

TECHNICAL REPORT

CJPG-JS-24-KY-0438



NING FENG YOU 1

Inspection place Zhoushan, China

Inspection date July 15th, 2024

Technical Report

Entrusted by the customer, our company organizes the surveyor to inspect the technical condition of "NING FENG YOU 1" and issue the technical report according to the ship data provided by the customer. The report reflects the ship's technical status at the time of inspection and is for reference only. In case of any discrepancy, the current situation of the ship shall prevail, and our company shall not assume legal liability. The specific report is as follows:

Overall Grade	
3.8	Fair
Grade	Level
>4.5	Good
4.0-4.5	Fair to good
3.0-4.0	Fair
<3.0	Poor

Principal Particulars

Ship name	NING FENG YOU 1
Identification No.	CN20123648816
PoR	Ningbo, China
Type of ship	Oil Tanker (Flash Point $\leq 60^{\circ}\text{C}$)
Class	CCS
Trading area	Offshore
LOA	99.80m
LPP	95.00m
MLB	16.20m
MLD	7.00m
GRT/NRT	2996/1677
Summer draft	5.400m
DWCC	4544t
Cargo tank /Slop tank No.	8/2
Cargo tank /Slop tank Capacity	5029.74/167.98m ³
LDT	1854.7t
Date of keel laying	March 23rd, 2012
Date of delivery	October 18th, 2012
Shipbuilder	Ningbo Dongfang Shipbuilding Co., Ltd
M/E Manufacturer	NINGBO C.S.I. POWER&MACHINERY GROUP CO.,LTD.

Model of M/E	G8300ZC16B
Rated Power/Rated Speed /No.	2000kW×600r/min×1 set
Minimum safe manning/Maximum number	8/17 persons
Type of Cargo oil pump	Ningbo Shuangning, cast iron shell and stainless steel Screw
Capacity of Cargo oil pump	730m³/h×2 sets



船舶概述

The ship was built as oil tank (Flash Point $\leq 60^{\circ}\text{C}$) with single deck, driven by single engine with single propeller. The ship has 10 tanks in total, 8 of which are liquid cargo tanks and 2 are slop tanks with double bottom and double hull structure. The cargo tank is equipped with seamless carbon steel heating coils, and the cargo hold cover is of a rotating type; There is a pump compartment between the cargo oil tank and the engine room.

Class Notation:

★ CSAD 双壳油船 (闪点 $\leq 60^{\circ}\text{C}$): 近海航区: B 级冰区航行

★ CSMD

1. Cargo tank Capacity

Tank Name	Frame	Capacity (m ³)
NO.1 Cargo Tank (P&S)	#110 ⁺³²⁵ -#134 ⁺³⁵⁰	485.45×2
NO.2 Cargo Tank (P&S)	#86 ⁺³²⁵ -#110 ⁺³²⁵	680.07×2
NO.3 Cargo Tank (P&S)	#62 ⁺³²⁵ -#86 ⁺³²⁵	680.11×2
NO.4 Cargo Tank (P&S)	#38 ⁺³²⁵ -#62 ⁺³²⁵	669.24×2
Slop Tank (P&S)	#35-#38 ⁺³²⁵	83.99×2
Total		5197.72

2. Pump

	Cargo oil pump	Stripping pump	Ballast pump
Material	Shell: Cast Iron Screw: Stainless steel	Shell: Cast Iron Screw: Stainless steel	Shell: Cast Iron Impeller: Brass
Quantity	2 sets	1 set	2 sets
Capacity	730m³/h	130m³/h	250m³/h
Manufacturer	Ningbo Shuangning	Ningbo Shuangning	Zhejiang Donghang
pipeline	seamless steel tube		
prime mover of Cargo oil pump	Brand: WEICHAI Rated Power: 330KW	type: X6170ZC-013A Rated Speed: 1000r/min	
Liquid cargo heating system	Thermal oil circulation heating	Boiler: WAYLIT Heating area: 170 m²	Working press: 0.8MPa
cargo control system	Location is the Poop deck, the brand is RONGDE.		

3. Engine Machinery

Machinery	NO.	Model	Parameter	Manufacturer
Main Engine	1	G8300ZC16B	2000kW×600r/min	NINGBO C.S.I.
1#、2# Generator	2	1FC6356-6SA42-Z	250kW×400V×451A	WEICHAI
Primer Mover of 1#、2# Generator	2	R6160ZC380	280kW×1000r/min	
3# Generator	1	1FC2 282-44SB43	120kW×400V×216.5A	WEICHAI
Primer Mover of 3# Generator	1	WP6CD180-15	132kW×1500r/min	
4# Generator	1	TFXW-225M4-H	30kW×400V×54A	WEICHAI
Primer Mover of 4# Generator	1	WP4.3CD38E1	38kW×1500r/min	
Windlass	2	YMFJ36	30KW	--
Steering Gear	1	--	100kN.m	WANTONG HEAVY INDUSTRY
Boiler	1	LYF0.5/70—0.7/II	81 m ²	WAYLIT
Bilge Oily Water Separator	1	ZYFM-0.5	1600L/d	HENGXIN
Sewage Treatment Unit	1	CSWB-20	17m ³	SHIJIU
Fuel supply unit	1	HY-01BSS	180CST-50℃	HUAYI
Fuel purifier	1	DH204SD-23	--	HUAYI
Lubricating oil purifier	1	DH203OD-23	--	HUAYI

4. Communication and navigation equipment

Equipment	NO.	Model	Manufacturer
MF/HF	1	FS-1570	FURUNO
NAVTEX	1	NX-700	FURUNO
VHF1	1	FM8800S	FURUNO
VHF2	1	FT-805	FEITONG
EPIRB	1	SEP406	SAMYUNG
SART	2	SAR-9	SAMYUNG
AIS	1	FA-150	FURUNO
Two Way-VHF	3	STV-160	SAMYUNG
Radar No.1	1	FAR-2127	FURUNO
Radar No.2	1	FAR-2127	FURUNO
Gyro Compass	1	--	Anschutz
Magnetic Compass	1	CGT-165	SHUNFENG
Echo Sounder	1	DS2008	KAIHANG
GPS	1	GP-150	XINLUO
ECDIS	1	HM5817	XINLUO

Technical status

1. Certificate and Inspection

Certificates Description	Authority	Issue Date	Expiry Date
Certificate of Registry	MSA	2022.11.02	2027.11.01
Minimum Safety Manning	MSA	2023.02.10	2027.11.01
Classification Certificate	CCS	2022.10.28	2027.10.17
Safety and Environmental Protection Certificate	CCS	2023.02.21	2027.10.17
Ship's Trading Certificates	Transportation Department	2021.10.25	2026.10.24

Concerns:

The last special survey has been completed on October 28th, 2022, and the annual survey on November 4th, 2023, and the next annual or intermediate survey for three months before and after October 17th, 2024.

2. PSC Inspection

Date	Place	Defect Code	Action Code	Note
2023.12.29	Zhoushan	1541, 1410, 1430, 1450, 0899, 1999	99/10, 16/10	Closed
2023.07.19	Zhoushan	1550, 1422, 1450, 1721, 1420, 0799, 0745, 0730	17/10	Closed
2023.02.06	Zhoushan	1761, 0110, 2041, 0650, 1550, 1230, 0830, 1422, 0799, 0741, 0745, 2540, 0745	16/10, 17/10.17/99/10, 30/99/10, 30/18/10	Closed
2022.07.29	Ningbo	1886, 1830, 1671, 1275, 0725, 0610, 1885, 1999, 0745, 1275, 0725, 0830, 1410, 2650, 2530	99/10, 18/10	Closed
2021.12.28	Zhoushan	0715, 1541, 1430, 0745, 1030, 1799, 0730	16/10, 17/10	Closed
2021.04.06	Dalian	1430, 0988, 0745	17/10	Closed

Concerns:

1.All defects found in the FSCO inspections over the past three years have been closed.

2.During the inspection, 15 defects were identified, of which 4 were detention items.

The details of the 4 detention items is as follows.

2.1 Ventilation and lighting issues in cargo pump compartments.

2.2 The protection issue of the main deck fire isolation valve facing the cargo oil area.

2.3 The diesel engine of the cargo oil pump and harbour generator use the same fuel supply source, and the isolation valve position should be kept at a safe distance from the engine.

2.4The crew is not familiar with the release operation of fixed CO2 fire extinguishing and foam fire extinguishing.

3. Speed and Fuel Consumption

The fuel oil consumed by the main engine is 120CST and MGO.

Condition	Rotary Speed rpm	Economic Speed kn	Fuel Consumption (t/d)	Design Speed kn
Ballast	460	~10	~4.3	12.3
Laden	440	~10	~4.7	

The fuel oil consumed by the auxiliary engine is MGO, and the boiler is 120CST and MGO.

