

Inspection Report

General

To:		Customer:	
Vessel name:		IMO No.:	
Engineer:		Job No. :	SE-220122-47273
Date:	26/02/2022	Place:	Yiulian (zhoushan) shipyard

Visit description General inspection for TTS anchor windlass and mooring winch

Date of visit **start** 25/02/2022

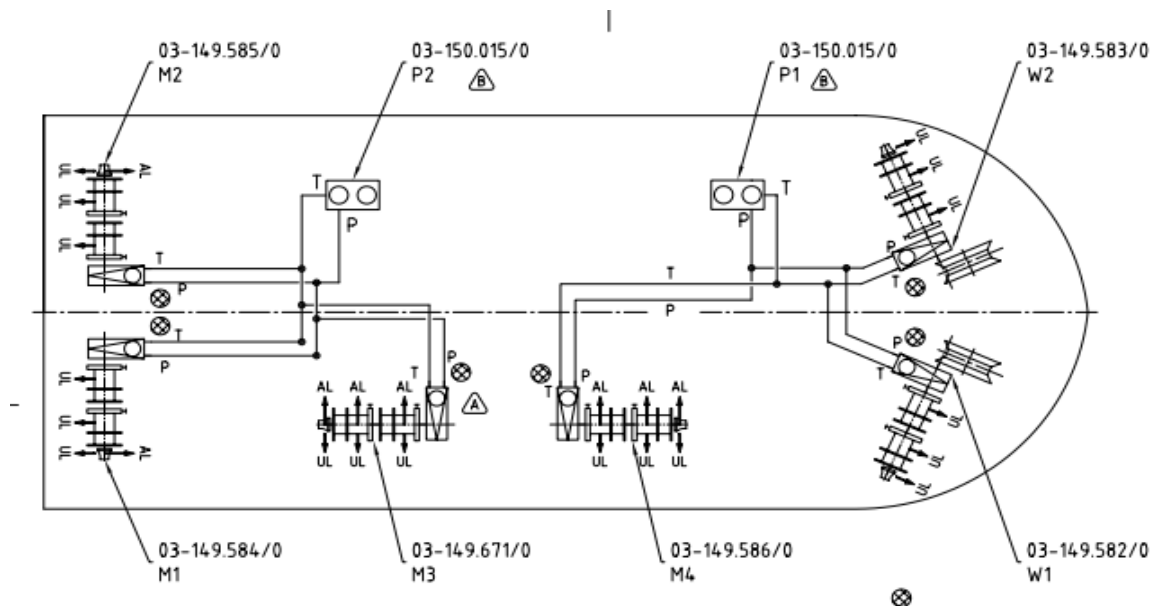
end 26/02/2022



Windlass



Mooring winch



Report

1.Anchor windlass

No load Test

		PORT W2	STBD W1
Noise		yes	no
Vibration		no	no
RPM	HEAVEN	23	13
	SLACK	31	13

Pump station

- Pump station at normal condition. No obviously oil leakage.

windlass

- 1 Brake lining for windlass worn out. **see figure1-1**
 - Please dismantle brake band and replace new lining at shipyard.
- 2 Brake lining for winch worn out see **figure1-2**
 - Please dismantle brake band and replace new lining at shipyard.
- 3 Clutch and declutch at normal condition.**see figure1-3**
- 4 Hydraulic motor corroded **W2. see figure1-4,**
 - Suggest do maintenance job
- 5 Pipe joint of the control valve oil leakage **W1 .see figure1-5**
 - Please tighten the joint and further check
- 6 Gear box oil emulsify and oil level indicator fuzzy. **W1 .see figure1-6**
 - Suggest analysis gear box oil and change the gear oil when necessary
 - Please order spare and replace the oil level indicator
- 7 Hydraulic oil tank oil black. **see figure1-7**
 - Suggest check the oil filter
 - Suggest analysis hydraulic oil and change the oil when necessary
8. Gear condition check ,**see figure 1-8**

