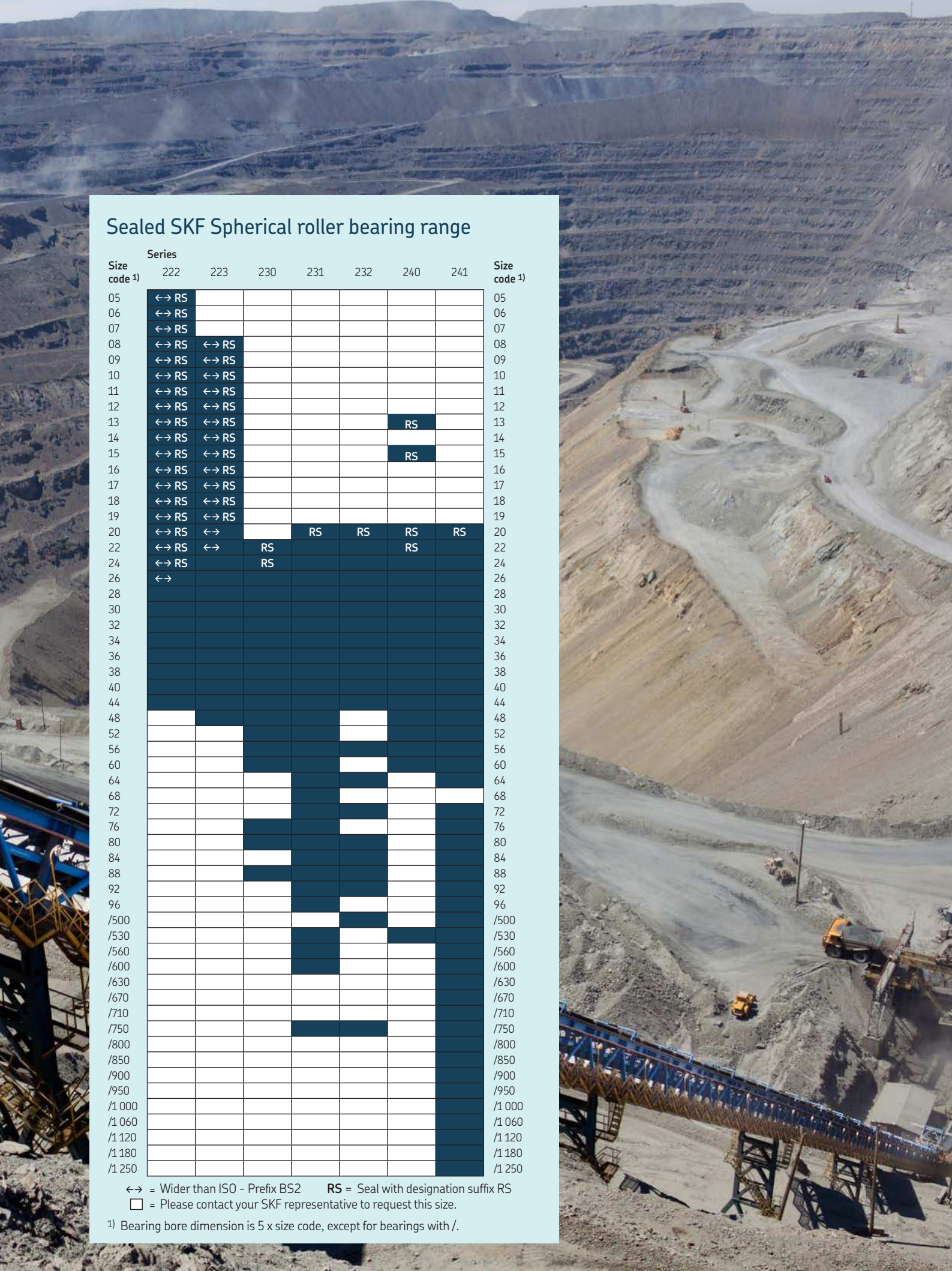
A full range of reliability

In industrial production, every minute of downtime is critical. Contaminated environments, heavy radial and axial loads in applications prone to misalignment or shaft deflections are daily issues for many industries. Problems with leaking grease and frequent relubrication in potentially hard to reach lubrication points also add to growing costs – not to mention the potential risks to workplace safety. For many, simply making it to the next planned maintenance stop without machine failure is a challenge.

