

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 12 AUG 1925

Date of writing Report 10 When handed in at Local Office -7 AUG. 1925 Port of Sunderland
 No. in Survey held at Sunderland Date, First Survey 25 Feb Last Survey 4 Aug 1926
 Reg. Book. 39009 on the New steel S.S. "FIRE GLOW" (Number of Visits 25) Gross 1260.90
 Built at Sunderland By whom built J. P. Austin & Son Ltd. Yard No. 309 When built 1925
 Engines made at Sunderland By whom made N. E. Marine Eng Co Ltd Engine No. 2609 when made 1925
 Boilers made at Sunderland By whom made N. E. Marine Eng Co Ltd Boiler No. 2609 when made 1925
 Registered Horse Power Owners Gas, Light & Coke Co Port belonging to London
 Nom. Horse Power as per Rule 158 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted no

ENGINES, &c.—Description of Engines.

Triple Expansion
 Dia. of Cylinders 18"-30"-49" Length of Stroke 33" Revs. per minute 79 No. of Cylinders 3 No. of Cranks 3
 Dia. of Crank shaft journals as per rule 9.46" as fitted 9.2" Dia. of Crank pin 9.2" Crank webs Mid. length breadth 15.34" Thickness parallel to axis 4.34"
 Diameter of Thrust shaft under collars as per rule 9.46" as fitted 9.2" Diameter of Tunnel shaft as per rule 9.013" as fitted none fitted Mid. length thickness 5.15" Thickness around eye-hole 5"
 Is the Screw shaft as fitted 10.58" Is the Screw shaft fitted with a continuous liner the whole length of the stern tube yes Is the after end of the liner made watertight in the propeller boss yes
 If the liner is in more than one length are the joints burned yes If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with plastic material insoluble in water and non-corrosive yes
 If two liners are fitted, is the shaft lapped or protected between the liners yes Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated yes Length of Stern Bush 42 1/2" Diameter of Propeller 15'3" square feet.
 Pitch of Propeller 13'-3" No. of Blades 4 State whether Moveable No Total Surface 55
 No. of Feed Pumps fitted to the Main Engines 2 Diameter of ditto 3" Stroke 15" Can one be overhauled while the other is at work yes
 No. of Bilge Pumps fitted to the Main Engines 2 Diameter of ditto 3 1/2" Stroke 15" Can one be overhauled while the other is at work yes
 Total number and size of power driven Feed and Bilge Auxiliary Pumps One 5 1/2" x 3 1/2" x 5"
 No. and size of Pumps connected to the Main Bilge Line One Ballast Pump 9" x 11" x 10"
 No. and size of Ballast Pumps One 9" x 11" x 10" No. and size of Lubricating Oil Pumps, including Spare Pump yes
 Are two independent means arranged for circulating water through the Oil Cooler yes No. and size of suction connected to both Main Bilge Pumps and Auxiliary and in Holds, &c. Two 2 1/2" dia
 Bilge Pumps;—In Engine and Boiler Room 2 @ 2 1/2" dia
apt. Hold 2 @ 2 1/2" dia

No. and size of Main Water Circulating Pump Bilge Suctions

one @ 5" dia No. and size of Donkey Pump Direct Suctions yes
 to the Engine Room Bilges one @ 3 1/2" dia Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes yes
 Are the Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges yes
 Are all connections with the sea direct on the skin of the ship yes Are they Valves or Cocks Both
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates yes Are the Discharge Pipes above or below the deep water line main below other above
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel yes Are the Blow Off Cocks fitted with a spigot and brass covering plate yes
 What Pipes are carried through the bunkers Hold Suctions How are they protected Limbs Boards
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yes
 Is the arrangement of Valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one compartment to another yes Is the Screw Shaft Tunnel watertight not fitted Is it fitted with a watertight door worked from
 Total Heating Surface of Boilers 2550 sq. ft. Working Pressure 180 lbs. sq.

