INSOCOAT electrically insulated bearings

Rolling bearings used in some related equipment such as electric motors and generators may be affected by current passing during use, which will not only damage the rolling elements and raceways in the bearings, but also affect the grease. performance. The variable speed range of the variable frequency motor is large, and parasitic capacitance is generated inside, which causes the bearing to have a high chance of being subjected to high frequency current. The leakage of the bearing caused by the current leakage will affect the abnormal vibration of the whole machine, the noise will increase, and the whole machine will not work normally.

In order to solve the problem of current passing through the bearing, LEADER INDUSTRIAL MANUFACTURE CO., LTD has developed INSOCOAT electrically insulated bearings, which can prevent electrical current from being damaged by electrical current, compared with other methods or measures generally used to protect bearing insulation, INSOCOAT Insulated bearings are a more economical solution.

The outer surface of the outer or inner ring of the INSOCOAT electrically insulated bearing has a layer of approximately 100 microns thick alumina that can withstand voltages up to 1000 VDC. For applications that require higher pressures, SKF can also provide bearings with an outer diameter of alumina over 300 microns. The coating on the INSOCOAT electrically insulated bearing can effectively prevent the passage of alternating current and direct current. The minimum resistance of the coating is 50M?. SKF has been tested and the insulation coating is electrically broken down above 3000VDC.

LEADER INDUSTRIAL MANUFACTURE CO., LTD's coating on INSOCOAT's electrically insulated bearings uses SKF's plasma spray technology to adhere the alumina coating firmly and evenly to the surface of the ferrule, and then perform some other processing steps. Increase its resistance to moisture and humidity.

The INSOCOAT electrically insulated bearings produced by LEADER INDUSTRIAL MANUFACTURE CO., LTD are mainly single row deep groove ball bearings and single row cylindrical roller bearings. The dimensions and rotation accuracy of the electrically insulated bearing are the same as those of the standard bearing. The outer and inner ring surfaces are coated with a 100 micron or 300 micron thick alumina coating, which does not affect the size and accuracy of the bearing.

Most INSOCOAT electrically insulated bearings are machined with an insulating coating on the outer surface of the outer ring. Insulating coated bearings with outer ring are generally products with an outer diameter of ?80mm. This design is indicated by the suffix VL0241.The inner ring with an insulating coating is used to machine the coating on the inner diameter surface of the inner ring. Since the surface area of the coating is small, the impedance is relatively increased, so that the insulation is better. Insulated coated bearings in the inner ring are generally ?70mm inner diameter. This design is indicated by the suffix VL2071.

INSOCOAT electrically insulated bearings are installed in the same way as general bearings. However, in order to give full play to the working life that INSOCOAT electrically insulated bearings should meet, it is necessary to have good lubrication and regularly supplement the lubricants that meet the bearing performance and cleanliness.