

Customer reference case

High-temperature bearings

Bearing manufacturing

Heat treatment



Heat treatment oven at SKF equipped with high-temperature bearings

High-temperature bearings save 60 000 euro in only five years

Christer Lundberg, Manager "Heat treatment" in the SKF factory, says:

"We faced high maintenance costs in the heat treatment ovens. To cut cost and increase uptime we found a solution by using high-temperature bearings with the graphite technology. Since 1997 the SKF factory has had no bearing failures in the heat treatment ovens."

SKF is the world leader in the production of rolling bearings and related products and services. At its factory in Gothenburg, Sweden, the company produces spherical roller bearings, CARB toroidal roller bearings and self-aligning ball bearings. The heat treatment process of the rings is a crucial part of the production and it is essential to have a reliable process.

Twice a year all bearings and shafts of the heat treatment oven were checked and the bearings were re-greased. Once a year all bearings were replaced. Also many shafts had to be scrapped and maintenance cost was very high. In a two-year period the bearing consumption was 434 pieces and 217 shafts.

In order to cut costs and increase reliability and uptime, a new solution was needed to be found.

As a result, high-temperature bearings using the graphite technology, were mounted to support the rollers to provide a maintenance-free solution. The graphite acts like a "dry" lubricant and as such, there's no need to relubricate the bearings.

The high temperature bearings were installed in 1997 and, five years later, the heat treatment oven has had no bearing failures and only 13 shafts were replaced.

The cost savings over a five years period is more than 60 000 euro, on an initial investment of less than 4 000 euro. Furthermore, the new solution is also good for the environment as, without the need for a grease lubrication system, there is no waste to dispose of.

For more information please contact your local SKF office.



Operating conditions

Bearing: 6202-2Z/VA228
Operating temperature: 130 °C inside the bearings
Speed: 0,2–0,3 m/min

Value added

- ✓ Extensive cost savings
- ✓ A maintenance-free solution
- ✓ An environmentally friendly solution

Financial outcome:

Initial investment
EUR 4 000

Total savings
EUR 60 000 in 5 years

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Publication 5236 EN

