

Supporting proactive food safety

SKF Food Line ball bearing units



FOR
DEMANDING
FOOD AND
BEVERAGE
ENVIRONMENTS



Reduce risks to food safety

With food recalls on the rise and safety regulations becoming stricter across the globe, proactive food safety programs have become the norm. As a result, companies must incorporate the latest advancements in hygienic design into all of your food processing assets – while also supporting your most critical goals around performance, cost and sustainability.

The SKF Food Line ball bearing units have been developed to offer a complete range of hygienic and high-performance bearing unit solutions for the most demanding Food and Beverage environments. Specially developed to help eliminate contaminants and to reduce the spread of bacteria, they provide a solution to many food safety issues. Lubricated for life and designed to withstand frequent washdowns, the new bearing units also solve many of the problems connected with traditional maintenance.

Learn how with SKF, you can:



Reduce
risks to
food safety



Increase
performance and
uptime



Reduce
maintenance and
related costs



Foster a
sustainable
culture

Designed for improved hygiene

SKF Food Line ball bearing units have been specifically designed from the ground up, component by component, for improved hygiene and compliance with food safety regulations.



Base seal



Back seal



End cover

Reduce bacteria buildup during food processing

Base seal: when mounted, the periphery of an overmoulded rubber deforms to provide a tight base seal to the mounting frame.

Back seal: seals statically against the housing and dynamically against the shaft, preventing process material from entering the bearing cavity from the back.

Housing: helps to eliminate crevices or recesses where soiling and bacteria might accumulate, including filled base.

End cover: effectively seals the unit off, while a patented locking mechanism prevents it from accidentally dislodging.

Relubrication free: helps to eliminate excess grease accumulation in end covers where bacteria can grow when exposed to processing material and liquids.



Comparative washdown test: left picture shows crevices and areas where food residues have not been properly removed after a typical industrial washdown. The right picture shows the new highly cleanable unit.



With no relubrication required, there is no accumulation of excess grease in end covers.

Improve hygiene at washdowns

Angled surfaces: promote self-draining and deter soiling, regardless of mounting orientation.

Extremely smooth surface finish: provides high cleanability, comparable to the internal surface finish on hygienic tubing and piping.

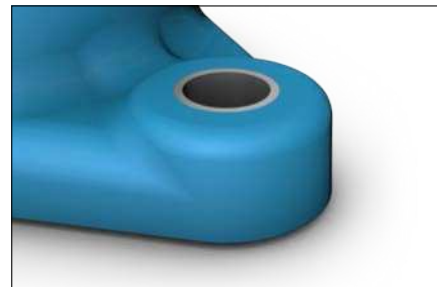
No excess grease: eliminates the risk of infected bearing grease spreading towards the food zone during pressure wash.

Proactively protect your products and ensure compliance

Compliant components: FDA and EC compliant end cover and food-grade synthetic rubber base seal. Housings, flinger and back seal also complies with FDA regulations.

Food-grade bearing grease: allergen-free and approved for accidental food contact.

Blue seals and housing material: aid with optical detectability if accidental contamination is suspected.



Angled surfaces promote self-draining and deter soiling.



Food grade grease NSF H1, American Halal Foundation (AHF) and 1K Kosher certified.

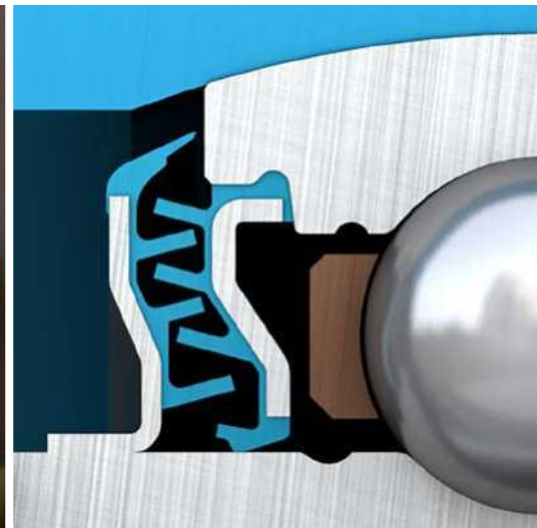


With the SKF solution, the risk of infected bearing grease spreading to the food zone during pressure wash is reduced.

