

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

11 JUN 1947

Date of writing Report 30. 5 1947 When handed in at Local Office 31. 5 1947 Port of **GLASGOW**

No. in Survey held at **ARDROSSAN** Date, First Survey **13th March 1947** Last Survey **13th May 1947**
 (Number of Visits.)

2481 on the **"NARVA" ex "EMPIRE CONFERENCE"** Tons { Gross **1901**
 Net **1076**

Built at **GAVLE** By whom built **GAVLE VRVS-SVERKSTADS NYA A/B** Yard No. - When built **1943**

Engines made at **HAMBURG** By whom made **CHRISTENSEN & MEYER** Engine No. - When made **1943**

Boilers made at **HAMBURG** By whom made **CHRISTENSEN & MEYER** Boiler No. - When made **1943**

Registered Horse Power - Owners **GLEN & CO.** Port belonging to **GLASGOW**

Vom. Horse Power as per Rule - Is Refrigerating Machinery fitted for cargo purposes **No** Is Electric Light fitted **Yes**

Trade for which vessel is intended **GENERAL**

Engines, &c.—Description of Engines **Double Compound (uniflow in L.P. engine)** Revs. per minute -

Dia. of Cylinders **(2) 15 1/2 and 35 1/2** Length of Stroke **33 1/2** No. of Cylinders **4** No. of Cranks **4**

Crank shaft, dia. of journals as per Rule - as fitted **10.7/8"** Crank pin dia. **10.7/8"** Mid. length breadth **17 1/16"** Thickness parallel to axis **6.11/16"**

Crank webs Mid. length thickness **6.11/16"** shrunk Thickness around eye-hole **5"**

Intermediate Shafts, diameter as per Rule - as fitted **10.3/16"** Thrust shaft, diameter at collars as per Rule - as fitted **10.5/8"**

Tube Shafts, diameter as per Rule - as fitted - Screw Shaft, diameter as per Rule - as fitted **11.3/16"** Is the { tube / screw } shaft fitted with a continuous liner { Yes / - }

Bronze Liners, thickness in way of bushes as per Rule **5/8"** Thickness between bushes as per Rule - 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 at **No** If so, state type - Length of Bearing in Stern Bush next to and supporting propeller **45"**

Propeller, dia. **13 ft.** Pitch **11ft** No. of Blades **4** Material **C.I.** whether Moveable **No** Total Developed Surface - sq. feet

Feed Pumps worked from the Main Engines, No. **2** Diameter **80 m/m** Stroke - Can one be overhauled while the other is at work **Yes**

Bilge Pumps worked from the Main Engines, No. **2** Diameter **80m/m** Stroke - Can one be overhauled while the other is at work -

Feed { No. and size **2 @ 80m/m, 1-7ton/hour** Pumps connected to the { No. and size **2 @ 80 m/m 1 @ 100 ton/hr. 1 @ 35 tons/hr.**
 How driven **Main Engines Steam** Main Bilge Line { How driven **Main Engines Steam Steam**

Ballast Pumps, No. and size **1 @ 100 tons per hour** 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 **After well 1 @ 2 1/2", Stokehold 2 @ 2 1/2", Engine Room 1 @ 3 1/2", 1 @ 3"**

In Pump Room **None** In Holds, &c. **Forepeak 3", No.1 hold 1 @ 2 1/2", No.2 hold 2 @ 3"**

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 @ 3 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**

That Pipes pass through the bunkers **None** How are they protected -

That pipes pass through the deep tanks **no 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 **None** Is it fitted with a watertight door - worked from -

MAIN BOILERS, &c.—(Letter for record -) Total Heating Surface of Boilers **2971 sq. ft.**

Which Boilers are fitted with Forced Draft **Yes** Which Boilers are fitted with Superheaters -

No. and Description of Boilers **Two Multitubular** Working Pressure **227 lbs**

IS A REPORT ON MAIN BOILERS NOW FORWARDED? **Yes**

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

Can the donkey boiler be used for domestic purposes only -

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

Superheaters **No** General Pumping Arrangements **Yes** Oil fuel Burning Piping Arrangements **None**

SPARE GEAR.

Is the spare gear required by the Rules been supplied **Yes**

State the principal additional spare gear supplied

Shipping

The foregoing is a correct description.

Manufacturer.



71780 4

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

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 Engines holding down bolts
 Completion of fitting sea connections Boilers fixed Engines tried under steam
 Completion of pumping arrangements Thickness of adjusting washers
 Main boiler safety valves adjusted Identification Mark Thrust shaft material Identification Mark
 Crank shaft material Identification Marks Tube shaft, material Identification Mark
 Intermediate shafts, material Identification Mark Steam Pipes, material Test pressure Date of Test
 Screw shaft, material Identification Mark
 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 **No** 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.)

The above forwarded for the information of the Committee.
 The Owner's Representative states that the cut-off, under working conditions is 35% with the maximum of 50%.

Certificate to be sent to GLASGOW

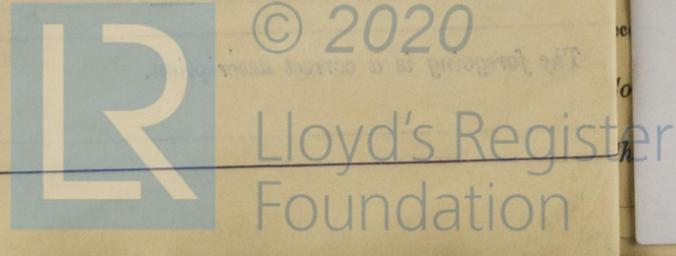
(The Surveyors are requested not to write on or below the space for Committee's Minute.)

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

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

Committee's Minute
 Assigned
 SEE ACCOMPANYING MACHINERY REPORT

GLASGOW 10 JUN 1917



his Certifi...
 While the...
 understood th...
 inaccuracy...
 Society, or...
 rs or Agent...
 t. Ev.) 2m