



Cut clinker cooler downtime and maintenance costs

Benefits

- Cut bearing failures by more than 50%
- Cut lubricant costs by up to 70%
- Limit lubrication-related breakdowns
- Reduce planned and unplanned shutdowns
- Limit production losses due to downtime
- Extend maintenance intervals
- Improve worker safety
- Reallocate maintenance resources



With an automatic lubrication system from SKF

Clinker coolers endure extremely high operating temperatures and dust levels. Because of these conditions, as well as the central role that clinker coolers play in cement production, they are generally shut down frequently for manual relubrication and inspection.

While these planned shutdowns are labour-intensive and drive maintenance costs, the alternative – unplanned shutdowns due to lubrication-related bearing failures – can be far more costly in terms of repairs and lost production. SKF can help.

SKF automatic lubrication system with FB pump

By providing every lubrication point with the appropriate lubricant, in the right quantity, at the right time, the SKF automatic lubrication system with FB pump enables precise, hands-off, 24/7 bearing lubrication.

The system uses a high-pressure pump in combination with a progressive divider to deliver the exact quantity of grease or oil to every clinker cooler lubrication point. This highly precise timing and dosing can cut lubricant costs by as much as 70% and bearing failures by more than 50%.



The end result? Far fewer planned and unplanned shutdowns, improved productivity and worker safety, and the ability to deploy maintenance resources elsewhere. Plus, the system is flexible enough to handle a range of medium to large systems, thanks to several performance features:

- FB pump available with 6, 15, or 30 kg tanks
- displacement volumes between 0.04 cm³ and 7 cm³
- 1-24 pump elements that can be configured to match the application
- oil or grease compatibility



Increase the return on your maintenance investment with SKF

The whole idea behind the SKF 360° Solution is to help you get more out of your plant machinery and equipment investment. This may mean lowering your maintenance costs, raising your productivity, or both! Here is an example of the SKF 360° Solution at work in the mining and mineral processing industry.

SKF boosts clinker cooler uptime and saves plant \$10 000 per year in grease costs alone

The problem

A cement mill in the Dominican Republic was experiencing problems with clinker cooler availability. Bearings were being over-lubricated and the reliability of the system, which did not cover all the necessary lubrication points, was poor.

The result was downtime and a lot of money spent on grease every month. Furthermore, as some points were manually re-lubricated, maintenance staff risked being burnt by hot clinker particles.

Looking for a solution that would increase process availability, cut costs, and increase the safety of their workforce, the mill turned to SKF.

The SKF solution

SKF suggested a progressive lubrication system that would provide automatic, hands-free lubrication 24/7. The system that SKF ultimately installed featured an FB30 pump, a 30 kg tank, four outlets with progressive feeders, plus piston detectors for system reliability.

The results

The SKF progressive lubrication system slashed cooler downtime, substantially increasing lubrication effectiveness and process availability. As a plant representative describes, “The arms of the transmission system had seven failures in the two months prior to the installation of the new system and, since it was installed, there has been zero failures.”



The SKF system also reduced the facility's lubricant consumption, cutting it from an average of 100 kg of grease per week to 35 kg, for a monthly savings of nearly \$1 000. The system also enabled the facility's maintenance team to begin focusing on other duties, and kept them safely away from hot clinker cooler particles.

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