Condition	Working set	Fuel Consumption of auxiliary engine (t/d)	Fuel Consumption of boiler (t/d)
Sailing	1 set	0.35	7.0
Berthing	2 sets	0.50	7.0



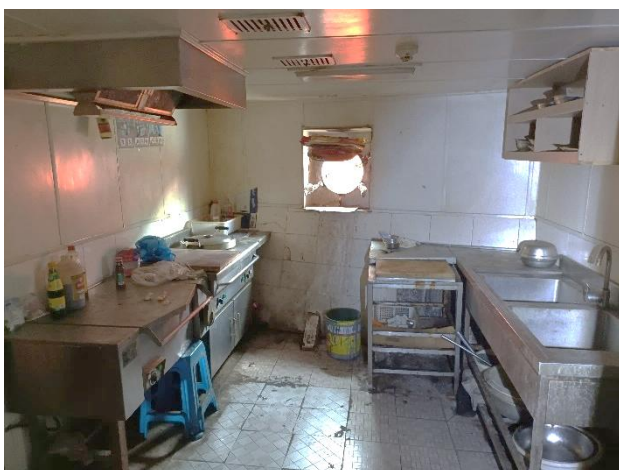
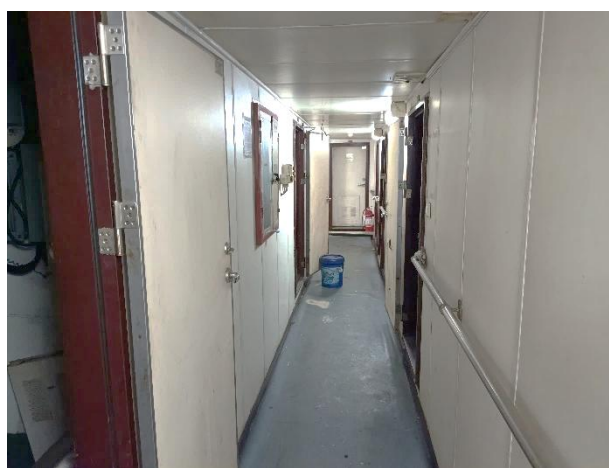
4. GALLEY & ACCOMMODATION

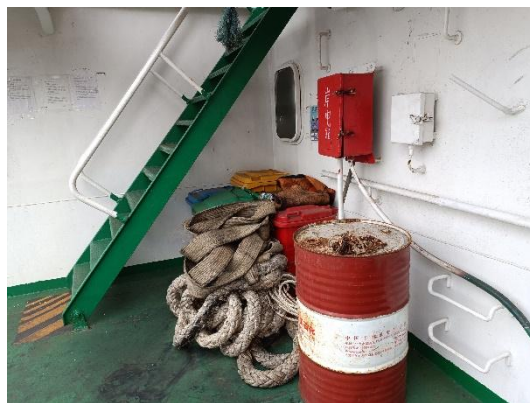
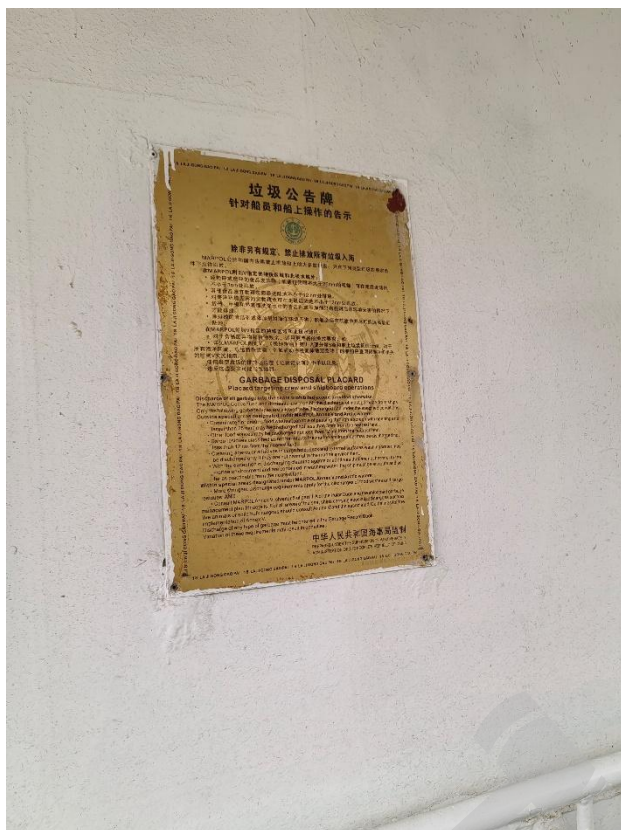
No.	Description	Good	Fair to good	Fair	Poor
1	The accommodation hallway, floor, and fireproof materials were undamaged, and the railings were not deformed or missing.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	The crew room has good lighting and ventilation conditions, and the air conditioning can work normally.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	The floor and fireproof materials in the crew room were undamaged, and the fire doors can open and closed normally.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	The bathroom facilities in the crew room.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Cleanliness of mess room and galley.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	No significant oil stain on the galley range hood and ventilation ducts. The cleanliness in the galley was found average and garbage has not been classified for storage. Portable fire extinguishers were inspected on schedule.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	The passage in the air conditioning room is unobstructed, the air conditioning cooling unit and pipeline insulation are intact, and there is no leakage in the condensing pipeline; The power supply of the motor is not loose, the voltage of the distribution box instrument is stable, and there is no excessive current.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	The garbage bulletin board in the accommodation area is properly posted, and the garbage classification and bin placement are operated in a standardized manner.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Note: The above inspection items were found in "Fair" level overall.

Concerns:

The cleanliness of the galley is poor, with cracked floor tiles and heavy oil stains on the range hood filter.





5. Lifesaving Equipment

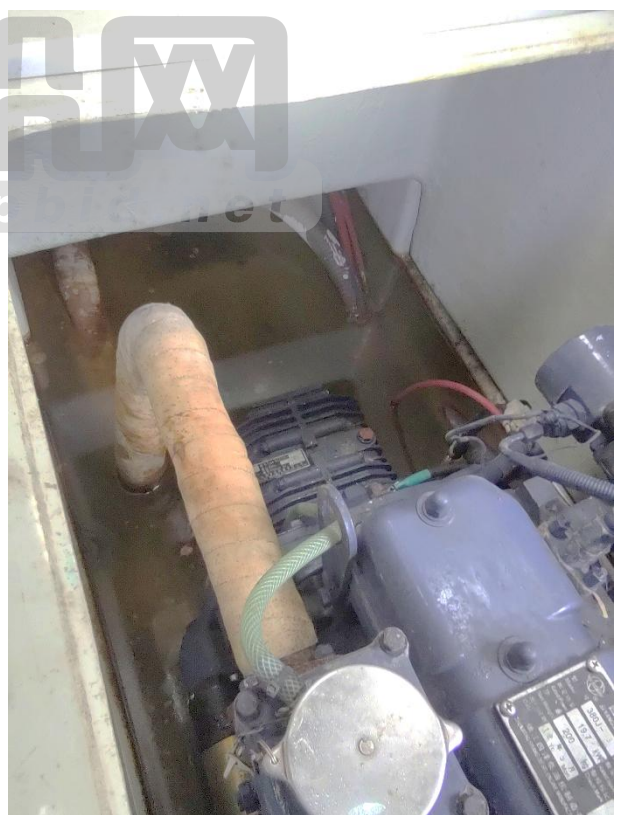
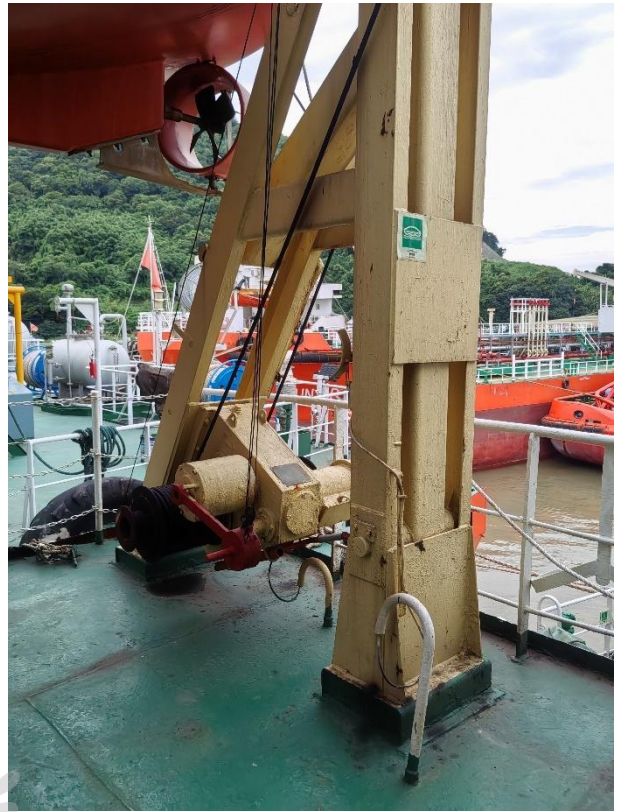
No.	Description	Good	Fair to good	Fair	Poor
1	The rescue boat has a good appearance, with clear markings such as the ship name and port of registry, and was properly stored.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	The crane motor of the rescue boat has a good appearance, and the boom pulleys, steel wires, shackles, etc. were found well lubricated.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	The motor casing of the lifeboat crane is undamaged, the hydraulic oil tank and pipelines are leak free, and the rotating mechanism is well lubricated.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	The engine of the rescue boat was well maintained.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	The lifesaving items in the rescue boat were complete.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	The operation procedures and maintenance manual of the rescue boat were posted, and lighting fixtures were equipped beside.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	The life raft and hydrostatic pressure release device were properly fixed, and found in normal maintenance cycle.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	The life raft boarding port is equipped with handrails, with no damaged joints, no cracked or loose pedals, and no significant corrosion on the connecting ground.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Lifebuoys, lights, floats, etc. were in the correct position and in good appearance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	Lifejackets, insulation suits, diving suits, etc. were approved by the class, properly stored, and in sufficient quantities.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	The configuration of flame parachutes, rope throwers, etc. complies with regulatory requirements and was stored correctly.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

