

Rpt. 4b.

REPORT ON OIL ENGINE MACHINERY.

No. 11852
-1 DEC 1936

Received at London Office

Date of writing Report 19... When handed in at Local Office 30. 11. 1936 Port of Belfast
 No. in Survey held at Belfast Date, First Survey 27. April 1936 Last Survey 28. 11. 36 19...
 Reg. Book. Number of Visits 15

Single
Twin
Triple
Quadruple
Screw vessel

Walmer Castle

Tons { Gross 906
Net 350

Built at Belfast By whom built Harland & Wolff L. Yard No. 983 When built 1936
 Engines made at Belfast By whom made Harland & Wolff L. Engine No. 983 When made 1936
 Donkey Boilers made at ✓ By whom made ✓ Boiler No. ✓ When made ✓
 Brake Horse Power 2250 Owners Union Castle Mail S.S. Co. L. Port belonging to London
 Nom. Horse Power as per Rule 538.8 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
 Trade for which vessel is intended 539 United Kingdom and Continent

OIL ENGINES, &c. Type of Engines Diesel principle 35% 2 or 4 stroke cycle Two Single or double acting single
 Maximum pressure in cylinders 700 lbs Diameter of cylinders 500% Length of stroke 900% No. of cylinders 8 No. of cranks 8
 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 698% Is there a bearing between each crank Yes
 Revolutions per minute 140 Flywheel dia. 1654% Weight 1000 Kgs Means of ignition Compression Kind of fuel used Diesel Oil
 Crank Shaft, dia. of journals as per Rule approved 27/5/36 Crank pin dia. 340% Crank Webs Mid. length breadth 800% Thickness parallel to axis 208%
 as fitted 340% 115 cent Mid. length thickness 208% Thickness around eye hole 153%
 Flywheel Shaft, diameter as per Rule approved 15/4/36 Thrust Shaft, diameter at collars as per Rule approved 27/5/36
 as fitted ✓ Intermediate Shafts, diameter as fitted 10 1/4" as fitted 306%
 Tube Shaft, diameter as per Rule approved 15/4/36 Is the tube shaft fitted with a continuous liner Yes
 as fitted ✓ Screw Shaft, diameter as fitted 11 1/2" as per rule 1 1/2" Is the after end of the liner made watertight in the
 Bronze Liners, thickness in way of bushes as per Rule approved Thickness between bushes as fitted 1 1/8" 1 1/32"
 as fitted ✓ If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner ✓
 propeller boss Yes If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive ✓
 If two liners are fitted, is the shaft lapped or protected between the liners ✓ Is an approved Oil Gland or other appliance fitted at the after end of the tube
 shaft No If so, state type ✓ Length of Bearing in Stern Bush next to and supporting propeller 3'-11"
 Propeller, dia. 4'-3" Pitch 13'-0" No. of blades 4 Material Mang. Bronze Whether Moveable No Total Developed Surface 42 sq. feet
 Method of reversing Engines Air Motor Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication
Forced Thickness of cylinder liners 36% Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with
 non-conducting material lagged If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine ✓
 Cooling Water Pumps, No. Two Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes
 Bilge Pumps worked from the Main Engines, No. ✓ Diameter ✓ Stroke ✓ Can one be overhauled while the other is at work ✓
 Pumps connected to the Main Bilge Line { No. and Size Two, each 70 tons/hr.
 How driven Electric Motor
 Ballast Pumps, No. and size Two same pumps used for bilge Lubricating Oil Pumps, including Spare Pump, No. and size Two, each 70 tons/hr.
 Are two independent means arranged for circulating water through the Oil Cooler Yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge
 Pumps, No. and size:—In Machinery Spaces 2- 2 1/2" bilge 2- 2" Crank pit wells 1- 2 1/2" tunnel well In Pump Room ✓
 In Holds, &c. 2- 2 1/2" N°1 2- 2 1/2" N°2 2- 2 1/2" N°3
 Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size Two 4" dia.
 Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Yes Are the Bilge Suctions in the Machinery Spaces
 led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges Yes
 Are all Sea Connections fitted direct on the skin of the ship Yes Are they fitted with Valves or Cocks Valves
 Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates Yes Are the Overboard Discharges above or below the deep water line Below
 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 ✓
 What pipes pass through the bunkers None How are they protected ✓
 What pipes pass through the deep tanks ✓ Have they been tested as per Rule ✓
 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 Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Upper deck
 If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork ✓

