

REPORT ON OIL ENGINE MACHINERY.

 Sld. No. 30449
 Sub No. 19194
 28 MAY 1930
 30 AUG 1930

Received at London Office

Date of writing Report

10.5.30

When handed in at Local Office

21st May 1930

Port of

Greenwich

No. in Survey held at
Reg. Book.

Date, First Survey 15th NOVEMBER 1929

Last Survey

15th May 1930

Number of Visits 83

on the ~~Twin~~ ^{Single} Screw vessel

M/S "Longwood"

Tons { Gross 9463
Net 5559

Built at Sunderland

By whom built

Sri James Laming & Co Ltd

Yard No.

Y12

When built

1930

Engines made at Greenock

By whom made

John & Russell Ltd

Engine No.

R151

When made

1930

Donkey Boilers made at

By whom made

Boiler No.

When made

Brake Horse Power

2808

Owners

John I. Jacobs & Co Ltd

Port belonging to

London

Nom. Horse Power as per Rule

709

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

Yes

Trade for which vessel is intended

Foreign

OIL ENGINES, &c.—Type of Engines ~~Burmeister & Wain~~ ^{4 stroke cycle 4 Single} ~~acting~~ ^{Single}

Maximum pressure in cylinders 45 kg/cm Diameter of cylinders 630 mm Length of stroke 1300 mm No. of cylinders 12 No. of cranks 12

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

Revolutions per minute 110 Flywheel dia. 1930 mm Weight 3800 lb Means of ignition Compression Kind of fuel used Diesel

Crank Shaft, dia. of journals 440 mm Crank pin dia. 440 mm Crank Webs Mid. length breadth shrunk Thickness parallel to axis 275 mm

Flywheel Shaft, diameter as per Rule 12" as fitted 13 3/4" Thrust Shaft, diameter at collars as per Rule 12" as fitted 13 3/4"

Tube Shaft, diameter as per Rule 13.125" as fitted 13 3/4" Is the screw shaft fitted with a continuous liner Yes

Bronze Liners, thickness in way of bushes as per Rule 5/16" as fitted 3/4" Thickness between bushes as per Rule 5/16" as fitted 19/32" Is the after end of the liner made watertight in the

propeller boss Yes 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 No If so, state type Length of Bearing in Stern Bush next to and supporting propeller 5-2 1/4"

Propeller, dia. 13-6" Pitch 11-3" No. of blades 4 Material Bronze whether Moveable No Total Developed Surface 54 sq. feet

Method of reversing Engines Air Is a governor fitted to prevent racing of the engine Yes Means of lubrication

Forced Thickness of cylinder liners 36/46 mm Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with

non-conducting 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 FUNNEL EXHAUST.

Cooling Water Pumps, No. 2 on Main Engines ONE INDEPENDENT (READY COUPLED) Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes

Bilge Pumps worked from the Main Engines, No. 2 Diameter 5" Stroke 8" Can one be overhauled while the other is at work Yes

Pumps connected to the Main Bilge Line How driven Three Ballast pumps 8 x 9 x 10 & J.T. 2 on main engine

Ballast Pumps, No. and size One 8 x 9 x 10 Lubricating Oil Pumps, including Spare Pump, No. and size 3 on 1930

Are two independent means arranged for circulating water through the Oil Cooler Yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

Pumps, No. and size:—In Machinery Space Three 2 3/4" Two 2 1/2" & 4 connections 2 1/2" In Pump Room 2 @ 2"

In Holds, &c. Two 2 1/2" Two Hold 3" ejecta after cofferdam 4" Port to

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size One 5"

Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Yes 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 Yes

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

Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates Yes Are the Overboard Discharges above or below the deep water line Above.

