

**Application of Electrically Conductive Grease with Nanocarbon for Preventive Measures
against Electrical Pitting on Rolling Bearings**

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This paper describes a fundamental study of the preventive measures against electrical pitting on rolling bearings by using electrically conductive lubricating grease. In order to evaluate the ability to prevent the electrical pitting on rolling bearings of several types of grease into which well conductive nanometer-scaled carbon particles (so-called “nanocarbon” such as carbon-blacks and carbon nano tubes) are dispersed, bearing rotation tests were conducted under the condition that an electric current is turned on. We concluded that the electrically conductive grease has an ability to prevent the generation of electrical pitting, so-called “ridge mark” if the electric current density at the points of rolling contact is lowered.