

# REPORT ON OIL ENGINE MACHINERY.

No. 20300.

20 JAN 1937

Received at London Office

19. 12. 36 When handed in at Local Office 15th JANUARY 1937. Port of Greenock  
Date, First Survey 3rd June 1936. Last Survey 12th January 1937  
Number of Visits 50

No. in Survey held at Greenock on the MS "Regent Lion" m/s "Regent Lion"  
Tons Gross 9551  
Net 5794

Built at Greenock By whom built S. & W. Hunter & Co. Ltd. Yard No. 1521 When built 1937  
Engines made at Greenock By whom made John & Richard & Co. Ltd. Engine No. 11104 When made 1937

Donkey Boilers made at ditto By whom made ditto Boiler No. 11104 When made 1937  
Brake Horse Power 3100  
Owners CT Bourne & Co. Managers Port belonging to London

Nom. Horse Power as per Rule 846  
Is Refrigerating Machinery fitted for cargo purposes - Is Electric Light fitted yes  
Trade for which vessel is intended Towage

TYPE OF ENGINES, &c. Type of Engines Diesel Solid Injection (B.W. Type) 4 stroke cycle + Single or double acting Single  
Maximum pressure in cylinders 600 lb Diameter of cylinders 440 mm Length of stroke 1500 mm No. of cylinders 10 No. of cranks 10

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 1004 mm Is there a bearing between each crank yes  
Revolutions per minute 95 Crank pin dia. 530 mm Weight 2660 kg Means of ignition Compression Kind of fuel used Diesel

Crank Shaft, dia. of journals 440 mm Crank pin dia. 530 mm Crank Webs shrunk Thickness parallel to axis 326 mm  
as per Rule 440 mm as fitted 530 mm Mid. length breadth shrunk Thickness around eyehole 326 mm  
as fitted 530 mm M.d. length thickness shrunk as per Rule 13" 86

Intermediate Shafts, diameter 24" Thrust Shaft, diameter at collars 24"  
as per Rule 14.62" as fitted 24" Is the tube shaft fitted with a continuous liner yes  
as fitted 530 mm as per Rule 14.62" as fitted 24" as per Rule 13" 86

Tube Shaft, diameter 14.62" as per Rule 14.62" as fitted 24" Is the after end of the liner made watertight in the  
as fitted 530 mm as per Rule 14.62" as fitted 24" as per Rule 13" 86

Bronze Liners, thickness in way of bushes 1.116" Thickness between bushes 1.116" Is the after end of the liner made watertight in the  
as per Rule 1.116" as fitted 1.116" as per Rule 1.116" as fitted 1.116"

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 -  
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 If so, state type - Length of Bearing in Stern Bush next to and supporting propeller 4-113/4"

Propeller, dia. 14'-0" Pitch 12.9" No. of blades 4 Material Bronze whether Moveable no Total Developed Surface 86 sq. feet  
Method of reversing Engines air Is a governor or other arrangement fitted to prevent racing of the engine yes Means of lubrication forced

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 funnel

Cooling Water Pumps, No. 2 Is the sea suction provided with an efficient strainer which can be cleared within the vessel -  
Bilge Pumps worked from the Main Engines, No. one Diameter 12" Stroke 10" Can one be overhauled while the other is at work -

Pumps connected to the Main Bilge Line { No. and Size 2 one 8" x 9" x 10" one 4" x 8" x 8" How driven steam  
Ballast Pumps, No. and size one 8" x 9" x 10" Lubricating Oil Pumps, including Spare Pump, No. and size 2 8" one 6"

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 -

In Holds, &c. - Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size - Are the Bilge Suctions in the Machinery Spaces  
Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes -

led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges - Are they fitted with Valves or Cocks -  
Are all Sea Connections fitted direct on the skin of the ship - Are the Overboard Discharges above or below the deep water line -

Are they sized sufficiently high on the ship's side to be seen without lifting the platform plates - Are the Blow Off Cocks fitted with a spigot and brass covering plate -  
Are they each fitted with a Discharge Valve always accessible on the plating of the vessel - How are they protected -

What pipes pass through the bunkers - Have they been tested as per Rule -  
What 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 -

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. None No. of stages None Diameters None Stroke None Driven by None

