

REPORT ON OIL ENGINE MACHINERY.

No. 18859

Received at London Office 21 MAR 1928

Date of writing Report 6.2.28 When handed in at Local Office 14th March 1928 Port of Greenock

Survey held at Greenock Date, First Survey 16th August 1926 Last Survey 16th March 1928

Book. on the Single Triple Quadruple Screw vessel M/S "Deido" 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 & Richard Coy Engine No. 1716 When made 1928

Boilers made at Amman By whom made Bolton & Co Amman Ltd Boiler No. 10312 When made 1928

Horse Power 1800 Owners British African S.S. Coy Ltd Port belonging to London

Horse Power as per Rule 1190 Is Refrigerating Machinery fitted for cargo purposes 910 Is Electric Light fitted Yes

for which vessel is intended Fourm

ENGINES, &c. Type of Engines Diesel (B & W) 4 stroke cycle H Single or double acting Single

Working pressure in cylinders 500 Diameter of cylinders 440 m/m Length of stroke 1500 m/m No. of cylinders 6 No. of cranks 6

Distance between bearings, adjacent to the Crank, measured from inner edge to inner edge 990 m/m Is there a bearing between each crank Yes

Revolutions per minute 875 Flywheel dia. 2500 m/m Weight 16000 lbs Means of ignition Compression Kind of fuel used Diesel

Crank Shaft, dia. of journals as per Rule 470.2 m/m Crank pin dia. 485 m/m Crank Webs shrunk Thickness parallel to axis 310 m/m

Intermediate Shafts, diameter as per Rule 13.39 Thrust Shaft, diameter at collars as per Rule 14.05

Shaft, diameter as fitted 13 1/2 Is the lubrication screw shaft fitted with a continuous liner Yes

Size 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

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

Do 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 910 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 Bull's Metal whether Moveable 910 Total Developed Surface 70 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

used oil Thickness of cylinder liners 32/33 m/m 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

Working Water Pumps, No. 2 Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes

Large 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

Ballast 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. 910 2-3 910 2-3 910 3-2 2 1/2 910 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

obtained 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 sized 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 Yes 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 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 450-675-150 m/m Stroke 460 m/m Driven by Main Engine

Auxiliary Air Compressors, No. three No. of stages 3 Diameters 48-285-318 m/m Stroke 220 m/m Driven by Diesel Engine

Small Auxiliary Air Compressors, No. one No. of stages 2 Diameters 34-106 m/m Stroke 80 m/m Driven by Steam

Scavenging Air Pumps, No. — Diameter — Stroke — Driven by —

Auxiliary Engines crank shafts, diameter as per Rule see London Rpt 910 920 49 attached

AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve 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

Seams, lap welded or riveted longitudinal joint Manual Material S Range of tensile strength 29, 33 Working pressure by Rules 1,000 lbs

Working Air Receivers, No. 2 Total cubic capacity 1070 45 Internal diameter 6-0 3/16 thickness 3 1/32

Seams, lap welded or riveted longitudinal joint TR.D.B.S Material S Range of tensile strength 28-32 Working pressure by Rules 364

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)

Receivers

yes

Separate Tanks

yes

Donkey Boilers

General Pumping Arrangements

Oil Fuel Burning Arrangements

SPARE GEAR

see Spare List 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... During erection on board vessel... Total No. of visits 94

Dates of Examination of principal parts: Cylinders 9-5-24 Covers 26-4-24 Pistons 24-6-24 Rods 22-3-24 Connecting rods 22-3-24 Crank shaft 3-5-24 Flywheel shaft 5-9-24 Thrust shaft 5-9-24 Intermediate shafts 7-11-24 Tube shaft

Completion of fitting sea connections see Gt Rept Completion of pumping arrangements 16-3-28 Engines tried under working conditions 16-3-28 Crank shaft, Material S Identification Mark LR 116 WGM Flywheel shaft, Material S Identification Mark LR 566 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. Found under working conditions found satisfactory. The Machinery is eligible in my opinion for the record of LMC 328 (Notation of Donkey Boiler 100th)

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

The amount of Entry Fee ... £ 5- : 0 : When applied for, Special ... £ 98- : 10 : 17th 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

Gordon-Muscliss Engineer Surveyor to Lloyd's Register of Shipping.

