

H5

Rpt. 4.

No. 16654

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 11.11.23

Date of writing Report 19 When handed in at Local Office 9.7.28 Port of WEST HARTLEPOOL
 No. in Survey held at West Hartlepool Date, First Survey 2nd Feb 1928. Last Survey 4th July 1928
 Reg. Book. on the S.S. "ALPHACCA" (Number of Visits 74...)
 Built at Sunderland By whom built Wm Gray & Co. Ltd. Yard No. 1004 When built 1928
 Engines made at West Hartlepool By whom made Central Marine Engine Works Engine No. 1004 when made 1928
 Boilers made at ditto By whom made Engine Works Boiler No. 1004 when made 1928
 Registered Horse Power Owners Port belonging to
 Nom. Horse Power as per Rule 592 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes
 Trade for which Vessel is intended Ocean going

ENGINES, &c.—Description of Engines Triple expansion Revs. per minute 73
 Dia. of Cylinders 27"-44"-73" Length of Stroke 51 No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule 14.65 as fitted 15" Crank pin dia. 15" Crank webs Mid. length breadth 22" Thickness parallel to axis 9 3/8"
 Intermediate Shafts, diameter as per Rule 13.95 as fitted 14 1/2" Thrust shaft, diameter at collars as per Rule 14.65 as fitted 15"
 Tube Shafts, diameter as per Rule as fitted Screw Shaft, diameter as per Rule 15.45 as fitted 16" Is the tube screw shaft fitted with a continuous liner yes
 Bronze Liners, thickness in way of bushes as per Rule .772 as fitted 3/32" Thickness between bushes as per Rule .579 as fitted 1/32" 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 junctions made by fusion through the whole thickness of the liner
 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 Length of Bearing in Stern Bush next to and supporting propeller 5'-2 5/8"
 Propeller, dia. 18'-0" Pitch 17'-6" No. of Blades 4 Material Bronze whether Movable no Total Developed Surface 140 sq. feet
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 4 1/2" Stroke 28" Can one be overhauled while the other is at work yes
 Feed Pumps No. and size 2. 12" x 9" x 21. Simplex Pumps connected to the Main Bilge Line No. and size 2 Main & 1 10" x 11 1/2" x 10 duplex How driven Steam
 Ballast Pumps, No. and size 1 10" x 11 1/2" x 10 Dup. Lubricating Oil Pumps, including Spare Pump, No. and size
 Are two independent means arranged for circulating water through the Oil Cooler Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room 3 of 3" dia. Tunnel 1 of 2 1/4"
 In Holds, &c. No 1 2 of 3" dia. No 2 2 of 3" dia. Reserve hold 2 of 2 1/2" No 3 2 of 3" dia. No 4 2 of 3" dia.
 Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 of 9" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 of 5" 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 Sea Connections fitted direct on the skin of the ship yes Are they fitted with Valves or Cocks yes
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold 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 yes
 What Pipes pass through the bunkers. Suctions from forward hold. How are they protected Strong wood casings.
 What pipes pass through the deep tanks none 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

MAIN BOILERS, &c.—(Letter for record r) Total Heating Surface of Boilers 8934 sq. ft.
 Is Forced Draft fitted yes No. and Description of Boilers 3 single ended Working Pressure 200 lbs
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? yes
 IS A DONKEY BOILER FITTED? no If so, is a report now forwarded?
 PLANS. Are approved plans forwarded herewith for Shafting Main Boilers yes Auxiliary Boilers Donkey Boilers
 Superheaters yes General Pumping Arrangements yes Oil fuel Burning Piping Arrangements

SPARE GEAR. State the articles supplied:— 2 bolts & nuts for connec. rod top ends. 2 ditto for bottom ends. 2 ditto for main bearings. 1 set coupling bolts & nuts. 1 set rings for H.P. & M.P. pistons. 1 set crosshead brasses 1 set crank pin bearings. 1 valve spindle. 1 set air pump valves. 4 hotwell pump valves 2 bilge pump valves. 1 air pump rod. 1 propeller shaft 1 cast iron propeller. 6 piston bolts. For main feed pumps.— 1 set piston springs. 1 set valves & springs 6 bucket rings. For Cent. Chic. pump.— 1 piston. 1 piston valve. 1 set crosshead. crank pin & main bearing brasses. 1 impeller shaft. For Ballast pump. 1 piston rod. 1 pump rod. 4 valves. Various spare parts for fan engine. 5% Boiler tubes. 2 stay tubes. 1/2 set safety valve springs 2 feed check valves.