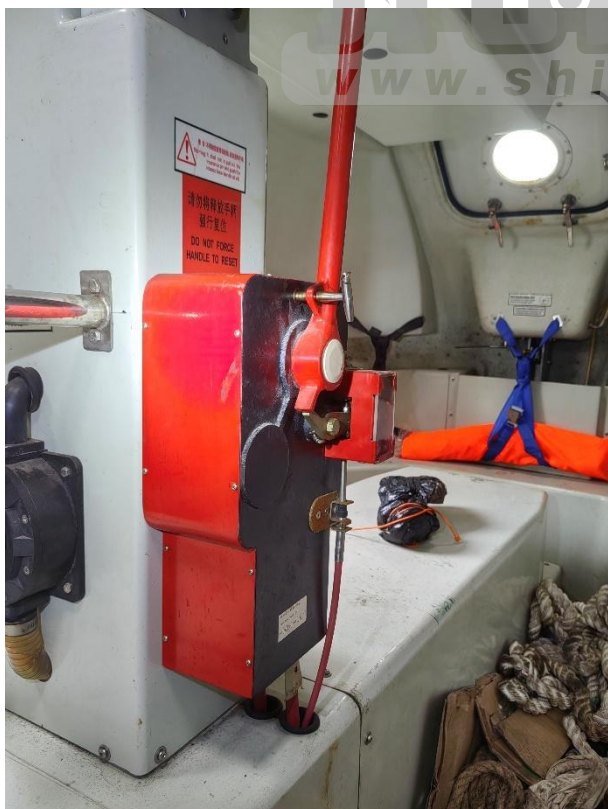
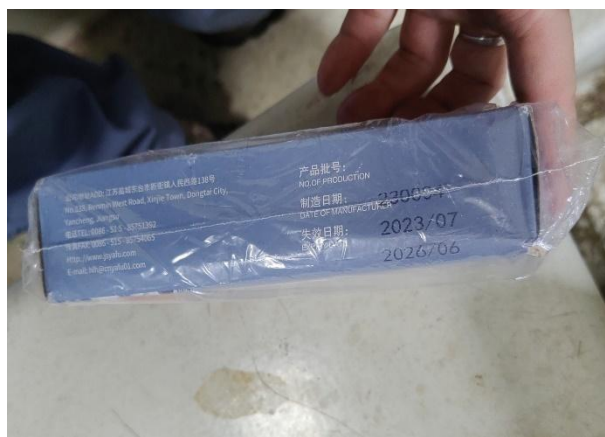
Note: The above inspection items were found in "Fair to good" level overall.

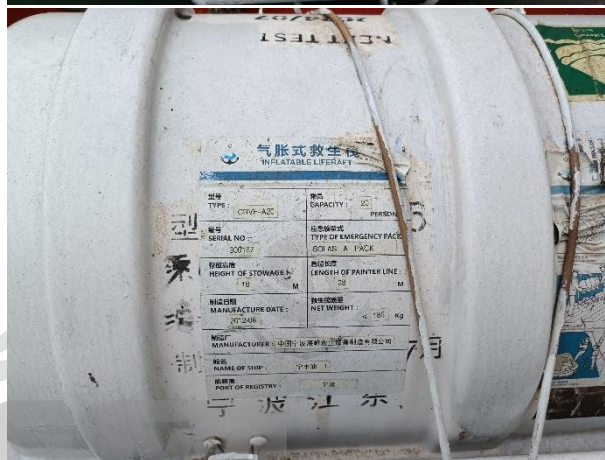
Concerns:

There is a large amount of accumulated water near the seawater pipe in the engine compartment of the starboard lifeboat.









6. Fire & Safety Appliance

No.	Description	Good	Fair to good	Fair	Poor
1	The CO2 steel cylinder and release device are within the valid inspection period, with automatic sound alarm and no faults, and complete and correct operating procedures posted.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	There is no looseness or leakage at the connection of the CO2 pipeline system, and the pressure of the starting gas cylinder is sufficient.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	The fire separation structure of foam room is intact, and the wrapping material is not damaged; The direction of foam concentrate pipeline shall be clearly marked, and the pipeline and valve shall be free of rust.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	The pressure gauge of the foam generator is intact, the gauge needle indication is clear, the liquid level gauge of the foam tank is sufficient, and the schematic diagram, operating instructions, and inspection marks are completely posted.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	The appearance of the fire hydrant was intact, the hand wheel switch was normal, and no significant corrosion or leakage in the pipeline.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	The hose box and buckle were found intact, and the joint and nozzle were in good condition.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	The appearance of the fire isolation valve was found intact, as well the main fire pump and pipeline.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	The appearance of the emergency fire pump and pipeline was found intact, the operating procedures were posted with regular testing and operation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	The emergency fire pump and pipelines are intact, and the pressure instruments are intact; The inlet valve should be kept normally open and clearly marked; The casing of the emergency fire pump motor is free from rust and damage.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	Portable fire extinguishers were properly placed, in good condition, with valid inspection marks, and equipped according to the requirement of	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

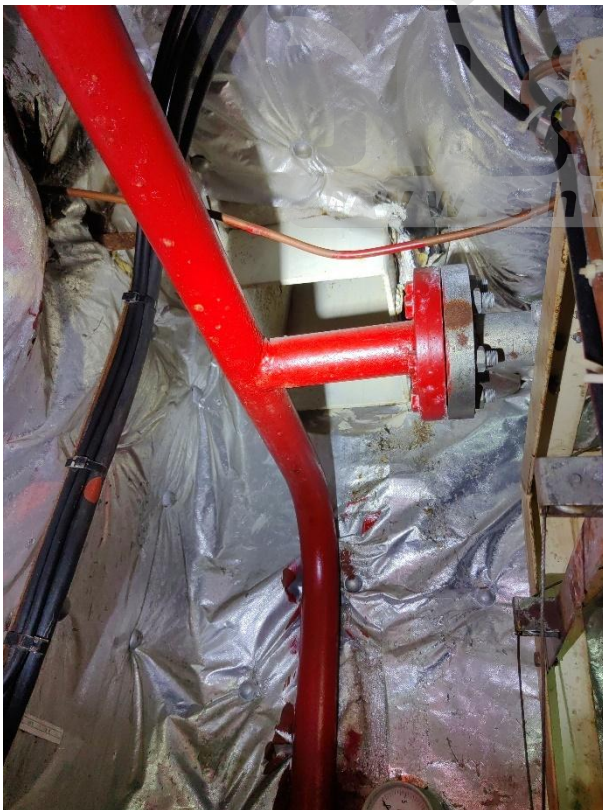
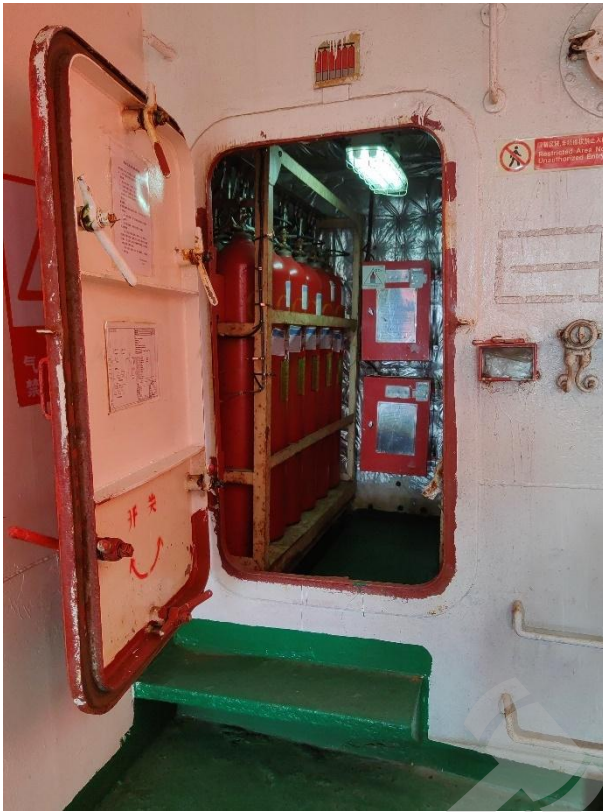
	fire control.				
11	The fire protection of the emergency escape passage was complete, with fireproof material at the bottom. The lighting, life rope, and life ladder were in good condition with normal self closing door.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	The fire protection in the paint room was found intact, with good the temperature sensing probe, the water mist pipeline was free of rust, the nozzle and the ventilation facilities were intact.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

