舟山市拍船网船舶
评估咨询有限公司

TECHNICAL REPORT

CJPG-JS-24-KY-028

GUO DIAN 36

Inspection place Shandong, China

Inspection date January 4th, 2024

Technical Report

Entrusted by the customer, our company organizes the surveyor to inspect the technical condition of "GUO DIAN 36" 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. 9	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	GUO DIAN 36
Identification No.	CN20014078348
POR	Shanghai, China
Type of Ship	Bulk Carrier
Class	CCS
Trading Area	Offshore
LOA	191.76m
LPP	182.00m
MLB	32.26m
MLD	17.40m
Summer Draft	12.220m
GRT/NRT	30928/17319
DWCC	50100t
No. of Cargo Hold	5H/5H
Cargo Hold Capacity	62015.2m³
LDT	10584t
Date of Keel Laying	September 10th, 2001
Date of Delivery	September 25th, 2002
Shipbuilder	Jiangsu New Century Shipbuilding Co.,Ltd
M/E Manufacturer	HUDONG HEAVY MACHINERY CO.,LTD

Model of M/E	6S50MC-C
Rated Power/Rated Speed /No.	9480kW×127r/min×1 set
Minimum Safe Manning	14 persons

Overview

The ship was built as a bulk carrier with single deck, and driven by single engine and single propeller. The ship has 5 cargo holds with double bottom and double hull, and is equipped with hydraulic folding hatch covers.

1. Cargo Hold Capacity

No.	Hatch Dimension（m）	Capacity (m^3)
NO.1	18.86×24.0/16.0	9917.9
NO.2	22.14×24.0	13691.7
NO.3	20.50×24.0	12859.8
NO.4	22.14×24.0	13700.0
NO.5	21.38×16.0/24.0	11845.9
Total		62015.2

2. Engine Machinery

Machinery	NO.	Model	Parameter	Manufacturer
Main Engine	1	6S50MC-C	9480kW×127r/min	HUDONG HEAVY MACHINERY
Steering Gear	1	RV-850-3	853KN.m	ULSTEIN FRYDENBV
Windlass	2	M63.SAL/R	72kW	--
Main Generator	2	FE547B-10	600kW×450V×962A	TAIYO
Primer Mover of Main Generator	2	6N21AL-UV	660kW×720r/min	YANMARCIESEA
Emergency Generator	1	TNC3 282-4	125kW×450V×161A	ULJANIK
Primer Mover of Emergency Generator	1	D2866E	132kW×1800r/min	MAN
Boiler	1	AQ-16	0.9MPa	Hailu Shazhou
Bilge Oil-Water Separator	1	DVZ 5000VC	5L/hour，15ppm	DVZ-SERVICES GMBJ
Air Compressor	2	HL2/120	3MPa	SPERRE.AIR.COMP
Crane（deactivated）	4	NI-CHHS3026	SWL 30T 25M 20°	--

3. Communication and navigation equipment

Equipment	NO.	Model
AIS	1	FA-170
GPS	2	GPS-170
ECS	1	NES-1000
Radar	2	FAR-2328/ FAR-2327
Gyro Compass	1	STD-22
Echo Sounder	1	FE-700
Weather facsimile	1	FAX-608
VHF radio device	2	FM-8500/ RT-5022
MF radio device	1	CU5100
NAVTEX	1	NX-500

Technical status

1. Certificate and Inspection

Certificates Description	Authority	Issue Date	Expiry Date
Certificate of Registry	MSA	2023.12.18	2028.12.17
Minimum Safety Manning Certificate	MSA	2023.12.21	2028.12.17
Certificate of Ownership	MSA	2023.11.09	--
Domestic Ship Safety and Environmental	CCS	2023.11.26	2027.01.09
Safety Management Certificate	MSA	2023.11.15	2027.06.23
Classification Certificate	CCS	2023.11.26	2027.01.09

Concern:

1.The ship has completed the annual survey in Qinhuangdao on November 26th, 2023, and the special survey in Nantong on January 3rd, 2022.

2.The ship was built before September 1st, 2009, the M/E and A/E on board do not need to meet the Nox emission control requirement.

3.4 sets cranes with 30T on board have been deactivated.

4.The minimum safety manning is 14 persons, and if the continuous sailing time does not exceed 36 hours, 1 third officer, 1 duty sailor, 1 fourth engineer, and 1 duty motorman can be exempted.

5.Class Notation：★CSAD 双舷侧散货船；近海航区；重货加强。

★CSMD

FSC Inspection

Date	Place	Defect Code	Action Code	Note
2023.08.01	Shanghai	0110 1250 1782 1423	99 17 17 17	Corrected
2024.02.26	Cangzhou	1250 1240 1581 0745 0899	17 17 17 17 17	Corrected

Concern:

The deficiencies which found by FSCO inspection in the past 2 years were basically general items, without detention item, and all defects have been corrected.

2. Last 10 Ports and Cargos

No.	Port	Cargo	Weight（t）
2330	Qinhuangdao-Taicang-Wuhan	Coal	46000
2329	Huanghua-Jingjiang	Coal	44442
2328	Qinhuangdao-Zhangjiagang	Coal	48000
2327	Qinhuangdao-Yueyang	Coal	44751
2326	Huanghua-Weihai	Coal	49546
2325	Huanghua-Taizhou	Coal	43924
2324	Qinhuangdao-Changzhou	Coal	43976
2323	Huanghua-Changzhou	Coal	43954
2322	Tianjin-Taizhou	Coal	43608
2321	Huanghua-Taizhou	Coal	43983

Concern:

In recent voyages, the ship has been loaded with magnesite mixture, iron ore Brazilian mixed powder, and iron ore ultra fine powder, with the rest mainly loaded with coal.

3. Speed and Fuel Consumption

The fuel oil consumed by the main engine is HFO.

Condition	Economic Speed kn	Rotary Speed rpm	Fuel Consumption （t/d）	Design Speed kn
Ballast	~12.5	103	~20.6	14.5
Laden	~11.5	103	~21.6	

The fuel oil consumed by 1 set auxiliary engine is HFO, and another set is MGO.

