

# REPORT ON OIL ENGINE MACHINERY.

No. 85398

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 Date of writing Report 21.2.1930 Port of Newcastle-on-Tyne  
 Date, First Survey 4 Feb 1929 Last Survey 14 Feb 1930  
 Number of Visits 91

Survey held at Wallsend-on-Tyne  
 Name of vessel "Luxor"  
 Type of vessel Single Screw vessel  
 Tons Gross 6554 Net 3926  
 Built at Jarrow By whom built Palmers S. B. & Co Ltd Yard No. 994 When built 1929  
 Engines made at Wallsend By whom made Wallsend Shipways & Co Engine No. 885 When made 1930  
 Mainkey Boilers made at Wallsend By whom made Wallsend Shipways & Co Boiler No. 885 When made 1930  
 Brake Horse Power 2400 Owners H. S. Moss & Co Port belonging to  
 Nom. Horse Power as per Rule 449 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 Diameter of cylinders 680 mm Length of stroke 1200 mm No. of cylinders 6 No. of cranks 6  
 Position of bearings, adjacent to the Crank, measured from inner edge to inner edge 935 mm Is there a bearing between each crank Yes  
 Revolutions per minute 92 Flywheel dia. 6'-8" Weight 4114 lbs Means of ignition Compression Kind of fuel used F.P. above 150°F  
 Crank Shaft, dia. of journals as per Rule 438 mm as fitted 460 mm Crank pin dia. 460 mm Mid. length breadth 13.75" Kind of fuel used F.P. above 150°F  
 Flywheel Shaft, diameter as per Rule 438 mm as fitted 460 mm Intermediate Shafts, diameter as per Rule 13.75" as fitted 19" Thrust Shaft, diameter at collars as per Rule 438 mm as fitted 460 mm  
 Main Shaft, diameter as per Rule 15.125" as fitted 19" Is the tube screw shaft fitted with a continuous liner Yes  
 Bronze Liners, thickness in way of bushes as per Rule .80 as fitted 15/16" Thickness between bushes as per Rule .60 as fitted 11/16" 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  
 Does the liner do 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  
 Are two liners are fitted, is the shaft lapped or protected between the liners Yes Is an approved Oil Cloud or other appliance fitted at the after end of the tube shaft Newark sand exclude Length of Bearing in Stern Bush next to and supporting propeller 6'-0" (Lequintitae bush)  
 Propeller, dia. 17'-0" Pitch 13'-3" No. of blades 4 Material Bronze whether Moveable No Total Developed Surface 91 sq. feet  
 Method of reversing Engines Compressed air Is a governor fitted to prevent racing of the engine Yes Means of lubrication  
 Proceed Thickness of cylinder liners 53 mm 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 near the waterline, what means are arranged to prevent water from being syphoned back to the engine as per Rule  
 Cooling Water Pumps, No. 1 salt water 9x18" 1 fresh water 9x18" stroke 1 stand by 9x10" stroke 1 with S.W. centrifugal 160 mm 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. one Diameter 5" Stroke 18" Can one be overhauled while the other is at work Yes  
 Pumps connected to the Main Bilge Line No. and Size 2 @ 5" x 5" x 6" 1 ballast pp 8" x 9" x 10" How driven Steam  
 Ballast Pumps, No. and size 1 @ 8" x 9" x 10" Lubricating Oil Pumps, including Spare Pump, No. and size 2 @ 2" x 2" x 2" 1 @ 2" x 2" x 2" all steam driven  
 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 @ 3/8" dia 2 @ 3/8" oil bilge. 1 @ 3/8" Cofferdam.  
 Holds, &c. 2 @ 3/8" fwd hold & 1 @ 4" fwd cofferdam. 1 @ 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 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 Yes  
 Do all pipes pass through the bunkers None How are they protected  
 Do all 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 None Is it fitted with a watertight door Yes worked from

On 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. one No. of stages 3 Diameters 150 mm 480 mm 600 mm Driven by Main engines  
 Auxiliary Air Compressors, No. two No. of stages 3 Diameters 3 3/4" 10 3/4" 13 1/2" Stroke 8" Driven by Steam  
 All Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by  
 Ventilating Air Pumps, No. two Diameter 1400 mm Stroke 450 mm Driven by Main engines  
 Auxiliary Engines crank shafts, diameter as per Rule as fitted none.

**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. two Cubic capacity of each 1 @ 17.6 cub ft. 1 @ 5.3 cub ft. Internal diameter 14 7/8" dia + 300 mm thickness 1/16" to 15 mm  
 Seamless, lap welded or riveted longitudinal joint Seamless Material Steel Range of tensile strength 28 to 32 tons Working pressure by Rules 1330 + 1100 lbs  
 Starting Air Receivers, No. 2 @ 600 lbs, 1 @ 420 lbs Total cubic capacity 215 cub ft each Internal diameter 4'-0" thickness 1 1/8"  
 Seamless, lap welded or riveted longitudinal joint riveted Material O.H. steel Range of tensile strength 28 to 32 tons Working pressure by Rules 62 + 40