With sealed SKF Explorer spherical roller bearings, you are equipped to meet these challenges. Prelubricated with a specially formulated grease and sealed with high-performance contact seals, they can protect the bearing and lubricant from contaminants that might otherwise cause premature bearing failure. Their high load carrying capacity and ability to accommodate misalignment further helps you reduce maintenance costs and prolong bearing service life.

Sealed SKF Explorer spherical roller bearings offer a unique opportunity to help reduce the risk of failure. They will help you reduce your overall costs and your environmental footprint – as well as the risk of worker injury. It's simply the future of reliable operations.

We offer the widest range of spherical roller bearings in the industry – both open and sealed – and can offer sealed bearings with an outer diameter up to 2 500 mm. We are the only manufacturer whose full standard range of spherical roller bearings, up to an outer diameter of 420 mm, is all available sealed, off the shelf.



Sealed SKF Spherical roller bearing range

Size code [1]	Series 222	223	230	231	232	240	241	Size code [1]
05	↔ RS							05
06	↔ RS							06
07	↔ RS							07
08	↔ RS	↔ RS						08
09	↔ RS	↔ RS						09
10	↔ RS	↔ RS						10
11	↔ RS	↔ RS						11
12	↔ RS	↔ RS						12
13	↔ RS	↔ RS				RS		13
14	↔ RS	↔ RS						14
15	↔ RS	↔ RS				RS		15
16	↔ RS	↔ RS						16
17	↔ RS	↔ RS						17
18	↔ RS	↔ RS						18
19	↔ RS	↔ RS						19
20	↔ RS	↔		RS	RS	RS	RS	20
22	↔ RS	↔	RS			RS		22
24	↔ RS		RS					24
26	↔							26
28								28
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/900								/900
/950								/950
/1 000								/1 000
/1 060								/1 060
/1 120								/1 120
/1 180								/1 180
/1 250								/1 250

↔ = Wider than ISO - Prefix BS2 **RS** = Seal with designation suffix RS

☐ = Please contact your SKF representative to request this size.

[1] Bearing bore dimension is 5 x size code, except for bearings with /.

For superior field performance

For original equipment manufacturers (OEM), sealed SKF Explorer spherical roller bearings offer a range of benefits. For OEMs, it's particularly worth mentioning that the need for a lubrication system could potentially be removed; we're talking a simplified and sustainable design that means low maintenance and increased safety. In many cases, since the bearing has integrated seals, the external sealing can be simplified or in some cases totally excluded, allowing for more compact designs. This also means that they are easy to handle during mounting. Sealed SKF Explorer spherical roller bearings mean a clear reduction in the total cost of your machine – and a key differentiator for your customer.

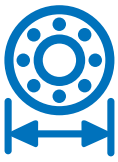
For end users, surviving to the next planned stop is critical. Focusing on production rather than worrying about failures enables you to create a more efficient and safer workplace. And when you have a sealed bearing that on average offers three times the service life of an open one, life gets a whole lot easier. If you also consider the almost non-existent grease leakage, sealed SKF Explorer spherical roller bearings not only reduce your environmental footprint, they also minimize the costs for grease purchase and disposal.

Compared with open spherical roller bearings, sealed SKF Explorer spherical roller bearings offer massive benefits for both OEMs and end users.

OEM benefits

Extended grease life

- Lower maintenance
- Safer maintenance
- Sustainable operations
- No need for lubrication system