- 9 Sometimes auto stopped during heave up operation. **W2. see figure 1-9**
 - Suggest overhaul the hydraulic motor and control valve
- 10 Gear box have noise during heave operation **W2.see figure 1-10**
 - Suggest further check the gearbox
- 11 Speed too slowly during the windlass operation **W1.see figure 1-11**
 - Suggest dismantle the reduction gearbox and and brake unit further check
 - Suggest overhaul the control valve
- 12 Pump station condition checked.**see figure 1-12**
- 13 Anchor chain damaged **W1.see figure 1-13**
 - Please do repair job
- 14 Anchor chain damaged **W2.see figure 1-14**
 - Please do repair job
- 15 Anchor chain misalignment and wear out of anchor chain gear wheels.**see figure 1-15**
 - Please repair it by buildup welding



Figure 1-1 Brake lining for windlass worn out



Figure 1-2 Brake lining for winch worn out



Figure 1-3 Clutch and declutch at normal conditions



Figure 1-4 Hydraulic motor corroded **W2**



Figure 1-5 Pipe joint of the control valve oil leakage **W1**



Figure 1-6 Gear box oil emulsify and oil level indicator fuzzy **W1**



Figure 1-7 Hydraulic oil tank oil black



Figure 1-8 Gear condition check

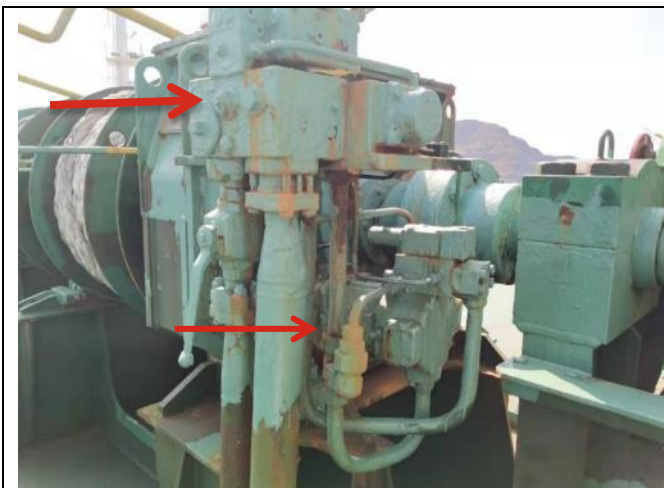


Figure 1-9 Sometimes auto stopped during heave operation **W2**



Figure 1-10 Gear box have noise during operation **W2**



Figure 1-11 Speed too slowly during the windlass operation W1



Figure 1-12 Pump station condition checked



Figure 1-13 Anchor chain damaged W1



Figure 1-14 Anchor chain damaged W2

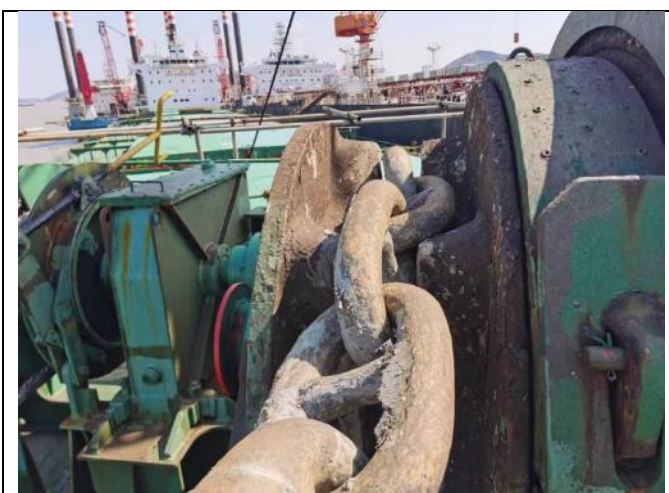


Figure 1-15 Anchor chain misalignment and wear out of anchor chain gear wheels

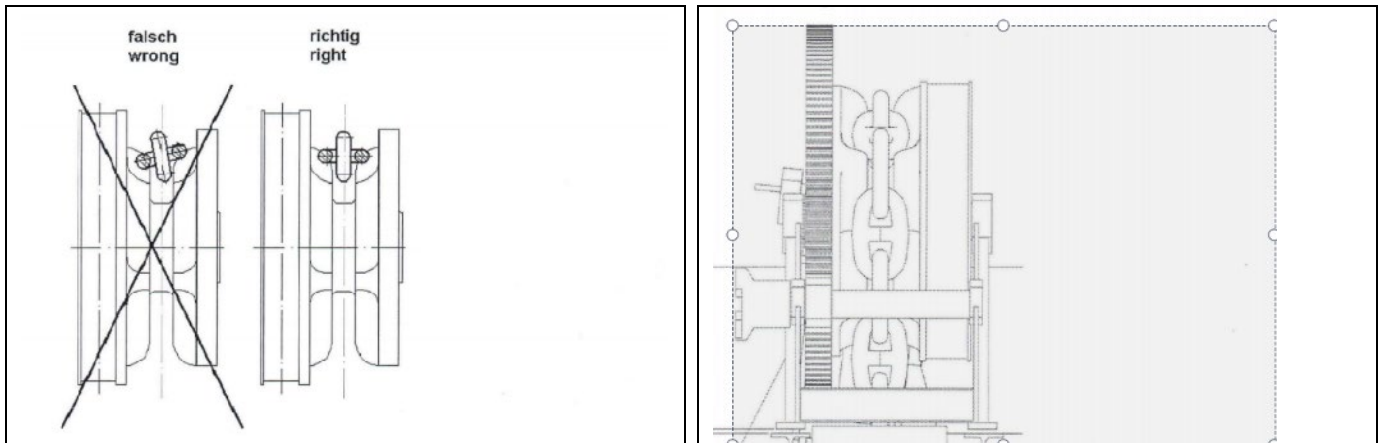


Figure 1-16 Please refer the picture

2. Mooring winch

No load Test

		Fwd-center M4	Aft-center M3	After-port M2	Aft-starboard M1
Noise		No	No	No	No
Vibration		No	No	No	No
RPM	HEAVEN	23	20	38	26
	SLACK	23	25	32	27

Pump station

- Pump station at normal condition. No obviously oil leakage.

Mooring winch

