

# REPORT ON OIL ENGINE MACHINERY.

No. 83867

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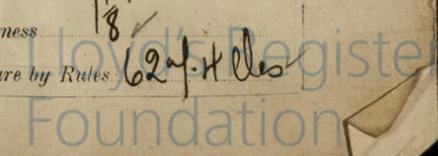
When handed in at Local Office 12-2-1929 Port of NEWCASTLE-ON-TYNE  
 Date, First Survey 18 April 28 Last Survey 12 Feb 1929  
 Number of Visits 105

in Survey held at Wallsend-on-Tyne  
 Book. "Hopemount"  
 on the Single Screw vessel  
 Tons Gross 7434  
 Net 4529  
 Built at Wallsend-on-Tyne By whom built Swainburner & W.P. Coy Ltd Yard No. 135 When built 1929  
 Engines made at Wallsend-on-Tyne By whom made Wallsend Shipways & Coy Ltd Engine No. 879 When made 1929  
 Key Boilers made at Wallsend By whom made Wallsend Shipways & Coy Ltd Boiler No. 879 When made 1929  
 Brake Horse Power 2820 Owners The Hopemount Shipping Co. Ltd Port belonging to Newcastle  
 Indicated Horse Power as per Rule 1010 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes  
 Trade for which vessel is intended Carrying petroleum in bulk

ENGINES, &c. Type of Engines Wallsend Sulzer 2 or 4 stroke cycle 2 Single or double acting S.A.  
 Maximum pressure in cylinders 540 lbs Diameter of cylinders 31" Length of stroke 43" No. of cylinders 6 No. of cranks 6  
 Position of bearings, adjacent to the Crank, measured from inner edge to inner edge 3'-5 1/2" Is there a bearing between each crank yes  
 Revolutions per minute 90 Flywheel dia. 4'-2" Weight 3 tons 8 cwt Means of ignition Compression Kind of fuel used above 150°F  
 Crank Shaft, dia. of journals as per Rule 19.95" Crank pin dia. 20 1/2" Crank Webs Mid. length breadth variable Thickness parallel to axis Solid  
 Flywheel Shaft, diameter as per Rule 19.95" as fitted 20 1/2" Intermediate Shafts, diameter as per Rule 14.94" as fitted 18" Thrust Shaft, diameter at collars as per Rule 19.95" as fitted 20 1/2"  
 Main Shaft, diameter as per Rule 15.68" as fitted 18 1/2" Is the tube shaft fitted with a continuous liner yes  
 Liners, thickness in way of bushes as per Rule 1/8" as fitted 1/8" Thickness between bushes as per rule 15 8/32" Is the after end of the liner made watertight in the  
 after 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  
 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  
 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 no Length of Bearing in Stern Bush next to and supporting propeller 6'-4"  
 Propeller, dia. 14'-3" Pitch 13'-9" No. of blades 4 Material Brass whether Moveable no Total Developed Surface 96 sq. feet  
 Method of reversing Engines Compressed air Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes Means of lubrication  
 forced Thickens of cylinder liners 2 1/4" Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with  
 conducting material yes If the exhaust is led overboard, what means are arranged to prevent water from being syphoned back to the engine up funnel  
 Bilge 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. two Diameter 4 1/2" D.A. Stroke 18" Can one be overhauled while the other is at work yes  
 Pumps connected to the Main Bilge Line { No. and Size 2 DA 4 1/2 x 18" stroke 1 Ballant pp 10x11x10 1 Bilge pp 8x8 1/2 x 8  
 How driven Main Engines Steam Steam  
 Main Pumps, No. and size 1 @ 10" x 11" x 10" Lubricating Oil Pumps, including Spare Pump, No. and size 1 @ 8 x 4 x 18" 2 Bearings on ME. 7 x 5 1/2 DA 1 crosshead on ME 2 1/2 x 5 1/2  
 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 4 @ 3 1/2"  
 Holds, &c. Fore Hold 2 @ 2" Fore P. room 1 @ 2 1/2" 1 @ 4" in each after compartment  
 Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 @ 5 1/2"  
 Are all the Bilge Suction pipes in Holds and Tunnels filled with strum-boxes yes Are the Bilge Suctions in the Machinery Spaces  
 from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges yes  
 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 yes  
 Do all pipes pass through the bunkers see below How are they protected yes  
 Do all pipes pass through the deep tanks Cofferdam suction 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 none Is it fitted with a watertight door yes worked from yes  
 On a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork yes

Number of Air Compressors, No. one No. of stages three Diameters 23 1/2, 19 1/2, 6 1/2" Stroke 2 1/4" Driven by Main Engines  
 Auxiliary Air Compressors, No. one No. of stages three Diameters 13 1/2, 10 3/4, 3 3/4" Stroke 8" Driven by Steam 340 RPM 13 x 22 x 120 lbs.  
 All Auxiliary Air Compressors, No. two (Yandem) No. of stages one Diameters 5'-1 1/2" Stroke 2'-5" Driven by Main Engines.  
 Ventilating Air Pumps, No. two Diameter 5'-1 1/2" Stroke 2'-5" Driven by Main Engines.  
 Auxiliary Engines crank shafts, diameter as per Rule Steam driven auxiliaries.

RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule yes  
 Are the internal surfaces of the receivers be examined yes What means are provided for cleaning their inner surfaces manholes & handholes  
 Is there a drain arrangement fitted at the lowest part of each receiver yes  
 High Pressure Air Receivers, No. 2 @ 1000 lbs Cubic capacity of each 5.3 cub ft Internal diameter 300 mm thickness 15 mm  
 Seamless, lap welded or riveted longitudinal joint Seamless Steel Material Steel Range of tensile strength 28-32 lbs Working pressure by Rules 1228 lbs.  
 Storing Air Receivers, No. two Total cubic capacity 10 @ 600 lbs WP 1 @ 400 Internal diameter 4'-0" thickness 18  
 Seamless, lap welded or riveted longitudinal joint Seamless Steel Material Steel Range of tensile strength 28-32 lbs Working pressure by Rules 624 lbs



IS A DONKEY BOILER FITTED? *Yes. 2 off* If so, is a report now forwarded? *Yes*  
 PLANS. Are approved plans forwarded herewith for Shafting *May 31<sup>st</sup> 1929* Receivers *Yes* Separate Tanks *Yes*  
 Donkey Boilers *Yes* General Pumping Arrangements *Yes* Oil Fuel Burning Arrangements *Yes*  
 SPARE GEAR *In accordance with & in excess of Rule requirements as per attached list.*

The foregoing is a correct description,  
 FOR THE WALLSEND SLIPWAY & ENGINEERING CO. LIMITED.

*A. King* Manufacturer.

1928  
 Dates of Survey while building  
 During progress of work in shops-- APL. 18. 24. 27. MAY. 4. 10. 23. 24. 29. 31. JUNE. 1. 4. 7. 11. 13. 15. 18. 20. 21. JULY. 2. 3. 4. 6. 9. 10. 13. 16. 19. 20. 23. 24.  
 During erection on board vessel-- AUG. 1. 3. 7. 8. 10. 14. 15. 16. 20. 22. 23. 27. 28. 29. 31. SEP. 4. 5. 6. 11. 12. 13. 17. 19. 21. 24. 27. 28. OCT. 1. 4. 9. 10. 12. 15. 26. 29. 30. 31. NOV. 1. 5. 6. 7. 8. 12. 13. 15. 16. 18. 20. 22. 26. 28. DEC. 3. 4. 5. 10. 12. 13. 14. 18. 19. 20. 1929 JAN. 4. 7.  
 Total No. of visits *105*  
 Dates of Examination of principal parts—Cylinders *3-8-28 to 29-8-28* Covers *19-7-28 to 29-10-28* Pistons *4-9-28 to 29-10-28* Rods *6-9-28 to 19-9-28* Connecting rods *18-10-28*  
 Crank shaft *4-9-28* Flywheel shaft *20-7-28 to 31-8-28* Thrust shaft *20-7-28 to 31-8-28* Intermediate shafts *15-10-28* Tube shaft ✓  
 Screw shaft *15-10-28* Propeller *12-10-28* Stern tube *12-10-28* Engine seatings *16-11-28* Engines holding down bolts *18-12-28*  
 Completion of fitting sea connections *16-11-28* Completion of pumping arrangements *24-1-29* Engines tried under working conditions *2-2-29*  
 Crank shaft, Material *Old Steel* Identification Mark *13496 KH.* Flywheel shaft, Material *Old Steel* Identification Mark *H609 W.B.*  
 Thrust shaft, Material *Old Steel* Identification Mark *H609 W.B.* Intermediate shafts, Material *Old Steel* Identification Marks *1515 W.B.*  
 Tube shaft, Material ✓ Identification Mark ✓ Screw shaft, Material *Old Steel* Identification Mark *2667 & H.*  
 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 *oil tanker* 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 *Engine same as the M.V. Coptic*

General Remarks (State quality of workmanship, opinions as to class, &c.)  
 The Machinery of this Vessel has been built under Special Survey. Materials & Workmanship good. Hydraulic tests satisfactory. The whole of the Machinery is efficiently installed & tried in the Vessel & has been tried under working conditions and to Rule requirements & was found to be in good & safe working condition and eligible in my opinion to be classed & have records ✕ L.M.C. 2-29. Tail Sha C.L. Fitted for oil fuel 2-29. Flash point over 150° F. in the Register Books.

The amount of Entry Fee ... £ 6 : 0 : 0 When applied for, 14. 2. 19. 29  
 Special ... £ 125 : 5 : 0  
 Donkey Boiler Fee ... £ 17 : 14 : 0 When received, 2. 3. 29  
 Travelling Expenses (if any) £ 6 : 6 : 0  
 Committee's Minute TUE. 5 MAR 1929

*William Duttes*  
 Engineer Surveyor to Lloyd's Register of Shipping.

Assigned *7 June 2 29 CL*



2013-12016 Oil Engines  
 CERTIFICATE WRITTEN.

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