Condition	Working set	Fuel Consumption （t/d）
Sailing	1	1.5
Berthing and Departure	1	1.5

Concern:

The fuel oil consumed by 1# auxiliary engine is HFO, and 2# is MGO. 1 set A/E will be used during berthing at the port, and two sets will be used during hatch cover opening.

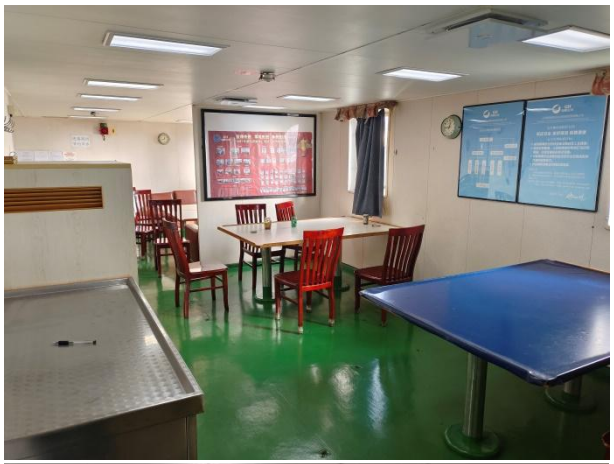
4. GALLEY & ACCOMMODATION

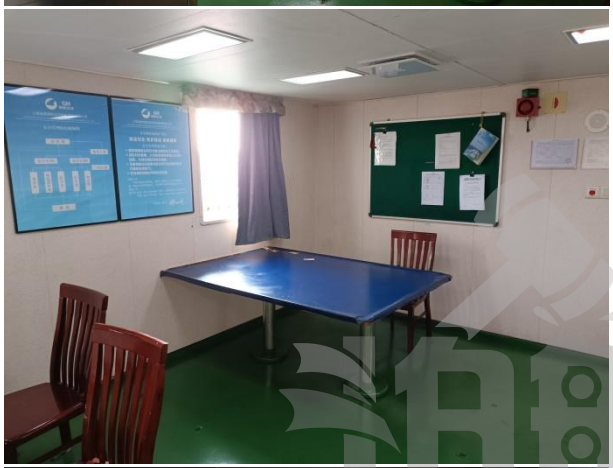
No.	Description	Good	Fair to good	Fair	Poor
1	The fireproof materials in the living area hallway were found undamaged, and the fire doors can work normally.	☐	☒	☐	☐
2	No significant damage was found on the stairway, and without deformation or missing on the railing.	☐	☒	☐	☐
3	The light facilities in the crew room.	☐	☒	☐	☐
4	The bathroom facilities in the crew room.	☐	☐	☒	☐
5	Cleanliness of mess room and galley	☐	☒	☐	☐
6	No significant oil stain was found on the galley range hood and ventilation ducts, and classify garbage and store it in designated areas. The Portable fire extinguishers were inspected on schedule.	☐	☐	☒	☐
7	The freezer can be used normally. The food was found neatly arranged and clean.	☐	☒	☐	☐

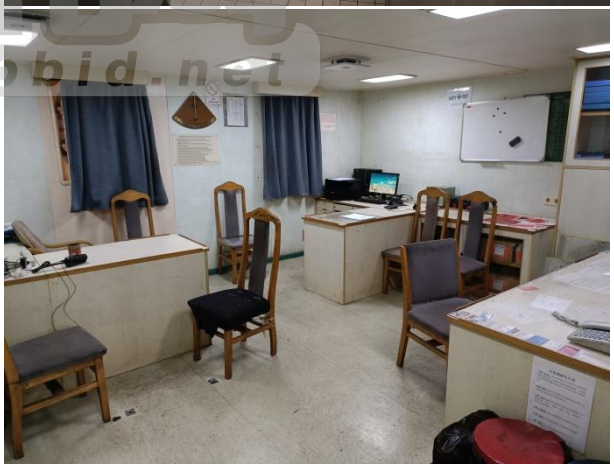
Note: The above inspection items were found in "Fair to good" level overall.

Concern:

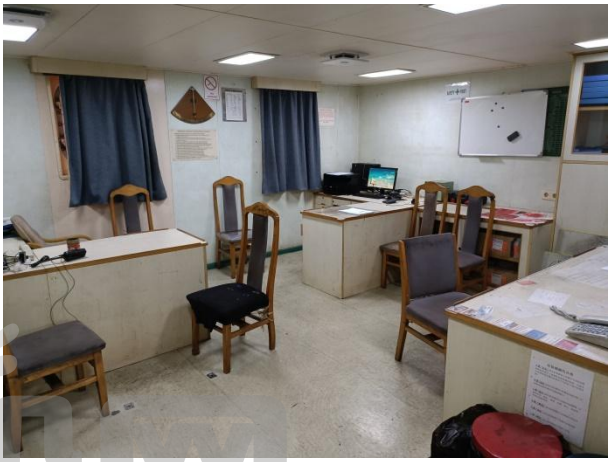
Wear and tear found on the accommodation area floor.





