

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

No. 19557.

Date of writing Report 16-4-1938 When handed in at Local Office 16-4-1938 Port of Leith Received at London Office APR 19 1938

No. in Survey held at Burntisland Reg. Book. 29710 on the S.S. "PORTSEA" Date, First Survey 21-2-38 Last Survey 11-4-1938 (Number of Visits 9)

Built at Burntisland By whom built Burntisland S.B. Co. Ltd. Yard No. 218 Tons } Gross 1582.59 Net 942.99
Engines made at Greenock By whom made Hankins & Blackmore, Glasgow Engine No. 456 When built 1938
Boilers made at Lo. By whom made Lo. Boiler No. 456 When made 1938
Registered Horse Power _____ Owners Sea Steamship Co. Ltd. Port belonging to Hull
Nom. Horse Power as per Rule 167 Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted Yes
Trade for which Vessel is intended _____

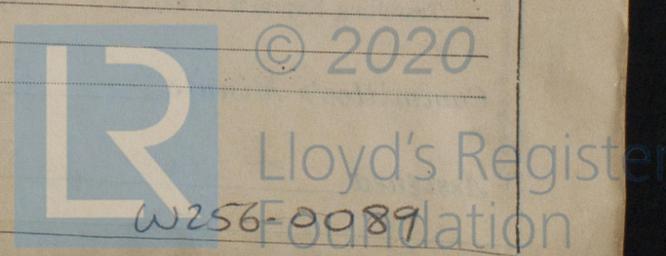
ENGINES, &c.—Description of Engines

Dia. of Cylinders _____ Length of Stroke _____ No. of Cylinders _____ Revs. per minute 99
Crank shaft, dia. of journals as per Rule _____ as fitted _____ Crank pin dia. _____ Crank webs Mid. length breadth _____ Mid. length thickness _____ No. of Cranks _____ Thickness parallel to axis _____ shrunk _____ 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 _____ Screw Shaft, diameter as per Rule _____ as fitted _____ Is the tube shaft fitted with a continuous liner }
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 _____
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 _____ If so, state type _____
Propeller, dia. _____ Pitch _____ No. of Blades _____ Material _____ whether Moveable _____ 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 _____ How driven _____ Pumps connected to the Main Bilge Line { No. and size _____ 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 _____
Bilge Pumps;—In Engine and Boiler Room 2 at 2 1/2" dia. on PORT SIDE 1 at 2 1/2" dia. on Starboard side 1 at 3 1/2" dia. on Starboard side Suctions, connected to both Main Bilge Pumps and Auxiliary In Pump Room _____
In Holds, &c. FORWARD HOLD 1 P. & 1 S. 3" dia. AFT HOLD WELL 1 at 2 1/2" dia. TUNNEL WELL 1 at 2 1/2" dia.
Main Water Circulating Pump Direct Bilge Suctions, No. and size one at 4" dia. Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size one at 3 1/2" dia. 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 suction pipes How are they protected Wood ceiling
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 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 E.R. platform

MAIN BOILERS, &c.—(Letter for record _____) Total Heating Surface of Boilers _____
Forced Draft fitted _____ No. and Description of Boilers _____ Working Pressure _____
IS A REPORT ON MAIN BOILERS NOW FORWARDED? _____
IS A DONKEY BOILER FITTED? _____
If the donkey boiler intended to be used for domestic purposes only See Greenock Rpt. No. 20522 If so, is a report now forwarded? _____
PLANS. Are approved plans forwarded herewith for Shafting _____ Main Boilers _____ Auxiliary Boilers _____ Donkey Boilers _____
Superheaters _____ General Pumping Arrangements _____ Oil fuel Burning Piping Arrangements _____

SPARE GEAR.
Are the spare gear required by the Rules been supplied Yes
Are the principal additional spare gear supplied One cast iron propeller.

The foregoing is a correct description,
Manufacturer.



During progress of work in shops - -
 Dates of Survey while building
 During erection on board vessel - - 21/2/38, 26/2/38, 28/2/38, 7/3/38, 15/3/38, 21/3/38, 24/3/38, 6/4/38, 11/4/38.
 Total No. of visits 9

Dates of Examination of principal parts—Cylinders Slides Covers
 Pistons Piston Rods Connecting rods
 Crank shaft Thrust shaft Intermediate shafts
 Tube shaft Screw shaft *in place 28-2-38* Propeller *in place 28-2-38*
 Stern tube *in place 25-2-38* Engine and boiler seatings 28-2-38 Engines holding down bolts 21-3-38
 Completion of fitting sea connections 28-2-38
 Completion of pumping arrangements 6-4-38 Boilers fixed 15-3-38 Engines tried under steam 11-4-38
 Main boiler safety valves adjusted 6-4-38 Thickness of adjusting washers PORT. P=3/8" S=3/8" SUP=5/16" STARBOARD. P=3/8" S=3/8" SUP=1/4"
 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 *Steel* Test pressure 600lb/sq Date of Test 31-3-38
 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 ✓ 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 *No* If so, state name of vessel ✓

General Remarks (State quality of workmanship, opinions as to class, &c. *This machinery—Greenock Report No 20522 has been efficiently fitted on board, the materials and workmanship being sound and good. On completion, the safety valves were adjusted to 200lb/sq and the Main and Auxiliary machinery were tried under working conditions at sea and found satisfactory. This machinery in my opinion, is in safe working condition and eligible to be classed in the Register Book with the notation of L.M.C. 4-38 and T.S.(C.L.) 4-38.*

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

for fee see Rk 20522.
 collected by Greenock & credited to acct. on 16-4-38.
 The amount of Entry Fee ... £ : :
 Special ^{1/2} L.M.C. ... £ 8:7:0
 Donkey Boiler Fee ... £ : :
 Travelling Expenses (if any) £ 1 :14:9
 When applied for, 18-4-1938
 When received, 31/5 1938
 JMR 1/6

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

Committee's Minute TUE. 26 APR 1938
 Assigned + LMC 4-38 (S/L) FD Ch