

Large Winch System Manual

(用户维护及保养手册—升降大系统)

Daily Inspection and Maintenance

1. Daily routine inspection

- 1.1 Make sure there are no loose bolts or welding seams at the connection between the system and the base.
- 1.2 Make sure there are no bolts and screws loose at the connection between the parts of the main body.
- 1.3 Check the rope arranging device's sprocket chain and ball screw for insufficient oil use.
- 1.4 The steel wire ropes are arranged in the drum groove in an orderly manner, and there is no disordered rope or slot-hopping phenomenon.
- 1.5 The connection between the steel wire rope and the equipment lifting point is reliable.
 - There is no open-welding phenomenon of lifting ears.
 - There is no loosening of bolts in wire rope buckles and fastened.
 - No wear and tear on the collar (horse eye).
 - There is no looseness of the wire rope clamp nut.
 - There is no displacement of the wire rope tail.
- 1.6 There is no damage to the parts.
- 1.7 Start the system and make the system run normally
- 1.8 There is no abnormal noise in the system.
- 1.9 The pulley and the cable wheel rotate flexibly, and there is no severe wear and tear.

- 1.10 The upper and lower limit positions of the travel switch are accurate and reliable, the action is sensitive, and there is no failure phenomenon.
- 1.11 There is no interference between the wire rope and other objects.
- 1.12 Check the wire rope (dynamic and static status), and replace the wire rope immediately when the following phenomena occur:

1) Strand breakage: If the entire rope strand breaks, it should be replaced immediately.

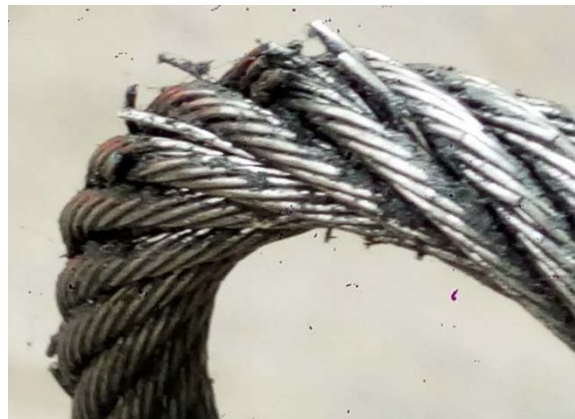


2) Broken wires: When the wire rope has more than six broken wires within the length range of 6 times the diameter or more than 13 broken wires within the length range of 30 times the diameter, the wire should be replaced immediately.



3) Corrosion: When the wire rope is seriously corrupted, the wire should be replaced immediately.

4) The rope diameter reduction caused by a broken steel core, damaged fiber rope core, and internal wear should be replaced immediately, mainly manifested as partial depression.



5) Wear: When the wire rope is seriously worn, it should be replaced immediately.

6) When the wire rope has mechanical damage, it should be replaced immediately.

1.13 Check the outside of the anti-falling wire rope is intact, no breakage or broken phenomena.

2. Lubrication and Maintenance

2.1 Rolling bearing with seat

1) Lubricants such as hydraulic oil or gear oil can be used as lubricants.

2) method and filling amount

Open the cap of the grease nipple and use the grease gun to inject from the grease port. Pay attention to observing the side of the bearing while filling the grease. When oil overflows from the side of the path, cover the cap and wipe off the side oil.

3) The lubrication period is 30 days.



2.2 Ball screw

1) The lubricant can be calcium-based grease, lithium-based grease, etc.

2) Filling method and amount by below:

Thread nut--Use the grease gun nozzle to add oil to the inside of the nut transmission cavity through the oil filling port (there is no grease nipple on the ball screw nut) until the dirty internal oil is completely squeezed out, and remove the squeezed dirty oil.

Screw--wipe off the oil on the surface of the screw, apply a little grease on the surface of the screw with your fingers, give priority to the groove, and reciprocate several times to ensure that the oil film evenly covers the surface of the screw and remove excess grease.



3) Lubrication cycle Observe whether there is an oil film on the surface of the screw during daily inspection. If not, it should be lubricated in time.

Slip, usually about ten days.

2.3 Chain drive

1) The lubricant can be selected from hydraulic oil, gear oil, engine oil, etc.

2) method, and filling amount

Apply evenly on the surface of the chain to form an oil film without running or dripping.

3) Lubrication cycle

During daily inspection, observe that there is no dry oil phenomenon on the surface of the chain. It should be lubricated in time if there is such a phenomenon, usually about 30 days.

3. The Replacement Cycle of Wearing Parts

The recommended replacement cycle of the steel wire rope is six months.

4. Method for Handling Common Faults

When the rope is disordered, please stop using the equipment immediately, and should handle it during non-business hours.

Lower the equipment to the lowest point by manual operation and manual assistance. At this time, the remaining wire rope on the drum should be in the correct position of the groove, and then Raise the equipment to the highest point, and the rope disorder problem can be solved.

After the rope disorder is solved, check whether the wire rope is damaged. If the damage reaches the replacement standard, replace the wire rope immediately.

Note: Because the product is continuously updated and upgraded, if the equipment you use does not include a ball screw, you can ignore the maintenance content of the modified parts.