

Rpt. 4.

No. 9428

## REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 24 JUL 1929

Date of writing Report 22/7/1929 When handed in at Local Office 23/7/1929 Port of Glasgow

No. in Survey held at Glasgow. Date, First Survey 21. 6. 29 Last Survey 9<sup>th</sup> July 1929.

Reg. Book. on the S.S. 'MASUNDA' (Number of Visits 46)

Tons { Gross 5250  
Net 3286

Built at Glasgow. By whom built Messrs. A. Stephen & Sons Ltd. Yard No. 524 When built 1929

Engines made at — do — By whom made — do — Engine No. 524 when made 1929

Boilers made at — do — By whom made — do — Boiler No. 524. when made 1929.

Registered Horse Power Owners Port belonging to

Net Horse Power as per Rule 464 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

Trade for which Vessel is intended

ENGINES, &c.—Description of Engines Triple Expansion Revs. per minute 80

Dia. of Cylinders 24" 40" 67" Length of Stroke 61" No. of Cylinders 3 No. of Cranks 3

Crank shaft, dia. of journals as per Rule 13.71" Crank pin dia. 13 3/4" Crank webs Mid. length breadth 18 1/4" Thickness parallel to axis 8 1/2"

Intermediate Shafts, diameter as per Rule 13.06" as fitted 13 3/4" Thrust shaft, diameter at collars as per Rule 13.71" as fitted 13 3/4"

Tube Shafts, diameter as per Rule 14.59" as fitted 14 3/4" Is the { tube } shaft fitted with a continuous liner { Yes

Screw Shaft, diameter as per Rule 14.59" as fitted 14 3/4"

Bronze Liners, thickness in way of bushes as per Rule 7/4" as fitted 3/4" Thickness between bushes as per Rule 5/8" as fitted 5/8" 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 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 Yes

If two liners are fitted, is the shaft lapped or protected between the liners Yes Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft Yes

Length of Bearing in Stern Bush next to and supporting propeller 5'-2"

Propeller, dia. 17'-6" Pitch 17'-6" No. of Blades 4. Material Bronze whether Moveable No Total Developed Surface 101 sq. feet

Feed Pumps worked from the Main Engines, No. 2 Diameter 5" Stroke 27" Can one be overhauled while the other is at work Yes

Bilge Pumps worked from the Main Engines, No. 2 Diameter 5" Stroke 27" Can one be overhauled while the other is at work Yes

Feed Pumps { No. and size 6- 9 1/2" x 7" x 21" Pumps connected to the { No. and size 1- 10 1/2" x 14" x 24" 1- 8" x 6" x 8"

How driven Steam Main Bilge Line How driven Steam

Ballast Pumps, No. and size 1- 10 1/2" x 14" x 24" 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- 3 1/2", 1- 2 1/2"

In Holds, &c. 4- 1 1/2" hold. 2- 3 1/2", 4- 2 2- 3 1/2", 4- 3, 2- 3 1/2", 4- 4 2- 3 1/2"

Main Water Circulating Pump Direct Bilge Suctions, No. and size one 8" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size one 4 3/4"

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 stowhold 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 No. 1-2 Hold Bilge Suctions How are they protected Steel Plate

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 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 6738 sq. ft.

Is Forced Draft fitted Yes No. and Description of Boilers 3 S.E. 3 S.B. Working Pressure 200 lb.

IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes

IS A DONKEY BOILER FITTED? No If so, is a report now forwarded? Yes

PLANS. Are approved plans forwarded herewith for Shafting No. 26.12.29. Main Boilers Yes Auxiliary Boilers Donkey Boilers

Superheaters General Pumping Arrangements Oil fuel Burning Piping Arrangements

SPARE GEAR. State the articles supplied:— 2 both. & top end & main bearing bolts & nuts, 1 screw shaft & propeller, 1 set. of connecting bolts, 1 set. of valves each for feed & ballast pumps, 1 set. H.P. piston rings, 3 feed check valves, 1 safety valve spring, 1 valve spindle, 1 steam chest for feed pump.

The foregoing is a correct description,

ALEXANDER STEPHEN & SONS, LIMITED.

Manufacturer.

Director.



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Lloyd's Register Foundation



Date of writing  
No. in Reg. Book

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Engines made  
Boilers made  
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1929 Jan 23-25-30 Feb. 6-9-14-20-26 Mar 1-6-8-12-18-19-21-26-28-29 Apr 8-11-16-19-22-24-26-30  
May 1-3-7-9-13-23-27-29-31 June 3-4-6-7-10-18-20-26-28 July 3-8  
During progress of work in shops - - -  
Dates of Survey while building  
During erection on board vessel - - -  
Total No. of visits 46  
Dates of Examination of principal parts—Cylinders 7-5-29 Slides 7-5-29 Covers 7-5-29  
Pistons 7-5-29 Piston Rods 24-4-29 Connecting rods 26-4-29  
Crank shaft 3-5-29 Thrust shaft 3-5-29 Intermediate shafts 27-3-29 & 4-4-29  
Tube shaft ✓ Screw shaft 27-5-29 Propeller 27-5-29  
Stern tube 27-5-29 Engine and boiler seatings 27-5-29 Engines holding down bolts 18-6-29  
Completion of fitting sea connections 27-5-29  
Completion of pumping arrangements 18-6-29 Boilers fixed 18-6-29 Engines tried under steam  
Main boiler safety valves adjusted 28-6-29 Thickness of adjusting washers Port B. 2 1/4 5/16 Centre B. 1 3/32 3/8 Star B. 1 1/32 1/32  
Crank shaft material Steel Identification Mark 2831 Thrust shaft material Steel Identification Mark 2831  
Intermediate shafts, material Steel Identification Marks 2831 Tube shaft, material Identification Mark  
Screw shaft, material Steel Identification Mark 2831 Steam Pipes, material Steel Test pressure 650 lb. Date of Test 7-6-29  
Is an installation fitted for burning oil fuel ✓ 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.)  
The machinery of this vessel has been built under Special Survey and in accordance with the Rules and approved plans. The materials and workmanship are good. It has been placed on board and efficiently secured in position. On completion it has been tried under full working conditions and found in order.  
The machinery of this vessel is eligible, in my opinion, to be classed in the Register Book with notation of L.M.C 7.29.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 7.29. C.L.F.D.

25.7.29

A. Campbell for R. Lane.

Robert Rae  
Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ 5:00  
Special ... £ 94:12:0  
Donkey Boiler Fee ... £ : :  
Travelling Expenses (if any) £ : :  
When applied for, 23/7/29  
When received, 1.8.29

Committee's Minute GLASGOW 23 JUL 1929  
Assigned + L.M.C. 7.29.