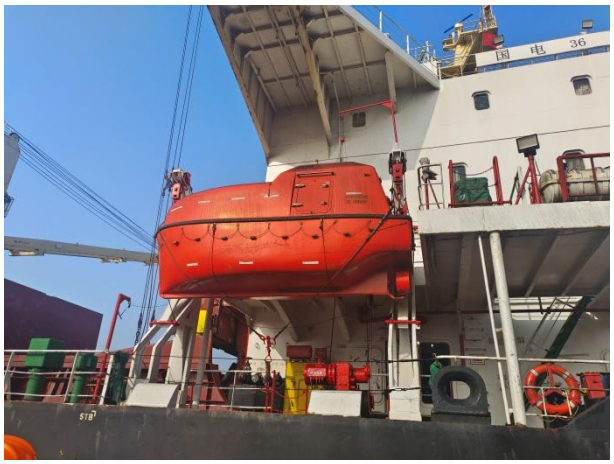



5. Lifesaving Equipment

No.	Description	Good	Fair to good	Fair	Poor
1	The lifeboat has a good appearance, and the ship name, port of registry, and other markings were clear and stored correctly.	☐	☐	☒	☐
2	The frame structure has a good appearance and well lubricated	☐	☒	☐	☐
3	The motor of the lifeboat was well maintained, and was easy to start (check records of tests or manoeuvre).	☐	☐	☐	☐
4	The lifeboat was fully equipped with life-saving appliances, food and fresh water.	☐	☒	☐	☐
5	The operation procedures and maintenance manual of the lifeboat were posted, and lighting fixtures were equipped beside.	☐	☒	☐	☐
6	The life raft and hydrostatic pressure release device were properly fixed, and found in normal maintenance cycle.	☐	☐	☒	☐
7	The rotating mechanism of the lifeboat crane was well lubricated, and without damaged on the motor casing. No leakage was found in the hydraulic oil tank and pipelines.	☐	☒	☐	☐
8	Lifebuoys, lights, floats, etc. were in the correct position and in good appearance.	☐	☒	☐	☐
9	Lifejackets, insulation suits, diving suits, etc. were approved by the class, properly stored, and in sufficient quantities.	☐	☐	☐	☐
10	All signs for safety equipment and escape routes have been posted in place, reflective signs comply with IMO requirement, and the main/emergency exits were found unobstructed.	☐	☒	☐	☐
11	The configuration of flame parachutes, rope throwers, etc. complies with regulatory requirements and was stored correctly.	☐	☒	☐	☐

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


国电 36


40t-43m
02
03


5.70X2.20X1.20M
定员 25 人
OPEN
CLOSED


2


SWL3T
关键设备


1


2


气 胀 式 救 生 筏
INFLATABLE LIFERAFT
HAF-ASR25
A1491
2016-11
2024-10
25
28
18

6. Fire & Safety Appliance

No.	Description	Good	Fair to good	Fair	Poor
1	The CO2 cylinders and release devices were found within the validity period of inspection, the automatic sound alarm was not faulty, and the operation regulations were posted.	☐	☒	☐	☐
2	No looseness or leakage was found on the connection of CO2 pipe system, and the starting cylinder pressure was sufficient.	☐	☒	☐	☐
3	Hydrant appearance was found intact, the handwheel switch was normal. No significant corrosion and leakage was found on pipelines.	☐	☒	☐	☐
4	The appearance of the hose box was found intact, and the water hose and water gun were approved type, with nozzles in good condition.	☐	☒	☐	☐
5	Main fire pumps, fire isolation valves, emergency fire pumps and pipelines were found in good condition.	☐	☒	☐	☐
6	Emergency fire pumps operating procedures were regularly tested and operated.	☐	☐	☐	☐
7	Portable fire extinguishers were correctly placed and in good condition, with inspection markings. The sufficient number of spare fire extinguishers were provided.	☐	☒	☐	☐
8	The fire protection of the emergency escape passage was found complete. The lighting, life rope, and life ladder were in good condition with normal self closing door.	☐	☒	☐	☐
9	The fire protection structure of the paint room was intact, as well the temperature sensing probe. The water mist pipeline was free of rust, and the ventilation facilities were intact.	☐	☐	☐	☐

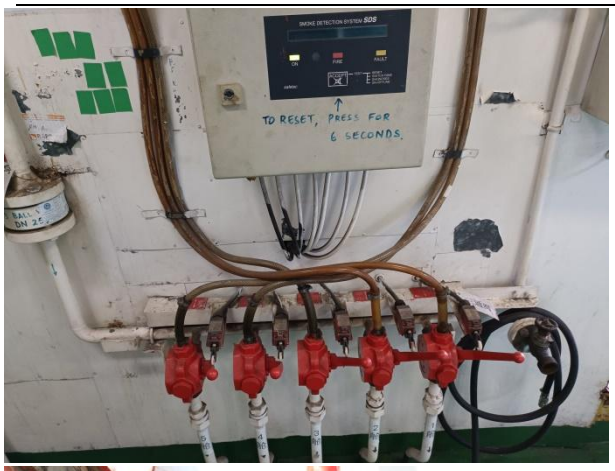
Note: The above inspection items were found in "Fair to good" level overall.






Hebei Jinhangshun Shipping Service Co.,ltd.
Inspector Signature:
Tested to
BAR
2025
2026
2027

通往机舱


TO RESET, PRESS FOR
6 SECONDS


防火控制图
Fire
Plan


货舱烟雾探测系统

7. Pollution Control

No.	Description	Good	Fair to good	Fair	Poor
1	The nameplate of the ballast water treatment device was found consistent with certificate, and the ballast water management plan was approved by the flag state or class.	☐	☐	☐	☐
2	The surface of the ballast water treatment equipment was found clean, and the ballast pump and valve markings was clear. The operating instructions were posted near the equipment.	☐	☐	☐	☐
3	The nameplate of the domestic sewage treatment plant was found consistent with the certificate. The sewage pump, air compressor, etc.were not faulty.	☐	☒	☐	☐
4	The appearance of the domestic sewage treatment device was found in good condition, and the pressure gauge was normal. No illegal bypass pipelines or joints, the discharge valve was locked and warning signs were hung.	☐	☒	☐	☐
5	The nameplate of the bilge oil-water separator was found consistent with the certificate, the surface of the equipment was clean. The operating instructions were posted near the equipment.	☐	☒	☐	☐
6	The bilge oil-water separator has no illegal by-pass pipeline or connector discharging directly to the outboard side, and without significant dismantling trace of the flange bolts on the outlet pipeline. The outboard discharge valve was in a closed and locked status, with a warning sign for prohibiting discharging.	☐	☒	☐	☐

