

# REPORT ON OIL ENGINE MACHINERY.

No. 108208

Date of writing Report 5 FEB 1940 When handed in at Local Office 5 FEB 1940 Port of LONDON Received at London Office 5 FEB 1940  
 No. in Survey held at 1 Date, First Survey 5 April 1939 Last Survey 22 Nov 1939  
 Reg. Book. Number of Visits 13

Single }  
 Twin }  
 Triple }  
 Quadruple } Screw vessel  
 "ALACRITY"  
 Tons { Gross  
 Net  
 Built at Loole By whom built Loole S.B. Co. Ltd. Yard No. 347 When built  
 Engines made at Newbury By whom made Newbury Marine Co. Ltd. Engine No. 726 When made  
 Donkey Boilers made at By whom made Boiler No. When made  
 Brake Horse Power 500 Owners Port belonging to  
 Nom. Horse Power as per Rule 139 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted  
 Trade for which vessel is intended

**MAIN ENGINES, &c.**—Type of Engines Sole injection Type L 2 or 4 stroke cycle 2 Single or double acting SA  
 Maximum pressure in cylinders 700 lbs. Diameter of cylinders 320 1/2 Length of stroke 426 1/2 No. of cylinders 5 No. of cranks 5  
 Position of bearings, adjacent to the Crank, measured from inner edge to inner edge 448 1/2 Is there a bearing between each crank Yes  
 Revolutions per minute 300 Flywheel dia. 900 1/2 Weight 885 lbs Means of ignition Compression Kind of fuel used Diesel oil  
 Crank Shaft, dia. of journals as per Rule as fitted 190 1/2 Crank pin dia. 190 1/2 Crank Webs Mid. length breadth 252 1/2 Thickness parallel to axis shrunk  
 Flywheel Shaft, diameter as per Rule as fitted Crank shaft Intermediate Shafts, diameter as per Rule as fitted 7 1/8 Thrust Shaft, diameter at collars as per Rule as fitted 7 1/2  
 Main Shaft, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted 6 1/2 cone 7 1/8 body Is the shaft fitted with a continuous liner No  
 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

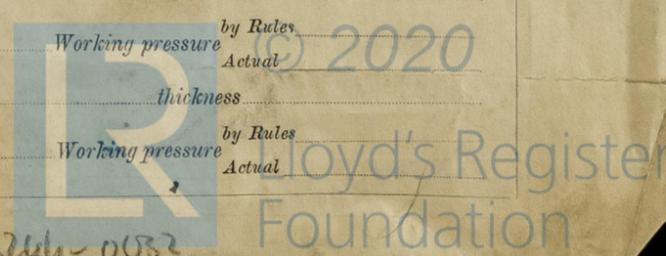
If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner  
 If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive  
 If two liners 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  
 If so, state type Newark Length of Bearing in Stern Bush next to and supporting propeller  
 Propeller, dia. 6'-4" Pitch 3'-8 1/2" No. of blades 4 Material Bronze whether Moveable No Total Developed Surface 14 1/2 sq. feet  
 Method of reversing Engines Revol. Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication  
 Thickness of cylinder liners 32 1/2 Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material

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. 1 @ 115 1/2 x 12 1/2 D.A. 18 Tons/hour Is the sea suction provided with an efficient strainer which can be cleared within the vessel  
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 110 1/2 Stroke 120 1/2 Can one be overhauled while the other is at work Yes  
 Pumps connected to the Main Bilge Line { No. and Size How driven  
 Main Pumps, No. and size Lubricating Oil Pumps, including Spare Pump, No. and size 1 @ 12 gals/min.  
 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 In Pump Room

Holds, &c.  
 Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size  
 Are all the Bilge Suction pipes in Holds and Tumble Well fitted with stram-boxes 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  
 Are all Sea Connections fitted direct on the skin of the ship Are they fitted with Valves or Cocks  
 Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates Are the Overboard Discharges above or below the deep water line  
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Are the Blow Off Cocks fitted with a spigot and brass covering plate  
 How are they protected  
 Are all pipes pass through the bunkers Have they been tested as per Rule  
 Are all pipes pass through the deep tanks

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times  
 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 Is the Shaft Tunnel watertight Is it fitted with a watertight door worked from  
 On 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 1 Diameters 110 1/2 Stroke 110 1/2 Driven by Main Engine  
 All Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by  
 Ventilating Air Pumps, No. 1 Diameter 600 1/2 D.A. Stroke 426 1/2 Driven by Main Engine  
 Auxiliary Engines crank shafts, diameter as per Rule as fitted

**RECEIVERS:**—Is each receiver, which can be isolated, fitted with a safety valve as per Rule  
 Are the internal surfaces of the receivers be examined and cleaned Is a drain fitted at the lowest part of each receiver  
 High Pressure Air Receivers, No. Cubic capacity of each Internal diameter thickness  
 Material Range of tensile strength Working pressure by Rules Actual  
 Low Pressure Air Receivers, No. Total cubic capacity Internal diameter thickness  
 Material Range of tensile strength Working pressure by Rules Actual



003240-003244-0032

IS A DONKEY BOILER FITTED?

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 (If not, state date of approval)

Receivers

Separate Tanks

Donkey Boilers

General Pumping Arrangements

Oil Fuel Burning Arrangements

SPARE GEAR.

Has the spare gear required by the Rules been supplied

State the principal additional spare gear supplied

The foregoing is a correct description,

For & on behalf of THE NEWBURY DIESEL Co. LTD.

Manufacturer.

Dates of Survey while building

During progress of work in shops - -  
During erection on board vessel - -  
Total No. of visits

1939: Apr 5-20 May 11-18 June 1-8 July 20 Aug 24 Sept 20-28 Nov 2-16-22  
13 (in shops)

Dates of Examination of principal parts - Cylinders 20/9/39 Covers 20/9/39 Pistons 20/9/39 Rods Connecting rods 20/9/39  
Crank shaft 5/5/39 28/9/39 Flywheel shaft Thrust shaft 28/9/39 Intermediate shafts 5/10/39 Tube shaft  
Screw shaft 22/11/39 Propeller Stern tube 12/10/39 Engine seatings Engines holding down bolts  
Completion of fitting sea connections Completion of pumping arrangements Engines tried under working conditions  
Crank shaft, Material S Identification Mark 10357 PK. Flywheel shaft, Material crank shaft Identification Mark  
Thrust shaft, Material S Identification Mark 4229 TDS Intermediate shafts, Material S Identification Marks 4609 TD  
Tube shaft, Material - Identification Mark Screw shaft, Material S Identification Mark 2030 TD

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 standard engine

General Remarks (State quality of workmanship, opinions as to class, &c. This machinery has been built under special survey of best materials in accordance with approved plans. The workmanship are good.  
The machinery has been forwarded to Lark for installation in the vessel.

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

The amount of Entry Fee .. £ 3 : - :  
Special 2/3 Fee .. £ 23 : 3/4 :  
Donkey Boiler Fee ... £ : :  
Travelling Expenses (if any) £ 5 : 5 : 1 :  
Committee's Minute .. FRI 15 MAR 1940

When applied for, 5 - FEB 1940  
When received, 1.5.40 A.P.A.

J. DeWitt  
Engineer Surveyor to Lloyd's Register of Shipping

Assigned Sec. J. H. 76. 50553