Increase performance and uptime

SKF Food Line ball bearing units have been engineered to reduce downtime for maintenance and cleaning. The patented bearing sealing system and the high-performance grease also increase the reliability and service life of your bearings.

Sealability of the complete units and the high performance of insert bearings contribute to increased asset availability.



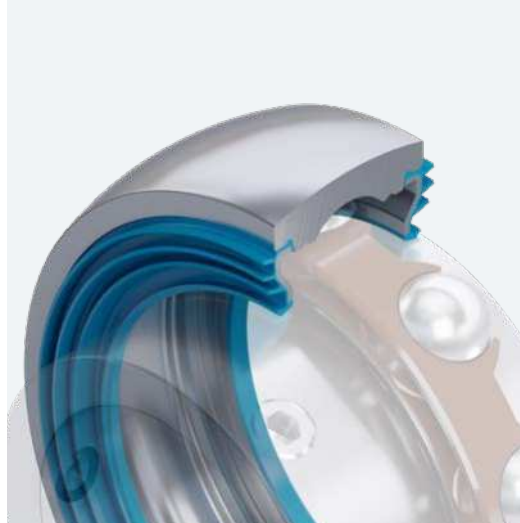
Increase bearing service life

- **Patented bearing sealing system:** a radically different approach that helps to prevent damage caused by detergent and water ingress into the bearing.
- **Sealability of complete units:** helps to prevent ingress of process material and cleaning agents via a back seal that seals statically against housing and dynamically against shaft. The end cover seals completely against the housing on the front side.
- **High-performance, food-grade, and allergen-free grease:** offers good resistance to degradation in the presence of a detergent.

- **Corrosion-resistant insert bearing:** includes ANSI-grade 420 stainless steel inner ring, outer ring and balls or zinc-coated bearing components as an option.

Reduce relubrication and cleaning downtime

- **33% percent faster cleaning of open units:** enabled by the hygienic design of all components and the relubrication-free feature.

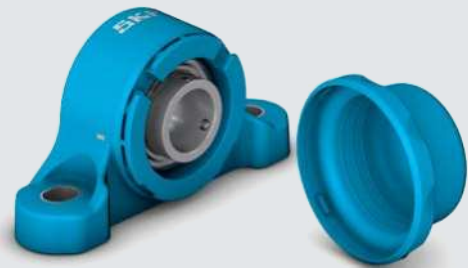
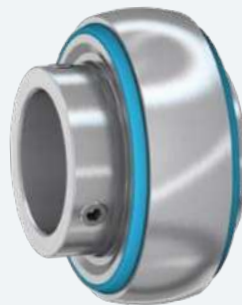




Assessing the cost of relubrication

As an example, relubricating 100 bearing positions requires about:

- 15 g (0.53 oz.) of lubricant per bearing purge, which equals
- 1,5 kg (3.3 lbs.) per weekly maintenance cycle, or a total of
- 78 kg (172 lbs.) of lubricant per year.



Reduce costs

Because the SKF Food Line ball bearing units have been designed for relubrication-free operation and increased performance even in harsh environments, you are able to reduce maintenance and related costs in a variety of ways.

Reduce maintenance costs

- **Relubrication-free:** leads to labour and lubricant cost savings.
- **Increased bearing service life:** get more production out of your bearings before you have to replace them.

Reduce environmental costs

- **Water savings:** 33% less water required for cleaning excess grease off open bearing units.
- **Reduce waste:** less cost for purchasing and disposing of grease absorbents used for cleaning off excess grease.