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


油水分离器


填料函放残柜

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.	☐	☒	☐	☐
2	The ship was equipped with the latest version of navigation books. The various charts related to safety management were posted.	☐	☒	☐	☐
3	The main communication devices were consistent with the certificate record.	☐	☒	☐	☐
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.	☐	☒	☐	☐
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.	☐	☒	☐	☐
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.	☐	☒	☐	☐
7	The electronic chart was recognized by class, and the screen can display normally. The function buttons on the panel were normal, and the electronic chart data had been updated in a timely manner.	☐	☒	☐	☐
8	The identification code displayed by the VHF equipment was consistent with MMSI code, and the DSC transceiver function was normal.	☐	☒	☐	☐
9	MF/HF radio device had no faults and DSC test was normal. The Emergency lighting installed at the operation area.	☐	☒	☐	☐
10	The NAVTEX display was normal and the recently printed data was clear.	☐	☒	☐	☐
11	The image display of the echo sounder was found clear, with normal brightness adjustment.	☐	☒	☐	☐
12	The water tightness of the SART casing was found intact, and the battery was effective.	☐	☒	☐	☐
13	The EPIRB casing had good water tightness and firmly installed, the battery and hydrostatic pressure release device were effective.	☐	☒	☐	☐

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

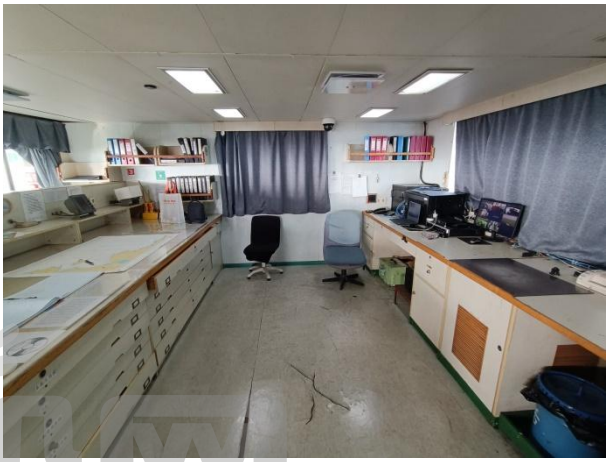


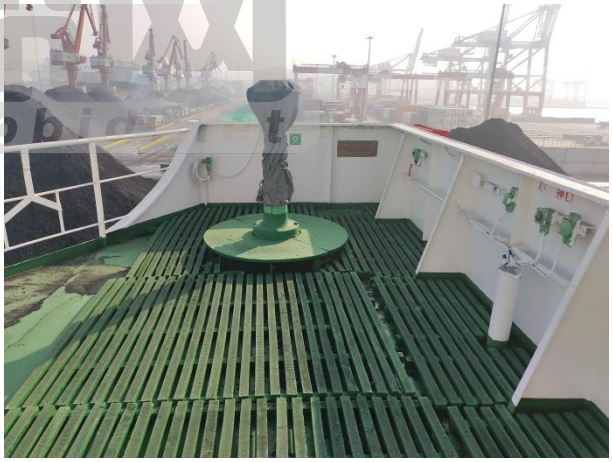



STEERING CHANGE-OVER PROCEDURES

AutoChief 4




BPKW3




9. Hull and Deck

No.	Description	Good	Fair to good	Fair	Poor
1	The marks of ship name, port of registry were found clear and fully painted.	☐	☒	☐	☐
2	The Load line and draft marking were found clear and fully painted	☐	☒	☐	☐
3	The coating condition of the visible part of the shell hull and main deck.	☐	☐	☒	☐
4	No deformation, cracking and lack of the personnel protection railings.	☐	☒	☐	☐
5	The accommodation ladder paint was found intact, as well lifting mechanism. The boarding platform was found free of rust.	☐	☐	☒	☐
6	The wooden pedals of the pilot ladder were found undamaged, and without broken on the ropes, the tying facilities were not significantly rusted, and the anti drop chain was not missing.	☐	☐	☒	☐
7	The air duct was found in good condition and equipped with an effective shut-off device.	☐	☒	☐	☐
8	The air duct head can be effectively closed.	☐	☒	☐	☐
9	The air ducts on the upper deck were found in good condition, equipped with effective closing devices and clearly label.	☐	☒	☐	☐
10	The lighting fixtures, cable pipelines, and fire protection pipelines in the cargo hold area were found in good condition.	☐	☒	☐	☐
11	The windlass and base were found no severely corroded, and without significantly leaking on the hydraulic pipelines, and the braking device was basically intact. The anchor chain and fair lead were not severely corroded or the base cracked.	☐	☐	☒	☐
12	The stern winch and base were found no severely corroded, and the motor wiring harness was intact. The bollard and ropes at the stern of the ship were found in satisfactory condition.	☐	☐	☒	☐

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

Concern:

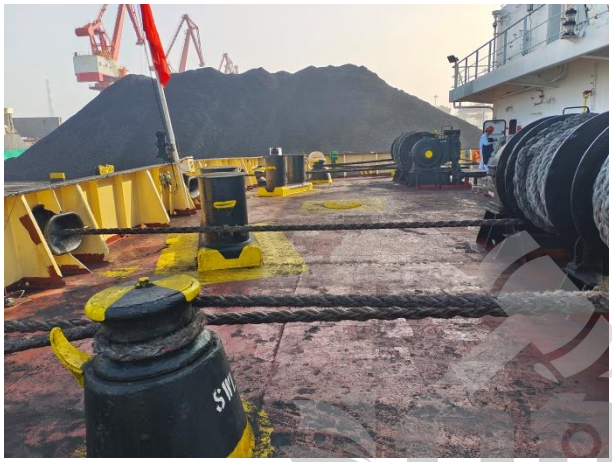
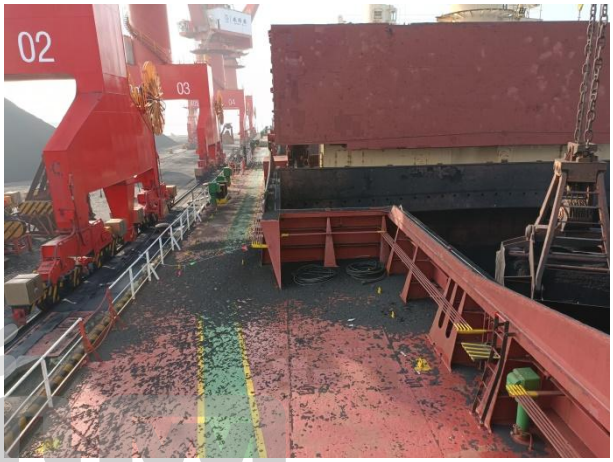
The scratches and local collision deformation were found on the hull shell.


