

REPORT ON OIL ENGINE MACHINERY.

No. 7819.2

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Port of Copenhagen

in Survey held at Copenhagen

Date, First Survey 9th December 1927. Last Survey 27th April 1928

Number of Visits 53

on the Single Twin Triple Quadruple Screw vessel

Tons ^{Gross} _{Net}

built at Yamato Japan By whom built Mitsui Bussan Kaisha Yard No. 150 When built

engines made at Copenhagen By whom made akt. Burmeister & Wain Maskin og Skibsbyggeri Engine No. 1439 1440 When made 1928

Boilers made at By whom made Boiler No. When made

Horse Power 4200 Owners Port belonging to

Horse Power as per Rule 95% Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted

for which vessel is intended

ENGINES, &c.—Type of Engines Vertical Diesel Oil Engines (Cross head type) 2 or 4 stroke cycle 4 Single or double acting Single

mean pressure in cylinders 35 kg/cm² Diameter of cylinders 630 mm = 24 3/8" Length of stroke 1100 mm = 43 1/16" No. of cylinders 2 x 8 No. of cranks 2 x 8

bearings, adjacent to the Crank, measured from inner edge to inner edge 892 mm Is there a bearing between each crank Yes

Revolutions per minute 135 Wheel dia. 1902 mm Weight 1189 kg Means of ignition Air compression Kind of fuel used Gas oil, flash point about 50°F.

Shaft, dia. of journals as per Rule 396.6 mm as fitted 398 mm Crank pin dia. 393 mm Crank Webs Mid. length breadth 764 mm shrunk Thickness parallel to axis 266 mm Mid. length thickness 246 mm Thickness around eye-hole 178 mm

Propeller Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted Thrust Shaft, diameter at collar's as per Rule 11.81" as fitted 12 1/2"

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

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 boss

If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner

Does 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

When 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

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

Means of reversing Engines Direct reversible Is a governor or other arrangement fitted to prevent racing of the engine when detached Yes Means of lubrication Direct

Thickness of cylinder liners 46 mm Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with insulating 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

Water Pumps, No. 2 off. 225 tons. Centrifugal Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Water Pumps worked from the Main Engines, No. 2 off Diameter of tanks 150 mm Stroke 196 mm Can one be overhauled while the other is at work Yes

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

Pumps, No. and size 1 off. 150 tons. Rotary wing pump. Lubricating Oil Pumps, including Spare Pump, No. and size 2 sets, each 2 off. Cog wheel pumps.

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

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

Are the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Are the Bilge Suctions in the Machinery Spaces easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges

Sea Connections fitted direct on the skin of the ship Are they fitted with Valves or Cocks

Are the Overboard Discharges above or below the deep water line

Are the Blow Off Cocks fitted with a spigot and brass covering plate

Are they protected

Have they been tested as per Rule

Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

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

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

Air Compressors, No. 2 off. No. of stages 3 Diameters 150-675-150 mm Stroke 350 mm Driven by the main engines

Auxiliary Air Compressors, No. 1 off. No. of stages 2 Diameters 90-35 mm Stroke 120 mm Driven by hand

Other Air Pumps, No. Diameter Stroke Driven by

Other Engines crank shafts, diameter as per Rule as fitted

RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes

Are the internal surfaces of the receivers be examined Yes What means are provided for cleaning their inner surfaces

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

Pressure Air Receivers, No. 1 working for main engines 3 13 Cubic capacity of each I-225 litres II-450 Internal diameter I-358 mm II-450 mm thickness I-25 mm II-25 mm

Are the receivers lap welded or riveted longitudinal joint lap welded Material SM Steel Range of tensile strength 36.7-37.8 kg/mm² Working pressure by Rules 7.49.3

Other Air Receivers, No. Total cubic capacity Internal diameter thickness

Are the receivers lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules