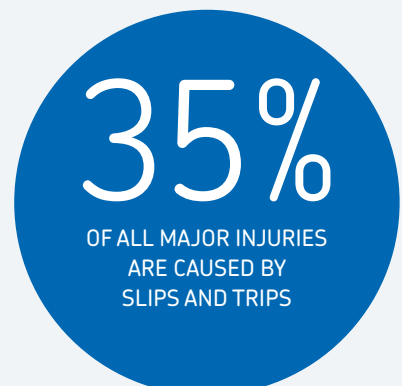
Reduce downtime costs

- **Planned downtime:** can be avoided or reduced with relubrication-free bearings, so you can potentially optimize or increase production.
- **Unplanned downtime:** can also be reduced or prevented by avoiding incidents around food safety, bearing service faults or even personal injuries.

Provide a safer work environment

Getting the most performance out of your assets is critical, but so is protecting your people in the workplace. Relubricating in hard-to-reach spots increases the risk of accidents – as do the slippery floors in areas that must be frequently washed down.

With SKF bearings, you reduce grease on the floor and eliminate manual relubrication tasks thanks to our relubrication-free technology. You also protect workers from coming into contact with dangerous parts via a secure locking end cover. As a result, the risk of accidents is reduced.

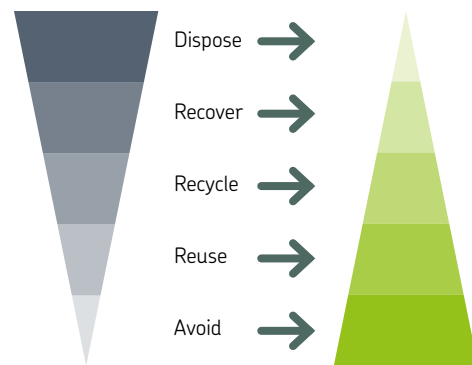


Achieve environmental benefits

With SKF Food Line ball bearing units, you are better positioned to achieve sustainability related to prevent, reduce and recycle goals described below. This fosters a proactive versus disposal-oriented environmental culture at the same time as the CO₂ footprint is reduced 0% landfill can be achieved.

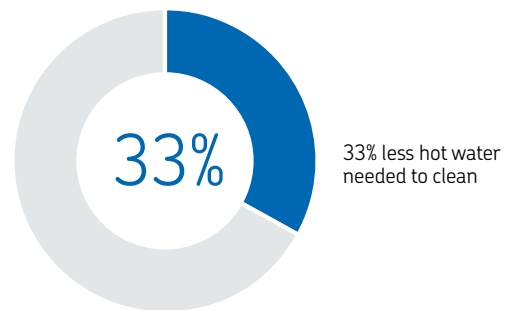
Prevent

- Wastage of production caused by unplanned downtime
- Waste water contamination from excess bearing grease
- Disposal of cleaning rags and paper towels



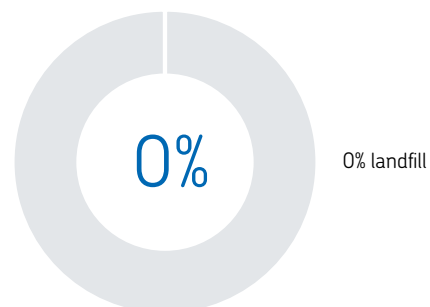
Reduce

- 33% less hot water needed to clean open bearing units
- CO₂ through less energy consumption to power the bearings and lower frequency of replacement



Recycle and zero landfill

- 0% landfill
- 59% of the product can be recycled*
- 41% is energy-recovered



* Based on product recyclability analysis by Stena Recycling, 2018

REDUCE GREASE
IN WASTE WATER



SUSTAINABLE
DEVELOPMENT GOALS

**Help prevent water contamination – use
water and resources more efficiently**

SKF Food Line ball bearing units help prevent water contamination and reduces water use in your food and beverage processes. It enables a longer operating life and is highly recyclable, improving your resource efficiency – both in your operations and over the life cycle of the product.

This is one example of how SKF customer solutions can be used to support a positive impact on the Global Goals.

Go to skf.com/foodandbeverage to:

- See what other customers have achieved with SKF Food Line ball bearing units
- Download the SKF Food Line ball bearing catalogue for more technical features and details
- Find out where to buy

skf.com

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