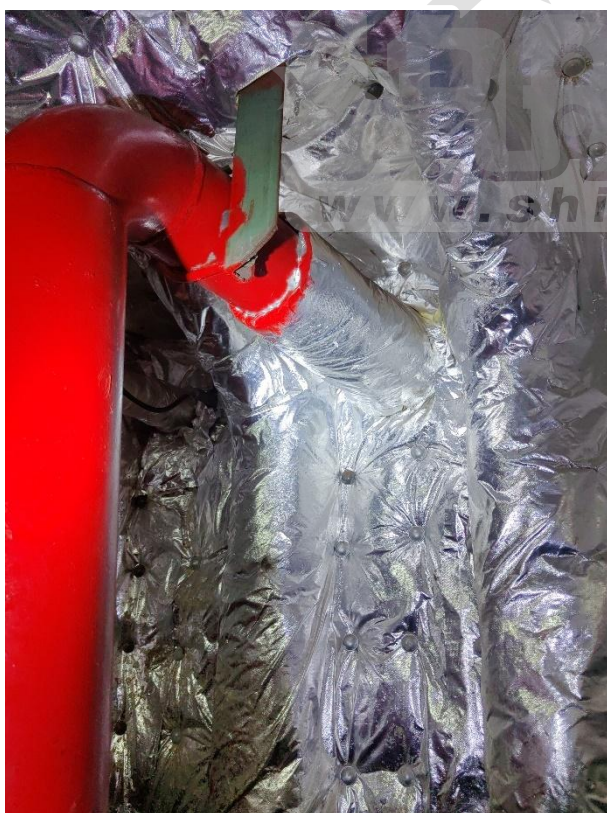
Note: The above inspection items were found in "Fair to good" level overall.

Concerns:

The CO2 room weatherproof door adhesive strip was found to be covered with paint.













7. Pollution Control

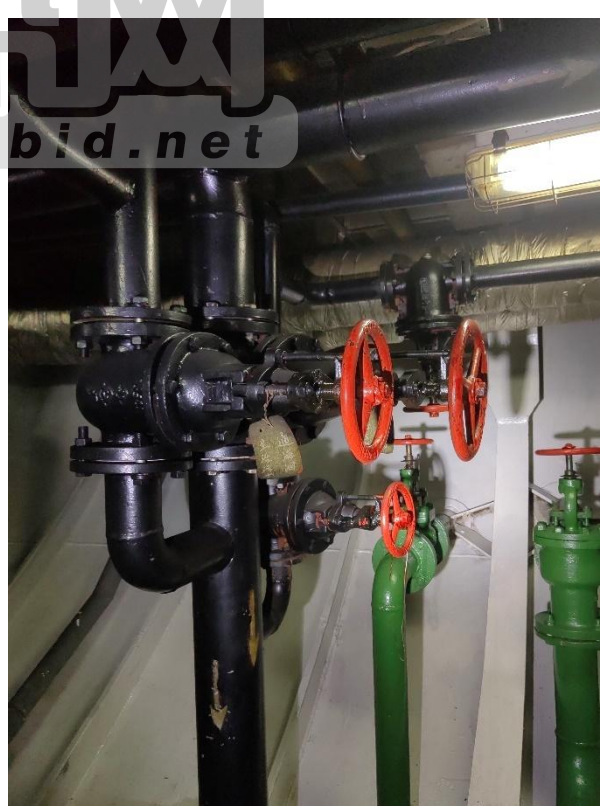
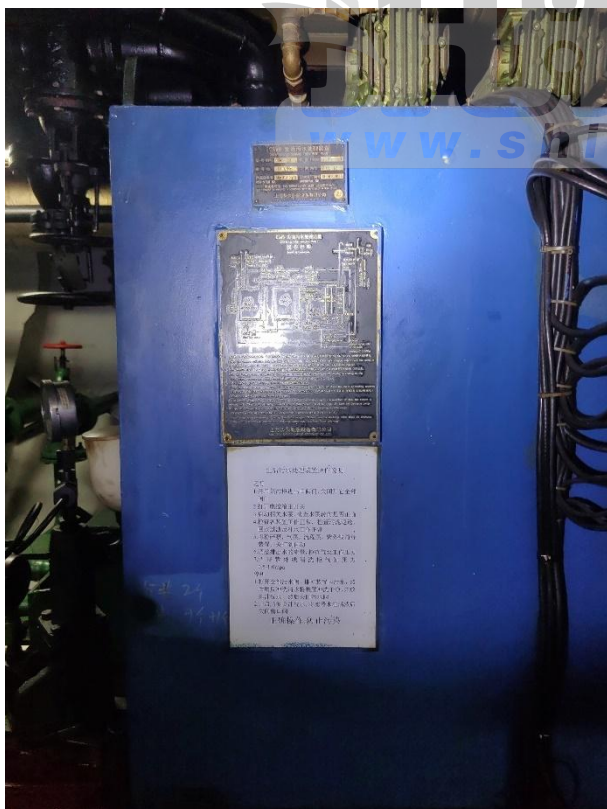
No.	Description	Good	Fair to good	Fair	Poor
1	The nameplate of the domestic sewage treatment device was found consistent with the certificate. No rust penetration on the body and no faults on the sewage pumps, air compressors, etc.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	The appearance of the domestic sewage treatment device was found in good condition, the pressure gauge was normal and no illegal bypass pipelines or joints. The discharge valve was locked and warning signs hung.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	The nameplate of the bilge water separator was found consistent with the certificate, the equipment surface and valve identification was clean. The operating instruction was posted near the equipment.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	The bilge water separator has no illegal bypass pipelines or joints for direct discharge overboard, and the flange bolts on the outlet pipelines had no significant signs of disassembly. The discharge valves at the port were locked and warning signs hung.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

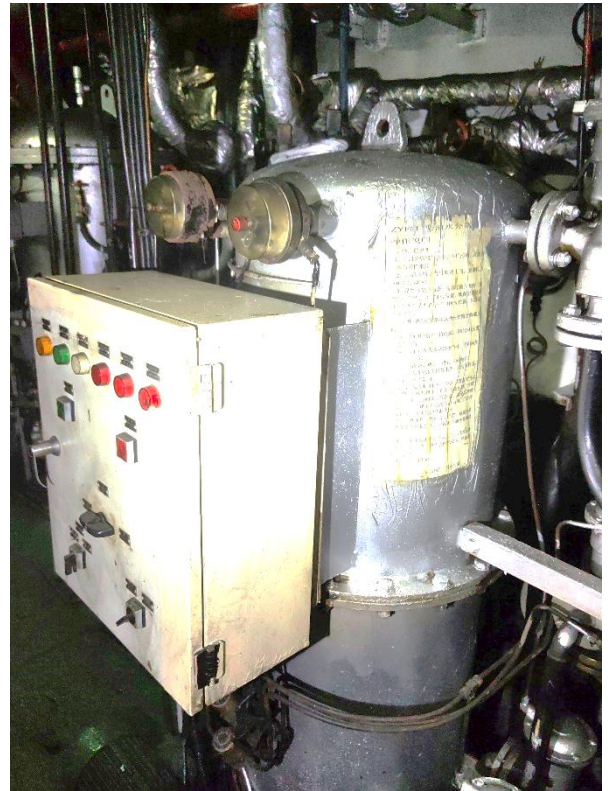
Note: The above inspection items were found in "Fair to good" level overall.

Concern:

No discharge rate table has been posted near the domestic sewage treatment plant.

The sea valve of the oil-water separator is not locked and there is no sign prohibiting discharge in the port.



