

REPORT ON OIL ENGINE MACHINERY.

No. 55388

Received at London Office

Date of writing Report

19

When handed in at Local Office

9. 2.

10

Port of

No. in Survey held at

Reg. Book.

Date, First Survey

Last Survey

1935

Number of Visits

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

Mussie Humphrey & Gray (Lighting) Ltd. for 90 H.P.

Tons

Built at

By whom built

Yard No.

When built

Engines made at

By whom made

Engine No.

When made

Donkey Boilers made at

By whom made

Boiler No.

When made

Brake Horse Power

Owners

Port belonging to

Nom. Horse Power as per Rule

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

Trade for which vessel is intended

L. ENGINES, &c.

Type of Engines

British Polar Diesel

2 or 4 stroke cycle

Single or double acting

Maximum pressure in cylinders

Diameter of cylinders

Length of stroke

No. of cylinders

No. of cranks

Mean Indicated Pressure

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge

Is there a bearing between each crank

Revolutions per minute

Flywheel dia.

Weight

Means of ignition

Kind of fuel used

Crank Shaft, dia. of journals

as per Rule

Crank pin dia.

Crank Webs

Mid. length breadth

Thickness parallel to axis

Flywheel Shaft, diameter

as per Rule

Intermediate Shafts, diameter

as per Rule

Thrust Shaft, diameter at collars

as per Rule

Stern Shaft, diameter

as per Rule

Screw Shaft, diameter

as per Rule

Is the

tube

screw

shaft fitted with a continuous liner

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

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

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

ft. If so, state type

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 detached

Means of lubrication

Thickens of cylinder liners

Are the cylinders fitted with safety valves

Are the exhaust pipes and silencers water cooled or lagged with

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

Suction 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

the cooling water led to the bilges

If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping

Bilge Pumps, No. and size

Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size

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

Holds, &c.

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

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

Are the Bilge Suctions in the Machinery Spaces

from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges

all Sea Connections fitted direct on the skin of the ship

Are they fitted with Valves or Cocks

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

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

at pipes pass through the bunkers

How are they protected

at pipes pass through the deep tanks

Have they been tested as per Rule

all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

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

apartment to another

Is the Shaft Tunnel watertight

Is it fitted with a watertight door

worked from

wood 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

Stroke

Driven by

Auxiliary Air Compressors, No.

No. of stages

Diameters

Stroke

Driven by

Auxiliary Air Compressors, No.

No. of stages

Diameters

Stroke

Driven by

Suctioning Air Pumps, No.

Diameter

Stroke

Driven by

Auxiliary Engines crank shafts, diameter

as per Rule

as fitted

Lloyd's Register Foundation

AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule. *2/2*
Can the internal surfaces of the receivers be examined and cleaned. *2/2* Is a drain fitted at the lowest part of each receiver. *2/2*
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. *3* Total cubic capacity *106 cft.* Internal diameter *150 1/2* thickness *14 7/8*
Seamless, lap welded or riveted longitudinal joint *links* Material *S* Range of tensile strength *28-32 tons* Working pressure by Rules *384* Actual *355*

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 *2/2* Receivers *2/2* Separate Tanks
(If not, state date of approval)
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

As per attached List.

The foregoing is a correct description,
For BRITISH AUXILIARIES, LIMITED,
John Rogers Manufacturer. *February 4th 1935*
DIRECTOR

Dates of Survey while building { During progress of work in shops - - 1934 July: 25 Aug: 14 Sep: 11 Oct: 11 17 29 Nov: 2 13 21 Dec: 4 11 13 17 26 28
During erection on board vessel - - 1935 Jan: 8 11 19 29 30 Feb: 1 4
Total No. of visits 22

Dates of Examination of principal parts—Cylinders 14.12.34 Covers 28.12.34 Pistons 11.1.35 Rods — Connecting rods 2.11.34
Crank shaft 21.11.34 Flywheel shaft and Thrust shaft 26.7.34 (FR) Intermediate shafts Tube shaft
Screw shaft Propeller Stern tube Engine seatings Engines holding down bolts
Completion of fitting sea connections Completion of pumping arrangements Engines tried under working conditions
Crank shaft, Material *Stn. Light Steels* Identification Mark *181-9210- PK* Flywheel shaft, Material *and* Identification Mark
Thrust shaft, Material *do.* Identification Mark *10545-928 -* Intermediate shafts, Material Identification Marks
Comp. Tube shaft, Material *do.* Identification Mark *2071-ARS-21.8.34* Screw shaft, Material Identification Mark

Is the flash point of the oil to be used over 150° F. *2/2*
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 *No.* If so, state name of vessel —

General Remarks (State quality of workmanship, opinions as to class, &c.)
This engine has been built under special Survey and in accordance with the Rules. The materials & workmanship are good. It has been run on a bench at full power with satisfactory results.
This engine is eligible, in my opinion to be classed in the Register Book with notation of + L.R.C. with date when it has been satisfactorily secured in position on board and tried under working conditions.
The engine has been shipped to London for fitting on board.

9/2/35

The amount of Entry Fee .. £ 3 : - : When applied for,
Special *24 40-25-0.0* £ 31 : 5 : *12 FEB 1935*
24 40-25-0.0 £ 31 : 5 :
Donkey Boiler Fee ... £ : : When received,
Travelling Expenses (if any) £ : : *15. 3 35 18/3*

Committee's Minute *GLASGOW 12 FEB 1935*
Assigned *Deferred.*

P. J. Brown
Engineer Surveyor to Lloyd's Register of Shipping.

