

[SUBJECT] Oil Leak Trouble from Wire Drum Shaft

Precaution information

1. Applied model

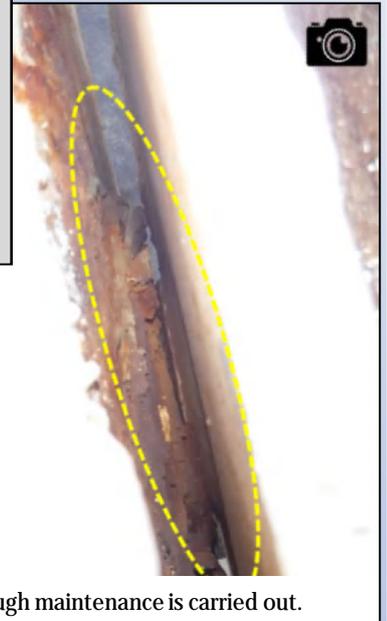
*All the winch for gravity type davit:
SWE-*** (Davit type : SHS-**/ SJS**)
SNW-*** (Davit type : SH-**/ SFB-**)

2. Date of manufacture

From start of production up to now

3. Outline

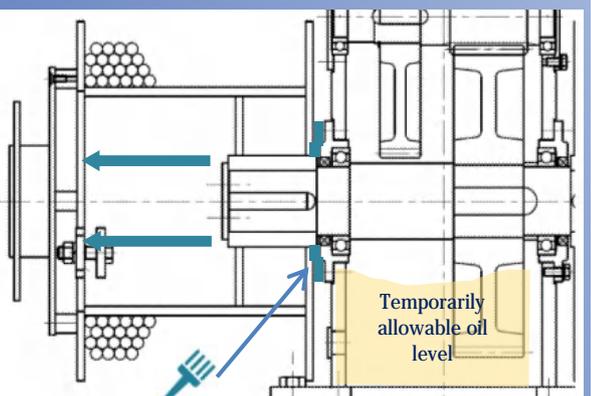
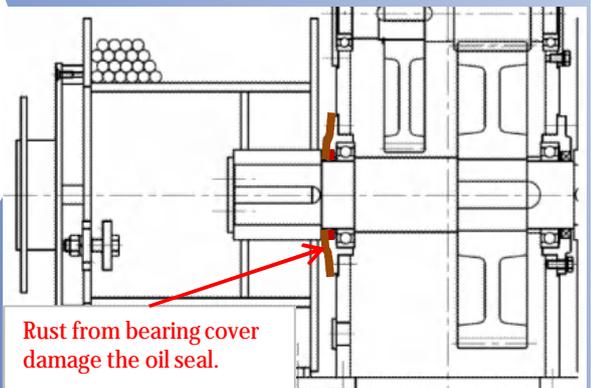
There was an oil leak from wire drum shaft. As a result of investigation, it was found that bearing covers for drum shaft were badly corroded. Since there was no problem for launching the boat, they later tried renewal of bearing covers during the dock-in. However, because the stuck was so bad, the wire drums could not be removed even if it was pulled hard or moved by bar. The drums were finally removed with a hydraulic jack and hot work.



Not enough maintenance is carried out.

4. Cause

1. Bearing cover at wire drum shaft was corroded by rain or sea water.
 2. Pieces from corrosion was sucked in the rotation of drum, which caused the damage on oil seal and oil leaked.
- * If the corrosion become worse, sea water may go into gear box through the damaged oil seal. This may cause a serious damage on bearing which may lead to critical functional malfunction.



5. Countermeasure

Maintenance after making enough gap with wire drum at every 5th year dock-in.

* Recommended to carry out the work at the same time as renewal of boat fall wire.

* If it is difficult, extended narrow brush is recommended to use for touch-up painting.

In case oil leaks, lower the oil level in the gear box to bottom part of outside diameter of the bearings.

Recommended maintenance at 10th year dock-in. If the corrosion is found, make a plan to renew it at the time of next dock-in.

 In most of the cases, drum, shaft cover, key are stuck and maintenance will need hot work and long working time. Completing the renewal work during port stay is not realistic. Well-planned maintenance at the shipyard is recommended.