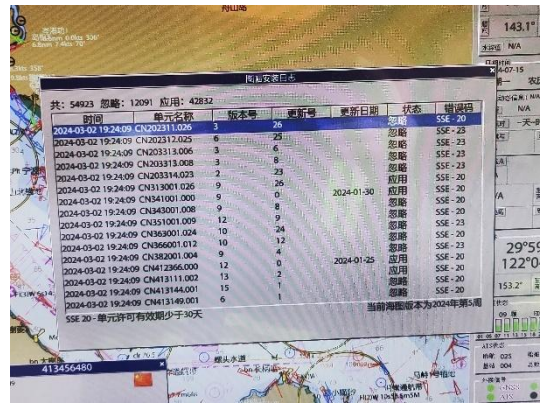
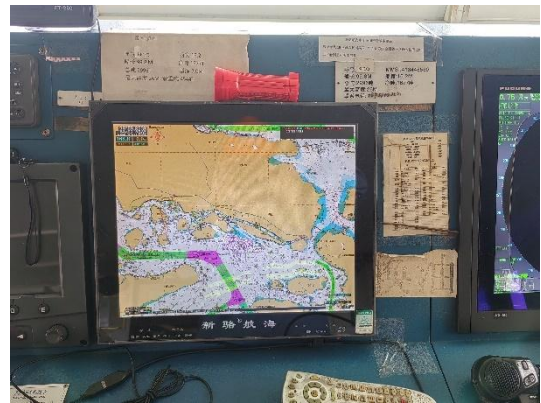
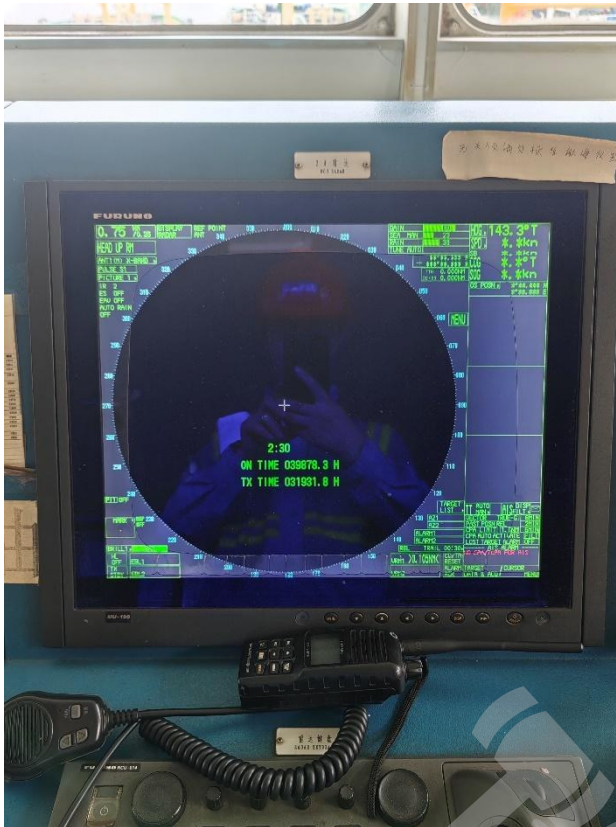


8. Navigating Bridge & Communications Equipment

No.	Description	Good	Fair to good	Fair	Poor
1	The layout of the bridge was consistent with the drawing, with wipers or rotating windows.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	The ship is equipped with the latest version of navigation books, and various charts related to safety management were posted and updated to the latest version.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	The main communication devices were consistent with the certificate record.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	The readings of the steering compass and the standard compass were found basically consistent and no large bubbles or steam inside the compass disc.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	The effective diameter of radar coverage meets regulatory requirement. The radar function keys /knobs were normal and no faults in the radar power supply, display, and operating system.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	AIS was in a normally open state, the displayed heading matched the actual heading, the static information matched the actual heading, and the MMSI was consistent with the certificate.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	The electronic chart is recognized by class, and the screen can display normally. The function buttons on the panel were normal.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	The identification code displayed by the VHF equipment was consistent with MMSI code, and the DSC transceiver function was normal.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	MF/HF radio device had no faults and DSC test was normal. The Emergency lighting installed at the operation area.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	The NAVTEX display was normal and the recently printed data was clear.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	The image display of the echo sounder was found clear with normal brightness adjustment.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	The water tightness of the SART casing was found intact, and the battery was effective.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	The EPIRB casing had good water tightness and firmly installed, the battery and hydrostatic pressure release device were effective.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note: The above inspection items were found in "Fair to good" level overall.





9. Hull and Deck Machinery

No.	Description	Good	Fair to good	Fair	Poor
1	The ship name, port of registry, and load line mark were found clear and fully painted.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	The shell plate, bilge keel, stem and stern post are free of dents, welding cracks, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	The bulwark structure was intact, without deformation or cracking, and the support structure was free of rust.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	The paint on the upper deck was intact, without pitting corrosion. The weld seam was free of rust and cracks, and no significant cracks on the deck at the opening and near the bollard.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	The gangway on the main deck is intact, the grille and the railings on both sides are intact.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	The windlass and its base were not severely corroded, and no significant leaking on the hydraulic pipelines, with basically intact brake device.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	The stern winch and its base were not severely corroded, and the motor wiring harness was intact. The bollard and ropes at the stern were in satisfactory condition.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note: The above inspection items were found in "Fair to good" level overall.

Concern:

There are two obvious collision dents on the starboard shell plate.

The fastening bolt on the brake side of the right anchor machine was found to be missing.







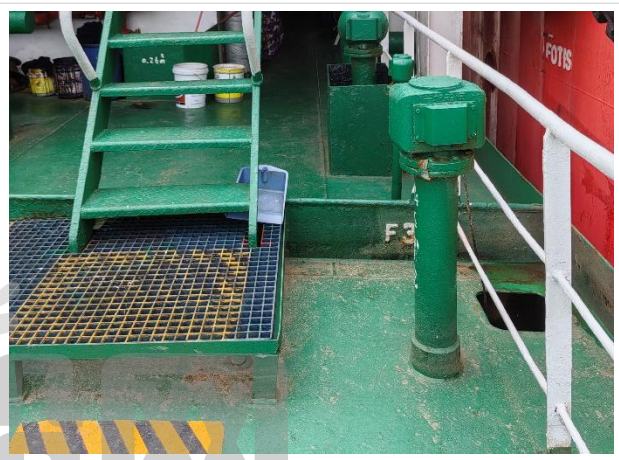
10. Ballast tank and Void Space

No.	Description	Good	Fair to good	Fair	Poor
1	The manhole cover of the ballast tank is not deformed or corroded, the sealing gasket is not damaged, and the bolts are not missing.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	The ballast tank valve can be effectively closed externally and there is an audible and visual alarm system in the control room.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	The air pipes in the ballast tank are in good condition, equipped with effective shut-off devices, and the cabin they serve is clearly marked.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	The structure has no buckling/fracture/crack/temporary repair/poor alignment, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	The pipeline passes through the watertight bulkhead with a collar plate and was effectively welded without cracks or leaks.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note: The above inspection items were found in "Fair to good" level overall.

Concern:

During the inspection, the effective ventilation was not carried out and the inside inspection has not been conducted. The specific situation inside the tank is unknown.



11. Cargo oil tank, Pump tank and Cargo control room

No.	Description	Good	Fair to good	Fair	Poor
1	The ventilation pipe of the cargo oil tank is not corroded, and the shut-off valve on the pipeline is in good condition; The fireproof net of the breathing valve is intact, and the valve shell is not cracked.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	The thermal insulation package of the hot oil pipeline in the cargo oil tank area is intact, the valve hand-wheel is not loose, and the connecting flange is not corroded.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	The paint on the liquid cargo conveying pipe is intact, there is no oil or gas leakage at the flange interface, the threaded rods of the pipeline valves are not corroded, and the structure of the sump is intact without significant oil stains.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	The cabin cover clip, hand-wheel, and screw have no significant rust stains; The cargo hold cover and observation port cover have no significant oil or gas, and the tightness is intact.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	The cargo oil tank access ladder is intact, the paint inside the tank is intact, there are no rust spots on the weld joints, and the transition structure is free of rust or cracks.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	The pipelines and flanges inside the cargo oil tank are rust free, and the radar level gauge pipelines are intact.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	The opening and closing of the pump compartment door is interlocked with the indoor fan and lighting; The ventilation grille blades of the pump compartment are not corroded, and the ventilation inside the compartment can be closed externally.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	The fire separation between the pump compartment and the engine room wall is intact.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	The paint on the pump body is intact and there is no significant rust; The sealing of the pipeline flange is intact, and no significant gaps are observed.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10	The underwater door handwheel screw in the pump compartment is well lubricated, and the underwater valve box is not corroded.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	The chequered plate inside the pump compartment is free of oil stains, there are no signs of leakage on the cabin walls, and there is no significant amount of oil stains at the bottom of the compartment.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12	The liquid cargo radar monitoring system in the cargo control room is functioning properly.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	The operation indicator light of the cargo pump in the cargo control room is not faulty, and the alarm system is not faulty.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	The doors and windows of the cargo control room, as well as the bulkheads facing the cargo area, have a fire rating of A60.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	The communication equipment in the cargo control room is intact, the liquid cargo pipeline system is posted, and a damage control manual is provided.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	The display screen of the ODME equipment in the cargo control room is clear and readable; All major buttons are functioning properly; The feedback indication of the sea valve/reflux valve is normal; All alarm functions are normal; The printer is functioning properly.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note: The above inspection items were found in "Fair to good" level overall.