The foregoing is a correct description,
 FOR THE CENTRAL MARINE ENGINE WORKS,
 (W. Gray & Co. Ltd.)
 Wm H. Seamey
 DIRECTOR.

Manufacturer.



W141-0016

NOTE.—The words "if not, state whether, and when, one will" are printed in small type in the margin of this form.

1928 Dec. 2, 3, 6, 7, 8, 9, 13, 15, 16, 17, 20, 22, 23, 28, 29 Mar. 1, 5, 6, 19, 20, 21, 22, 30 Apr. 2, 3, 5, 12, 13, 16, 17, 18, 19, 20, 23, 24, 25
 During progress of work in shops - - -
 X. 27, 30 May. 1, 3, 4, 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 21, 22, 24, 25, 30, 31 June 1, 4, 5, 7, 8, 11, 12, 13, 14, 15, 16, 19, 21, 28 July 3, 4
 Dates of Survey while building
 During erection on board vessel - - -
 Total No. of visits 7 1/2

Dates of Examination of principal parts—Cylinders 22.3.28 - 16.5.28 Slides 11.5.28 - 15.5.28 Covers 20.3.28 - 15.5.28.
 Pistons 7.5.28 - 14.5.28. Piston Rods 28.2.28 - 21.5.28 Connecting rods 24.2.28 - 10.5.28
 Crank shaft 6.2.28 - 4.5.28. Thrust shaft 2.4.28 - 7.5.28. Intermediate shafts 13.4.28 - 17.5.28
 Tube shaft ✓ Screw shaft 5.4.28 - 18.5.28 Propeller 15.5.28 - 17.5.28.
 Stern tube 15.5.28 - 18.5.28 Engine and boiler seatings 22.2.28 - 5.28 Engines holding down bolts 4.6.28 - 15.6.28
 Completion of fitting sea connections 19.6.28
 Completion of pumping arrangements 15.6.28. Boilers fixed 4.6.28 Engines tried under steam 4-7-28
 Main boiler safety valves adjusted 28.6.28. Thickness of adjusting washers P.P. 5/16 S 2 1/4 C.P. 9/32 S 9/32 S.P. 1/2 S 3/8 Superheater F. 9/16 C 5/16 S 1/2
 Crank shaft material S.M. Ingot Stl. Identification Mark 6426 H. Thrust shaft material S.M. Ingot Stl. Identification Mark 3711 J.L.
 Intermediate shafts, material S.M. Ingot Stl. Identification Marks 1036, 1184, MK Tube shaft, material ✓ Identification Mark ✓
 Screw shaft, material S.M. Ingot Stl. Identification Mark W. 3795 J.L. 3708 3759 J.L. 1572 V.S. Steam Pipes, material S.D. Steel Test pressure 600 lb. Date of Test 30.5.28
 Is an installation fitted for burning oil fuel no Is the flash point of the oil to be used over 150°F. ✓
 Have the requirements of the Rules for the use of oil as fuel been complied with ✓
 Is the vessel (not being an oil tanker) fitted for carrying oil as cargo ✓ If so, have the requirements of the Rules 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.)
 This vessel's machinery has been built and installed under Special Survey, and is in accordance with the Rules. The materials and workmanship are good and efficient. On completion it was tried under full steam and found satisfactory, and is now eligible in our opinion to have the notation ∇ L.M.C. 7.28

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 7.28 F.D. CL

J.S.A. 12/9/28 J.R.K.

The Surveyors are requested not to write on or below the space for Committee's Minute.

The amount of Entry Fee ... £ 6 : :
 Special ... £ 104 : 12 :
 Donkey Boiler Fee ... £ : :
 Travelling Expenses (if any) £ : :
 When applied for, 10.7.19.28
 When received, 11.8.28

R.D. Shilston & A. Daintith.
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute
 Assigned + L.M.C. 7.28

