

# REPORT ON OIL ENGINE MACHINERY.

No. 273916

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Date of writing Report 3.10.1938 When handed in at Local Office 19

Port of Rotterdam

No. in Survey held at Deert

Date, First Survey 1.3.38 Last Survey 26.2.1938

Number of Visits 6

on the Single Screw vessel

## ENIDTOWN

Tons { Gross 495  
Net 405

Built at Deert By whom built Gebr. Va. West. Yard No. 206 When built 1938.

Engines made at Mannheim By whom made Elberh. Motoren Werke Mannheim Engine No. 41163 When made 1938

Donkey Boilers made at - By whom made - Boiler No. - When made -

Brake Horse Power 600 BHP Owners Brook Shipping Co Ltd Port belonging to LONDON.

Nom. Horse Power as per Rule 128 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

Trade for which vessel is intended -

OIL ENGINES, &c. Type of Engines R.H. 255 Sv 2 or 4 stroke cycle 4 Single or double acting Single

Maximum pressure in cylinders Please see Bremen Augsburg Report No. 1030. Diameter of cylinders 175 Length of stroke 175 No. of cylinders 4 No. of cranks 2

Mean Indicated Pressure - Is there a bearing between each crank -

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge -

Revolutions per minute 260 Flywheel dia. - Weight - Means of ignition - Kind of fuel used -

Crank Shaft, { Solid forged dia. of journals as per Rule - Crank pin dia. - Crank Webs Mid. length breadth - Thickness parallel to axis -  
Semi built as fitted - All built as fitted - Mid. length thickness - shrunk Thickness around eyehole -

Flywheel Shaft, diameter as per Rule - Intermediate Shafts, diameter as per Rule 190 mm Thrust Shaft, diameter at collars as per Rule 190 mm

Tube Shaft, diameter as per Rule - Screw Shaft, diameter as per Rule 175 mm Is the screw shaft fitted with a continuous liner Yes

Bronze Liners, thickness in way of bushes as per Rule 12 1/2 mm Thickness between bushes as per Rule 9 mm 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 One length

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

Propeller, dia. 1050 mm Pitch 1800 mm No. of blades 4 Material Bronze whether Moveable No Total Developed Surface 32 sq. feet

Method of reversing Engines Hand gear Is a governor or other arrangement fitted to prevent racing of the engine when declutched - Means of lubrication Forged Thickness of cylinder liners - Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material Lagged

Cooling Water Pumps, No. 2 Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes

Bilge Pumps worked from the Main Engines, No. 1 Diameter 100 mm Stroke 90 mm Can one be overhauled while the other is at work -

Pumps connected to the Main Bilge Line { No. and Size One 100 x 90 One rotary in 3000 rev per hour.  
How driven Main Engine Auxiliary engine

Is the cooling water led to the bilges No If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping arrangements -

Ballast Pumps, No. and size 1 in 4500 rev per hour Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 1 in 6000 rev per hour

Are two independent means arranged for circulating water through the Oil Cooler Yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps, No. and size: - In Machinery Spaces 2 in 3" 1 in 2 1/2" In Pump Room -

In Holds, &c. 2 in 1 hold in 2 1/2" with centre bilge well draining to side bilges

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 in 3" Are the Bilge Suctions in the Machinery Spaces

Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Yes

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 platform 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 -

What pipes pass through the bunkers None 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 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 No tunnel Is it fitted with a watertight door - worked from -

If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork -

Main Air Compressors, No. - No. of stages - Diameters - Stroke - Driven by -

Auxiliary Air Compressors, No. 1 No. of stages Please type 3 1/2 in 3 in 5900 rev per hour 7.6 in 2.8 in 254. Air by

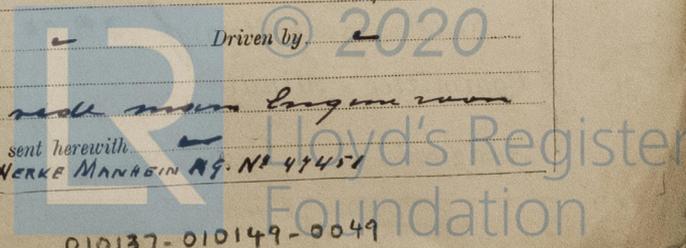
Small Auxiliary Air Compressors, No. - No. of stages - Diameters 150/160 Stroke 170 Driven by Main engine

