

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 5 MAR 1930

Date of writing Report 19 30 When handed in at Local Office 3. 3. 1930 Port of Glasgow
 No. in Survey held at Glasgow Date, First Survey 13. 8. 29 Last Survey 28-2-1930
 Reg. Book. on the new steel SIALUNE (Number of Visits 55)
 Built at Glasgow By whom built Blythswood SB Co. Ld. Yard No. 27 When built 1930
 Engines made at Glasgow By whom made D & W Henderson & Co. Ld. Engine No. 14F when made 1930
 Boilers made at Glasgow By whom made D & W Henderson & Co. Ld. Boiler No. 14F when made 1930
 Registered Horse Power 432 Owners Union S.S. Co. of W. G. Port belonging to Hobart
 Nom. Horse Power as per Rule 432 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes
 Trade for which Vessel is intended P 5-11-25

ENGINES, &c.—Description of Engines Triple expansion Revs. per minute 89
 Dia. of Cylinders 23 1/2" - 40 1/2" - 66" Length of Stroke 45" No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals 12.89 as per Rule 13 1/4" Crank pin dia. 13 1/4" Crank webs 19 3/4" Mid. length breadth 8 5/16" Thickness parallel to axis 8 9/16"
 as fitted 13 1/4" Mid. length thickness 8 5/16" shrunk Thickness around eye-hole 5 13/16"
 Intermediate Shafts, diameter 12.28" as per Rule 12 9/16" as fitted Thrust shaft, diameter at collars 12.89" as per Rule 13 1/4" as fitted
 Tube Shafts, diameter 13.61" as per Rule 14 1/4" as fitted Is the tube shaft fitted with a continuous liner yes
 as fitted 13.61" as fitted 14 1/4" Is the screw shaft fitted with a continuous liner yes
 Bronze Liners, thickness in way of bushes .734" as per Rule 3/4" as fitted Thickness between bushes .549" as per Rule 2" as fitted 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 no
 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 no
 If two liners are fitted, is the shaft lapped or protected between the liners no 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 4-9"
 Propeller, dia. 16'-0" Pitch 16:3 No. of Blades 4 Material Bronze whether Moveable no Total Developed Surface 85 sq. feet
 Feed Pumps worked from the Main Engines, No. 2 Diameter 4 1/4" Stroke 2 1/2" Can one be overhauled while the other is at work yes
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 4 1/4" Stroke 2 1/2" Can one be overhauled while the other is at work yes
 Feed Pumps { No. and size 2 @ 9 1/2" x 7" x 2 1/2" Weirs Pumps connected to the { No. and size Geneva 13" x 6 1/4" x 10" and ballast pump
 How driven steam Main Bilge Line How driven steam
 Ballast Pumps, No. and size 1 @ 10" x 11" x 10" Lubricating Oil Pumps, including Spare Pump, No. and size none
 Are two independent means arranged for circulating water through the Oil Cooler no Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps: In Engine and Boiler Room 4 @ 3"
 In Holds, &c. Nº 1 hold - 2 @ 3" Nº 2 hold - 2 @ 3" Nº 3 hold - 2 @ 2 1/2" Tunnel well - 1 @ 2 1/2"

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 @ 8" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 @ 4 1/2"
 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 both
 Are they sized sufficiently high on the ship's side to be seen without lifting the stowhold plates yes Are the Overboard Discharges above or below the deep water line 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 pass through the bunkers none How are they protected no
 What pipes pass through the deep tanks none Have they been tested as per Rule no
 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 S) Total Heating Surface of Boilers 6345 sq. ft.
 Is Forced Draft fitted yes No. and Description of Boilers 2 SB Working Pressure 200
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? yes
 IS A DONKEY BOILER FITTED? no If so, is a report now forwarded? no
 PLANS. Are approved plans forwarded herewith for Shafting yes Main Boilers yes Auxiliary Boilers no Donkey Boilers no
 Superheaters no General Pumping Arrangements with ship report Oil fuel Burning Piping Arrangements yes

SPARE GEAR. State the articles supplied:— As per rules and in addition, - one piston rod, one valve spindle, one air pump rod, one set of air pump valves, one complete set of piston rings, two top end bushes, one bottom end bush, one main bearing, bottom half bush, one screw shaft and one cast iron propeller.
One crank web, one crank pin and one crank coupling end.

The foregoing is a correct description,
 FOR DAVID & W. HENDERSON & CO., LTD.

H. Patell

DIRECTOR

Manufacturer.



