

Rpt. 4b.

REPORT ON OIL ENGINE MACHINERY.

No. 167.

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Date of writing Report 19.4.37. When handed in at Local Office 25.4.37 Port of Düsseldorf.

No. in Survey held at Cologne Date, First Survey 28th May, 36. Last Survey 19. April, 1937. Reg. Book. Number of Visits 10

22104 on the Single Screw vessel Tons Gross 323 Net 184

Built at Newcastle-on-Tyne By whom built Jas Pollock, Sons & Co. Cleland's Work Willington Quay, Yard No. 36-419700/05 When built 1937.

Engines made at Cologne By whom made Humboldt-Deutzmotoren A.G. Engine No. When made 1937.

Donkey Boilers made at By whom made Boiler No. When made

Brake Horse Power 300 BHP Owners Newcastle Coal Shipping Co. Port belonging to London

Nom. Horse Power as per Rule 71 NHP Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted

Trade for which vessel is intended

OIL ENGINES, &c.—Type of Engines Heavy Oil Engine R.V.6 M. 345 2 or 4 stroke cycle 4 Single or double acting single

Maximum pressure in cylinders 50 kgs/cm² Diameter of cylinders 280 mm Length of stroke 450 mm No. of cylinders six No. of cranks six

Mean Indicated Pressure 6.6 kgs/cm² Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 307.5 mm Is there a bearing between each crank yes

Revolutions per minute 300 Flywheel dia. 1250 mm Weight 2600 kgs. Means of ignition sol. inject. Kind of fuel used on test bed gas oil

Crank Shaft, dia. of journals as per Rule 187.8 as fitted 190 mm Crank pin dia. 170 mm Crank Webs Mid. length breadth 325 mm Thickness parallel to axis Mid. length thickness 70 mm Thickness around eye-hole

Flywheel Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule 190 mm Thrust Shaft, diameter at collars as per Rule 140 mm

Tube Shaft, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted Is the tube screw shaft fitted with a continuous liner

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

shaft If so, state type Length of Bearing in Stern Bush next to and supporting propeller

Propeller, dia. Pitch No. of blades Material whether Moveable Total Developed Surface sq. feet

Method of reversing Engines directly by hand Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes Means of lubrication forced at present

Thickness of cylinder liners 25 mm Are the cylinders fitted with safety valves none Are the exhaust pipes water cooled or lagged with non-conducting material water cooled

Cooling Water Pumps, No. one 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 100 mm Stroke 85 mm Can be overhauled while at work yes

Pumps connected to the Main Bilge Line No. and Size How driven

Is the cooling water led to the bilges If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping arrangements capacity 100/80 lts/h. at 1400 rev.p.min.

Ballast Pumps, No. and size Main Engine Driven Lubricating Oil Pumps, including Spare Pump, No. and size 1 tooth wheel pump & 1 spare of same type

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 Pump Room

In Holds, &c. Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size

Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Are the Bilge Suctions in the Machinery Spaces

led 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

What pipes pass through the bunkers How are they protected

What 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

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. No. of stages Diameters Stroke Driven by

Auxiliary Air Compressors, No. one No. of stages Diameters 145/60 mm Stroke 85 mm Driven by main engine

Small Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by

Scavenging Air Pumps, No. Diameter Stroke Driven by

Auxiliary Engines crank shafts, diameter as per Rule as fitted Position

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