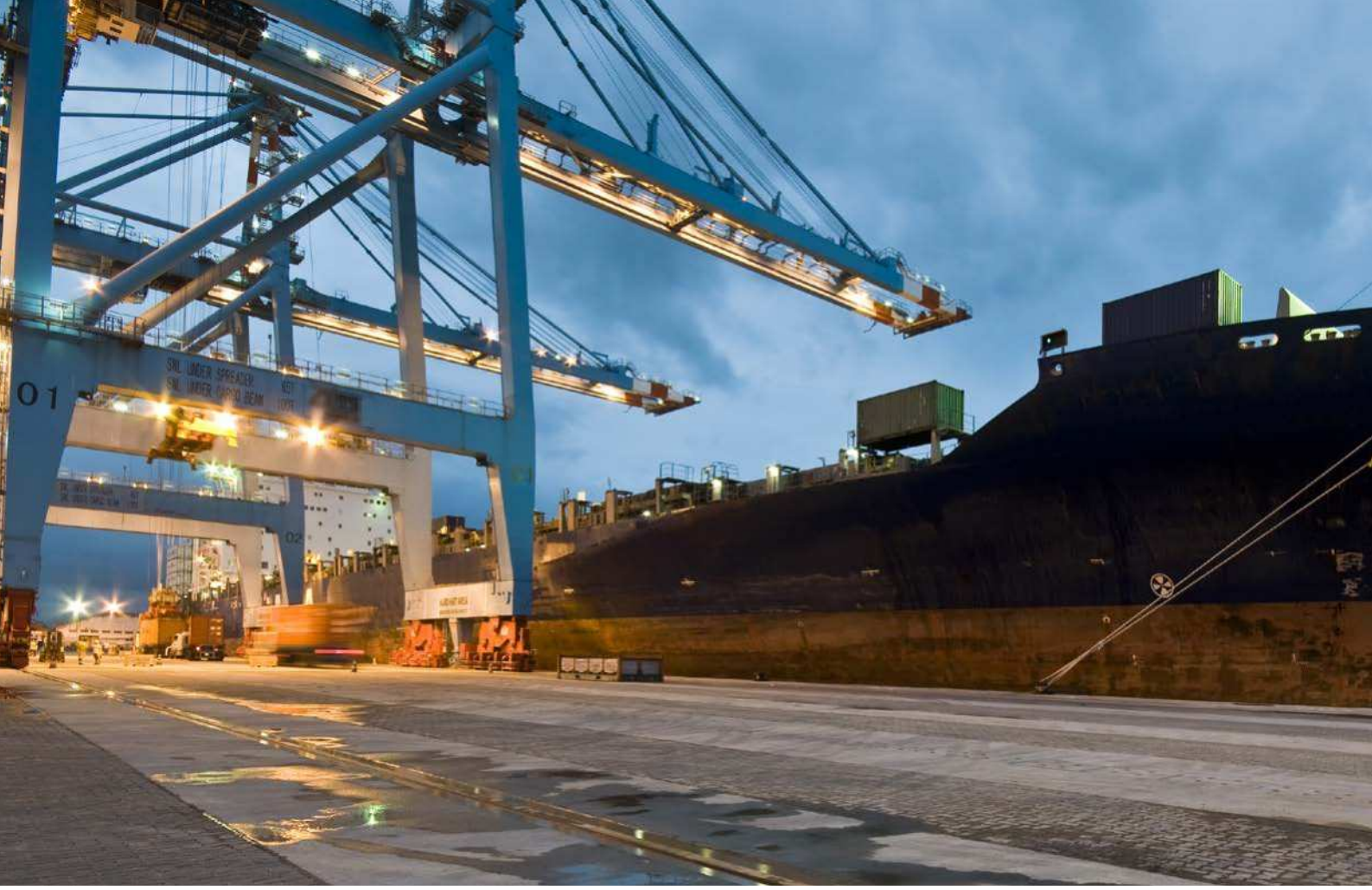
Compact design

- The ability to downsize
- Possibility for simpler housing design
- Less need for external seals
- Easier mounting

Longer service life

- Reduced warranty cost
- Potentially extended warranty
- Differentiator supporting end users' KPIs

These benefits will reduce the total cost of your machine and enhance your offer.



