

## REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

11 SEP 1929

Date of writing Report 24.4.1929 When handed in at Local Office 4-9-1929 Port of Greenock  
 No. in Survey held at Greenock Date, First Survey 12th September 1928 Last Survey 3rd Sept 1929  
 Reg. Book. S/S "Esperance" (Number of Visits 60)  
 on the Esperance Gross 4423.88 Tons  
 Built at Glasgow By whom built Glasgow Ld Yard No. 826 When built 1929  
 Engines made at Greenock By whom made Rankin Blackmore Engine No. 433 when made 1929  
 Boilers made at ditto By whom made ditto Boiler No. 433 when made 1929  
 Registered Horse Power 100 Owners A Crawford & Co Ltd Port belonging to Glasgow  
 Nom. Horse Power 120 = NHP 473 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes  
 Trade for which Vessel is intended Foreign

ENGINES, &c.—Description of Engines Triple ExpansionRevs. per minute 75

Dia. of Cylinders 23 1/2 - 40 - 65 Length of Stroke 45 No. of Cylinders 3 No. of Cranks 3  
 Crank shaft, dia. of journals 13 Crank pin dia. 13 Mid. length breadth shrunk Thickness parallel to axis 8 1/4  
 Intermediate Shafts, diameter 12 1/4 Thrust shaft, diameter at collars 13 3/4 Thickness around eye-hole 5 7/8  
 Tube Shafts, diameter 14 Is the screw shaft fitted with a continuous liner Yes  
 Bronze Liners, thickness in way of bushes 3/4 Thickness between bushes 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 No  
 Length of Bearing in Stern Bush next to and supporting propeller 56  
 Propeller, dia. 17.0 Pitch 16.3 No. of Blades 4 Material Iron whether Moveable No Total Developed Surface 90 sq. feet  
 Feed Pumps worked from the Main Engines, No. 2 Diameter 3 1/2 Stroke 24 Can one be overhauled while the other is at work Yes  
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 4 Stroke 24 Can one be overhauled while the other is at work Yes  
 Feed Pumps { No. and size 3 (4 1/2) (5 1/8) (4 1/2) Pumps connected to the { No. and size one 12 1/2  
 How driven Steam Main Bilge Line How driven Steam  
 Ballast Pumps, No. and size one 12 1/2 Lubricating Oil Pumps, including Spare Pump, No. and size 2 (4 1/2)  
 Are two independent means arranged for circulating water through the Oil Cooler one Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room 3 at 23 1/4 Boiler Room 1 at 2 1/2 Tunnel Well 1 at 2 1/2  
 In Holds, &c. 901. 2. 3 902. 2. 3 1/4 903. 2. 2 904. 2. 2 1/2

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 - 4 1/2 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 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 None How are they protected Yes  
 What pipes pass through the deep tanks None 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 PLATFORM

MAIN BOILERS, &c.—(Letter for record 3) Total Heating Surface of Boilers 6141.4

Is Forced Draft fitted Yes No. and Description of Boilers 3 Single Ended 358 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? Yes

PLANS. Are approved plans forwarded herewith for Shafting Yes Main Boilers Yes Auxiliary Boilers Yes Donkey Boilers Yes  
 Superheaters Yes General Pumping Arrangements Yes Oil fuel Burning Piping Arrangements Yes

SPARE GEAR. State the articles supplied:—2 Counting Rod top end bolts & nuts  
ditto for bottom end, 2 main bearing bolts one  
set of coupling bolts one set of Feed & Bilge pump  
valves a quantity of assorted bolts & nuts & Iron  
of various sizes

The foregoing is a correct description,

RANKIN &amp; BLACKMORE, LTD.,

Manufacturer.  
 Director.

003549-003555-0226

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Lloyd's Register  
 Foundation



GENERAL REMARKS  
the Plans show

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P  
Mid  
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Dates of Survey while building  
During progress of work in shops -- (1928) Sept 12-21-24 Oct 1-10-14 25-31 Nov 2-5-13-19-26-29 Dec 5-13-19-28 (1929) Jan 10-23 Feb 1-5-6-11-13-26-28 Mar 4-13-19-28  
During erection on board vessel -- April 1-10-15-19-25-30 May 4-14-23-28 June 4-4-10-13-18-25 July 1-2-14-18-23-30 Aug 2-3-5-21-26 Sept 3-  
Total No. of visits 60

Dates of Examination of principal parts—Cylinders 6. 2- 29 Slides 19. 3- 29 Covers 6- 2- 29  
Pistons 13. 3- 29 Piston Rods 13. 3- 29 Connecting rods 30. 4- 29  
Crank shaft 30. 4- 29 Thrust shaft 25- 6- 29 Intermediate shafts 25- 6- 29  
Tube shaft 10- 6- 29 Engine and boiler seatings 13- 6- 29 Propeller 25- 4- 29  
Stern tube 10- 6- 29 Engines holding down bolts 30. 7- 29  
Completion of fitting sea connections 13- 6- 29  
Completion of pumping arrangements 30. 4- 29 Boilers fixed 30. 4- 29 Engines tried under steam 3- 9- 29  
Main boiler safety valves adjusted 21. 8- 29 Thickness of adjusting washers P 11 32 S 5 16 P 14 6 S 14 P 11 32 S 21  
Crank shaft material S Identification Mark LR 1105 1115 WGM Thrust shaft material S Identification Mark LR 1309 1399 1399  
Intermediate shafts, material S Identification Mark LR 1399 1409 1499 WGM Tube shaft, material S Identification Mark LR 1254 WGM  
Screw shaft, material S Identification Mark LR 1254 WGM Steam Pipes, material 9101 Test pressure 600 Date of Test 3-8  
Is an installation fitted for burning oil fuel 9101 Is the flash point of the oil to be used over 150°F. ✓  
Have the requirements of the Rules for carrying and burning oil fuel been complied with ✓  
Is this machinery duplicate of a previous case 9101 If so, state name of vessel ✓

General Remarks (State quality of workmanship, opinions as to class, &c.) These Enguin & Boiler have been built under special survey in accordance with the approved plans & the workmanship is of good quality. They are now securely fitted on board and under steam found satisfactory also the Bauer trial & P turbine etc Rpt 9: 149218. The Machinery is eligible in my opinion for the record of + L M E 9-29.

Part  
Ca  
W  
N  
o

PA

No

GREENOCK

The amount of Entry Fee ... £ 5. 0. 0  
Special ... £ 88. 0. 0  
Travelling Expenses (if any) £ 2. 0. 0  
When applied for, 4th SEPTEMBER 1929  
When received, 12.9.29

Committee's Minute GLASGOW 10 SEP 1929

Assigned + L M E 9.29

CERTIFICATE WRITTEN

Gordon-Muclen  
Engineer Surveyor to Lloyd's Register of Shipping.



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