国电36
GUODIAN36

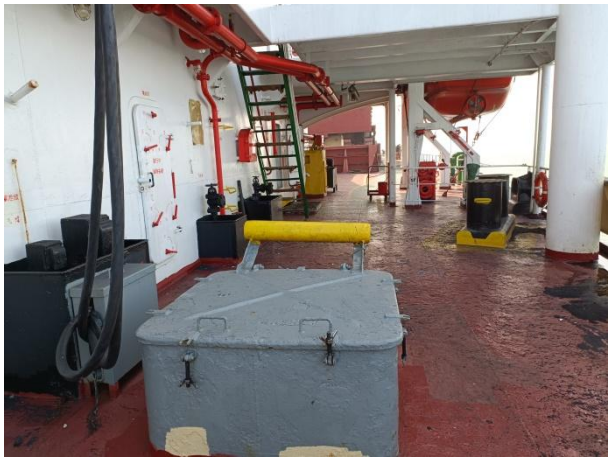

国电36
GUODIAN36
04


国电36
GUODIAN36





02
03

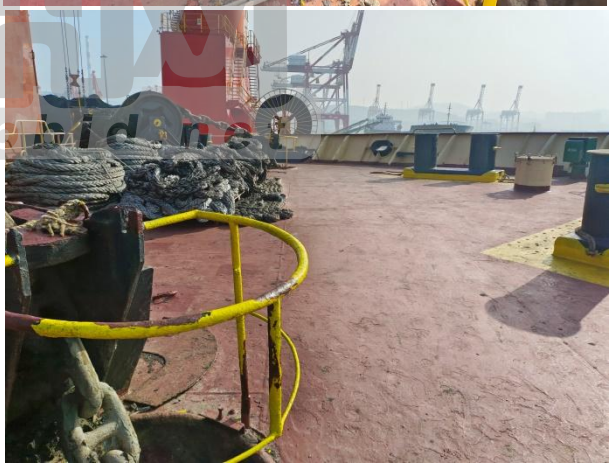
冷却水仓
透气











10. Cargo Hold

No.	Description	Good	Fair to good	Fair	Poor
1	No cracking or severe rust was found on the bracket and reinforcement plate near the hatch coaming.	☐	☒	☐	☐
2	The drainage groove of the hatch panel has no excessive rust, and the waterproof pressure strip has no deformation, cracking, or rust penetration.	☐	☐	☒	☐
3	The inside wall of the hatch coaming was painted intact, and the corner structure of the hatch was intact.	☐	☐	☒	☐
4	The paint on the watertight bulkheads inside the cargo hold was found intact, and without obvious impact deformation observed.	☐	☐	☒	☐
5	The manhole cover, ladder, platform, and railing in the cargo hold were found in good condition.	☐	☐	☐	☐
6	The rubber pad of the hatch cover was in good condition, and the drainage channel has no significant rust or blockage.	☐	☐	☒	☐
7	The hatch cover panel, side plate, and reinforced structure were found to be free significant corrosion.	☐	☐	☒	☐
8	The clip of the hatch cover was not found missing or rusted.	☐	☐	☒	☐
9	The cargo hold ventilation duct was free of rust, the ventilation was closed properly, and the fire screen was not damaged.	☐	☒	☐	☐
10	The hydraulic system of the cargo cover was found normal, without significant leakage in the pipelines.	☐	☒	☐	☐

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

Concern:

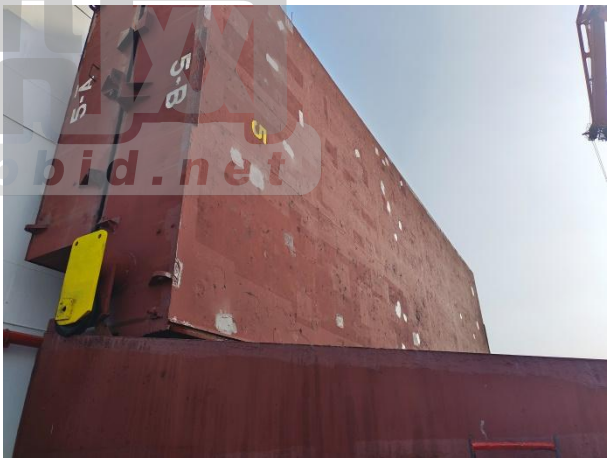
1.Large area of rust found on the inner side of the hatch coaming.

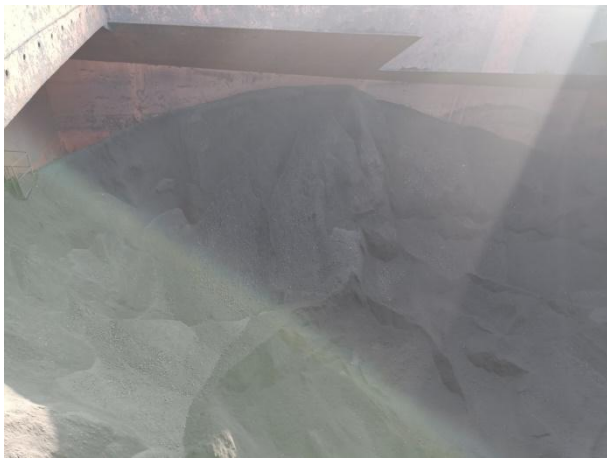
2.Large areas of rust were found in the structure of the cargo hold, as well collision marks caused by loading and unloading.