End user benefits

Get 3x service life

- Increased availability of machines
- Reduced risk of failure
- Lower overall bearing purchase cost
- Operate to planned maintenance stop

Cut 99% of grease consumption

- Minimized purchase and disposal costs
- Reduced grease leakage
- Reduced overall environmental impact

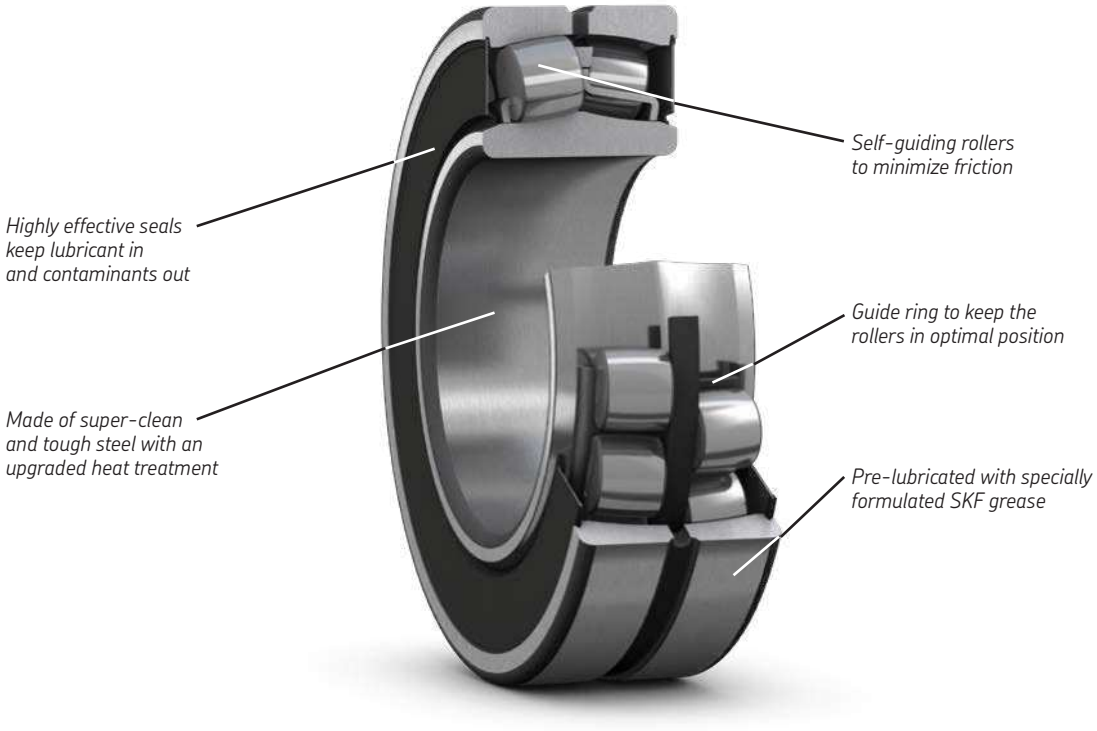
Cut 90% of relubrication tasks from your calendar

- Reduced maintenance needs
- Reduced risk of injury
- Possibility to optimize manpower

Good for productivity and maintenance in harsh operating environments

Sealed SKF Explorer spherical roller bearings can significantly increase bearing service life in contaminated environments.

A sealed bearing has a service life of up to three times longer than an open bearing. Longer service life leads to a more productive and profitable operation.



Upgraded SKF Three-barrier solution

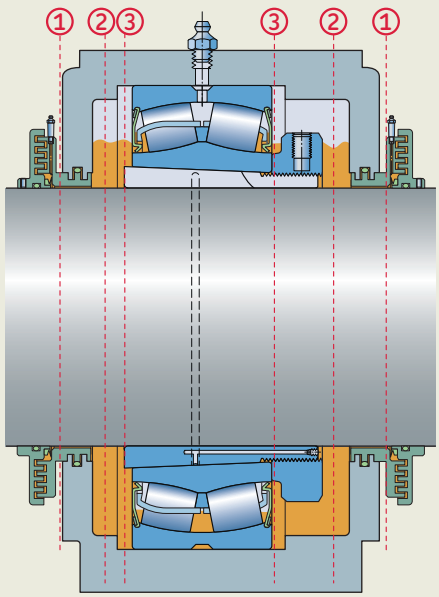
For the harshest operating environments, SKF recommends the upgraded three-barrier solution that has an average life-time three times longer than an open bearing.

The upgraded SKF Three-barrier solution means re-greasing twice a year instead of once a week, saving up to 90% of the time and cost of greasing and increasing safety for maintenance workers.

