

Low-Friction TM-Seal for Transmission Bearings

NSK has developed a low-friction seal for transmission bearings that reduces the seal friction by 50%, in comparison to the old TM-seal design (10% friction reduction on the complete bearing). NSK's fitted bearings with TM-seals are used inside transmissions to inhibit the ingress of gear dust and other contaminants.

Product Features

- The seal friction was reduced by narrowing the seal lip by 10% and lengthening it by 70%, compared to conventional bearings
- The seal lip shape was improved based on computer analysis; the new shape improves lip-following and stabilises the contact pressure along the edge.

Benefits

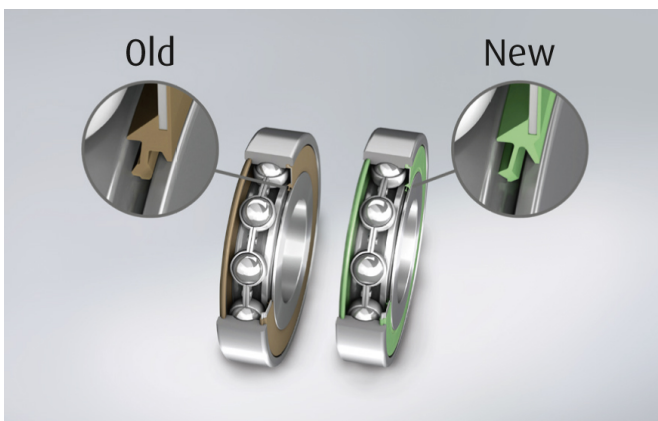
- Seal friction reduced by up to 50% compared to the old TM-seal design and total bearing friction reduction of around 10%.
- Same durability as the replaced TM-bearings by preventing the ingress of contaminants to the transmission oil in the bearing. The bearing life is improved by 2,5 times in comparison to open bearings.

Condition Description

- Corrosive Environment
- Low Friction

Industries

- Automotive



35 TM 11 A2 -A-6 E7 X26

Description

35	Bore diameter
TM	NSK Sealed-clean technology seal
11	sequential number of design
A2	internal design
-A-6	corner form
E7	outer ring Special Feature
X26	Heat Stabilisation of Rings