

Suggestion of Maintenance for Safety and Relief For the safe use of Sekigahara Product

Accident
Record

[Subject]

Corrosion of Brake Drum Flange for Boat Winch

1. Applied model

SHS-33-056 SHS-35-054 SHS-35-062 SHS-37-054
SHS-37-058 SHS-37-062 SHS-38-079

2. Date of manufacture

From 1987 up to now

Centrifugal Brake

3. Outline of accident

During the annual inspection, it is found out that drum flange for centrifugal brake case was badly corroded and flange became very thin. It is also found that screws were corroded and there was some gap between the flange and the brake case. It seems that water went inside of brake case and brake lining was broken and brake itself was corroded.

Since the corrosion / damage was found at the inspection, it does not lead to critical accident this time. However, there was possibility that the operation of davit become impossible if nothing had been done for this bad condition.



OLD **NEW**
Back side flange corroded to be thinner



Broken brake lining



Just after dismantling of centrifugal brake case


4. Cause

When the water splashed on the winch, it made the installation screws corroded and they lost screw heads. This made the gap and flange became corroded due to intruded salt water. Then, the rust swelled and the gap got bigger. The brake case was not vertically installed any more. As a result, salt water entered inside and brake was corroded.

5. Prevention of accident

Regular maintenance to avoid the rust is necessary.

 Removal of rust and touch up painting.

 Replacement of rusted / corroded parts.

Note: Bottom side of flange need to be checked very carefully. This is when the corrosion is normally remarkably bad.



Back side of flange

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Here is one of the most critical cases. Crews will never be able to lower the davit safely. Not being able to evacuate from the vessel at emergency!!

A davit manufactured in 1998.



Centrifugal brake casing fell off from the winch during launching test. As a result, the brake itself is exposed to rain and sea breeze.

This was caused by the extremely bad corrosion. Screw head is broken and missing.



One corner of brake lining is broken and missing.