Barrier 1 SMS (SKF Mining specific) housing with SKF Taconite sealing

Barrier 2 SKF LGGB 2 biodegradable grease

Barrier 3 Sealed SKF Explorer spherical roller bearing

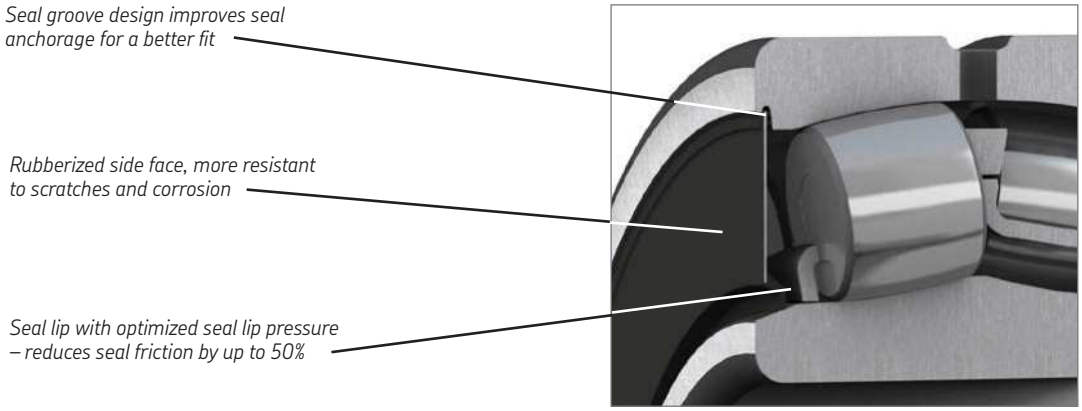


Half the friction, twice the speed

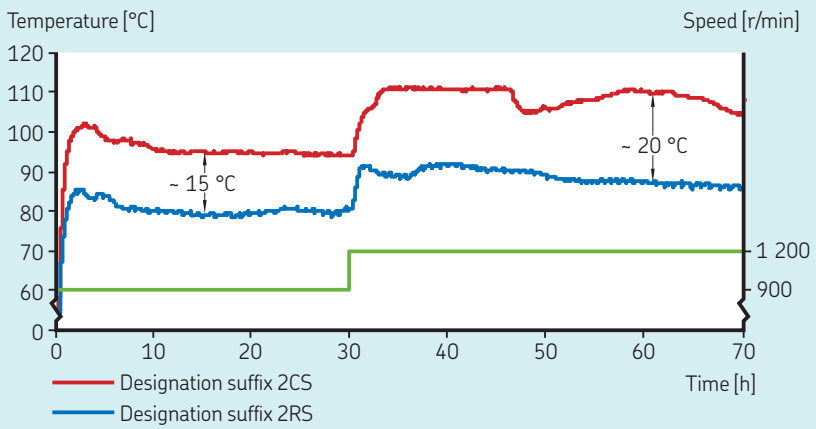
Small sealed SKF Spherical roller bearing with designation suffix RS (shown in diagram on page 3)

- A design that results in up to 50% less seal friction
- Reduce operating temperatures by as much as 20 °C (36 °F) (see diagram below), enabling us to double the limiting speed rating

As a result, more applications can benefit from the superior contamination protection of sealed SKF Spherical roller bearings.
Sealed spherical roller bearings are suitable for a wide range of applications including elevators, off-highway and agricultural machinery, fans and fluid machinery, food and beverage equipment, conveyors and some small electric motors.



Sealed SKF spherical roller bearing operating temperature



Test conditions:

Bearings: 23022-2CS/VT143 and 23022-2RS/VT143
Load: C/P = 10, pure radial load
Speed: 900 r/min and 1 200 r/min
Temperature measured on outer ring

The reduced seal friction of the bearings with improved performance seal (designation suffix RS) results in lower operating temperature, enabling extended relubrication intervals.

SKF Explorer bearings

SKF Explorer rolling bearings accommodate higher load levels and provide extended service life. Optimized internal geometry reduces friction, wear and heat generation, allowing heavier loads to be accommodated. Their advanced surface finish reduces friction and enhances lubricating conditions.

Benefits of using SKF Explorer bearings include:

- significantly extended service life
- increased uptime and productivity
- extended lubricant life
- reduced sensitivity to misalignment
- reduced noise and vibration
- the prospect of downsizing applications

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