

Rpt. 4b

# REPORT ON OIL ENGINE MACHINERY.

No. 18968

17 OCT 1928

date of writing Report 6.9.28 When handed in at Local Office 8th October 1928 Port of Greenock  
 No. in Survey held at Greenock Date, First Survey 22nd November 1927 Last Survey 8th October 1928  
 Reg. Book. Number of Visits 60

on the Single Triple Screw vessel MS "Winton" Tons Gross  
 Built at Greenock By whom built W. Hamilton & Co. Ltd. Yard No. 404 When built 1928  
 Engines made at Greenock By whom made John & Richard & Co. Engine No. 1730 When made 1928  
 Donkey Boilers made at Aman By whom made Boiler (Aman) Ltd. Boiler No. 10785 When made 1928  
 Brake Horse Power 1950 Owners The Avenue Shipping Co. Ltd. Port belonging to London  
 Nom. Horse Power as per Rule 443 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes  
 Trade for which vessel is intended Foreign

**IL ENGINES, &c.**—Type of Engines 3 or 4 stroke cycle H. Single or double acting Single  
 Maximum pressure in cylinders 500 Diameter of cylinders 630 mm Length of stroke 1300 mm No. of cylinders 8 No. of cranks 8  
 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 880 mm Is there a bearing between each crank Yes  
 Revolutions per minute 105 Flywheel dia. 1930 Weight 1460 Means of ignition Compression Kind of fuel used Diesel  
 Crank Shaft, dia. of journals as per Rule 412.5 mm Crank pin dia. 420 mm Crank Webs Mid. length breadth shrunk Thickness parallel to axis 240 mm  
 Flywheel Shaft, diameter as per Rule 412.5 mm Intermediate Shafts, diameter as per Rule 11.85 Thrust Shaft, diameter at collars as per Rule 12.44  
 Tube Shaft, diameter as per Rule Screw Shaft, diameter as per Rule 13.18 Is the tube shaft fitted with a continuous liner Yes  
 Bronze Liners, thickness in way of bushes as per Rule 3/4" Thickness between bushes as per Rule 5/8" 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 Yes  
 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 Yes  
 If two liners are fitted, is the shaft lapped or protected between the liners Yes Is an approved Oil Gland or other appliance fitted at the after  
 end of the tube shaft Yes Length of Bearing in Stern Bush next to and supporting propeller 55"

Propeller, dia. 15' 0" Pitch 11' 3" No. of blades 4 Material Bronze whether Moveable No Total Developed Surface 70 sq. feet  
 Method of reversing Engines air Is a governor or other arrangement fitted to prevent racing of the engine when detached Yes Means of lubrication  
Forced Thickness of cylinder liners 36/46 mm Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with  
 non-conducting material lagged If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine Yes  
 Cooling Water Pumps, No. 2 at 100 tons per hour 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. None Diameter — Stroke — Can one be overhauled while the other is at work Yes  
 Pumps connected to the Main Bilge Line { No. and Size 2 at 140 tons per hour & one at 73 tons per hour  
 How driven Electric Motor

Ballast Pumps, No. and size one 170 tons per hour Lubricating Oil Pumps, including Spare Pump, No. and size 2 at 40 tons 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 at 23 1/4" 1 at 2 1/2" 2 at 5" Tunnel Well 1.2 1/2"  
 In Holds, &c. 90 1/2 23 1/4" 90 2. 2 3 1/4" Deep Tank 2.6.2.2 1/4" 90 3. 2.23 1/4" 90 4. 2.23 1/4" Tunnel Well 1.25"

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 2 at 5"  
 Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Yes Are the Bilge Suctions in the Machinery Spaces  
 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 sized 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 Yes  
 What pipes pass through the bunkers None How are they protected Yes  
 What pipes pass through the deep tanks None Have they been tested as per Rule Yes

