

REPORT ON OIL ENGINE MACHINERY.

No. 7819.a

29 OCT 1928

Writing Report 24/10 1928 When handed in at Local Office 10 Port of Copenhagen. Date, First Survey 15/8 1928 Last Survey 20/3 1928 Number of Visits 10

Survey held at Høiby. Date, First Survey 15/8 1928 Last Survey 20/3 1928 Number of Visits 10. Single on the Twin Triple Quadruple Screw vessel. Tons Gross Net. at Tama Japan By whom built Mitsui Bussan Kaisha Yard No. 150 When built. By whom made Høiby Dieselmotor Fabrik Engines No. 1441/1442 When made 1927-8. Boilers made at By whom made Boiler No. When made. Horse Power 4200 Owners. Port belonging to. Horse Power as per Rule 957 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted. for which vessel is intended.

ENGINES, &c.—Type of Engines Vertical Diesel, trunk type 2 or 4 stroke cycle 4 Single or double acting single. Pressure in cylinders 35 kg/cm² Diameter of cylinders 310 mm Length of stroke 350 mm No. of cylinders 3 No. of cranks 3. 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 Diesel oil. 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 dia. Thickness parallel to axis shrunk Thickness around eyehole. Main Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule Thrust Shaft, diameter at collars as per Rule as fitted.

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

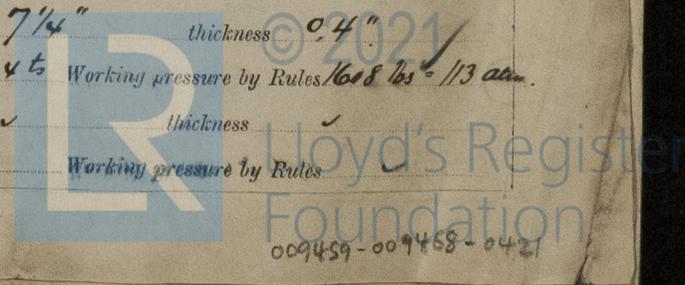
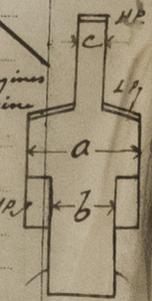
Propeller, dia. Pitch No. of blades Material whether Moveable Total Developed Surface sq. feet. No. of reversing Engines Is a governor or other arrangement fitted to prevent racing of the engine when declutched Means of lubrication. Thickness of cylinder liners Are the cylinders fitted with safety valves Are the exhaust pipes and silencers water cooled or lagged with insulating material. 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. Is the sea suction provided with an efficient strainer which can be cleared within the vessel. 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. 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 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 the Blow Off Cocks fitted with a spigot and brass covering plate. Are they each fitted with a Discharge Valve always accessible on the plating of the vessel. How are they protected. Are they tested as per Rule. Do they pass through the bunkers. Have they been tested as per Rule. Do they pass through the deep tanks.

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. Is it worked from the vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork. Air Compressors, No. No. of stages Diameters a. b. c. Stroke Driven by. Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by. Air Pumps, No. Diameter Stroke Driven by.

Receivers:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule yes. Internal surfaces of the receivers be examined yes. What means are provided for cleaning their inner surfaces. Drain arrangement fitted at the lowest part of each receiver yes. Pressure Air Receivers, No. 3 Cubic capacity of each 25 litres Internal diameter 7 1/4" thickness 0.4". Cap welded or riveted longitudinal joint seamless Material mild steel Range of tensile strength 31.3-32.4 t Working pressure by Rules 1608 lbs = 1/13 atm. Air Receivers, No. Total cubic capacity Internal diameter thickness Cap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules.



IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

PLANS. Are approved plans forwarded herewith for Shafting *yes.*

Receivers

Separate Tanks

Donkey Boilers

General Pumping Arrangements

Oil Fuel Burning Arrangements

SPARE GEAR

as per accompanying list

- to be checked on board the vessel.

The foregoing is a correct description,

**HOLEBY DIESEL MOTOR FABRIK**

*C. Kasper*

Manufacturer.

Dates of Survey while building

During progress of work in shops - - - 15/8. 25/8. 5/9. 12/9. 10/12. 1927; 17/1. 24/1. 22/2. 6/3. 20/3 1928.

During erection on board vessel - - -

Total No. of visits 10.

Dates of Examination of principal parts—Cylinders with Covers 10/12. 17/1. Pistons 10/12. 17/1. Rods Connecting rods 5/9. 12/9. 10/12

Crank shaft 25/8. 5/9. 12/9. 10/12 Flywheel shaft Thrust shaft Intermediate shafts Tube shaft

Screw shaft Propeller Stern tube Engine sealings Engines holding down bolts

Completion of fitting sea connections Completion of pumping arrangements Engines tried under working conditions 6/3. 20/3

Crank shaft, Material S.M. steel Identification Mark LLOYD'S N: 8696-8697-8704. Flywheel shaft, Material Identification Mark

Thrust shaft, Material Identification Mark Intermediate shafts, Material Identification Marks

Tube shaft, Material Identification Mark Screw shaft, Material Identification Mark

Is the flash point of the oil to be used over 150° F. *yes.*

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo  If so, have the requirements of the Rules been complied with

Is this machinery duplicate of a previous case  If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.)

These auxiliary engines have been built under special survey and in accordance with the Society's Rules, the approved plans of crank shafts and the requirements contained in the Secretary's letter of date 17-10-27.

The material used in the construction has been tested and examined as required by the Rules and found good, and the workmanship is of good description throughout.

Each engine is connected with a compound wound dynamo of resp. 100 kwh. for the 3 cyl. engines and 66 kwh. for the 2 cyl. engine, and after completion the engines were tested under full power working conditions and found to work satisfactorily.

The amount of Entry Fee ... £ : : When applied for, 22/10 1928

Special ... £ 300.00

Donkey Boiler Fee ... £ : : When received, 25/10 1928

Travelling Expenses (if any) £ 95.00

Committee's Minute

TUE. 15 JAN 1929

Assigned

*See Note No. 1st. No. 6368*

*Atkinson*  
Engineer Surveyor to Lloyd's Register of Shipping.



© 2021

Lloyd's Register Foundation

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

Rpt.

Date

No. Reg.

Built

Engin

Boiler

Owner

VER

Made

Manu

Total

No. an

Tested

Area

Area

State

or wo

3

Shell

Are the

Dia. of

Workin

Shell C

Tensile

Descrip

Thickne

Pitch of

Diamete

Thickne

ombus

radius

length a

diamete

ube Pl

compr

each

orders

depth an

stance