Prevent electrical erosion, bearing damage and downtime with the INSOCOAT bearing

Benefits

- Virtually eliminates bearing damage from stray electric currents
- Extends bearing service life
- Increases machine uptime
- Reduces maintenance and repair costs
- Cost-effective solution compared to other insulating methods
- Drop-in replacements for easy installation
- Maximizes grease life

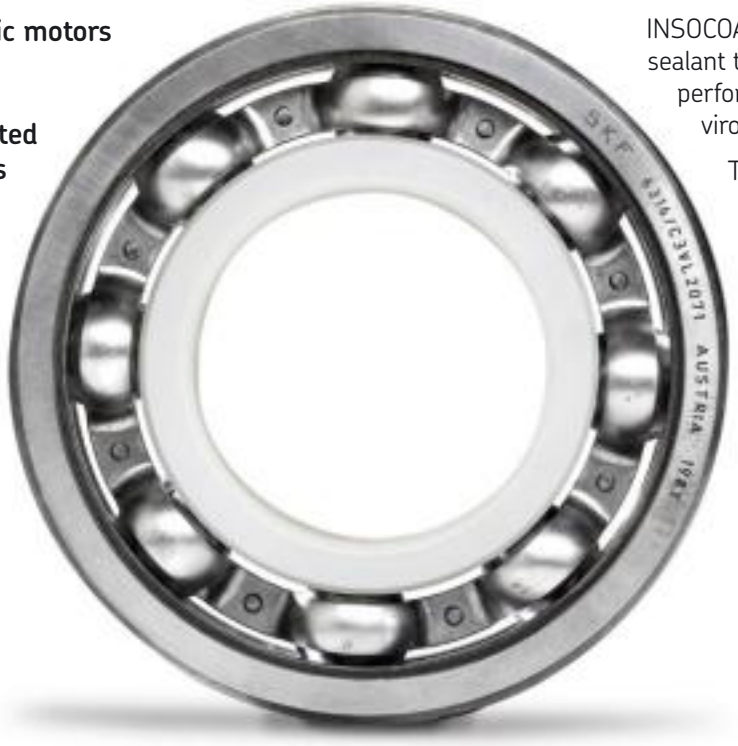
Typical applications

- AC and DC electric motors
- Generators
- Machines connected to electric motors

Stray currents in electric motors, generators or associated equipment can damage the rolling elements and raceways of steel bearings and rapidly degrade the lubricant. The

result is unplanned downtime along with increased costs related to bearing replacement and lost productivity. While attempts are sometimes made to alleviate the problem by insulating the housing or shaft, this can be an expensive and time-consuming task that may not yield optimum results.

A better solution is a bearing designed to manage stray electric currents.



INSOCOAT bearings prevent current passage

The INSOCOAT® bearing from SKF is a standard, all-steel bearing that is plasma-sprayed with a ceramic coating. The coating is applied to the outside surface of the bearing inner or outer ring, depending on the application, and sealed to protect against the conductive effects of water and moisture. Well-suited to medium and large sized motors, INSOCOAT bearings offer a number of advantages over other methods used to prevent damage from stray currents.

Because they have the same boundary dimensions as standard bearings, INSOCOAT bearings do not require special installation procedures or expensive modifications.

INSOCOAT bearings feature a unique sealant that enables the coating to perform effectively in humid environments.

The environmentally-friendly coating provides a consistent insulation layer that is virtually insensitive to high operating temperatures and chemicals.

The INSOCOAT coating also prevents degradation of the lubricant caused by current discharges.

For more information on SKF® products and solutions for the pulp and paper industry, contact your SKF Authorized Distributor.

Increase the return on your maintenance investment with SKF

The SKF 360° Solution programme embodies our goal 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's an example of the SKF 360° Solution programme at work in the pulp and paper industry.

Pulp and cartonboard mill generates 4 900 % ROI with INSOCOAT bearings

A modern, integrated pulp and cartonboard mill was losing productivity due to bearing problems in the pulp boiler flue gas recirculation fan motors. The 400 kW AC motors with frequency converters were running at 950 r/min with an operating temperature in excess of 100 °C.

The motors were equipped with standard bearings, which lasted only six months on average due to damage caused by stray electric currents. To improve reliability and reduce maintenance and repair costs, INSOCOAT bearings from SKF were installed in the fan motors.

Since installing the INSOCOAT bearings, there have been no failures. The mill has realized dramatic savings in maintenance and repair costs, along with additional benefits in reduced downtime and increased productivity. The result has been a significant improvement in the bottom line.

ROI summary (annually)

Previous costs

Cost of replacement bearings: **€1 000**
Cost of maintenance/repair: **€6 000**
Cost of downtime: **€43 000**
Total cost **€50 000**

Current costs

INSOCOAT bearings: **€300**
Cost of maintenance/repair: **€700**
Total cost **€1 000**

Total ROI ..... 4 900 %

All figures are rounded and based on customer's estimates of labour and production costs. Your particular cost savings results may vary.

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

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