

REPORT ON OIL ENGINE MACHINERY.

No. 2858.

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No. in Survey held at Helby & Nakskov Date, First Survey 5/11 1927 Last Survey 23/12 1928 Reg. Book. Number of Visits 15

92048 on the Triple Screw vessel 'SIR KARL KNUDSEN' Tons Gross 7747.17 Net 4581.48

Built at Nakskov By whom built a/s Nakskov Skibsverft Yard No. 33 When built 1928 Engines made at Helby By whom made a/s Helby Dieselmotor Fabrik Engine No. 249 When made 1928 Donkey Boilers made at a/s aarhu By whom made a/s Babcock & Wilcox Lt. Boiler No. 5826-7 When made 1927-8 Brake Horse Power 3000 Owners A. F. Klemmuss & Co. a/s Port belonging to Oslo. Nom. Horse Power as per Rule 624 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted yes.

Trade for which vessel is intended Ocean Steamer, carrying petroleum in bulk.

OIL ENGINES, &c.—Type of Engines Vertical Diesel, trunk type 2 or 4 stroke cycle 4 Single or double acting single Maximum pressure in cylinders 35 kg/cm² Diameter of cylinders 310 mm Length of stroke 350 mm No. of cylinders 2 No. of cranks 2

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 360 mm Is there a bearing between each crank yes. Revolutions per minute 400 Flywheel dia. 1240 mm Weight 2710 kg Means of ignition compression Kind of fuel used ord. Diesel oil

Crank Shaft, dia. of journals as per Rule 161.8 mm as fitted 170 mm Crank pin dia. 170 mm Crank Webs Mid. length breadth 355 mm shrunk Thickness parallel to axis Thickness around eye-hole 95 mm Thrust Shaft, diameter at collars as per Rule as fitted

Flywheel Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted Tube Shaft, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted Is the tube 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 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 Is a governor or other arrangement fitted to prevent racing of the engine when declutched Means of lubrication

Thickness of cylinder liners Are the cylinders fitted with safety valves Are the exhaust pipes and silencers water cooled or lagged with non-conducting material If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine

Cooling Water Pumps, No. Is the sea suction provided with an efficient strainer which can be cleared within the vessel Bilge Pumps worked from the Main Engines, No. Diameter Stroke Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line No. and Size How driven Lubricating Oil Pumps, including Spare Pump, No. and size

Ballast Pumps, No. and size 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 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 Have they been tested as per Rule What pipes pass through the deep tanks

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 'Shift' 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 A B C Stroke Driven by

Auxiliary Air Compressors, No. 2 No. of stages 3 Diameter 318-285-78 Stroke 170 mm Driven by 2 auxil. engines

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

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 steam pipes fitted

Is there a drain arrangement fitted at the lowest part of each receiver yes. High Pressure Air Receivers, No. 2 Cubic capacity of each 25 litres Internal diameter 7 1/4" thickness 0.395"

Seamless, lap welded or riveted longitudinal joint seamless. Material steel Range of tensile strength 31.1-31.7 t Working pressure by Rules 1568 lb = 110 kg/cm²

Starting Air Receivers, No. Total cubic capacity Internal diameter thickness Working pressure by Rules Seamless, lap welded or riveted longitudinal joint Material Range of tensile strength



