

REPORT ON OIL ENGINE MACHINERY.

No. 3234.

2 MAY 1930

Received at London Office

Date of writing Report 28 April 1930 When handed in at Local Office

Port of Stockholm

No. in Survey held at Sickla, Skm. Distr.

Date, First Survey 1 Febr. 1929

Last Survey 7 April 1930.

Reg. Book.

Number of Visits 7.

On the ~~Single~~
~~Twin~~
~~Triple~~
Quadruple Screw vessel DanwoodTons { Gross
Net

Built at Fredrikstad By whom built Fredrikstad Mek. Vaerkst. Yard No. 80248 When built 1930
Engines made at Stockholm By whom made Aktieb. Atlas-Diesel Engine No. When made 1930
Donkey Boilers made at By whom made Boiler No. When made
Brake Horse Power 100 Owners A/s Danwood Port belonging to Oslo
Nom. Horse Power as per Rule 46 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted
Trade for which vessel is intended

OIL ENGINES, &c. Type of Engines Stationary Diesel Oil Engine/type 2H29/ 2 or 4 stroke cycle Single or double acting
Maximum pressure in cylinders 35 kg/cm² Diameter of cylinders 290 mm. Length of stroke 410 mm. No. of cylinders 2 No. of cranks 2
Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 984 mm. Is there a bearing between each crank no
Revolutions per minute 275 Flywheel dia. 1400 mm. Weight 1185 kg. Means of ignition Compression and of fuel used Crude oil
Crank Shaft, dia. of journals as per Rule 178 mm. Crank pin dia. 195 mm. Crank Webs Mid. length breadth 260 mm. Thickness parallel to axis
The flywheel is fitted as per Rule 200 " shrunk Mid. length thickness 110-120 mm. Thickness around eyehole
Flywheel Shaft, diameter as fitted Intermediate Shafts, diameter as per Rule Thrust Shaft, diameter at collars as per Rule
Tube Shaft, diameter as fitted Screw Shaft, diameter as per Rule Is the { tube } shaft fitted with a continuous liner { screw }

Bronze Liners, thickness in way of bushes as per Rule Thickness between bushes as per rule 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 yes Means of lubrication

pumps Thickness of cylinder liners none fitted Are the cylinders fitted with safety valves yes 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. 1 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

Ballast Pumps, No. and size Lubricating Oil Pumps, including Spare Pump, 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

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. none fitted No. of stages Diameters Stroke Driven by

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

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

IR 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 mudhole 120 mm.

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

High Pressure Air Receivers, No. none fitted, solid injection Internal diameter thickness

Seamless, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules

Starting Air Receivers, No. 1 Total cubic capacity 100 litres Internal diameter 340 mm. thickness 15 mm.

Seamless, lap welded or riveted longitudinal joint lap welded Material S.M. Steel Range of tensile strength 38 Kg. mm² as a min. 51 kg/cm²

Working pressure by Rules

W194-0066

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

PLANS. Are approved plans forwarded herewith for Shifting **E.28.5.25**
(If not, state date of approval)

Receivers **25.10.26** Separate Tanks

Donkey Boilers General Pumping Arrangements Oil Fuel Burning Arrangements

SPARE GEAR as per list, approved on the 4th Febr.1926, will be inspected when machinery is be fitted in ship.

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops - - 1/2,18/3,17/4,25/9,1&9/10 1929; 7/4 1930.
During erection on board vessel - -
Total No. of visits in shop 7.

Dates of Examination of principal parts—Cylinders with Covers 1 & 9 29 Pistons 9 29 Rods Connecting rods 1, 17 & 9 2, 4 10
Crank shaft 18, 25, 9 29 Flywheel shaft Thrust shaft 10 Intermediate shafts Tube shaft
Screw shaft 3 9 10 Propeller Stern tube Engine seatings Engines holding down bolts
Completion of fitting sea connections Completion of pumping arrangements Engines tried under working conditions in shop 1 2
Crank shaft, Material S.M.Steel Identification Mark Lloyd's N:o 5724 Flywheel shaft, Material Identification Mark
Thrust shaft, Material Identification Mark AI.25.9.29 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.

Is this machinery duplicate of a previous case yes If so, state name of vessel See Skm. report no.3175.

General Remarks (State quality of workmanship, opinions as to class, &c. I am of opinion, that this engine is of super material and workmanship, and as it has been designed and constructed under special survey, I have respectfully to submit that it be approved as auxiliary to a classed main engine.

The amount of Entry Fee ... £ : : When applied for,
Special ... Kr. 218:40 : 29.7.1930
Donkey Boiler Fee ... £ : : When received,
Travelling Expenses (if any) £ 28:00 : 30.6.1930
Total Kr. 246:40.

Committee's Minute FRI. 26 SEP 1930

Assigned

A. Hakson
Engineer Surveyor to Lloyd's Register of Shipping.
Assisted by Mr. K. J. Andersson

TUE. 12 MAY 1931

Lloyd's Register Foundation