Auxiliary Air Compressors, No. Two No. of stages Two Diameters 4 3/4" 1 1/2" Stroke 8" Driven by Steam Engine  
Small Auxiliary Air Compressors, No. One No. of stages Two Diameters 2 3/8" 5 3/4" Stroke 4" Driven by Diesel

Scavenging Air Pumps, No. One Diameter None Stroke None Driven by None  
Auxiliary Engines crank shafts, diameter None as per Rule None as fitted None

AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule yes What means are provided for cleaning their inner surfaces manhole  
Can the internal surfaces of the receivers be examined yes Is there a drain arrangement fitted at the lowest part of each receiver yes

High Pressure Air Receivers, No. None Cubic capacity of each None Internal diameter None thickness None  
Seamless, lap welded or riveted longitudinal joint None Material None Range of tensile strength None Working pressure by Rules None

Starting Air Receivers, No. 2 Total cubic capacity 1200 c/f Internal diameter 6.0315" thickness 3/32"  
Seamless, lap welded or riveted longitudinal joint Ruetta Material S Range of tensile strength 28-32 Working pressure by Rules 364



1910-28114

IS A DONKEY BOILER FITTED? *Yes*

If so, is a report now forwarded? *Yes*

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

Receivers *Yes*

Separate Tanks *-*

Donkey Boilers *Yes*

General Pumping Arrangements *-*

Oil Fuel Burning Arrangements *-*

SPARE GEAR

Propeller shaft (C.H.) stamped LR 6404 WGM. 14-12-36  
Cast Iron Propeller

The foregoing is a correct description,  
For JOHN G. KINGAID & CO. LIMITED.

*McCauley*

Director.

Manufacturer.

Dates of Survey while building  
During progress of work in shops - (1936) June 3-9, July 15-28, Aug. 13-24, Sept. 9-16, 22-30, Oct. 16-24, 29, Nov. 2-4, 5-6, 9-10, 11-13, 13-14, 16-19, 20-23, 24-25, 30, Dec. 2-4, 8-9, 10-11, 14-15, 17-18, 21-25  
During erection on board vessel - (1937) Jan. 5-4, 8-9, 11-12  
Total No. of visits 50

Dates of Examination of principal parts - Cylinders 6-11-36 Covers 25-11-36 Pistons 2-12-36 Rods 23-11-36 Connecting rods 23-11-36

Crank shaft 18-11-36 Flywheel shaft *✓* Thrust shaft 23-11-36 Intermediate shafts 23-11-36 Tube shaft *-*

Screw shaft 19-11-36 Propeller 2-11-36 Stern tube 12-11-36 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 LR 6404 P.F. Flywheel shaft, Material *✓* Identification Mark *-*

Thrust shaft, Material *S* Identification Mark LR 6404 WGM. Intermediate shafts, Material *S* Identification Marks LR 6404 WGM

Tube shaft, Material *✓* Identification Mark *-* Screw shaft, Material *S* Identification Mark LR 6404 J.H.B.

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 *-*

Is this machinery duplicate of a previous case *No* If so, state name of vessel *-*

General Remarks (State quality of workmanship, opinions as to class, &c. These Engines have been built under Special Survey in accordance with the approved plans & the workmanship & material are of good quality. They have been fitted on the Brake of sound satisfactory & have now with the Boilers been shipped to Newcastle for fitting on board. The Machinery when fitted on board, tried under working conditions of sound satisfactory will in my opinion be eligible for the record of \* L.M.C. (A station of Donkey Boilers 180°) with date.

These Engines have been satisfactorily installed on the M/S REGENT LION, S.H.W.R.'s yard No 1521.

*A Watt*  
Newcastle on 26/3/37.

The amount of Entry Fee ... £ 6-0-0 : When applied for, 4/5-12  
Special ... £ 92-12 : 5th JANUARY 1937.  
Donkey Boiler Fee ... £ 23-4 :  
Air Reservoir ... £ 20-0 :  
Travelling Expenses (if any) £ 8-8 : 8th JANUARY 1937.

*W. Gordon-Mitchell*

Engineer Surveyor to Lloyd's Register of Shipping.

FRI 2 APR 1937

Committee's Minute GLASGOW 19 JAN 1937

Assigned *Deferred*  
(See NWC 94861)



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