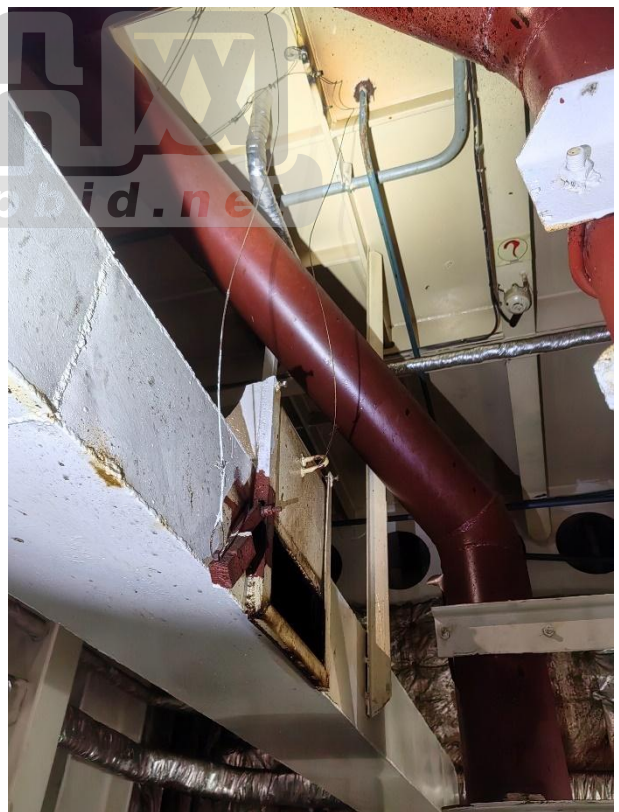
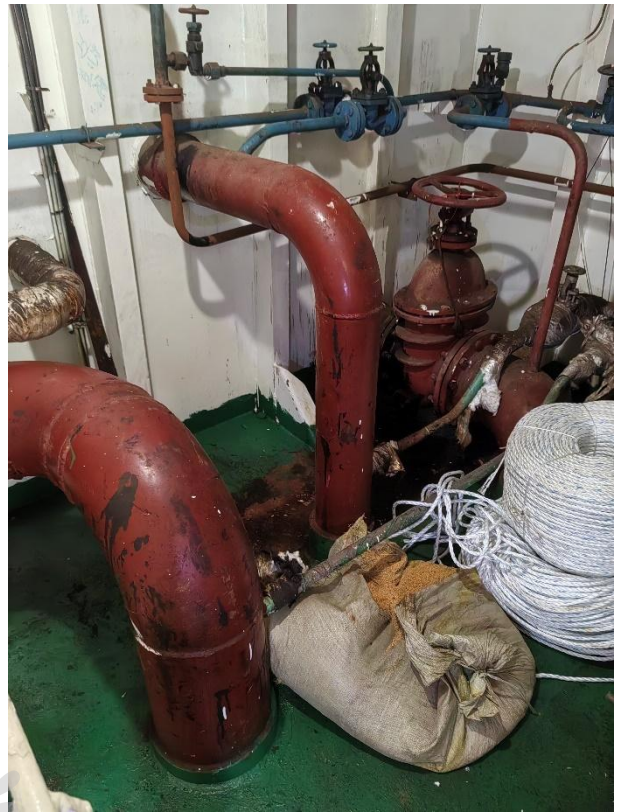
Concern:

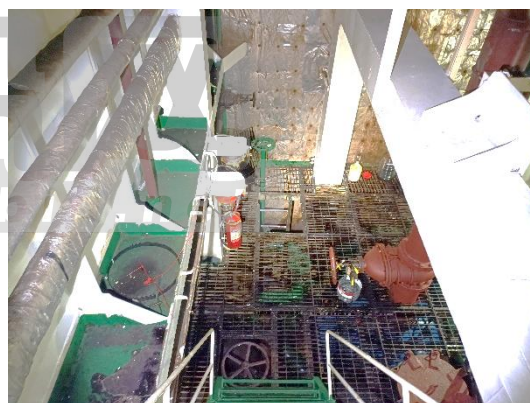
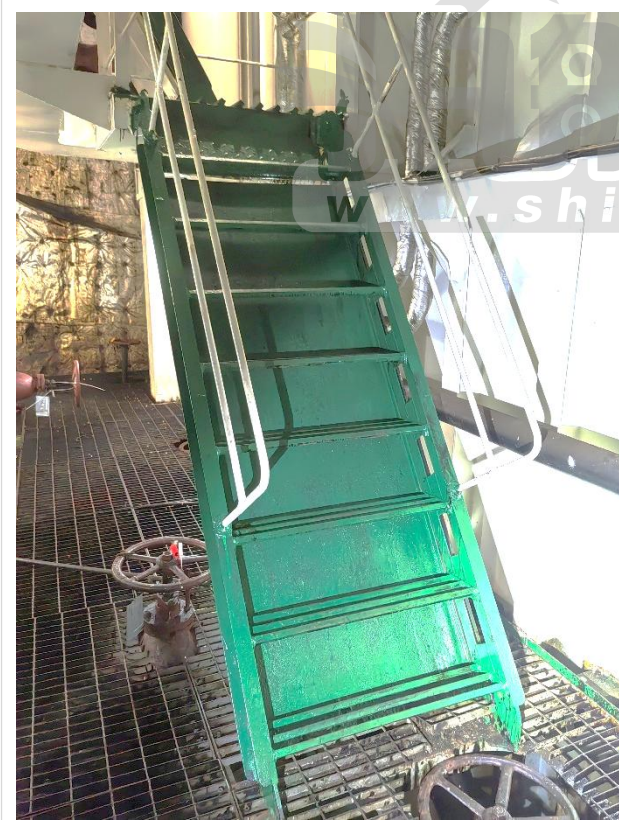
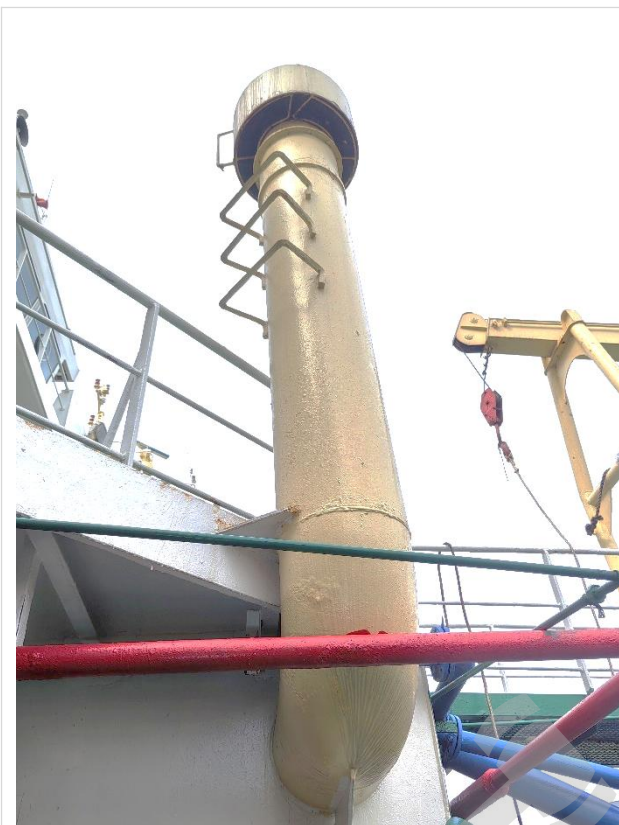
The cargo oil tank has not been cleared and no inspection has been conducted. The specific situation inside the tank is unknown.

The insulation material of the residual oil pipeline of the cargo oil screw pump in the cargo pump compartment is damaged.

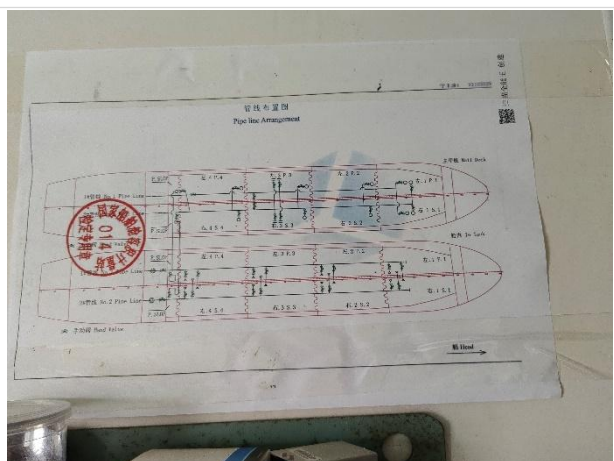












12. Engine Room and Machinery

No.	Description	Good	Fair to good	Fair	Poor
1	The nameplate of the boiler was found consistent with the certificate. The safety valve was in good condition, without significant rust.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	The boiler water level gauge displays clearly, without blockage or dripping on the valve parts.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	The boiler steam pipeline and valve components had no leakage, and the outer surface insulation was wrapped intact.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	No dripping in the fuel supply pipeline of the boiler, with oil collection tray below the combustion device.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	The appearance of the main generator was clean, the base was free of significant oil stains, and the pipelines and components were basically free of rust.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	The appearance of all switches, alarm lights, instruments, and monitoring screens on the main switchboard was found normal.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	The indicator light and panel display on the emergency switchboard were in a normal state.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	The casing of the emergency generator set, the wires, and switchboard had the protective grounding wire	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	The emergency generator was started by batteries with normal voltage.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	The liquid level in the fuel tank of the emergency generation diesel engine was at a reasonable position, the fuel quick closing valve was directly welded to the oil tank, and the appearance of the pneumatic valve control unit was intact.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	The liquid level in the fuel tank of the emergency generation diesel engine was at a reasonable position, the fuel quick closing valve was directly welded to the oil tank, and the appearance of the pneumatic valve control unit was intact.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	The M/E monitoring device was complete and in normally open state, with regular inspection.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

13	The high-pressure fuel pipe of the M/E was a double sleeve and equipped with a leakage alarm device or splash guard. The exhaust pipe was leak free with complete insulation.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14	The engine room was found clean, and no significant rust, leakage or temporary repair of the bilge pipelines and sea valves.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	The nameplate of the steering gear was found consistent with the certificate, and personnel protection facilities were in place.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	No leakage was found at the joints, valves, and cylinder disc of the steering gear piping system. The vent valves and pressure gauges at both ends of the oil cylinder were in normal condition.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	The compass and rudder horn in the steering gear room were consistent with the bridge, the readings were clear. The working schematic diagram and operating procedure were posted.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	The E/R was equipped with spare parts for the main and auxiliary engines, and the repair room was equipped with maintenance tools and replacement parts.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note: The above inspection items were found in "Fair to good" level overall.

