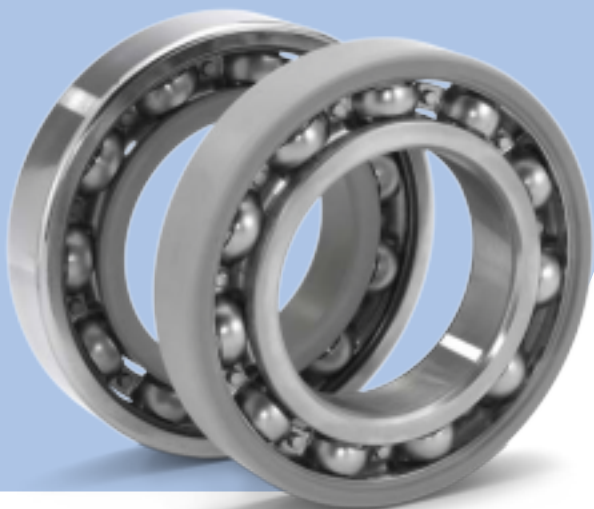


Why SKF?

INSOCOAT bearings



SKF provides electrically insulated bearings, called INSOCOAT, that protect a bearing against electric current passage.

INSOCOAT bearings have an electrically insulating coating on the external surfaces of the outer ring or the inner ring.

The bearings are a very cost-effective solution compared with other methods of protecting bearings against damage and eventual failure due to the passage of electric current through their rolling contacts. By integrating the insulation feature, INSOCOAT bearings can improve reliability and increase machine uptime by virtually eliminating the problem of electrical erosion.

The standard range of INSOCOAT bearings in the most frequently used sizes and variants are available from stock as:

- Single row deep groove ball bearings
- Single row cylindrical roller bearings

The performance data as well as the dimensional and running accuracy of INSOCOAT bearings are identical to standard non-insulated bearings.

Product features

- Electrically insulating coating on the outer ring or the inner ring
- The high quality insulating coating has very good adherence and is virtually insensitive to heat and chemicals
- Wide operating temperature range (-30 to +120 °C (-22 to +248 °F))

User benefits

- Improved reliability
- Reduced maintenance cost
- Virtually eliminates premature bearing failures caused by stray electric current
- Can be mounted using standard methods and tooling

Common applications

- Electric motors
- Traction motors
- Generators

Industries

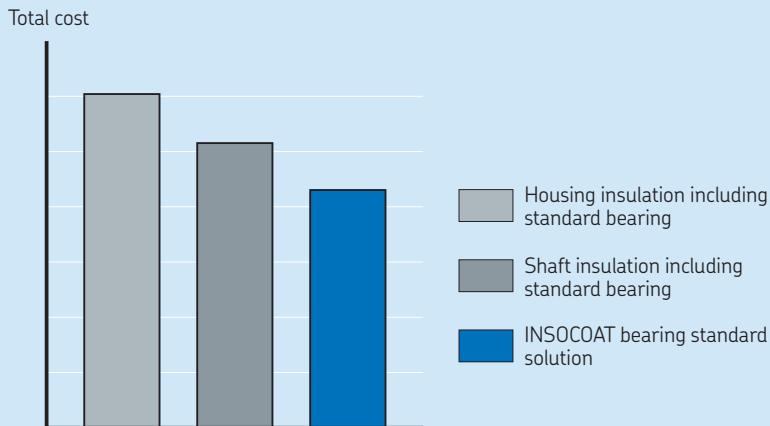
- Railway
- Off-highway
- Industrial electrical
- Renewable

INSOCOAT bearing data

Deep groove ball bearings and cylindrical roller bearings

Dimension standards	Boundary dimensions: ISO 15.
Tolerances	Normal, higher accuracy on request. Values: ISO 492, for additional information, refer to SKF catalogues. The aluminium-oxide layer on the external surfaces of either the outer or the inner ring does not influence the accuracy.
Internal clearance	C3 as standard, check availability for other internal clearance classes. Values are valid for new bearings before mounting under zero measuring load: ISO 5753-1, see SKF catalogues.
Allowable misalignment	Identical to the comparable standard bearings.
Electrical properties	The standard INSOCOAT layer provides protection against AC and DC currents. The minimum ohmic resistance is 50 M Ω at 1 000 V DC. Tests at SKF have shown that electrical breakdown of the insulating layer occurs above 3 000 V DC.

Total cost of the INSOCOAT bearing solution relative to other insulation approaches



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