

Proper use of SKF grease

Proper use of grease requires knowledge of the movement of the grease in the SKF bearing to ensure the stability of the grease. [The movement of the grease filled in the rolling bearing, with the rotation of the SKF bearing turning can be roughly divided into two stages.](#) In general, the amount of grease in the SKF bearing always exceeds the actual amount of lubrication directly involved in the lubrication. The grease is distributed in the cage and in the cavity of the bearing cover and forms a contour on the periphery of the rolling elements. During this process, the bearing temperature rises rapidly due to the resistance of the excess grease. Although mostly the remaining grease is squeezed out at the beginning of the run, and the grease that is squeezed into the raceway attachment may still be brought between the raceways by the rolling element. In the early stages of bearing use, Most of the grease is squeezed out of the raceway very quickly (less than a minute), and the accumulated grease is discharged a small amount while circulating along with the bearing rotor.

At this time, the bearing temperature continues to rise until the excess grease is completely discharged, which can be called the running phase of the grease, according to the bearing. [Factors such as the quality of the grease, the amount of filling, etc., may last for ten minutes or even hours. After the remaining grease is completely discharged, the remaining amount of lubrication](#)

The grease forms a thin layer of grease film on the mutual contact surface of the rolling element, the raceway and the cage, thereby entering the normal use stage of the bearing. At this time, the temperature gradually drops and reaches equilibrium. In other words, long-term lubrication is mainly borne by this layer of grease film. In addition, during the long-term operation of the bearing, the contours on the rolling element and the raceway and the grease on the cage are shrunk. Part of the base oil is separated and flows into the raceway to supplement the lubrication. The contours of different greases formed in the bearings are different. It is necessary to form a contour that is relatively wide, and the running time is short and long. During the period of operation, the bearing temperature is low and stable, which is an ideal grease, so it is especially important for the grease channeling.

Some so-called eddy-flow greases are not good, they are not easy to form contours, and even if they are contoured, they are easy to collapse. At this time, the excess grease that is repeatedly returned to the raceway is in a state of being strongly stirred for a long time.

The torque is large, the temperature is high, and it is unbalanced. It may also generate noise, and the grease is also prone to deterioration and loss.