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

Main Air Compressors, No. one No. of stages 3 Diameters 150-675.440 mm Stroke 420 mm Driven by Main Engine  
 Auxiliary Air Compressors, No. 3 No. of stages 3 Diameters 46-232-260 mm Stroke 320 mm Driven by Diesel Engine  
 Small Auxiliary Air Compressors, No. one No. of stages 2 Diameters 34-106 mm Stroke 80 mm Driven by Steam  
 Scavenging Air Pumps, No. — Diameter — Stroke — Driven by —

Auxiliary Engines crank shafts, diameter as per Rule see 4b Rpt.  
**IR RECEIVERS:**—Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes  
 Can the internal surfaces of the receivers be examined Yes What means are provided for cleaning their inner surfaces Mauls  
 Is there a drain arrangement fitted at the lowest part of each receiver Yes

High Pressure Air Receivers, No. 2 Cubic capacity of each 200 lbs Internal diameter 14" thickness 1/2"  
 Seamless, lap welded or riveted longitudinal joint seamless Material — Range of tensile strength 29.33 Working pressure by Rules 1000 lbs  
 Starting Air Receivers, No. 2 Total cubic capacity 880 Internal diameter 6' 6" thickness 1 1/16"  
 Seamless, lap welded or riveted longitudinal joint TRIPLES Material — Range of tensile strength 28/32 Working pressure by Rules 356



IS A DONKEY BOILER FITTED?

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

Donkey Boilers

General Pumping Arrangements

Receivers

Separate Tanks

Oil Fuel Burning Arrangements

SPARE GEAR

see list attached

The foregoing is a correct description  
FOR JOHN G. KINCAID & COY. LIMITED

Manufacturer.

Dates of Survey while building  
During progress of work in shops - - (1924) Nov. 22. Dec. 5. 9. (1928) Jan. 16. 14. 19. 20. Feb. 2. 9. 10. 22. Mar. 5. 19. 20. April 3. 4. 5. 9. 20. 23. 30. May 2. 4. 8. 10. 11. 16. 28. 31. June 12. 14. 20. 21. 25. 26. July 14. 23. 30. Aug. 1. 8. 10. 14. 14. 20. 23. 28. 29. 30. Sept. 4. 11. 13. 14. 19. 25. Oct. 2. 3. 8.  
Total No. of visits 60.

Dates of Examination of principal parts—Cylinders 23. 4. 28 Covers 4. 4. 28 Pistons 4. 5. 28 Rods 4. 5. 28 Connecting rods 4. 5. 28 Crank shaft 16. 5. 28 Flywheel shaft 23. 7. 28 Thrust shaft 23. 7. 28 Intermediate shafts 14. 7. 28 Tube shaft 1. 8. 28 Propeller 14. 4. 28 Stern tube 14. 4. 28 Engine seatings 30. 7. 28 Engines holding down bolts 29. 8. 28 Completion of fitting sea connections 30. 7. 28 Completion of pumping arrangements 25. 9. 28 Engines tried under working conditions 3. 10. 28

Crank shaft, Material \$ Identification Mark LR 130. WGM. Flywheel shaft, Material \$ Identification Mark LR 485 WGM. Thrust shaft, Material \$ Identification Mark LR 485 WGM. Intermediate shafts, Material \$ Identification Marks 1339. 7960 W. Tube shaft, Material \$ Identification Mark LR 4959 J.D.

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

Is this machinery duplicate of a previous case

General Remarks (State quality of workmanship, opinions as to class, &c.)

The engine & boiler have been built under special survey in accordance with the approved plans. The workmanship & material are of good quality. They are now securely fitted on board, and under working conditions found satisfactory. The machinery is eligible in my opinion for the record of T.M.C. 1028 & notation of DB 10045.

The amount of Entry Fee ... £ 15. 0. 0  
Special ... £ 95. 19. 0  
Travelling Expenses (if any) £ : :  
When applied for, 1<sup>st</sup> OCTOBER 1928.  
When received, 1<sup>st</sup> OCTOBER 1928.

Committee's Minute GLASGOW 16 OCT 1928

Assigned + L.M.C. 10, 28

W. Gordon-Mitchell

Engine Surveyor to Lloyd's Register of Shipping.



© 2020

Lloyd's Register Foundation