

Rpt. 4b.

Aux.  
REPORT ON OIL ENGINE MACHINERY.

No. 13526

23 SEP 1936

Received at London Office

Date of writing Report 22nd Sept 1936 When handed in at Local Office 22nd Sept 1936 Port of BRISTOL

No. in Survey held at DURSLEY

Date, First Survey 20th July

Last Survey 21st Sept 1936

Reg. Book.

Number of Visits 2

Single  
on the Twin  
Triple } Screw vessel  
Quadruple }

CHAGFORD

Tons { Gross  
Net

Built at

By whom built

Yard No. When built

Engines made at Dursley

By whom made R.A. Lister &amp; Co. Ltd.

Engine No. 353726 When made 1936

Donkey Boilers made at

By whom made

Boiler No. When made

Brake Horse Power 7

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, &amp;c.—Type of Engines C.I. Airless Injection 2 or 4 stroke cycle 4 Single or double acting Single

Maximum pressure in cylinders 750 lb Diameter of cylinders 4.5 Length of stroke 4.375 No. of cylinders one No. of cranks one

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 4.875 Is there a bearing between each crank

Revolutions per minute 1100 Flywheel dia. 18.75 Weight 3000 Means of ignition Compression Kind of fuel used Diesel oil

Crank Shaft, dia. of journals as per Rule as fitted 2.375 Crank pin dia. 2.75 Crank Webs Mid. length breadth 3.5 Thickness parallel to axis

Flywheel Shaft, diameter as per Rule as fitted 2.25 Intermediate Shafts, diameter as per Rule as fitted Thrust Shaft, diameter at collars as per Rule as fitted

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

Bronze Liners, thickness in way of bushes as per Rule as fitted Thickness between bushes as per rule as fitted 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

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

Thickness of cylinder liners 2.4 Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with

non-conducting material No 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. Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Large 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

Fast Pumps, No. and size 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

Holds, &amp;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

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

Do all pipes pass through the bunkers How are they protected

Do all 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 the vessel is 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

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

Serving 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

Can the internal surfaces of the receivers be examined What means are provided for cleaning their inner surfaces

Is there a drain arrangement 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

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

WS18-0263



IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

PLANS. Are approved plans forwarded herewith for Shafting *24/10/34*  
(If not, state date of approval)

Receivers

Separate Tanks

Donkey Boilers

General Pumping Arrangements

Oil Fuel Burning Arrangements

SPARE GEAR

The foregoing is a correct description,

*Per J. R. A. Lister & Son (Marine Sales Dept.)* Manufacturer.

Dates of Survey while building

During progress of work in shops - -

During erection on board vessel - -

Total No. of visits

*20<sup>th</sup> July 21<sup>st</sup> Sept*

*2*

Dates of Examination of principal parts—Cylinders *20.7.36* Covers *20.7.36* Pistons *20.7.36* Rods *✓* Connecting rods *20.7.36*

Crank shaft *20.7.36* Flywheel shaft *20.7.36* 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 *21.9.36*

Crank shaft, Material *Steel* Identification Mark *M 474* Flywheel shaft, Material *Steel* Identification Mark *M 474*

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

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.)

*All parts of this engine have been exam'd before being assembled & afterwards tested on the test bed & found satisfactory*

*It has been sent to the Hamworthy Engr. Co, their order N. 51930. (Lister order N. M667) issued to be for the Corin shipbuilding Co. N. 323.*

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

The amount of Entry Fee ... £ : : When applied for,  
Special ... £ *3* : *3* : *0.22nd Sept 1936*  
Donkey Boiler Fee ... £ : : When received,  
Travelling Expenses (if any) £ : *9* : *0.20/10/1936*

Committee's Minute

Assigned

TUE 26 JAN 1937

*See Lister J.E. 47544*

*John W. Gwynne*

Engineer Surveyor to Lloyd's Register of Shipping.



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