

REPORT ON OIL ENGINE MACHINERY.

No. 10.27

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19

Port of

Belfast

No. in Survey held at
Reg. Book.

BELFAST

Date, First Survey

4th Nov. 1929

Last Survey

23rd July 1930

Number of Visits

103

24465

Single
Twin
Triple
Quadruple

Screw vessel

SILVER WALNUT

Tons
Gross
Net

Built at BELFAST

By whom built

HARLAND AND WOLFF LO.

Yard No. 883 When built 1930

Engines made at BELFAST

By whom made

HARLAND AND WOLFF LO.

Engine No. 883 When made 1930

Donkey Boilers made at ANNAN AND LINCOLN

By whom made COCHRAN & CO. ANNAN LO.

BABCOCK & WILCOX LO.

Boiler No. 73/4606 When made 1930

Brake Horse Power 6600

Owners SILVER LINE LO. (STANLEY & JOHN THOMPSON LO. MARS.)

Port belonging to LONDON

Nom. Horse Power as per Rule 979

Is Refrigerating Machinery fitted for cargo purposes YES

Is Electric Light fitted YES.

Trade for which vessel is intended

OCEAN-GOING.

OIL ENGINES, &c.—Type of Engines HARLAND & WOLFF - B & W WITH PRESSURE INDUCTION 2 or 4 stroke cycle 4 Single or double acting Single

Maximum pressure in cylinders 650 lb/sq. in. Diameter of cylinders 740 mm. Length of stroke 1500 mm. No. of cylinders 12 No. of cranks 12

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 110 Flywheel dia. 2.489 metres Weight 2,400 Kgs. Means of ignition Compression Kind of fuel used diesel oil

Crank Shaft, dia. of journals as per Rule approved as fitted 515 mm. Crank pin dia. 575 mm. Crank Webs Mid. length breadth 860 mm. Thickness parallel to axis 320 mm. M.d. length thickness 320 mm. Thickness around eye hole 227 mm.

Flywheel Shaft, diameter as per Rule approved as fitted Intermediate Shafts, diameter as per Rule approved as fitted 13 3/4" Thrust Shaft, diameter at collars as per Rule approved as fitted 15"

Tube Shaft, diameter as per Rule approved as fitted Screw Shaft, diameter as per Rule approved as fitted 15 3/4" Is the shaft fitted with a continuous liner YES

Bronze Liners, thickness in way of bushes as per Rule 24.625" as fitted 13 3/16" Thickness between bushes as per rule 18.468" as fitted 31 3/32" 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

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 YES

If two 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 NO. If so, state type YES Length of Bearing in Stern Bush next to and supporting propeller 70"

Propeller, dia. 16'-0" Pitch 15'-3" No. of blades three Material Man. Br. whether Moveable YES Total Developed Surface each 56 sq. feet

Method of reversing Engines direct engine Is a governor or other arrangement fitted to prevent racing of the engine when detached YES Means of lubrication

forced 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

non-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 to funnel

Cooling Water Pumps, No. Two VERT. CENT. 8" BORE 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. Diameter Stroke Can one be overhauled while the other is at work YES

Pumps connected to the Main Bilge Line No. and Size ONE BILGE 4 1/2" 100 TONS/HR. ONE BALLAST 8" 150 TONS/HR. How driven ELECTRIC MOTORS

Ballast Pumps, No. and size ONE VERT. CENT. 8" Lubricating Oil Pumps, including Spare Pump, No. and size Two 100 TONS/HR.

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 of 3 1/2" Four of 2 1/2" Tunnel One of 3 1/2" One of 2 1/2" (Shower): One of 2 1/2" (Refrig. Space)

In Holds, &c. No. 1 Hold Two of 3 1/2" No. 2 Hold Two of 3 1/2" FORWARD DEEPTANKS Four of 3 1/2" Refrig. Cargo Spaces Two of 3 1/2" No. 5 Hold Two of 3 1/2" DRYTANK One of 2 1/2"

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size THREE 5 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

fitted 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 YES

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

What pipes pass through the bunkers How are they protected

What pipes pass through the deep tanks NO. 1 & 2 HOLD SUCTIONS 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 upper deck

If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork YES

Main Air Compressors, No. Two No. of stages THREE Diameters 750.675.150 mm. Stroke 500 mm. Driven by main engines

Auxiliary Air Compressors, No. ONE No. of stages THREE Diameters 460.405.92 mm. Stroke 260 mm. Driven by electric motor

Small Auxiliary Air Compressors, No. ONE No. of stages TWO Diameters 106.34 mm. Stroke 80 mm. Driven by petrol motor

Scavenging Air Pumps, No. Diameter Stroke Driven by

Auxiliary Engines crank shafts, diameter as per Rule 132 mm. as fitted 140 mm.

AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule YES and/or fusible plug

Can the internal surfaces of the receivers be examined YES What means are provided for cleaning their inner surfaces open ends

Is there a drain arrangement fitted at the lowest part of each receiver YES

High Pressure Air Receivers, No. FIVE Cubic capacity of each 4,330 LITRES Internal diameter 4-4 1/16 mm. thickness 1-17.5 mm.

Seamless, lap welded or riveted longitudinal joint seamless Material steel Range of tensile strength 26-30 T Working pressure by Rules 1305-1103 lb/sq. in.

Starting Air Receivers, No. THREE Total cubic capacity 2175 cu. ft. Internal diameter 6-11 5/16" thickness 1 1/2"

Seamless, lap welded or riveted longitudinal joint d.b.s. Material steel Range of tensile strength 28-32 T Working pressure by Rules 358 lb/sq. in.

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