

## hydraulic gear pump catalogue

As a widely used power element in industrial equipment, the standardization of its installation and maintenance directly affects the service life and operational efficiency. This article is a [hydraulic gear pump catalogue](#), will be from the point of view of reducing the user's operating threshold, the system combining gear pump standardized installation process, key maintenance points and cycle management strategy to help users achieve efficient operation and maintenance.

### 1. Preparation before installation

#### (1) Environmental inspection

Before installation, it is necessary to ensure that the working environment meets the requirements of ventilation, dustproof and temperature control. The leveling error of the foundation platform should be no more than 0.1mm/m to prevent damage to the pump body caused by vibration transmission.

#### (2) Pre-inspection of components

Check whether the models of pump body, coupling, seals and other key components are consistent with the design drawings, and focus on testing whether the gear meshing clearance and bearing preload are in accordance with the specifications.

#### (3) Piping pretreatment

Thoroughly flush the connecting pipelines to ensure that the cleanliness of the system meets the standard. Install a filter at the front of the pump inlet to intercept impurities into the pump chamber.

### 2. Standardized installation method

Standardized installation is the basis for ensuring stable operation of gear pumps.

#### (1) Fixing

Use shock-absorbing pads and locating pins to fix the pump body. The bolt tightening torque should be applied at 90% of the value specified in the manual, and a torque wrench is recommended to ensure accuracy.

#### (2) Import and export connection

Priority is given to the use of flexible joints to connect the pipelines to compensate for the installation stress, and the use of brute force to force the counterparts is strictly prohibited. After installation, a pressure gauge should be used to verify the airtightness of the connection.

#### (3) Seal installation

The spring compression of the mechanical seal should be controlled strictly according to the manufacturer's calibration value of  $\pm 5\%$ , and the depth gauge should be used to measure accurately, so as to prevent leakage caused by over-compression.

#### (4) First oil filling

Fill the specified type of lubricating oil to the window at 2/3 height, the oil injection needs to use a viscometer to verify the oil performance, to ensure that the lubrication system works effectively.

#### (5) Trial run verification

No-load operation for 30 minutes, monitor the pump body temperature and vibration values, real-time data collection.

### 3. Full Life Cycle Maintenance Strategy

#### (1) Daily maintenance requirements

Daily inspection: monitor the temperature change of the fuel tank and check the leakage at

the seals.

#### (2) Periodic maintenance program

Monthly maintenance: clean or replace the inlet filter, when the pressure difference between the front and rear of the filter exceeds 0.15MPa, a new filter element must be replaced.

Annual maintenance: detect the wear state of gear pair, and replace the whole set of gear assembly when the tooth side clearance is too large.

Three-year overhaul: disassemble the whole pump for overhaul according to the standard, and fully replace the aging seals and wear parts.

#### 4. Quick Diagnostic Guide to Failures

Gear pumps can fail even with good routine maintenance. When the flow rate is insufficient, the inlet may be clogged or the gap may be leaking, so it is necessary to check the filter and tighten the end cap bolts. Abnormal noise, may be bearing damage or cavitation, need to stop immediately to replace the bearing and reduce the medium temperature. Seal leakage, may be O-ring aging or axial tampering, need to replace the seal and adjust the axial clearance. Motor overload, may be the outlet pressure is too high or the medium viscosity is abnormal, need to check the pipeline resistance and test the medium viscosity.

I hope this article can help users better use the “[hydraulic gear pump catalogue](#)”, systematic mastery of gear pump installation, maintenance and troubleshooting and other key points, follow the standardized installation process and preventive maintenance system to enhance productivity.

rexroth hydraulic pump catalog pdf

gear pump catalogue pdf

hydraulic gear pump manufacturers

yuken gear pump catalogue pdf

rexroth gear pump catalogue pdf

casappa hydraulic pump catalog

hydraulic pump specifications pdf

commercial hydraulics gear pumps