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Yes Are the Blow Off Cocks fitted with a spigot and brass covering plate Yes

What pipes pass through the bunkers None How are they protected

What pipes pass through the deep tanks None 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 Yes

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 Yes 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. 2 No. of stages 3 Diameters 600-540-120 mm Stroke 480 mm Driven by Main Engine

Auxiliary Air Compressors, No. one No. of stages 3 Diameters 400-350-83 mm Stroke 260 mm Driven by Steam Engine

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 and cleaned Yes Is a drain fitted at the lowest part of each receiver Yes

High Pressure Air Receivers, No. 4 Cubic capacity of each 150 Litres Internal diameter 12" thickness 1 1/2"

Seamless, lap welded or riveted longitudinal joint Seamless Material S Range of tensile strength 29.33 Working pressure by Rules 1004 lb/sq. inch

Starting Air Receivers, No. 2 Total cubic capacity 1300 CF Internal diameter 5.10 1/4" - 6.03 1/16" thickness 2 1/32" - 1 1/16"

Seamless, lap welded or riveted longitudinal joint Riveted Material S Range of tensile strength 28.32 Working pressure by Rules 362 lb/sq. inch

Actual 350

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

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,
For John G. Kincaid & Co. Ltd.

Director.

Manufacturer.

Dates of Survey while building
During progress of work in shops -
During erection on board vessel -
Total No. of visits

Dates of Examination of principal parts

Crank shaft 11-4-30 Flywheel shaft Thrust shaft 7-5-30 Intermediate shafts 6-5-30 Tube shaft

Screw shaft 6-5-30 Propeller 6-5-30 Stern tube 15-5-30 Engine seatings 15/4/30 8/2/4/30 Engines holding down bolts 15/7/30

Completion of fitting sea connections 24/5/30 Completion of pumping arrangements 6/8/30 Engines tried under working conditions 6/8/30

Crank shaft, Material S Identification Mark L.R. 1151 W.G.M. Flywheel shaft, Material S Identification Mark S.L.R. 8143 W.G.M.

Thrust shaft, Material S Identification Mark S.L.R. 13947 W.G.M. Intermediate shafts, Material S Identification Marks S.L.R. 13946 W.G.M. S.L.R. 13945 W.G.M.

Tube shaft, Material S Identification Mark S.L.R. 13948 W.G.M. Screw shaft, Material S Identification Mark S.L.R. 13948 W.G.M.

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 Yes.

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo Yes, 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 No If so, state name of vessel

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

These Engines have been built under Special Survey in accordance with the approved plans & the workmanship & material are of good quality. They have been tested on the Test Bed & found satisfactory & have now been shipped to Sunderland at which port they will be fitted on board.

The machinery when fitted on board & tried under working condition will be eligible in my opinion for the record of L.M.C. with date. The machinery & boilers have been satisfactorily fitted on board the vessel. The machinery throughout is now in a good & efficient condition & eligible in my opinion to have the record of L.M.C. - 8 - 30 marked in the Register Book. The donkey boiler was also fitted to burn oil fuel F.P. above 150° F. & the requirements of Section 29 of the Rules fully complied with.

The amount of Entry Fee 6 : - When applied for, 19th May 1930.

Special 4/5 £ 68 : 4 When received, 21.5.30 R.B.N.

General 1/5 £ 22 : 2

Oil 8/8 £ 8 : 8

Committee's Minute GLASGOW 27 MAY 1930

Assigned Deferred.

Rpt. 5a.

Date of writing Report

No. in Reg. Book

on the

Master

Engines made at

Boilers made at

Nominal Horse Power

MULTITUBULAR

Manufacturers of

Total Heating Surface

No. and Description

Tested by hydraulic

Area of Firegrate

Area of each set

In case of donkey

Smallest distance

Smallest distance

Largest internal

Thickness

long. seams

Percentage of str

Percentage of str

Thickness of butt

Material

Length of plain

Dimensions of st

End plates in st

How are stays s

Tube plates: M

Mean pitch of st

Girders to comb

at centre 8

in each 3

Tensile strength

Pitch of stays to

Working pressur

Thickness

Pitch of stays a

Working Pressu

Diameter { At bod

Working pressu

Diameter { At turn

Over th

Over th

GREENOCK OFFICE.

Certificate (if required) to be sent to

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

FRI. 5 SEP 1930

© 2020

+ L.M.C. 8-30

Oil fuel 20 lb. 150 lb.

CERTIFICATE WRITTEN

Lloyd's Register Foundation