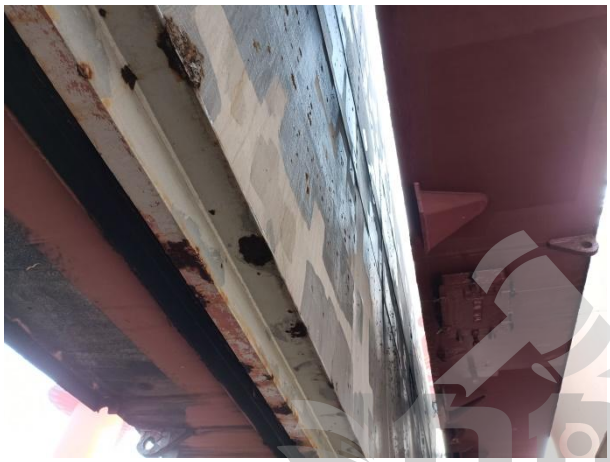
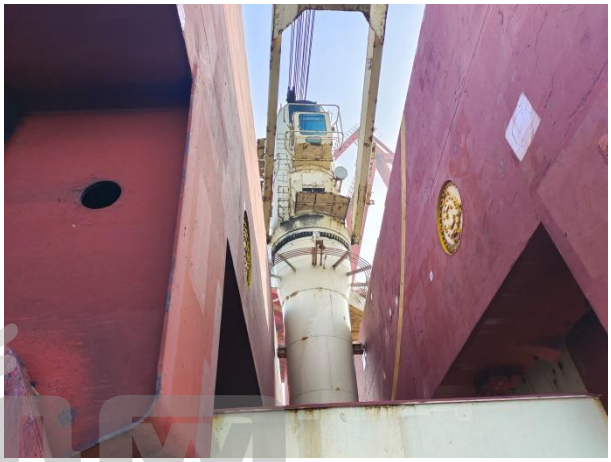
3.4 sets cranes with 30T have been deactivated.







11. Engine Room and Machinery

No.	Description	Good	Fair to good	Fair	Poor
1	The engine room was found clean and sufficient lighting, without significant rust, leakage or temporary repairs to the bilge pipelines and underwater valves.	☒	☐	☐	☐
2	The main equipment was effectively maintained at intervals specified by the manufacturer.	☐	☒	☐	☐
3	The insulation protection of the main switchboard was found in place, and the grounding fault monitoring device was operating normally.	☐	☒	☐	☐
4	The appearance of all switches, alarm lights, electrical instruments, and monitoring screens on the main switchboard were found normal.	☐	☒	☐	☐
5	The surface of the fuel/lubricating oil separator and fuel supply unit was found to be free of a large amount of oil stains and in good condition.	☐	☒	☐	☐
6	The appearance of the main generator was found clean, without significant oil stains on the chassis. The pipelines and components were basically free of rust.	☐	☒	☐	☐
7	The monitoring devices of the main and auxiliary machines were complete and in a normally open state, and undergo regular inspections.	☐	☒	☐	☐
8	The high-pressure fuel pipes of the main and auxiliary engines were double sleeves, equipped with leakage alarm devices or splash guards.	☐	☒	☐	☐
9	The casing of the main engine's shaft generator was found intact, without aging and cracking on the wiring harness.	☐	☒	☐	☐
10	The nameplate of the steering gear was found consistent with the certificate and and personnel protection measures were in place.	☐	☒	☐	☐
11	No leakage was found at the joints, valves, and oil cylinders of the steering gear piping system. The relief valves and pressure gauges at both ends of the oil cylinder were found in normal condition.	☐	☒	☐	☐
12	The compass and rudder horn in the steering gear room were consistent with the bridge, and the readings were clear. The working schematic	☐	☒	☐	☐

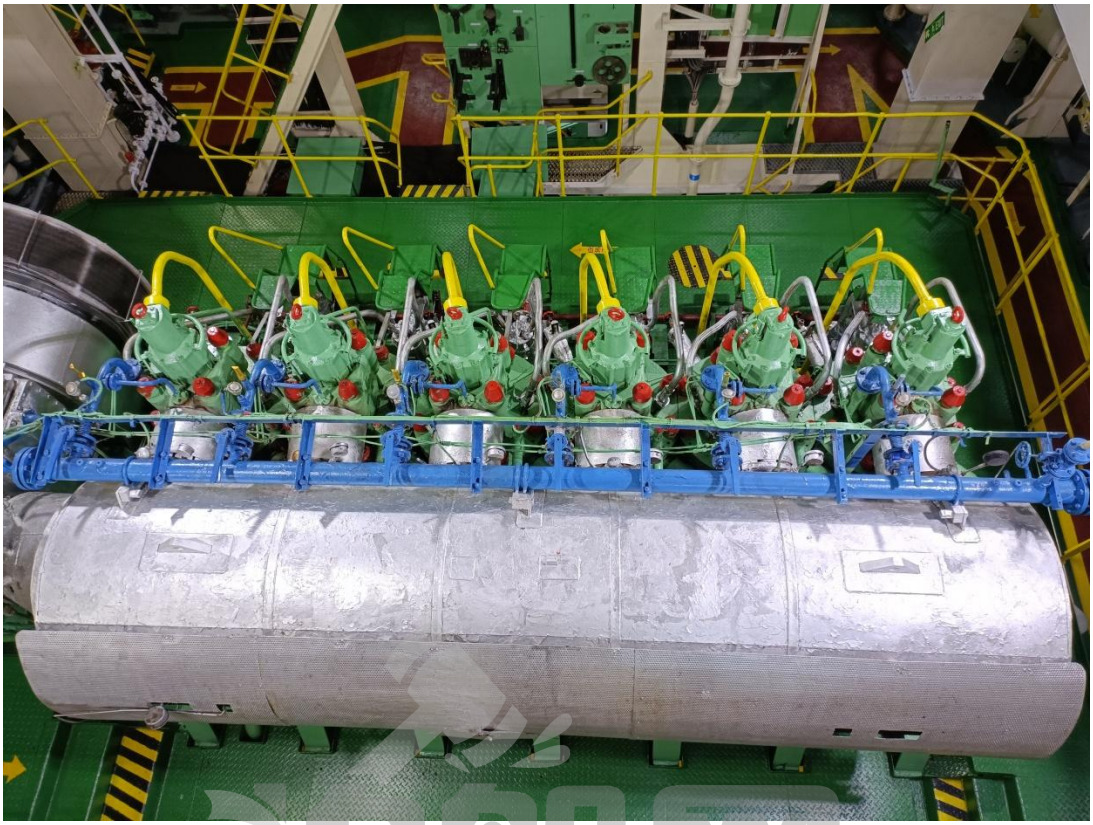
	diagrams and operating procedures were posted.				
13	The indicator light and panel display on the emergency switchboard were in a normal state.	☐	☒	☐	☐
14	The emergency generator, wires, and the distribution board casing has a grounding wire.	☐	☒	☐	☐
15	The voltage of the emergency generator set starting battery was found normal, and with replacement or inspection record.	☐	☒	☐	☐
16	The liquid level in the fuel tank of the emergency generation diesel engine was at a reasonable position.	☐	☒	☐	☐
17	The nameplate of the boiler was consistent with the certificate, and the safety valve was in good condition, without significant rust or leakage.	☐	☒	☐	☐
18	The boiler water level gauge can display clearly, the valve components were found active, without blockage or dripping.	☐	☐	☒	☐
19	The boiler safety valve was found intact, without leakage in the steam pipeline and valve, and the outer surface insulation was wrapped intact。	☐	☒	☐	☐
20	No leakage was found in the fuel supply pipeline of the boiler, and with a drip tray below the combustion device.	☐	☒	☐	☐
21	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.	☐	☒	☐	☐

