

REPORT ON OIL ENGINE MACHINERY.

No. 84958
18 NOV 1929

Received at London Office
NEWCASTLE-ON-TYNE

Port of South Shields Date, First Survey 9th August Last Survey 15th Nov. 1929
When handed in at Local Office 15th Nov. 1929 Number of Visits 17

on the Single Twin Triple Screw vessel Water Tank Barge. Tons 68.
Built at South Shields By whom built W & E Hill Ltd. Yard No. 501. When built 1929
Engines made at Amsterdam By whom made Kromhout Materen Fabriek Engine No. 5107 When made 1929
Main Engines made at Amsterdam By whom made Amsterdam Boiler No. ✓ When made ✓
Indicated Horse Power 2 x 60. Owners The Constantinople Port Monopoly Port belonging to Constantinople
Net Horse Power as per Rule 2 x 17 Is Refrigerating Machinery fitted for cargo purposes ✓ Is Electric Light fitted Yes.
Made for which vessel is intended For water carrying purposes.

ENGINES, &c.—Type of Engines ✓ 2 or 4 stroke cycle ✓ Single or double acting ✓
Maximum pressure in cylinders ✓ Diameter of cylinders ✓ Length of stroke ✓ No. of cylinders ✓ No. of cranks ✓
Distance between bearings, adjacent to the Crank, measured from inner edge to inner edge ✓ Is there a bearing between each crank ✓
Revolutions per minute ✓ Flywheel dia. ✓ Weight ✓ Means of ignition ✓ Kind of fuel used ✓
Crank Shaft, dia. of journals as per Rule as fitted Crank pin dia. ✓ Crank Webs Mid. length breadth shrunken Thickness parallel to axis ✓
Flywheel Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted Thrust Shaft, diameter at collars as per Rule as fitted
Main Shaft, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted Is the tube screw 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 No. Length of Bearing in Stern Bush next to and supporting propeller ✓

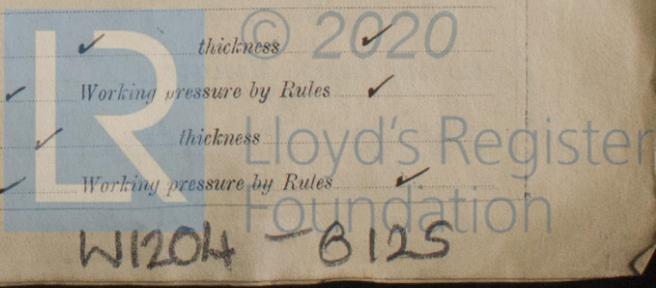
Propeller, dia. ✓ Pitch ✓ No. of blades ✓ Material ✓ whether Moveable ✓ Total Developed Surface ✓ sq. feet
Method of reversing Engines ✓ Is a governor or other arrangement fitted to prevent racing of the engine when declutched ✓ Means of lubrication
Thickness of cylinder liners ✓ Are the cylinders fitted with safety valves ✓ Are the exhaust pipes and silencers water cooled or lagged with
non-conducting material Yes. If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine ✓
Cooling Water Pumps, No. ✓ Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes

Large Pumps worked from the Main Engines, No. Backs Diameter 65 Stroke 40 Can one be overhauled while the other is at work ✓
Pumps connected to the Main Bilge Line No. and Size Hand pump to suction, as per approved
How driven plan. 6.2.29.
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, No. and size:—In Machinery Spaces 1-2" One to a hand pump suction.
In Holds, &c. off beam (dry tank) 1-2" Main engine bilge pump suction.

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size ✓
Are all the Bilge Suction pipes in ENGINE SPACE Yes filled with strum-boxes Yes Are the Bilge Suctions in the Machinery Spaces
closed 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 Valves.
Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates No. 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 ✓
That pipes pass through the bunkers ✓ How are they protected ✓
That 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
compartiment to another Yes Is the Shaft Tunnel watertight ✓ 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. ✓ No. of stages ✓ Diameters ✓ Stroke ✓ Driven by ✓
Small Auxiliary Air Compressors, No. ✓ No. of stages ✓ Diameters ✓ Stroke ✓ Driven by ✓
Scavenging Air Pumps, No. ✓ Diameter ✓ Stroke ✓ Driven by ✓
Auxiliary Engines crank shafts, diameter as per Rule as fitted

AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule ✓
Can the internal surfaces of the receivers be examined ✓ What means are provided for cleaning their inner surfaces ✓
Is there a drain arrangement fitted at the lowest part of each receiver ✓
High Pressure 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 ✓
Starting Air Receivers, No. ✓ Total cubic capacity ✓ Internal diameter ✓ thickness ✓
Seamless, lap welded or riveted longitudinal joint ✓ Material ✓ Range of tensile strength ✓ Working pressure by Rules ✓



IS A DONKEY BOILER FITTED?

No.

If so, is a report now forwarded?

✓

PLANS. Are approved plans forwarded herewith for Shafting (If not, state date of approval)

Receivers

✓

Separate Tanks

✓

Donkey Boilers

✓

General Pumping Arrangements

Yes

Oil Fuel Burning Arrangements

✓

SPARE GEAR

The foregoing is a correct description,

FOR W & E. HILL, LTD

Edmund Hill

Manufacturer.

Dates of Survey while building: During progress of work in shops - 1929 Aug. 9. 23. Sep. 2. 10. 13. 17. 19. 23. Oct. 1. 9. 11. 21. 29. 30. Nov. 2. 4. 15. Total No. of visits: 17.

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, Stern tube, Engine seatings, Engines holding down bolts, Completion of fitting sea connections, Completion of pumping arrangements, Engines tried under working conditions.

Is the flash point of the oil to be used over 150° F. Yes. Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with Yes. 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 ✓. Is this machinery duplicate of a previous case No. If so, state name of vessel ✓.

General Remarks: The engines Nos. 5107/8 as stated in the Amsterdam Report No. 11388 have now been fitted on board this vessel in accordance with the rules and approved plans. The material and workmanship were found to be good. Machinery examined under working conditions, certificate of trials herewith. The machinery of this vessel is in my opinion eligible to have class as contemplated, and to have record of L.M.C. 11,29.

The following approved plans are returned herewith: Pumping arrangements (2 plans). Shaft brackets, flush in way of shaft brackets.

The amount of Entry Fee ... £ 4 : 0 : Special ... £ 6 : 6 : Donkey Boiler Fee ... £ : : Travelling Expenses (if any) £ : :

George R. Chappel, Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute Assigned + L.M.C. 11.29 oil engines

