

SKF high temperature bearings

Bearings in high temperature applications can be unreliable due to premature failure. The result is higher costs and time wasted on frequent bearing replacements. SKF offers a solution with a range of high temperature bearings designed to reduce longer and cleaner in high temperature applications.

SKF high temperature bearings incorporate graphite-based lubricants that continuously lubricate the bearing, eliminating the use of grease. Ideal for applications in industries such as metals and food and beverage, these bearings are designed for relubrication-free operation at temperatures up to 350 °C (660 °F).



Features

- Lubricated for life with graphite
- Boundary dimensions as standard ISO metric bearings
- Optimised radial internal clearance
- Shields for ball bearings/Y-bearings as standard
- Surface coated bearings for some variants

Benefits

- No need for relubrication
- Simple bearing replacement
- Enables operating temperatures up to 350 °C (660 °F) depending on variant
- Increased protection against contamination
- Improved running in

Typical applications

Metals:

- Cooling bed for steel plates

Food and beverage:

- Continuous baking ovens
- Wafer baking ovens

Material handling:

- Paint lines

The SKF high temperature bearing solution

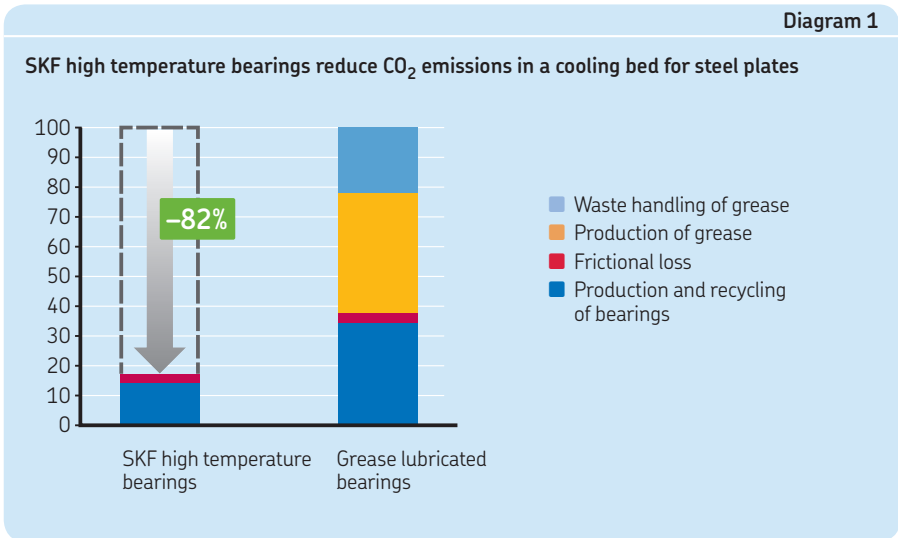
Graphite has excellent lubrication properties at high temperatures, thus eliminating the risk of metal-to-metal contact between rolling elements and the raceways. SKF high temperature bearings are relubrication-free. To avoid seized bearings, radial clearances appropriate for high temperature operation are specified.

The SKF advantage: optimum performance, efficiency and savings

Benefits and cost savings can be realized by a simple bearing change, SKF high temperature bearings correspond to the ISO boundary dimensions for standard bearings. By changing to relubrication-free high temperature bearings, cooling systems used to reduce bearing operating temperatures and lubrication systems may be unnecessary.

Increased reliability, reduced maintenance

SKF high temperature bearings improve the overall machine reliability and



output as temperature related bearing failures are avoided. A relubrication-free solution provides a more cost-effective operation.

Reduced environmental impact

Substantial environmental benefits are realized as no relubrication is needed and the increased service life reduces emissions related to manufacturing of replacement bearings. The significant environmental benefits qualify SKF high temperature bearings for inclusion in the SKF BeyondZero product portfolio.

Workplace and process safety

With grease removed from the process environment, relubrication procedures in potentially dangerous areas of the operation are no longer needed. Also, slippery surfaces from grease leakage and the risk of excess grease catching fire are eliminated. Versions of SKF high temperature bearings can also contribute to food safety as they are NSF H1 certified. See Core assortment table below.



SKF 6212-2Z/VA228 SKF SY 50 TF/VA228

SKF high temperature bearings provide proven solutions in a number of different applications across a variety of industries.

Characteristic	Deep groove ball bearing			Y-bearing and Y-bearing units	
	VA201	VA208	VA228	VA201	VA228
Maximum operating temperature	250 °C (480 °F)	350 °C (660 °F)	350 °C (660 °F)	250 °C (480 °F)	350 °C (660 °F)
Limiting speed [r/min]	4 500/d _m	4 500/d _m	9 000/d _m	4 500/d _m	9 000/d _m
NSF H1 food grade	No	Yes	Yes	No	Yes

d_m = bearing mean diameter = 0,5(d+D). For outer ring rotation use d_m = D

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