



Customer
Cement and aggregate
supplier

Industry
Cement, Aggregate &
Construction

Application
Clinker cooler fan

Rexnord Solution:
SHURLOK® ZA6211 &
ZA6211 Bearings

Total Annual Savings
\$4,627

SHURLOK bearings keep vibration and costs down for cement supplier.

Challenge

A leading supplier of cement and aggregate was experiencing premature failure of the bearings used on the shaft of a fan used to cool red-hot clinker conveyed in its plant. With such intense temperatures, it is imperative that the fan continue running at all times. Otherwise, the plant runs the risk of the clinker melting its conveyors and the plant shutting down.

The problem stemmed from the set screw design on their existing pillow block bearings. An improper fit of the bearing on the shaft caused the shaft to move from the fan vibration. This movement led to the set screws damaging the shaft, which became a bigger and more expensive problem. To prevent this from happening in such a critical application, the plant was replacing their existing pillow block bearings almost every seven months. These preemptive replacements were costing the company over \$7,000 per year.

Rexnord Solution

Rexnord recommended replacing the existing bearings with SHURLOK Adapter Mount Roller Bearings for this critical application. With its exclusive Spyglass™ Optical Strain Sensor (OSS) technology, the SHURLOK bearing visually informs the installer when the correct tightness is achieved. This not only makes installation easier and faster, but by achieving a better fit, vibration is minimized as the shaft is kept precisely in the center of the bearing. With the bearing installed correctly, damage to the bearing and shafting is eliminated.

Rexnord Solutions and Savings in Action

Although the initial cost of the SHURLOK bearings was slightly higher, and the installation costs were the same, the longer life expectancy of SHURLOK bearings convinced the cement supplier to install them. After 21 months of service – already three times longer than the existing bearings – the SHURLOK bearings were removed, simply because they had lasted so much longer that the customer had become anxious. Upon removal, the customer found no damage to the shaft. Convinced of their superior performance, new SHURLOK bearings were installed and continue to perform. By reducing the number of replacement installations, the cement supplier achieved 65% in savings per year.

For a detailed cost analysis for your application, contact your local Rexnord Representative.



Calculating the Annual Total Cost of Ownership (TCO)

Rexnord worked with the customer to determine their current cost of ownership and compared that to the cost of the Rexnord solution. Factors considered were:

- Acquisition costs of bearings
- Installation costs
- Expected life

Annual Cost Analysis Breakdown

Acquisition Costs

	Purchase Price	Expected Life (years)	Units Installed	Total
Current product	\$320	7.0	2	\$1,097
Rexnord SHURLOK Bearing	\$431	21.0	2	\$493
Annualized Savings				\$605

Installation Costs

Time reduced by 50%

	Cost/Install	Installations/Year	Units Installed	Total
Current product	\$1,760	1.71	2	\$6,034
Rexnord SHURLOK Bearing	\$1,760	0.57	2	\$2,011
Annualized Savings				\$4,023

Rexnord Solution Annual Savings Summary

Total current cost	\$7,131
Total proposed cost	\$2,504
Total savings per year	\$4,627
TCO reduction percent	65%

Total Cost of Ownership Annual Savings: \$4,627