

-3 DEC 1930

Rpt. 4b.

REPORT ON OIL ENGINE MACHINERY.

No. 95710

Received at London Office 11 NOV 1930

Date of writing Report

When handed in at Local Office 11 NOV 1930

Port of London

No. in Survey held at

Newbury

Date, First Survey 28th April

Last Survey 9th Oct 1930

Number of Visits six

on the ^{Single} ~~Triple~~ ~~Quadruple~~ Screw vessel

M.V. ASSIDUITY

Tons { Gross 350
Net 186

built at Greenock

By whom built Messrs. Geo. Brown & Co. Ltd.

Yard No. 174

When built 1930

Engines made at Newbury

By whom made Messrs. Bentley & Sons Ltd.

Engine No. 608

When made 1930

Donkey Boilers made at

By whom made

Boiler No.

When made

Brake Horse Power 250 / 275

Owners Frederick T. Everard & Sons

Port belonging to

London

Nom. Horse Power as per Rule 71

Is Refrigerating Machinery fitted for cargo purposes No

Is Electric Light fitted No

Trade for which vessel is intended

154 H.P.B.

13 3/16

15 3/8

L ENGINES, &c. Type of Engines Heavy Oil 2 or 4 stroke cycle 2 Single or double acting S.A.

Maximum pressure in cylinders 450 lbs. Diameter of cylinders 33 5/8" Length of stroke 39 1/2" No. of cylinders 5 No. of cranks 5

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 42 5/8" Is there a bearing between each crank Yes

Revolutions per minute 300 Flywheel dia. 105 1/2" Weight 1 Ton Means of ignition Hot Spark Kind of fuel used Diesel

Crank Shaft, dia. of journals as per Rule 146 1/4" Crank pin dia. 174 1/4" Crank Webs Mid. length breadth 265 1/2" Mid. length thickness 100 1/2" Thickness parallel to axis SOLID FORGED Thickness around eyelet

Propeller Shaft, diameter as per Rule 174 1/4" Intermediate Shafts, diameter as per Rule 120 1/2" Thrust Shaft, diameter at collars as per Rule 126 1/2"

Screw Shaft, diameter as per Rule 53 3/8" Is the shaft fitted with a continuous liner Yes

Bronze Liners, thickness in way of bushes as per Rule 19 3/32" Thickness between bushes as per Rule 15 1/32" 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

Length of Bearing in Stern Bush next to and supporting propeller 24"

Propeller, dia. 5'-6" Pitch 3'-5" No. of blades 3 Material STEEL whether Moveable No Total Developed Surface 9 1/2 sq. feet

Method of reversing Engines Gear Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication

Thickness of cylinder liners 27 1/2" Are the cylinders fitted with safety valves No 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. 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 130 1/2" Stroke 120 1/2" Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line No. and Size Two - 130 x 120 @ 150 RPM, & 125 x 120 @ 150 RPM. How driven One Main Engine & P. and One Aux. Eng.

Ballast Pumps, No. and size Ballast on both lines Lubricating Oil Pumps, including Spare Pump, No. and size Hand by. driven multiple

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

ed 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 No. of stages 2 Diameters 36 1/2" Stroke 3 1/2" Driven by Aux. Engine

Auxiliary Air Compressors, No. One No. of stages 2 Diameters 36 1/2" Stroke 3 1/2" Driven by

Small Auxiliary Air Compressors, No. None No. of stages 2 Diameters 36 1/2" Stroke 3 1/2" Driven by

Scavenging Air Pumps, No. None Diameter 36 1/2" Stroke 3 1/2" Driven by

Auxiliary Engines crank shafts, diameter as per Rule 75 1/2" as fitted

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

Can the internal surfaces of the receivers be examined and cleaned Yes Is a drain fitted at the lowest part of each receiver Yes

High Pressure Air Receivers, No. Cubic capacity of each Internal diameter thickness

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

Starting Air Receivers, No. Three Total cubic capacity 13.8 cub. ft. Internal diameter 13" thickness 1/4"

Seamless, lap welded or riveted longitudinal joint Material Steel Range of tensile strength 29/33 Working pressure by Rules Actual

002536-002542-0074

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

Is the donkey boiler intended to be used for domestic purposes only

PLANS. Are approved plans forwarded herewith for Shafting
(If not, state date of approval)

April 8th 1930

Receivers

Separate Tanks

Donkey Boilers

General Pumping Arrangements

Oil Fuel Burning Arrangements

SPARE GEAR.

Has the spare gear required by the Rules been supplied

State the principal additional spare gear supplied

The foregoing is a correct description,

J. M. O. R.

THE PLANT STILL OIL ENGINES LIMITED.

Manufacturer.

Dates of Survey while building { During progress of work in shops - April 28. May 9. June 13 July 17 Aug. 14 Sep. 1. 12. Oct 9. Nov. 3. 1930.
During erection on board vessel - - -
Total No. of visits 9.

Dates of Examination of principal parts—Cylinders 28-4-30 Covers 13-6-30 Pistons 9-5-30 Rods ✓ Connecting rods 9-5-30

Crank shaft 28-4-30 Flywheel shaft ✓ Thrust shaft 28-4-30 Intermediate shafts ✓ Tube shaft ✓

Screw shaft 1-9-30 Propeller 12-9-30 Stern tube 12-9-30 Engine seatings Engines holding down bolts

Completion of fitting sea connections Completion of pumping arrangements Engines tried under working conditions

Crank shaft, Material *Engt Steel* Identification Mark *LLOYDS 460 MCK 7-1-30* Flywheel shaft, Material *CRANK SHAFT.* Identification Mark

Thrust shaft, Material *do* Identification Mark *LLOYDS 3116 RWF 3-2-30* Intermediate shafts, Material ✓ Identification Marks *LLOYDS 3116 RWF 3-2-30*

Tube shaft, Material ✓ Identification Mark ✓ Screw shaft, Material *Engt Steel.* Identification Mark *RWF 22-7-30*

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

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

If the notation for Ice Strengthening is desired, state whether the requirements in this respect have 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.)

This Machinery, which has been constructed under survey to approved plans & rule requirements, has been despatched to Greenock for installation on board.

The workmanship and materials, so far as can be seen, are good and, in my opinion, the machinery will be eligible for the record of T.M.C. (with date) when it has been fitted aboard the vessel under survey and tried under working conditions.

The amount of Entry Fee 2:0:0

Special 19:15:0

4/5 for survey of machinery
Donkey Boiler Fee
Travelling Expenses (if any)

When applied for,

11 NOV 1830

When received,

18-2-31

Committee's Minute GLASGOW 2 DEC 1930

Assigned T.M.C. 11.30 subject re on G.R.K. 19269.

Arthur Palmer

Engineer Surveyor to Lloyd's Register of Shipping.

FRI 30 JAN 1931



© 2020

Lloyd's Register Foundation