Main Air Compressors, No. 3 No. of stages 2 Diameters 280-250% Stroke 190% Driven by Aux. Engines
 Auxiliary Air Compressors, No. ✓ No. of stages ✓ Diameters ✓ Stroke ✓ Driven by ✓
 Small Auxiliary Air Compressors, No. 1 No. of stages 2 Diameters 2 3/4" - 1 1/8" Stroke 3" Driven by Diesel Engine
 Scavenging Air Pumps, No. Two Capacity 124 m³/min each at Stroke 600 rpm. Press 1.2 atm abs. Driven by Main engines
 Auxiliary Engines crank shafts, diameter as per Rule See Glasgow apt N° 57599 No. 3
 as fitted attached Position Port side engine room

AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes
 Can the internal surfaces of the receivers be examined and cleaned Yes Is a drain fitted at the lowest part of each receiver Yes
 High Pressure Air Receivers, No. One Cubic capacity of each 150 litres Internal diameter 1'-6" thickness 3/8"
 Seamless, lap welded or riveted longitudinal joint riveted Material Steel Range of tensile strength 28/32 tons Working pressure Actual 375 lb/sq. in.
 Starting Air Receivers, No. Two Total cubic capacity 380 cub. ft. Internal diameter 4'-0" thickness 45"
 Seamless, lap welded or riveted longitudinal joint riveted Material Steel Range of tensile strength 28/32 tons Working pressure Actual 356 lb/sq. in.

W138-0183

IS A DONKEY BOILER FITTED?

No

If so, is a report now forwarded?

Is the donkey boiler intended to be used for domestic purposes only?

PLANS. Are approved plans forwarded herewith for Shafting (If not, state date of approval)

No

Receivers

Yes

Separate Tanks

Yes

Donkey Boilers

General Pumping Arrangements

Yes

Oil Fuel Burning Arrangements

SPARE GEAR.

Has the spare gear required by the Rules been supplied?

State the principal additional spare gear supplied

The foregoing is a correct description.

A. J. Marshall

Manufacturer.

Assistant Secretary

1936
Dates of Survey while building
During progress of work in shops -
During erection on board vessel -
Total No. of visits

Dates of Examination of principal parts - Cylinders 1.4.29-6.36 Covers 1/4.36 to 2/7.36 Pistons June & July. Rods Connecting rods 12.8.36

Crank shaft 29-6-36 Flywheel shaft Thrust shaft 30-6-36 Intermediate shafts 20-8-36 Tube shaft

Screw shaft 12-8-36 Propeller 17-9-36 Stern tube 25-8-36 Engine seatings 27-8-36 Engines holding down bolts 5-10-36

Completion of fitting sea connections 17-9-36 Completion of pumping arrangements 19.11.36 Engines tried under working conditions 18.11-20.11.36

Crank shaft, Material Steel Identification Mark 249. Flywheel shaft, Material Identification Mark

Thrust shaft, Material Steel Identification Mark 329. Intermediate shafts, Material Steel Identification Marks 510

Tube shaft, Material Identification Mark Screw shaft, Material Steel Identification Mark 510

Is the flash point of the oil to be used over 150° F. Yes

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with Yes

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo No If so, have the requirements of the Rules been complied with

If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with

Is this machinery duplicate of a previous case No If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.)

The machinery of this vessel has been constructed under special survey and in accordance with the Rules. The workmanship and materials are good. The main engines and auxiliaries have been efficiently installed and tried out under working conditions with satisfactory results. In our opinion the vessel is eligible for notation in the Society's Register Book

+ LMC 11-36 CL. OIL ENGINES

The amount of Entry Fee .. £ 4 : 0 :
Special ... £ 101 : 19 :
Donkey Boiler Fee ... £ 4 : 4 :
Travelling Expenses (if any) £ : :
When applied for, 30.11.1936
When received, 11.12.36

Committee's Minute

FRI. 4 DEC 1936

Assigned

+ Lmb. 11.36 Oil Eng. Ch.

Charles J. Hunter & R. Lee Amess
Engineer Surveyors to Lloyd's Register of Shipping.



© 2020

Lloyd's Register Foundation