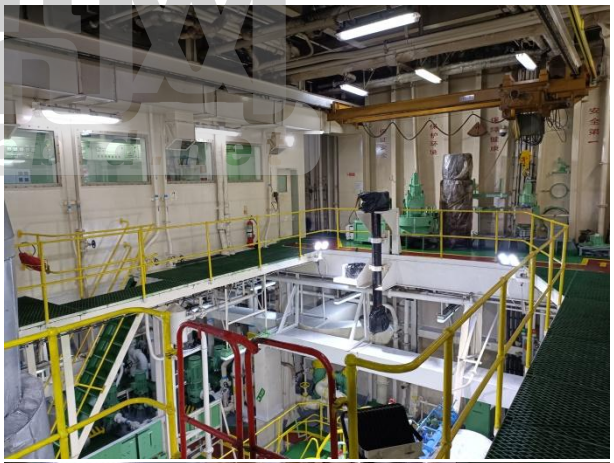
Note: The above inspection items were found in "Fair to good" level overall.

Concern:

The running time of the M/E since the last maintenance.

Cylinder No.	High pressure oil pump (hours)	After lifting cylinder (hours)
1	4705.9	8224.7
2	1199.7	1544.3
3	4327.4	1917
4	1258.3	390.7
5	4921.4	2775.3
6	5475.2	3101.6