MAIN BOILERS, &c.—(Letter for record (S))

Is Forced Draft fitted no No. and Description of Boilers One - Single ended
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? yes
 IS A DONKEY BOILER FITTED? yes If so, is a report now forwarded? yes

PLANS. Are approved plans forwarded herewith for Shafting

(If not state date of approval) yes Main Boilers yes Auxiliary Boilers yes Donkey Boilers yes
 General Pumping Arrangements yes Oil fuel Burning Piping Arrangements yes

SPARE GEAR. State the articles supplied:—

1. Cast Iron propeller, 2 Bottom end bolts and nuts, 2 Top end bolts and nuts,
 2 Main bearing bolts and nuts, 6 Coupling bolts and nuts, 2 Feed pump
 valves, 2 Bilge pump valves, Assorted Helt and nuts, plates & bars,
 1 Safety valve spring, 6 Boiler Tubes

The foregoing is a correct description,

FOR THE NORTH EASTERN MARINE ENGINEERING CO. LTD.

C. T. Adams Manufacturer.

Manager.



© 2021

Lloyd's Register
Foundation

W37-0108

1925. Feb. 25. Mar. 10. Apr. 2. 17. 22. 29. May. 4. 6. 11. 14. 20. 26. 27. June 3. 10. 11. 12.
 During progress of work in shops - - 15.16
 Dates of Survey while building
 During erection on board vessel - - June 23. 26. July. 1. 2. 3. 6. 10. 17. 20. Aug. 4.
 Total No. of visits 29

Dates of Examination of principal parts - Cylinders	14-5-25	Slides	14-5-25
Covers	14-4-25	Pistons	3-6-25
Connecting rods	3-6-25	Crank shaft	14-5-25
Tunnel shafts	none fitted	Screw shaft	11-6-25
Stern tube	11-6-25	Engine and boiler seatings	1-4-25
Completion of pumping arrangements	3-4-25	Boilers fixed	2-4-25
Completion of fitting sea connections	12-6-25	Stern tube	12-6-25
Main boiler safety valves adjusted	3-4-25	Thrust shaft	14-5-25
Material of Crank shaft	Ingot Steel	Propeller	3-6-25
Material of Thrust shaft	Ingot Steel	Engines holding down bolts	1-4-25
Material of Tunnel shafts		Engines tried under steam	3-4-25
Material of Screw shafts	Ingot Steel	Screw shaft and propeller	23-6-25
Material of Steam Pipes	Lap welded steel	Thicknes of adjusting washers	Fore 1/2" Aft 7/16"
Is an installation fitted for burning oil fuel	No	Identification Mark on Do.	LLOYDS No 488N G.A. 14-5-25
Have the requirements of the Rules for carrying and burning oil fuel been complied with		Identification Mark on Do.	LLOYDS No. 4242 G.A. 14-5-25
Is this machinery duplicate of a previous case	No	Identification Marks on Do.	
		Identification Marks on Do.	LLOYDS NO 4242 G.A. 11-6-25
		Test pressure	540 lbs
		Date of Test	1-4-25 & (Feb) 18-8-25
		Is the flash point of the oil to be used over 150°F.	✓
			✓
			✓

General Remarks (State quality of workmanship, opinions as to class, &c.)
 The materials and workmanship are good. The machinery has been constructed under special survey and tried under working conditions and is eligible in my opinion for Classification and the record of +L.M.C. 4-25.

It is submitted that
 this vessel is eligible for
 THE RECORD. +L.M.C. 8.25 C.L.

[Signature]
 13.8.25

SUNDERLAND

The amount of Entry Fee ... £ 3 : 0 :
 Special ... £ 39 : 10 :
 Donkey Boiler Fee ... £ : :
 Travelling Expenses (if any) £ : :

Committee's Minute
 Assigned
 FRI. 14 AUG 1925
 + L.M.C. 8.25
 C.L.

George Anderson
 Engineer Surveyor to Lloyd's Register of Shipping.