Concern:

- 1.The 2 # generator was found traces of rust and leakage repair on the seawater inlet pipe.
- 2.The muddy water seeps out from the cooling water tank of the harbour generator.
- 3.The wiring harness of the control box next to the harbour generator is exposed, and there is no filler sealing at the threading sleeve.
- 4.Poor sealing at the end cover of the engine room hot well condenser.
- 5.One temperature gauge of the main turbine is damaged and malfunctioning.
- 6.The monthly report of main and auxiliary engines is as follows.

轮机部主副机运行记录月报表

船名 宁丰渔

填报日期 2024.6.30

SMIC01-4

名称	型号	额定转速	额定马力	常用转速	累积运转小时
主机	683002C-1613	600	2700	440	3632.5

主机数据	1	2	3	4	5	6	7	8	备注
排气温度	370	360	365	365	370	365	360	370	
冷却水温度	50	51	50	50	52	52	51	50	
爆炸压力	9.1	9.0	9.1	9.0	9.2	9.1	9.0	9.0	
进油提前角									
拐档测量数									

名称	压力	温度	增压器	数据
主机润滑油	0.43	44	增压压力	0.05
主机冷却器	0.15/0.15	53/45		
离合器工作油压力				

副机	型号	滑油压力	冷却水温度	累计运转数	汽缸号	1	2	3	4	5	6
1	12616-2C380	0.45	45	1106	爆压	✓	✓	✓	✓	✓	✓
2	12616-2C380	0.42	42	1773	排温	✓	✓	✓	✓	✓	✓
3	WP6C13180-7	✓	✓	✓		✓	✓	✓	✓	✓	✓
4	WP4C0382C	✓	✓	✓		✓	✓	✓	✓	✓	✓

燃油锅炉型号	工作压力	受热面积 m ²	燃油耗量 kg/h	蒸气量 T/H	累计使用时数
LRX420-08 0.8		170	354	0.5 T/H	

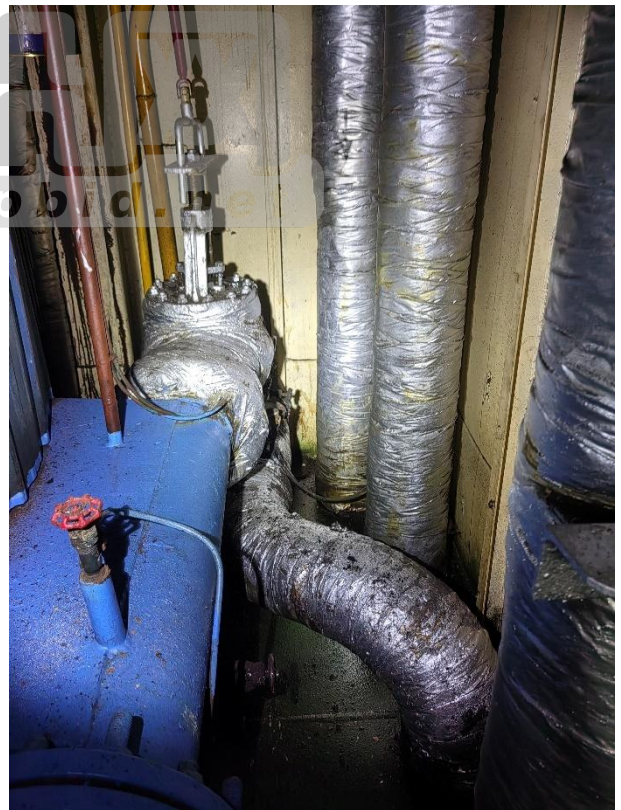
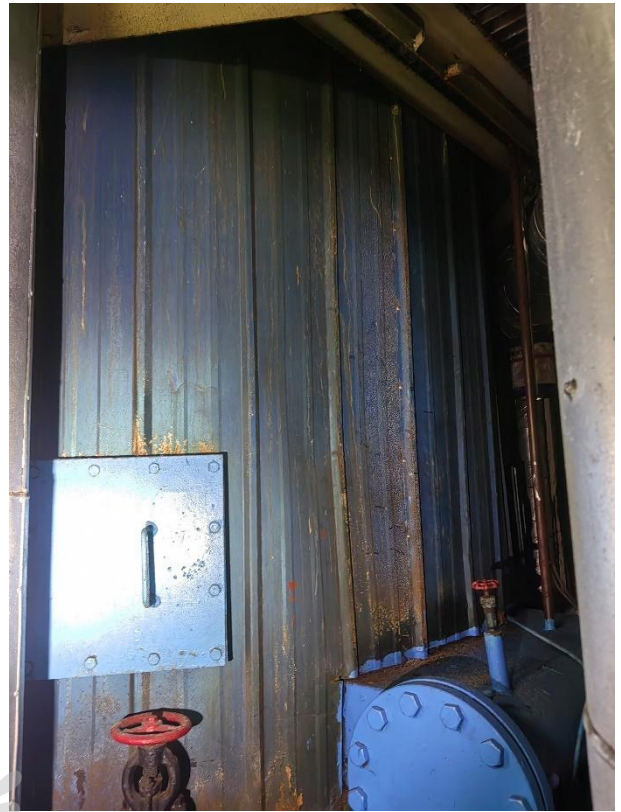
废气锅炉型号	工作压力	蒸气量 T/H	累计使用时数
CYE10 ⁴⁵ /70-47	0.7	0.5 T/H	1291

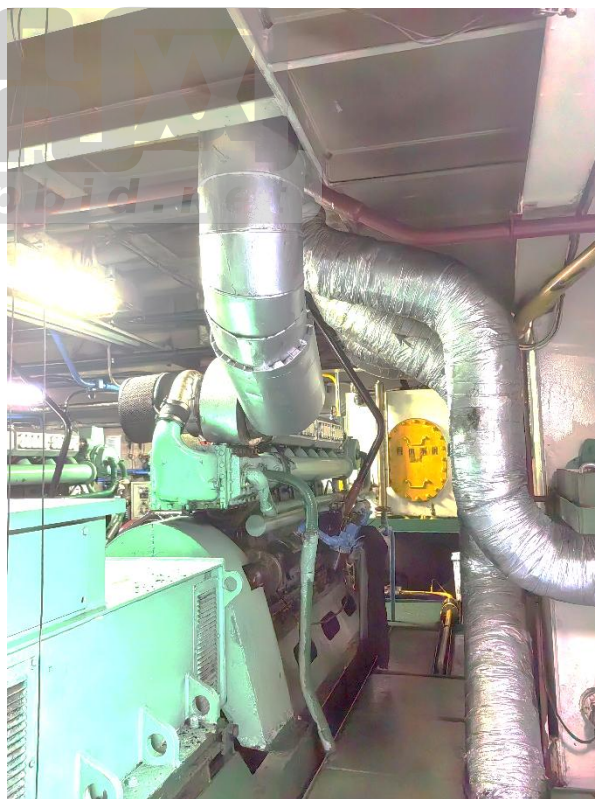
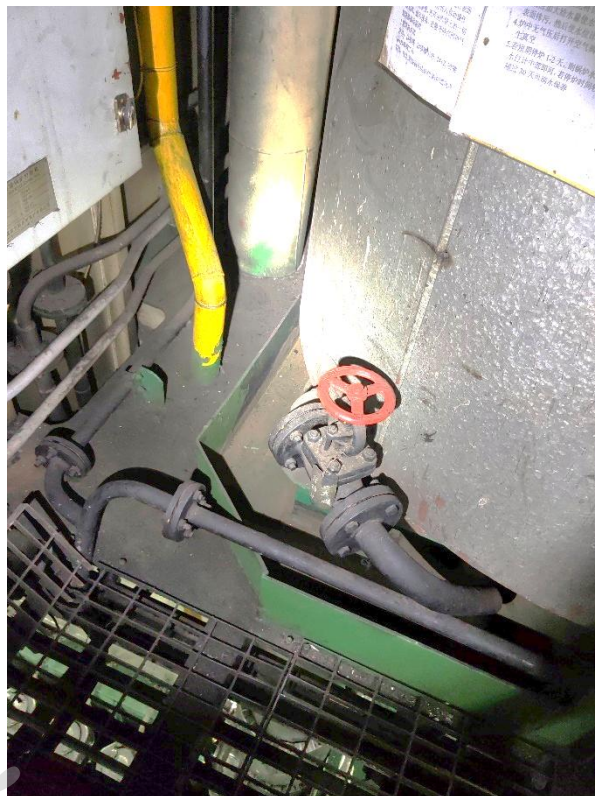
名称	海水泵	淡水泵	压载泵	消防泵	空压机	分油机	空调机	污水水分离机	卫生泵	通风机
使用情况	正常	正常	正常	正常	正常	正常	正常	正常	正常	正常

