

## REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

10 MAY 1933

Date of writing Report 6<sup>th</sup> May 1933 When handed in at Local Office 6<sup>th</sup> May 1933 Port of Greenock  
 No. in Survey held at Port Glasgow Date, First Survey 9<sup>th</sup> March 1933 Last Survey 24<sup>th</sup> March 1933  
 Reg. Book. on the SS "HARBLEDOWN" (Number of Visits 2)  
 Built at Port Glasgow By whom built Lithgows Ltd Yard No. 861 Tons { Gross 5413  
 Engines made at Glasgow By whom made D. Rowan & Co. Ltd Engine No. When made { Net 3206  
 Boilers made at " By whom made " Boiler No. When made {  
 Registered Horse Power Owners National Steamship Co. Ltd Port belonging to London  
 Nom. Horse Power as per Rule Is Refrigerating Machinery fitted for cargo purposes ☒ Is Electric Light fitted Yes  
 Trade for which Vessel is intended Foreign

ENGINES, &c.—Description of Engines Triple expansion Revs. per minute  
 Dia. of Cylinders Length of Stroke No. of Cylinders No. of Cranks  
 Crank shaft, dia. of journals as per Rule as fitted Crank pin dia. Crank webs Mid. length breadth Mid. length thickness Thickness parallel to axis Thickness around eye-hole  
 Intermediate Shafts, diameter as per Rule as fitted Thrust shaft, diameter at collars as per Rule as fitted  
 Tube Shafts, diameter as per Rule as fitted SEA GRASS Screw Shaft, diameter as per Rule as fitted Is the tube shaft fitted with a continuous liner Yes  
 Bronze Liners, thickness in way of bushes as per Rule as fitted Thickness between bushes as per Rule 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 ☒  
 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 ☒  
 If two liners are fitted, is the shaft lapped or protected between the liners ☒ Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft No If so, state type ☒ Length of Bearing in Stern Bush next to and supporting propeller ☒  
 Propeller, dia. Pitch No. of Blades Material whether Movable Total Developed Surface sq. feet  
 Feed Pumps worked from the Main Engines, No. Diameter Stroke Can one be overhauled while the other is at work  
 Bilge Pumps worked from the Main Engines, No. Diameter Stroke Can one be overhauled while the other is at work  
 Feed Pumps { No. and size Pumps connected to the { No. and size  
 { How driven Main Bilge Line { How driven  
 Ballast Pumps, No. and size 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  
 In Pump Room In Holds, &c.

Main Water Circulating Pump Direct Bilge Suctions, No. and size ☒ Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size ☒  
 Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes ☒  
 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 ☒  
 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 ☒ How are they protected ☒  
 What pipes pass through the deep tanks ☒ Have they been tested as per Rule ☒  
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times ☒  
 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 ☒ Is the Shaft Tunnel watertight ☒ Is it fitted with a watertight door ☒ worked from

MAIN BOILERS, &c.—(Letter for record ) Total Heating Surface of Boilers  
 Is Forced Draft fitted No. and Description of Boilers Working Pressure  
 IS A REPORT ON MAIN BOILERS NOW FORWARDED?  
 IS A DONKEY BOILER FITTED? If so, is a report now forwarded?  
 Is the donkey boiler intended to be used for domestic purposes only  
 PLANS. Are approved plans forwarded herewith for Shafting Main Boilers Auxiliary Boilers Donkey Boilers  
 (If not state date of approval)  
 Superheaters General Pumping Arrangements Oil fuel Burning Piping Arrangements

## SPARE GEAR.

Has the spare gear required by the Rules been supplied  
 State the principal additional spare gear supplied

The foregoing is a correct description,

Manufacturer.



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During progress of work in shops - -  
Dates of Survey while building  
During erection on board vessel - - -  
Total No. of visits. 2.

See connection. etc. (1933) Mar. 9. 24.  
Dates of Examination of principal parts—Cylinders Slides Covers  
Pistons Piston Rods Connecting rods  
Crank shaft Thrust shaft Intermediate shafts  
Tube shaft Screw shaft Propeller  
Stern tube Engine and boiler seatings 9-3-33 Engines holding down bolts  
Completion of fitting sea connections 24-3-33.  
Completion of pumping arrangements Boilers fixed Engines tried under steam  
Main boiler safety valves adjusted Thickness of adjusting washers  
Crank shaft material Identification Mark Thrust shaft material Identification Mark  
Intermediate shafts, material Identification Marks Tube shaft, material Identification Mark  
Screw shaft, material Identification Mark Steam Pipes, material Test pressure Date of Test  
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  
If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with  
Is this machinery duplicate of a previous case If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c. The propeller, tail shaft, stern tube & sea connections have been satisfactorily fitted on board. The vessel has left for Glasgow for installation of machinery by Messrs D. Rowan & Co. Ltd. Glasgow Surveyors notified.

The amount of Entry Fee ... £ : : When applied for,  
Special ... £ : : 19  
Donkey Boiler Fee ... £ : : When received,  
Travelling Expenses (if any) £ : : 19

J. Davey  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 9 - MAY 1933

Assigned SEE ACCOMPANYING MACHINERY REPORT.



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