

NSK-Railway Rolling Stock Bearings

Railway rolling stock bearings are important components of rolling stocks that require high reliability

The main bearings consist of axle bearings that are mounted at both ends of axle and support the entire weight of the rolling stock. Additionally, there are railway traction motor bearings that are used for the motor that drives the axle; and gear unit bearings that transfer the power from the motor to the axle. NSK has designed and manufactured specific bearings for these very applications.

Types and Features

.. Axle bearings consist of the following types of bearings to meet operator demands for high-speed capability of rolling stock, weight reductions, and minimal maintenance and inspection requirements

Cylindrical roller bearings with a thrust collar (oil bath lubrication, grease lubrication)

Tapered roller bearings (oil bath lubrication)

Sealed-Clean rotating end cap cylindrical roller bearings (grease lubrication)

Sealed-clean rotating end Cap tapered roller bearings (grease lubrication)

NSK has been approved by AAR (Association of American Railroads).

Traction Motor Bearings

, Bearings for inverter controlled AC motors are speciality designed to meet high-speed specifications and requirements for ensuring dimensional stability. NSK recommends long-life grease for these bearings

NSK offers the following bearings as a measure against electric erosion, which occurs

when electric current is allowed to flow through the motor bearings:

Ceramic-insulated bearings (ceramic-coated bearings and PPS-insulated bearings)

High capacity bearings also available for locomotive-type large traction motors

