

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

26 FEB 1930

Date of writing Report Feb 21st 1930 when handed in at Local Office Feb 22nd 1930 Port of GLASGOW.
 To. in Survey held at Yroon Date, First Survey 29. 10. 29 Last Survey Feb 20th 1930
 Reg. Book. on the SS. THE EMPEROR. (Number of Visits 20) Tons { Gross 824
 Net 405
 Built at Yroon By whom built Ailsa S.B. Co Ltd Yard No. 414 When built 1930
 Engines made at Yroon By whom made Ailsa S.B. Co Ltd Engine No. 149 when made 1930
 Boilers made at Glasgow By whom made Barclay Curle & Co Ltd Boiler No. A-10 when made 1930.
 Registered Horse Power 115. Owners J. Hay and Sons Ltd Port belonging to Glasgow.
 Nom. Horse Power as per Rule 115. Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
 Trade for which Vessel is intended DE-1-41

ENGINES, &c.—Description of Engines Triple Expansion Revs. per minute 92.
 Dia. of Cylinders 14", 23 1/2", 39" Length of Stroke 30" No. of Cylinders 3. No. of Cranks 3.
 Crank shaft, dia. of journals as per Rule 4.96 Crank pin dia. DE 8 1/8" 01 Crank webs Mid. length breadth 15 1/2" Thickness parallel to axis 5"
 as fitted 8 1/8" Mid. length thickness 5" shrunk Thickness around eye-hole 3 1/8"
 Intermediate Shafts, diameter as per Rule 4.56 Thrust shaft, diameter at collars as per Rule 4.96
 as fitted None as fitted 8 1/8" Mitchell
 Tube Shafts, diameter as per Rule 8.3.4 Is the { tube } shaft fitted with a continuous liner { Yes
 as fitted 8 1/8" { screw }
 Bronze Liners, thickness in way of bushes as per Rule 5.56 Thickness between bushes as per Rule 4.14 Is the after end of the liner made watertight in the
 as fitted 5/8" as fitted 5/8" 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 Close fit.
 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 2'-11"
 Propeller, dia. 11'-6" Pitch 12'-0" No. of Blades 4 Material C. Iron whether Moveable No Total Developed Surface 45.4 sq. feet
 Feed Pumps worked from the Main Engines, No. 2 Diameter 2 1/8" Stroke 15" Can one be overhauled while the other is at work Yes
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 2 1/8" Stroke 15" Can one be overhauled while the other is at work Yes
 Feed Pumps { No. and size 1 Duplex 6" x 4 1/2" x 6" Pumps connected to the { No. and size 1 Duplex 4" x 8" x 8"
 How driven Steam Main Bilge Line { How driven Steam
 Ballast Pumps, No. and size 1 @ 4" x 8" x 8" 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 Three at 2 1/2"
 In Holds, &c. Two @ 3 1/2"

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 @ 4" Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size 1 @ 3" 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 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 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 Hold bilge suction How are they protected Wood protected
 What pipes pass through the deep tanks — Have they been tested as per Rule Yes
 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 None Is it fitted with a watertight door — worked from —

MAIN BOILERS, &c.—(Letter for record (S)) Total Heating Surface of Boilers 2021 sq
 Is Forced Draft fitted No No. and Description of Boilers One S.B. 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 — General Pumping Arrangements — Oil fuel Burning Piping Arrangements —

SPARE GEAR. State the articles supplied:— Two connecting rod top end bolts and nuts.
Two bottom end bolts and nuts. Two main bearing bolts. One set of coupling bolts
One set of feed and bilge pump valves. A quantity of assorted bolts and nuts
Iron of various sizes.

The foregoing is a correct description,
 FOR AILSA SHIPBUILDING CO., LIMITED.

J. M. M. M.
 ENGINEER MANAGER

Manufacturer.



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 Foundation

W1142-0042

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1929 Oct 29 Nov 1-12 Dec 3-10-13-17-19-26 (1930) Jan 9-12-21-24-28-31 Feb 5-10-13-18-20

Dates of Survey while building

During progress of work in shops - - -

During erection on board vessel - - -

Total No. of visits 20

Dates of Examination of principal parts—Cylinders 19-12-29 Slides 13-12-29 Covers 3-12-29

Pistons 13-12-29 Piston Rods 21-1-30 Connecting rods 21-1-30

Crank shaft 14-12-29 Thrust shaft 14-11-29 Intermediate shafts -

Tube shaft - Screw shaft 14-1-30 Propeller 9-1-30

Stern tube 9-1-30 Engine and boiler seatings 28-1-30 Engines holding down bolts 10-2-30

Completion of fitting sea connections 24-1-30

Completion of pumping arrangements 18-2-30 Boilers fixed 10-2-30 Engines tried under steam 20-2-30

Main boiler safety valves adjusted 18-2-30 Thickness of adjusting washers P.V. $\frac{13}{32}$ SV $\frac{4}{16}$

Crank shaft material S Identification Mark LLOYDS No 8517 D.C.B. 14-12-29 Thrust shaft material S Identification Mark LLOYDS No 218 D.C.B. 14-11-29

Intermediate shafts, material - Identification Marks Tube shaft, material / Identification Mark LLOYDS No 218 D.C.B. 14-11-29

Screw shaft, material Identification Mark LLOYDS No 8439 D.C.B. 14-1-30 Steam Pipes, material Copper Test pressure 400 lbs Date of Test 5-10-2-30

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 No If so, have the requirements of the Rules been complied with -

Is this machinery duplicate of a previous case Yes If so, state name of vessel SS. THE VICEROY.

General Remarks (State quality of workmanship, opinions as to class, &c. The machinery has been built under Special Survey in accordance with the Rules of the Society. The workmanship and materials are of good quality. The engines and boiler have been securely fitted on board and tried under steam with satisfactory results. It is submitted that this vessel is eligible for record of LMC 2-30.

It is submitted that this vessel is eligible for record of THE RECORD, + LMC 2-30 cl.

A.G. 22/2/30.

D.A. 27/2/30. J.R.R.

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

The amount of Entry Fee ... £ 3 : 0 :
 2/3 Special ... £ 14 : 5 :
 Donkey Boiler Fee ... £ : :
 Travelling Expenses (if any) £ 3 : 5 :

When applied for, 24 FEB 1930
 When received, 26/2/30

David C Barr.
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 25 FEB 1930

Assigned + LMC 2,30



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