



Inverter-duty bearings prolong electric motor life

SKF INSOCOAT® bearings extend bearing service life in electric motors, reducing maintenance costs

Benefits

- Reliable solution to reduce electric motor breakdowns
- Reduced maintenance costs
- Bearing and insulation all in one
- Standard bearing dimensions for easy retrofit
- SKF quality and backing

Typical applications

- Variable speed drive AC motors
- Large AC motors (low pole)
- DC motors
- Windmill generators

Are you experiencing short service life in your electrical motors?

Are you aware that conventional motor bearings get "fried" by the electrical current passing through them?

Are you aware that grounding the shaft doesn't stop the problem?

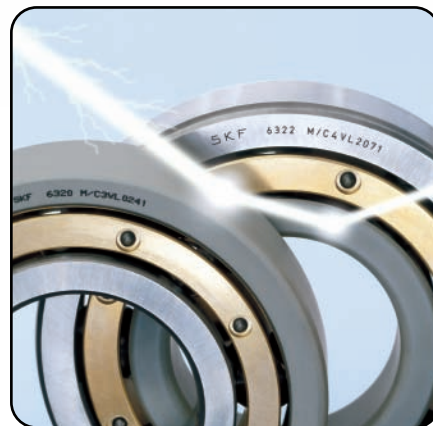
Are you aware how much motor breakdowns and downtime cost you per year?

These questions point out common problems experienced by variable speed motor users. You have a choice to either accept the impact that these problems have on your plant's bottom line, or you can do something about it.

SKF INSOCOAT bearings are the solution to current-induced bearing failure.

SKF INSOCOAT® bearings are designed to prevent electrical current damage. They feature a coating of aluminum oxide as an insulator on the inner or outer ring of the bearing – depending on shaft size. This coating is an effective insulating barrier, preventing electrical current from passing through the bearing to cause microscopic "melting" of the bearing and subsequent failure – and motor stoppage.

Plasma spray technology provides a uniform coating for reliable performance. In addition, INSOCOAT

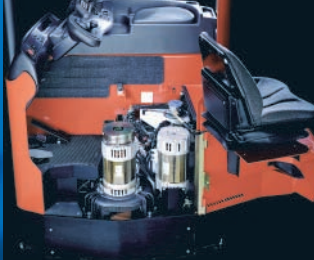


bearings are treated with a sealant that resists humid environments, heat and chemicals.

Field tests conducted by SKF demonstrate that INSOCOAT bearings outperform (both electrically and mechanically) all other solutions, including so-called "conductive" grease. Under SKF failure analysis, competitive insulated bearings tend to exhibit cracked coatings and show a high sensitivity to humidity.

INSOCOAT bearings are 100% performance-tested to 1,000 V DC with a minimum ohmic resistance of 50 MΩ. They are made to standard bearing dimensions allowing for drop-in replacement. There is no need to rework housings or change mounting procedures. Bearings are available for shaft diameters up to 155 mm.

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SKF puts more ROI in your MRO.

The whole idea behind the SKF 360° Solution is to help you get more out of your plant machinery and equipment investment.

This means lowering your maintenance costs, or raising your productivity, or both! Here is an example of the SKF 360° Solution at work in electric motors.

Cartonboard maker achieves 800% ROI using INSOCOAT bearings

A major international producer of heavy duty cartonboard experienced high maintenance and material costs in their large flue gas recirculation fan. These costs were a result of bearing failure caused by stray electrical current from their frequency converters.

The bearings in the hot gas fan motor in the boiler lasted on an average of only six months. A solution was needed to eliminate stray electrical currents, increase reliability, and cut costs. The maintenance

department decided to install SKF INSOCOAT® bearings in the fan motor.

Since changing to INSOCOAT bearings five years ago, this producer has had no bearing failures in the hot gas fan. In addition, the frequency drive can be used to its full capacity.

This plant's savings in bearing replacement costs using INSOCOAT bearings are dramatic. In addition,



reduction of downtime and enhanced productivity contribute to profitability in a major way.

You can use your own numbers to make an approximate calculation of your plant's projected ROI in switching to INSOCOAT bearings.



SKF 360 Solution ROI calculations are from the SKF Documented Solutions Program. Ask your SKF Authorized Distributor for more details.

ROI for a five year period – using the example above:

Cost savings of replacing conventional bearings twice a year ..\$21,359

Cost savings for maintenance\$16,550

Cost savings for lost production\$112,400

Total savings\$150,309

Investment in INSOCOAT bearings\$16,700

800% ROI

Note: All numbers are rounded and based on customer's estimates of labor and production costs