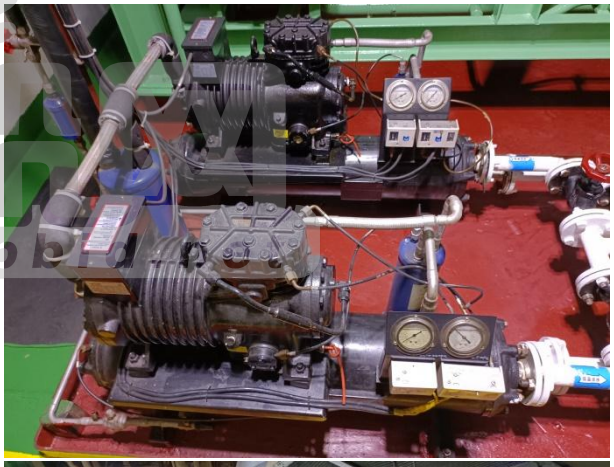



至主机
NO1
至辅机


Danger
同步补偿机

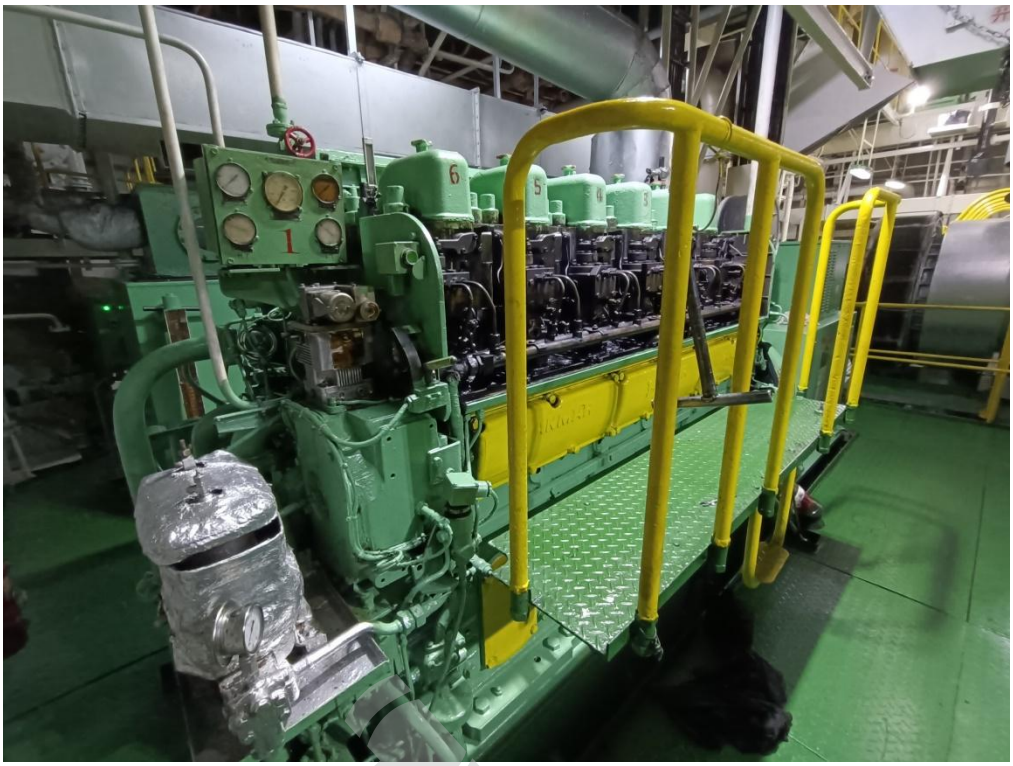

护环境

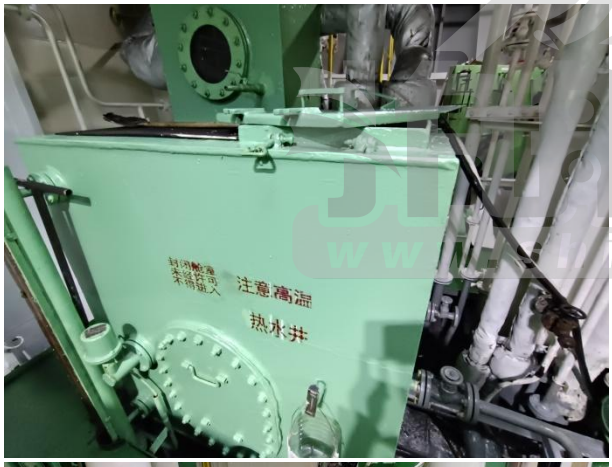

Danger
110 volts



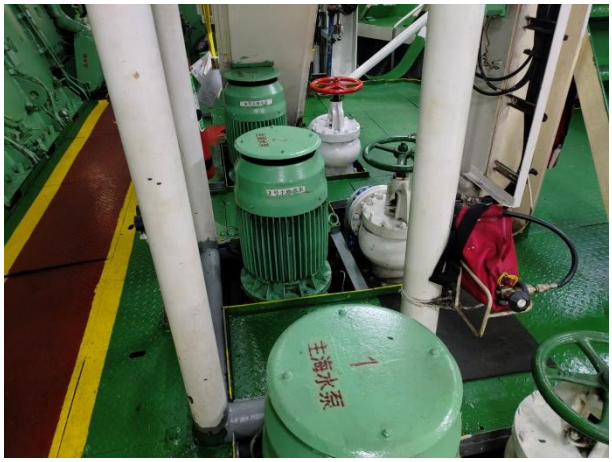




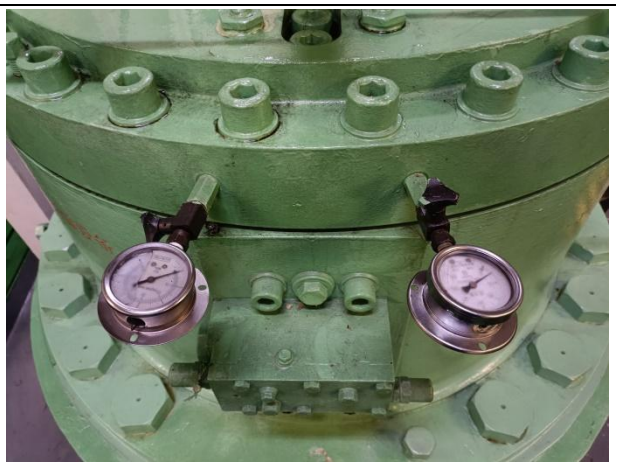



注意高温
热水井


CN20014078348


主海水泵


压载泵



Key concerns

No.	Description
1	The ship has 5 cargo holds with double bottom and double hull, and is equipped with hydraulic folding hatch covers.
2	The ship has completed the annual survey in Qinhuangdao on November 26th, 2023, and the special survey in Nantong on January 3rd, 2022.
3	The ship was built before September 1st, 2009, the M/E and A/E on board do not need to meet the Nox emission control requirement.
4	4 sets cranes with 30T on board have been deactivated.
5	The minimum safety manning is 14 persons, and the maximum number of crew members is 25 persons.
6	The deficiencies which found by FSCO inspection in the past 2 years were basically general items, without detention item, and all defects have been corrected.
7	In recent voyages, the ship has been loaded with magnesite mixture, iron ore Brazilian mixed powder, and iron ore ultra fine powder, with the rest mainly loaded with coal.
8	The fuel oil consumed by 1# auxiliary engine is HFO, and 2# is MGO. 1 set A/E will be used during berthing at the port, and two sets will be used during hatch cover opening.
9	Large areas of rust were found in the structure of the cargo hold, as well collision marks caused by loading and unloading.
10	Large area of rust found on the inner side of the hatch coaming.
11	4# Cylinder has been running for 390 hours since recent maintenance, while 1# cylinder has been running for 8224 hours since the last maintenance.

Technical Report Attachment

Annex 1 : Grade details

Item	Grade
Performance Condition	**30%**
Certificate	4.5
Inspection	4.0
Speed and Fuel Consumption	3.5
Appearance Condition	**40%**
Galley & Accommodation	4.0
Lifesaving Equipment	4.0
Fire & Safety Appliance	4.5
Pollution Control	4.0
Navigating Bridge & Communication Equipment	4.0
Hull and Deck	3.5
Cargo Hold	3.5
Engine Room and Machinery	4.0
Mechanical Working Condition	**30%**
M/E	4.0
Main Generator	4.0
Windlass	3.5
Winch	3.5
Steering Gear	4.0
Overall	**3.9**

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.