What provision is made for first Charging the Air Receivers Hand starting motor

Scavenging Air Pumps, No. - Diameter - Stroke - Driven by -

Auxiliary Engines crank shafts, diameter as per Rule 30 mm journals 65 mm as fitted 30 mm 65 Position 1 in 1st main engine room

Have the Auxiliary Engines been constructed under special survey 60 BHP one not Is a report sent herewith -



010137-010149-0049

**AIR RECEIVERS:**—Have they been made under survey *Please see attached Bremen report No 2030*

Is each receiver, which can be isolated, fitted with a safety valve as per Rule  *Is a drain fitted at the lowest part of each receiver*

Can the internal surfaces of the receivers be examined and cleaned

**Injection Air Receivers, No.**  Cubic capacity of each  Internal diameter  thickness

Seamless, lap welded or riveted longitudinal joint  Material  Range of tensile strength  Working pressure  by Rules  Actual

**Starting Air Receivers, No.** *2 + 1* Total cubic capacity  Internal diameter  thickness

Seamless, lap welded or riveted longitudinal joint  Material  Range of tensile strength  Working pressure  by Rules  Actual

**IS A DONKEY BOILER FITTED?** *No* 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 *all as per m.v. Rotterdam* Separate Fuel Tanks   
(If not, state date of approval) *Rotterdam report No 26151*

Donkey Boilers  General Pumping Arrangements  Pumping Arrangements in Machinery Space

Oil Fuel Burning Arrangements

**SPARE GEAR.**

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

State the principal additional spare gear supplied *as per attached list*

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building

During progress of work in shops--	<input checked="" type="checkbox"/>
During erection on board vessel--	<i>1/3 2/4 28/7 21/9 26/9 1938</i>
Total No. of visits	<i>6</i>

Dates of Examination of principal parts—Cylinders  Covers  Pistons  Rods  Connecting rods

Crank shaft  Flywheel shaft  Thrust shaft  Intermediate shafts  Tube shaft

Screw shaft  Propeller *22.4.38* Stern tube *13.5.38* Engine seatings *22.4.38* Engines holding down bolts *7.9.38*

Completion of fitting sea connections *22.4.38* Completion of pumping arrangements *17.9.38* Engines tried under working conditions *26.9.38*

Crank shaft, Material  Identification Mark  Flywheel shaft, Material  Identification Mark

Thrust shaft, Material *S.M. Steel* Identification Mark  Intermediate shafts, Material *S.M. Steel* Identification Mark

Tube shaft, Material  Identification Mark  Screw shaft, Material *S.M. Steel* Identification Mark

Identification Marks on Air Receivers *As per Bremen report No 2030.*

Is the flash point of the oil to be used over 150° F.

Have the requirements of the Rules for oil fuel pipes and tank fittings 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 *Yes* If so, state name of vessel *MV. "WILLIAMSTOWN"*

**General Remarks** (State quality of workmanship, opinions as to class, &c. *The machinery has been made and fitted in accordance with the Society's Rules, approved plans and Secretary's letters, material tested as required and workmanship good. The whole was found in a good working condition during a trial trip and I am of opinion that this vessel is eligible to be recorded in the Society's Register Book with + LMC 9-38 OIL ENG. CL. The auxiliary motor has been opened out and examined, cylinder jacket tested as required and crankshaft Brinell tested and found all as per approved plan of crankshaft. Brinell test 8049/1000.*)

The amount of  $\frac{1}{2}$  Entry Fee ... *£ 7.50* : When applied for, *8.10.1938*

$\frac{1}{2}$  Special ... *£ 80.00* : When received, *18/10 1938*

Donkey Boiler Fee ... *£* : *18/10 1938*

Travelling Expenses (if any) *£ 38.00* : *18/10 1938*

Committee's Minute *FRI 14 OCT 1938*

Assigned *+ LMC 9.38 C.L.*

*Y. Y. Ochoa*  
Engine Surveyor to Lloyd's Register of Shipping.

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Rotterdam Surveyor

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