

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 21 SEP 1927

Date of writing Report 19. 9. 1927 When handed in at Local Office 19. 9. 1927 Port of Glasgow 24. 10. 27 Leith 17275.
 No. in Survey held at Glasgow Date, First Survey 26. 1. 27 Last Survey 19. 9. 1927
 Reg. Book. on the new steel S/S "PENTOR" (Number of Visits 59)
 Built at Buntisland By whom built Buntisland SBC Co Yard No. 141 When built 1927
 Engines made at Glasgow By whom made W. Rowan & Co Ltd Engine No. 860 when made 1927
 Boilers made at Glasgow By whom made W. Rowan & Co Ltd Boiler No. 860 when made 1927
 Registered Horse Power 371 Owners Barnett & Brown Port belonging to London
 Nom. Horse Power as per Rule 371 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes
 Trade for which Vessel is intended S.S.P.P.

ENGINES, &c.—Description of Engines Triple expansion
 Dia. of Cylinders 25-41-68 Length of Stroke 49 No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule 12.894 as fitted 13" Crank pin dia. 13 1/4" Crank webs Mid. length breadth 19 3/4" Thickness parallel to axis 8 1/4" shrunk Thickness around eye-hole 5 3/8"
 Intermediate Shafts, diameter as per Rule 12.28" as fitted 12 1/2" Thrust shaft, diameter at collars as per Rule 12.894" as fitted 13 1/4"
 Tube Shafts, diameter as per Rule 13 1/2" as fitted 14 3/8" Screw Shaft, diameter as per Rule 13 1/2" as fitted 14 3/8" Is the tube screw shaft fitted with a continuous liner yes
 Bronze Liners, thickness in way of bushes as per Rule 7 1/4" as fitted 7 1/4" Thickness between bushes as per Rule 5 3/4" as fitted 5 3/4" 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 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 4-10
 Propeller, dia. 17-9" Pitch 18-6" No. of Blades 4 Material Bronze whether Moveable no Total Developed Surface 101.5 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 1 @ 6" x 4 1/2" x 6" Duplex Pumps connected to the Main Bilge Line No. and size 1 @ 9" x 12" x 12" General bilge pumps 8 x 6 x 8
 How driven steam How driven steam
 Ballast Pumps, No. and size 10 @ 9" x 12" x 12" Lubricating Oil Pumps, including Spare Pump, No. and size none
 Are two independent means arranged for circulating water through the Oil Cooler yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room 4-2 1/2" Ind. Bilge 1-4 1/2"
 In Holds, &c. N°1 Hold 2-3" N°2 Hold 2-3 1/2" N°3 Hold 2-3"
 N°4 Hold 1-3" Tunnel well 2 1/2"

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1-6 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 Bilge Pipes How are they protected Wood Casing
 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 Top platform

MAIN BOILERS, &c.—(Letter for record. 2) Total Heating Surface of Boilers 6201 sq. ft.
 Is Forced Draft fitted no No. and Description of Boilers Three single ended Working Pressure 180
 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 no Main Boilers yes Auxiliary Boilers no Donkey Boilers no
 Superheaters no General Pumping Arrangements with ship plans Oil fuel Burning Piping Arrangements no

SPARE GEAR. State the articles supplied:— 2 Connecting rod top and bottom end bolts and nuts
 2 Main bearing bolts; 1 set of coupling bolts; 1 set of feed and bilge pump valves. A quantity of assorted bolts and nuts. from of various sizes

The foregoing is a correct description,

For David Rowan & Co. Ltd
Arch. N. Grierson,

Manufacturer.



If not state whether, and when, one will be sent? Is a Report also sent on the Hull of the Ship? X07E—The words which do not apply should be deleted.

1927 Jan 26 Feb 7-10-14-25 Mar 8-10-11-14-16-17-18-20-29 Apr 7-11-14-15 May 2-5-9-10-11-13-16-25-27
During progress of work in shops - - - 30 Jun 2-6-7-10-13-14-15-20-24-29 July 5-6-7-12-14 Aug 1-2-8-9-10-16-22-25-30 Sep 1-7-8-9-12-13-19

1927 July 15 Aug 25-29 Sept 5-9-20-21-23-28 Oct 7-13-20-24
During erection on board vessel - - -

Total No. of visits 59 + 13

Dates of Examination of principal parts - Cylinders Slides 7-7-27 Covers 2-5-27

Pistons 25-5-27 Piston Rods 14-7-27 Connecting rods 24-6-27

Crank shaft 15-6-27 Thrust shaft 30-8-27 Intermediate shafts 20-6-27

Tube shaft - Screw shafts 9-9-27 Propeller 9-9-27

Stern tube 7-9-27 Engine and boiler seatings 5-9-27 Engines holding down bolts 7-10-27

Completion of fitting sea connections 9-9-27 Boilers fixed 7-10-27 Engines tried under steam 24-10-27

Completion of pumping arrangements 20-10-27 Thickness of adjusting washers 13-10-27

Main boiler safety valves adjusted 13-10-27 Crank shaft material Steel Identification Mark LLOYD'S NO 860 L.C.D. 15-6-27 Thrust shaft material mark LLOYD'S NO 686 A.C. 30-8-27 Identification Mark Steel

Intermediate shafts, material Steel Identification Marks LLOYD'S NO 860 L.C.D. 20-6-27 Tail working Tube shaft material LLOYD'S NO 675 L.C.D. 9-9-27 Identification Mark Steel

Screw shaft, material Spare Steel Identification Mark LLOYD'S NO 2106 L.C.D. 9-9-27 Steam Pipes, material Test pressure 540 lb. Date of Test 8-10-27

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 carrying and burning oil fuel 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 and sent to Burntisland to be fitted in the vessel.
The machinery has now been satisfactorily fitted in the vessel, tried under steam and found satisfactory.
The machinery is now in a good and safe working condition, which renders the vessel eligible in our opinion to have the notation +L.M.C 10.27

It is submitted that this vessel is eligible for THE RECORD + LMC 10.27.C.L.

Signature: S. Davis, Engineer Surveyor to Lloyd's Register of Shipping. Date: 8/11/27

The amount of Entry Fee £ 5 : - When applied for, 20 SEP 1927
Special £ 64 : 10
Donkey Boiler Fee £ 16 : 3 When received, 22.9.27
Travelling Expenses (if any) £ :

Committee's Minute GLASGOW 20 SEP 1927
Assigned Deferred.
CERTIFICATE WRITTEN BY LLOYD'S REGISTER FOUNDATION

A.B. 19/9/27

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

Date of... No. in Reg. Book... Master... Engines... Boilers... Nominal... MULT... Manufact... Total Hea... No. and... Tested by... Area of F... Area of e... In case of... Smallest d... Smallest d... Largest im... Thickness... long, seams... Percentage... Percentage... Thickness... Material... Length of... Dimensions... End plates... How are st... Tube plate... lean pitch... rders to... centre... each... ensile stre... itch of sta... orking pr... ickness... tch of sta... orking Pr... meter... At... ing pr... At... Or...