

Bearing Maintenance

In order to regulate the maintenance and use of bearings, the following provisions are formulated.

1. The bearing is strictly subjected to periodic replacement, and the replacement cycle should be reasonably set according to the bearing operating conditions;
2. [The new bearing must be inspected before use](#). The contents of the inspection are whether the packaging (preferably with the instruction manual and the certificate of conformity) is in good condition; whether the identification (factory name, model number) is clear; whether the appearance (corrosion, damage) is good;
3. New bearings that have passed the inspection can be cleaned under normal use conditions (motors with more than 2 poles); new sealed bearings are not cleaned.
4. Bearings and bearings must be cleaned before the oil is changed. The cleaning is divided into rough washing and fine washing, the crude washing oil is clean diesel or kerosene, and the fine washing oil is clean gasoline.
5. When rough washing, the old bearing is scraped off with waste bamboo and then brushed with a soft brush in the cleaning solution. It is required to press in the same direction when brushing, and it is strictly prohibited to rotate the rolling elements. During fine washing, slowly rotate the bearing in the oil and wash it carefully. Finally rinse twice with clean gasoline.
6. After the cleaning of the bearing is completed, the hand rotation should be flexible and the radial and axial shaking can be used to determine whether it is loose or the gap is too large. Check the gap if necessary. Serious wear, rust and metal peeling such as balls or roller frames should be replaced.
7. [After cleaning the bearing, wipe the cleaning agent with a white cloth \(or dry it\) and add qualified grease](#). It is not allowed to add different types of grease to the same bearing.
8. Do not allow dust in the surrounding environment when refueling; use clean hands to refuel, slowly rotate the whole bearing in one hand, and press the middle finger and index finger into the bearing cavity with one hand. Add one side and then proceed to the other side. Remove excess grease based on the number of motor poles.
9. Bearing and bearing cap refueling amount: bearing cap oil capacity is bearing cap capacity $1/2 \sim 2/3$ (motor pole number is high); bearing oil bearing inner and outer ring cavity $1/2 \sim 2/3$ (motor The maximum number of poles is upper).
10. The motor end cover with oil filling hole and oil drain hole must also be cleaned when changing oil to keep the passage open. The oil hole must be filled with oil when refueling.
11. The motor with the oil filling hole must be replenished regularly. The oil replenishment cycle is determined according to the motor operation requirements and operating conditions (usually 500 hours of operation of the two-pole motor for 24 hours).
12. When replenishing oil, the oil filling port must be clean. The amount of oil replenishment is limited to a temperature increase of only $2\text{ }^{\circ}\text{C}$ (the 2-pole motor is quickly filled with oil gun for 10 minutes, depending on the situation, whether to continue adding).
13. When the bearing is disassembled, it must be ensured that the force point is correct (the inner ring of the shaft is stressed, the inner and outer rings of the end cap are stressed), and the force is even. It is best to press in (small motor) and hot-sleeve method (large interference and large motor).
14. When the bearing is installed, evenly apply a little grease to the contact surface. After the

bearing is installed, the inner ring of the bearing and the shoulder clearance must be checked (no gap is preferred).

15. The temperature of the heating of the bearing hot-sleeve method is controlled at 80 to 100 ° C, and the time is controlled within 80 minutes from 80 to 100 ° C. Oil heating ensures the use of non-corrosive, thermally stable mineral oil (preferably using transformer oil), and the oil and container should be clean. A metal mesh is placed 50 to 70 mm from the bottom of the oil sump, the bearings are placed on the net, and the large bearings are also hung with hooks.

16. Regularly inspect the motor and record the motor running condition (motor vibration, motor and bearing temperature, motor running current). Generally, the two-pole motor above 75KW is once a day. Intensify inspections in the event of abnormal operating conditions and inform the parties concerned.

17. All maintenance work of the bearing must be recorded as a basis for the periodic replacement cycle of the bearing and the determination of the bearing quality