

# REPORT ON OIL ENGINE MACHINERY.

No. 18859

Received at London Office 21 MAR 1928

Report of writing Report 6.2.28 When handed in at Local Office 14th March 1928 Port of Greenock  
 Date, First Survey 16th August 1926 Last Survey 16th March 1928  
 Number of Visits 9th

in Survey held at Greenock  
 Book. M/S "Deido"  
 on the Single Screw vessel  
 Tons { Gross  
 Net  
 Built at Anderson By whom built Anderson & Co Ltd Yard No. 337 When built 1928  
 Engines made at Greenock By whom made John & Thos Reid & Co Ltd Engine No. 1716 When made 1928  
 Boilers made at Amman By whom made Bohrsen & Co Amman Ltd Boiler No. 10312 When made 1928  
 Horse Power 1800 Owners British African S.S. Co Ltd Port belonging to London  
 Horse Power as per Rule 1190 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes  
 for which vessel is intended Foreign

ENGINES, &c.—Type of Engines Diesel (B & W) 4 stroke cycle H Single or double acting Single  
 Mean pressure in cylinders 500 Diameter of cylinders 440 mm Length of stroke 1500 mm No. of cylinders 6 No. of cranks 6  
 Bearings, adjacent to the Crank, measured from inner edge to inner edge 990 mm Is there a bearing between each crank Yes  
 Revolutions per minute 815 Flywheel dia. 2500 mm Weight 16000 lbs Means of ignition Compression Kind of fuel used Diesel  
 Crank pin dia. 470.2 mm Crank pin dia. 485 mm Crank Webs Mid. length breadth shrunk Thickness parallel to axis 310 mm  
 as per Rule 470.2 mm as fitted 485 mm Mid. length thickness shrunk Thickness around eye hole 210 mm  
 Main Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule 13.39 Thrust Shaft, diameter at collars as per Rule 14.05  
 as fitted 485 mm as fitted 13 1/2 as fitted 14 1/4  
 Main Shaft, diameter as per Rule as fitted Screw Shaft, diameter as per Rule 14.42 Is the lubrication shaft fitted with a continuous liner Yes  
 as fitted as fitted as fitted 15 1/2  
 Liners, thickness in way of bushes as per Rule 74 Thickness between bushes as per rule 609 Is the after end of the liner made watertight in the  
 as fitted 13/16 as fitted 518  
 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner Yes  
 Is an approved Oil Gland or other appliance fitted at the after  
 Length of Bearing in Stern Bush next to and supporting propeller 5-6  
 Propeller, dia. 16' 0" Pitch 13' 6" No. of blades 4 Material Ball's Metal whether Moveable No Total Developed Surface 40 sq. feet  
 Method of reversing Engines air Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication  
 Thickness of cylinder liners 32/33 mm Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with  
 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  
 Bilge Water Pumps, No. 2 Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes  
 Main 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. one 5" one 4" Centrifugal  
 How driven Electric  
 Main Pumps, No. and size one 100 tons per hour Lubricating Oil Pumps, including Spare Pump, No. and size Two 6"  
 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 Two at 3" Tunnel well 1.3"  
 Holds, &c. No. 1. 2. 3" No. 2. 2. 3" No. 3. 2. 2 1/2" No. 4. 2. 3"  
 Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size one at 5" Two 4 1/2"  
 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 Below  
 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  
 That pipes pass through the bunkers Bilge Suctions How are they protected Basin  
 That pipes pass through the deep tanks Have they been tested as per Rule

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 VER Platform  
 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. one No. of stages 3 Diameters 450-615-150 mm Stroke 460 mm Driven by Main Engine  
 Auxiliary Air Compressors, No. Three No. of stages 3 Diameters 48-285-318 mm Stroke 220 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 as fitted see London Rpt. No 92049 attached

AIR 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 Manual  
 Is there a drain arrangement fitted at the lowest part of each receiver Yes  
 High Pressure Air Receivers, No. 6 Cubic capacity of each 3 at 150 litres Internal diameter 3 at 12 thickness 3 at 3/8 3 at 1/2  
 Joints, lap welded or riveted longitudinal joint Stainless Material S Range of tensile strength 29.33 Working pressure by Rules 1,000 lbs  
 Working Air Receivers, No. 2 Total cubic capacity 1070 4/5 Internal diameter 6-03/16 thickness 3 1/32  
 Joints, lap welded or riveted longitudinal joint T.R.D.B.S Material S Range of tensile strength 28.32 Working pressure by Rules 364

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

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

see plan book attached

The foregoing is a correct description,

For and on behalf of JOHN G. KINCAID & COY., LIMITED.

Manufacturer.

Robert Green Director

Dates of Survey while building { During progress of work in shops - - (1926) Aug. 16-20 Sept. 10-21 Oct. 12-21 Nov. 5-10 18-22-24-29 Dec. 13-20 22-23-28 (1927) Feb. 3-4 8-11 15-24 Mar. 3-9 22-31 Apr. 1-14 18-21 22-24 27 May 3-4 5-9 11-13 14 23-24  
During erection on board vessel - - 30 June 2-3-6-8-13-15-22-24-27 July 12-18-19-26-27-28 Aug. 1-2-3-11-12-14 Sept. 5-10-11-14-16 Dec. 30 (1928) Jan. 10-14-19-24-30 Feb. 3-6-10-13-14-17-20-21-22-23-25  
Total No. of visits 94

Dates of Examination of principal parts—Cylinders 9- 5- 27 Covers 26- 4 27 Pistons 27, 6 27 Rods 22- 3- 27 Connecting rods 22- 3- 27

Crank shaft 3- 5- 27 Flywheel shaft 5- 9, 27 Thrust shaft 5- 9, 27 Intermediate shafts 7- 11- 27 Tube shaft ✓

Screw shaft 16- 11- 27 Propeller 16- 11- 27 Stern tube 11- 11- 27 Engine seatings see Gt Rept Engines holding down bolts 1- 3- 27

Completion of fitting sea connections see Gt Rept Completion of pumping arrangements 16- 3 28 Engines tried under working conditions 16- 3- 27

Crank shaft, Material S Identification Mark LR 116 WGM Flywheel shaft, Material S Identification Mark LR 566 WGM

Thrust shaft, Material S Identification Mark LR 566 WGM Intermediate shafts, Material S Identification Marks LR 212-213-242

Tube shaft, Material ✓ Identification Mark ✓ Screw shaft, Material S Identification Mark LR 565 WGM

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

yes

Is this machinery duplicate of a previous case 910 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 is of good quality, they are now securely fitted on board. Tried under working conditions, found satisfactory. The Machinery is eligible in my opinion for the record of LMC 328 (Notation of Donkey Boiler 100th)

The amount of Entry Fee ... £ 5- : 0 : When applied for,

Special ... £ 98- : 10 : 17<sup>th</sup> MARCH 1928

Donkey Boiler Fee ... £ 8- : 8 : When received,

Travelling Expenses (if any) £ : : 20/13 1928

Committee's Minute GLASGOW 20 MAR 1928

Assigned + LMC 328

CERTIFICATE WRITTEN:

W. Gordon-Musclie

Engineer Surveyor to Lloyd's Register of Shipping.



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