

Rpt. 4b.

REPORT ON OIL ENGINE MACHINERY.

No. 19372

Received at London Office

21 AUG 1935

Date of writing Report 26th June 1935 When handed in at Local Office

2.7.35

Port of Grimsby.

No. in Survey held at Lincoln.

Date, First Survey 21st March.

Last Survey 24th June 1935

Reg. Book.

Number of Visits

Single
on the Twin
Triple
Quadruple } Screw vessel

Joseph Medall

Tons { Gross 2087
Net 1607

Built at Wallsend

By whom built S. Kimble & Wigham Richardson Yard No. 21507 When built 1935

Engines made at

By whom made

Engine No. 195046 When made

Ausc. Engines made at Lincoln

By whom made Ruston & Hornsby, Ltd.

Engine No. 195047 When made 1935

Brake Horse Power 88 each

Owners

Port belonging to

Nom. Horse Power as per Rule 14 each Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted yes

Trade for which vessel is intended 1 [Two Engines Type 5VQZ.] Auxiliary

OIL ENGINES, &c.—Type of Engines Airless Injection, Cold Starting 2 or 4 stroke cycle 4 Single or double acting Single

Maximum pressure in cylinders 800 lb. Diameter of cylinders 5 3/8" Length of stroke 8" No. of cylinders 5 No. of cranks 5

Mean Indicated Pressure 80 lb.

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 6 1/4" Is there a bearing between each crank yes

Revolutions per minute 1000 Flywheel dia. 26" Weight 440 lb. Means of ignition Compression Kind of fuel used Crude oil

Crank Shaft, dia. of journals as approved 3 5/8" Crank pin dia. 3 1/4" Crank Webs Mid. length breadth 5 3/8" Mid. length thickness 1 9/16" Thickness parallel to axis 1/2" Thickness around eyehole 1/2"

Flywheel Shaft, diameter as approved 3 5/8" Intermediate Shafts, diameter as per Rule 4 as fitted Thrust Shaft, diameter at collars as per Rule 4 as fitted

Tube Shaft, diameter as per Rule 4 as fitted Screw Shaft, diameter as per Rule 4 as fitted Is the tube screw shaft fitted with a continuous liner

Bronze Liners, thickness in way of bushes as per Rule 4 as fitted Thickness between bushes as per Rule 4 as fitted Is the after end of the liner made watertight in the propeller boss

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 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 declutched yes Means of lubrication

forced Thickness of cylinder liners 1/2" Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with

non-conducting material water 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. Diameter Stroke Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line No. and Size How driven

Is 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 arrangements

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

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

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. 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 4 as fitted

W475-0017

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 ✓

Is a drain fitted at the lowest part of each receiver ✓

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. ✓

Total cubic capacity ✓

Internal diameter ✓

thickness ✓

Seamless, lap welded or riveted longitudinal joint ✓

Material ✓

Range of tensile strength ✓

Working pressure by Rules ✓

Actual ✓

IS A DONKEY BOILER FITTED? *No.*

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 *7.7.32.*

Receivers ✓

Separate Tanks ✓

Donkey Boilers ✓

General Pumping Arrangements ✓

Oil Fuel Burning Arrangements ✓

SPARE GEAR.

Has the spare gear required by the Rules been supplied *yes.*

State the principal additional spare gear supplied ✓

Multon & Hornsby, Limited,
The foregoing is a correct description,

M. R. Orms

1/1/35

Manufacturer.

Dates of Survey while building

During progress of work in shops--

During erection on board vessel--

Total No. of visits *24*

Dates of Examination of principal parts—Cylinders *3.6.35, 3.6.35* Covers *4.6.35* Pistons *4.6.35* Rods ✓ Connecting rods *3.6.35, 3.6.35*

Crank shaft *4.6.35* Flywheel shaft *4.6.35* Thrust shaft ✓ 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 *17.6.35*

Crank shaft, Material *Sm. Steel* Identification Mark *3216A + 3217A* Flywheel shaft, Material *Sm. Steel* Identification Mark *3216A + 3217A*

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. ✓

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. *The workmanship & materials are good.*)

The engines have been built under Special Survey, in accordance with the Rules & Approved plans. Trials were carried out at the maker's works, driving dynamometers with satisfactory results. The engines are being despatched to Wallsend-on-Tyne to be fitted on board the vessel.

This machinery has been installed on board, tried under working conditions and found satisfactory.

A. Riddell.

Ref. 4946/35/11.21/2

The amount of Entry Fee .. £	:	When applied for,
Special £	:	19.
Donkey Boiler Fee <i>10/-</i> £	:	When received,
Travelling Expenses (if any) £	:	19.

Committee's Minute

Assigned

See Nwc. 7.E. 92860

A. L. Ridditch.

Engineer Surveyor to Lloyd's Register of Shipping.

TUE. 27 AUG 1935



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