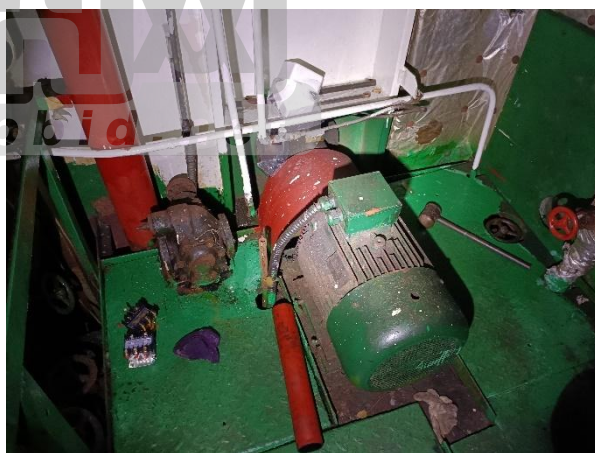
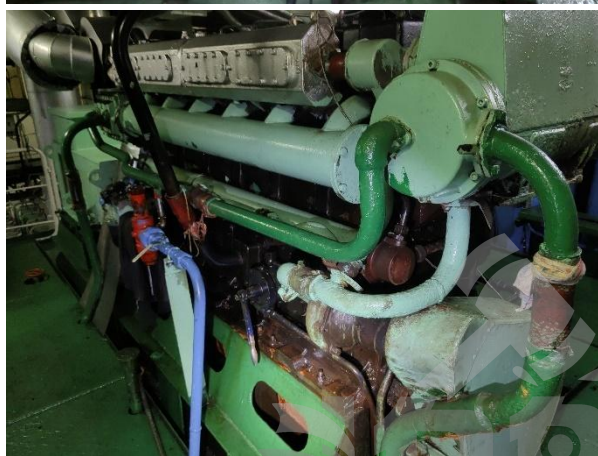
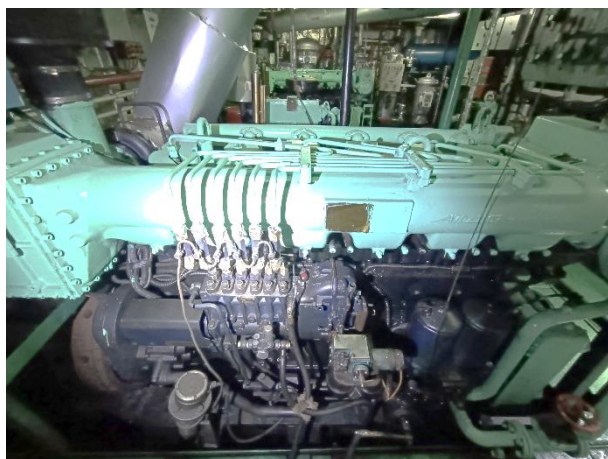
轮机长 陈

船长 陈

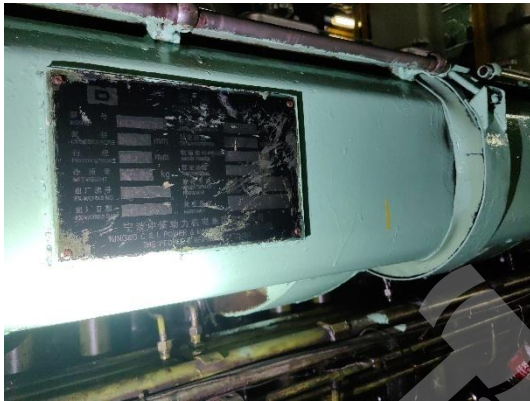
机务经理核准 陈

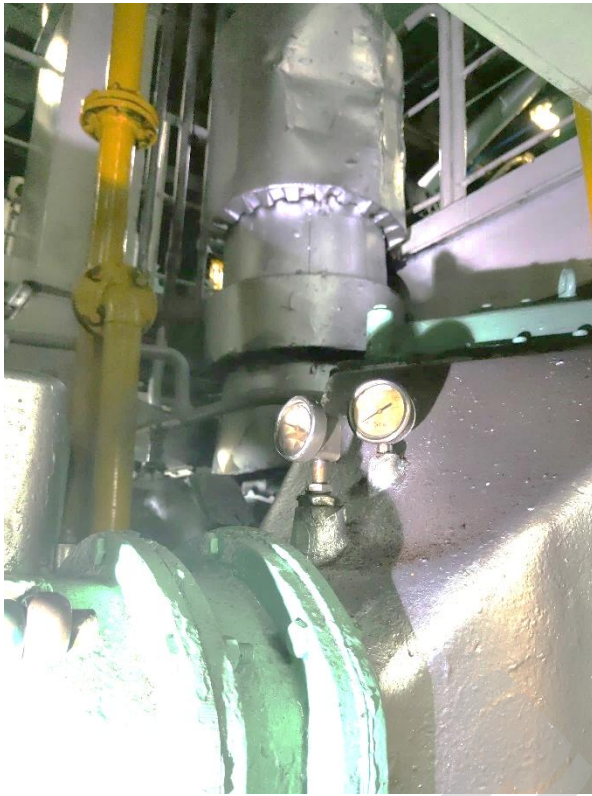


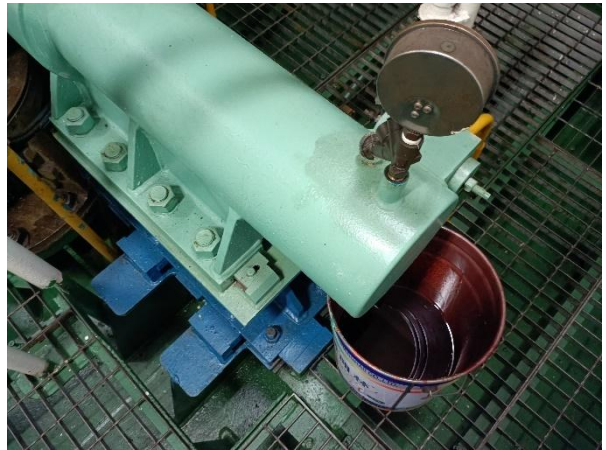












Key concerns

No.	Description
1	The expiration date of the transport qualification certificate is October 24th, 2026.
2	The pump compartment is equipped with 2 sets liquid cargo pumps with 730m ³ /h, and the shell is cast iron, screw is stainless steel.
3	The cargo oil tank is equipped with seamless carbon steel heating coils, and the heating form is thermal oil circulation heating.
4	The ship is equipped with cargo control system and an ODME monitoring device on the poop deck.
5	The last special survey has been completed on October 28th, 2022, and the annual survey on November 4th, 2023, and the next annual or intermediate survey for three months before and after October 17th, 2024.
6	All defects found in the FSCO inspections over the past three years have been closed. There are 15 defects were identified, of which 4 were detention items.
7	Under laden conditions, the ship operates at approximately 70% engine speed, with an average speed of nearly 10kn and an engine fuel consumption of approximately 4.7t/d.
8	The cleanliness of the galley is poor, with cracked floor tiles and heavy oil stains on the range hood filter.
9	There is a large amount of accumulated water near the seawater pipe in the engine compartment of the starboard lifeboat.
10	The CO2 room weatherproof door adhesive strip was found to be covered with paint.
11	No discharge rate table has been posted near the domestic sewage treatment plant.
12	The fastening bolt on the brake side of the right anchor machine was found to be missing.
13	The insulation material of the residual oil pipeline of the cargo oil screw pump in the cargo pump compartment is damaged.
14	The 2 # generator was found traces of rust and leakage repair on the seawater inlet pipe.
15	The muddy water seeps out from the cooling water tank of the harbour generator.
16	The wiring harness of the control box next to the harbour generator is exposed, and there is no filler sealing at the threading sleeve.
17	One temperature gauge of the main turbine is damaged and malfunctioning.

Technical Report Attachment

Annex 1 : Grade details

Item	Grade
Basic attributes	15%
Shipbuilder	3.8
Classification	4.0
Document on board	3.5
Performance Condition	25%
Speed	3.8
Fuel Consumption	3.8
FSCO.SMS	3.2
Hull Condition	30%
Galley & Accommodation	3.5
Lifesaving Equipment	3.8
Hull Structure	4.0
Cargo tank	4.0
Deck Machinery	4.0
Mechanical Working Condition	30%
Pollution Control	4.0
Navigating Bridge & Communication	4.0
Engine Machinery	4.0
Pump valve piping system	4.0
Overall	3.8

Annex 2 : Grade Specification

Grade	Level	Description
>4.5	Good	Unimpaired condition without significant wear, or deviation from original strength and operating efficiency. No maintenance or repair required.
4.0-4.5	Fair to good	Unimpaired condition but may require some minor maintenance to bring to a good standard.
3.0-4.0	Fair	Condition where wear and tear or other deficiencies of a minor nature, do not require correction or repair.
<3.0	Poor	Condition in which the adequacy of strength and/or operational efficiency is marginally below acceptable limits, or is in doubt. Remedial action is required.