© 2020

Lloyd's Register Foundation

002471-002434-0016

1929 Aug 13 Sep 10 12 16 17 24 Oct 3 4 10 15 17 18 22 23 24 25 29 Nov 4 6 8 11 12 13 14 15 18 19

Dates of Survey while building: During progress of work in shops... During erection on board vessel... Total No. of visits 55

Dates of Examination of principal parts - Cylinders 11-29 Slides 22-10-29 Covers 15-10-29 Pistons 16-9-29 Piston Rods 6-11-29 Connecting rods 24-9-29 Crank shaft 10-10-29 Thrust shaft 10-10-29 Intermediate shafts 12-11-29 Tube shaft - Screw shaft 22-11-29 Propeller 15-11-29 Span 28-11-29 Stern tube 19-11-29 Engine and boiler seatings 18-12-29 Engines holding down bolts 21-1-30

Completion of fitting sea connections 18-12-29 18-12-29 Completion of pumping arrangements 13-2-30 Boilers fixed 14-1-30 Engines tried under steam 22-2-30 & 28-2-30

Main boiler safety valves adjusted 7-2-30 Thickness of adjusting washers 1 1/2" 9/32" Std. Lh. - P 3/8" 5/32" Crank shaft material 1/2" steel Identification Mark LLOYD'S NO 14F L.C.D. 10-10-29 Thrust shaft material 1/2" steel Identification Mark LLOYD'S NO 14F L.C.D. 10-10-29

Intermediate shafts, material 1/2" steel Identification Marks LLOYD'S NO 14F L.C.D. 12-11-29 Tube shaft, material - Identification Mark - Screw shaft, material 1/2" steel Identification Mark LLOYD'S NO 14F L.C.D. 22-11-29 Steam Pipes, material steel Test pressure 600 Date of Test 20-27-11-29

Is an installation fitted for burning oil fuel yes Is the flash point of the oil to be used over 150°F. yes Have the requirements of the Rules for the use of oil as fuel 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 - 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 materials and workmanship are good. The machinery has been constructed under special survey in accordance with the Rules, satisfactorily fitted in the vessel, tried under steam and found good. It is eligible in my opinion for Classification and the Records L.M.C. 2,30. Fitted for oil fuel 2,30. F.P. above 150° Fah - subject to the water ballast and oil fuel lines being isolated upon arrival at Sydney or Hobart. See below.

NOTE. The double bottom tanks Nos 1, 3, 4 & 8 and the tunnel side tanks, port and starboard, are intended for water ballast only and are permanently connected to the ballast line of piping.

The double bottom tanks Nos 5, 6 & 7 are intended for oil fuel only and are permanently connected to the oil line of piping.

The double bottom tanks No 2, Port & Starboard, are intended for water ballast or oil and a change over device enables each to be connected to either line of piping but prevents either tank being connected to both lines at the same time.

In order to accommodate the necessary quantity of fuel for the voyage to Sydney the double bottom ballast tank No 8 and the side ballast tanks, port and starboard, have been filled with oil through a temporary pipe in the thrust recess - connecting the water ballast and oil fuel lines.

This temporary pipe, shown in red on the attached plan and also painted red for identification in the vessel, should be removed upon the vessel's arrival at Sydney or Hobart, the tee piece on the main ballast line reversed and permanently connected to the tunnel ballast line by means of the pipe, shown dotted on the plan - now carried in the vessel, clipped to the bulkhead in tunnel recess.

The connection to the oil fuel line should be blanked and the removed (temporary) pipe and valve box, put ashore. Sydney surveyors advised. Copy of letter & diagram attached hereto.

The amount of Entry Fee ... £ 5 : Special ... £ 89 : 16 : Donkey Boiler Fee ... £ : Travelling Expenses (if any) £ :

When applied for, 1.3.30. When received, 11.3.30. S. Davies Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 4 - MAR 1930 CERTIFICATE WRITTEN.

Assigned + L.M.C. 2,30 subject to

Fitted for oil fuel 2,30 F.P. above 150°F.

Date of writing Report No. in Reg. Book Survey held at on the Master Engines made at Boilers made at Nominal Horse Power MULTITUBULAR Manufacturers of Steel Total Heating Surface No. and Description of Tested by hydraulic pressure Area of Firegrate in each Area of each set of calorimeters In case of donkey boilers, Smallest distance between Smallest distance between Largest internal dia. of Thickness 1 1/2" long. seams NBS Percentage of strength of Percentage of strength of Thickness of butt straps Material steel Length of plain part Dimensions of stiffening End plates in steam space How are stays secured Tube plates: Material Mean pitch of stay tubes Girders to combustion chamber at centre 3 @ 8 3/4 x in each 3 @ 8 3/4 Tensile strength 265 Pitch of stays to ditto: Working pressure by Rules Thickness 1" Pitch of stays at wide waist Working Pressure Diameter At body of stay, or Over threads Working pressure by Rules Diameter At turned off part, or Over threads

Vertical stamp: Certificate to be sent to Glasgow 3/3/30

