

SKF helps the metals industry to reduce greenhouse gas emissions



Environmental benefits

- Extended bearing service life
- Eliminates grease consumption
- Eliminates hazardous waste associated with grease disposal
- Reduced greenhouse gas emissions over the life cycle of the product



SKF extreme temperature bearings eliminate relubrication and increase bearing service life in high-temperature applications

High-temperature applications such as cooling beds in hot rolling mills typically require a great deal of bearing maintenance.

When temperatures reach 250 °C or higher, grease lubricated bearings typically fail prematurely even if costly special greases are used. At these extreme temperatures, grease quickly loses its ability to lubricate. If that occurs, the lubricant can dissipate or even carbonize. One way to avoid premature bearing failures is to relubricate the bearings very frequently or install a central relubrication system. Though quite effective, these systems require large amounts of grease to be pumped into the bearings at regular intervals.

To avoid the problems associated with high temperature applications, SKF has developed SKF extreme temperature bearings which can operate continuously at temperatures up to 350 °C (660 °F) without any need for relubrication.

SKF extreme temperature bearings are particularly suitable for applications subjected to **high temperatures**, in **dry environments** with **slow rotational speeds**. While these operating conditions are very challenging for grease lubricated bearings, SKF extreme temperature bearings last longer without any need for relubrication.

This leads to a significant reduction of greenhouse gas emissions.



SKF BeyondZero solutions can help reduce CO₂ emissions, preserve limited resources and protect the environment from the use and spread of toxic substances. For more details, including documentation of reduced environmental impact, visit www.beyondzero.com



SKF extreme temperature bearings reduce emissions

Operational benefits

- Significantly increased bearing service life
- No relubrication
- Virtually no lubricant leakage
- Improved safety

Operational features

- Graphite cage
- Special clearance for high temperature
- Interchangeability with standard bearings

82% reduction of greenhouse gas emissions

In a cooling bed for sheet metal, the bearing service life is increased by a factor of three, and there is no need for relubrication. These savings are equivalent to an 82% reduction of greenhouse gas emissions.

More information is available in the product brochure 11358/3 EN



Lubrication challenge in the metals industry

The metals industry is one of the most energy intensive industries, and reduction of greenhouse gas emissions is a goal on top of the agenda.

Cooling beds in the metals industry typically use standard deep groove ball bearings lubricated with grease, but the high temperatures require frequent relubrication, and bearing service life is often very short, leading to unplanned downtime.

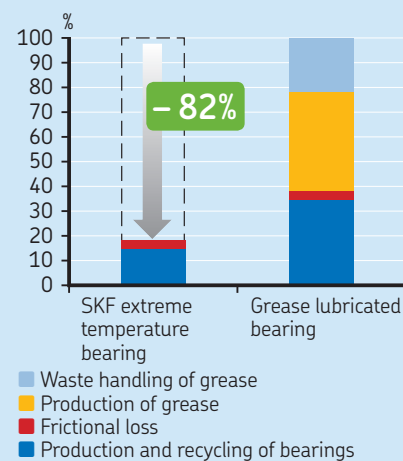
SKF extreme temperature bearings

The SKF extreme temperature bearings are made with a special internal clearance and a graphite cage. The cage lubricates the bearing, which eliminates the problems associated with high temperature lubrication. In actual customer cases, SKF extreme temperature bearings last **three times longer** than conventional solutions. The increased service life and the elimination of grease lubrication is equivalent to an 82% reduction of greenhouse gas emissions related to the bearings throughout the life cycle of the product.

Read more on the web via

www.skf.com/extreme

Climate impact of SKF extreme temperature bearing compared to a grease lubricated bearing



Assortment of SKF extreme temperature deep groove ball bearings and Y-bearings (suffix VA208 or VA228)

Bore d [mm]	60	62	63	YAR2	size code
12					01
15					02
17					03
20					04
25					05
30					06
35					07
40					08
45					09
50					10
55					11
60					12
65					13
70					14
75					15
80					16
85					17
90					18
95					19
100					20
110					22
120					24

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