- 1 Control valve and hydraulic motor corroded **M4 see figure 2-1**
 - Suggest do maintenance job
- 2 Hydraulic motor and pipe corroded **M3. see figure 2-2**
 - Suggest do maintenance job
- 3 Clutch and declutch at normal conditions .**see figure 2-3**
- 4 Clutch stuck **M2. see figure 2-4**
 - Please do maintenance job
- 5 Control valve corroded **see figure 2-5**
 - Please do maintenance job
- 6 Bearing of rope drum guider need more grease. **See figure 2-6**
 - Please apply more fresh grease
- 7 Control valve oil leakage. **see figure 2-7**
 - Suggest overhaul the control valve
- 8 Gear box oil emulsify and oil level indicator fuzzy. **see figure 2-8**
 - Suggest analysis gear box oil and change the gear oil when necessary
 - Please order spare and replace the oil level indicator
- 9 Brake lining for mooring winch worn out .**see figure 2-9**
 - Please dismantle brake band and replace new lining at shipyard.
- 10 Hydraulic oil tank oil black. **see figure 2-9**
 - Suggest check the oil filter
 - Suggest analysis hydraulic oil and change the oil when necessary

Recommend Spare parts

Description	Part no	Qty	Comments
Brake lining with mounting bolts, windlass		2sets	
Brake lining with mounting bolts, mooring winch		12sets	
Seal kit for mooring winch control valve		4sets	
Seal kit for mooring winch hydraulic motor		4pcs	
Seal kit for windlass control valve		2sets	
Seal kit for windlass hydraulic motor		2pcs	
Oil level indicator KT000770		4pcs	



Figure 2-1 Control valve and hydraulic motor corroded **M4**



Figure 2-2 Hydraulic motor and pipe corroded **M3**



Figure 2-3 Clutch and declutch at normal conditions



Figure 2-4 Clutch stuck **M2**



Figure 2-5 Control valve corroded **M3**



Figure 2-6 Bearing of rope drum guider need more fresh grease **M3**



Figure 2-7 Control valve oil leakage **M2**



Figure 2-8 Gear box oil emulsify and oil level indicator fuzzy **M1**



Figure 2-9 Brake lining for mooring winch worn out



Figure 2-10 Hydraulic oil tank oil black