

Rpt. 4b.

## REPORT ON OIL ENGINE MACHINERY.

MOB 18205

No. 34413

27 FEB 1946

25 FEB 1946

Received at London Office

Date of writing Report

When handed in at Local Office

Port of

No. in Survey held at  
Reg. Book.Date, First Survey 9 Oct 45 Last Survey 6 Feb 1946  
Number of Visits 57Single  
on the ~~Twin~~  
Triple  
Screw vessel

"BRITISH ADMIRAL"

Tons Gross 8738  
Net 4983Built at ~~Hawthorn Hill~~By whom built ~~Furness S.B. Co. Ld.~~

Yard No. 390 When built

Engines made at ~~Sunderland~~By whom made ~~Wm. Leoford & Son Ld.~~

Engine No. 253 When made 1946.

Donkey Boilers made at ~~Wallasey~~By whom made ~~N.E.M. Eng. Co. (1938) Ld.~~

Boiler No. 274 When made 1946.

Brake Horse Power 3100

Owners ~~BRITISH TANKERS C. L.~~Port belonging to ~~LONDON~~

Nom. Horse Power as per Rule 684

Is Refrigerating Machinery fitted for cargo purposes

No. Is Electric Light fitted YES.

Trade for which vessel is intended

235/9 915/16

## OIL ENGINES, &amp;c.—Type of Engines

Opposed piston action 2 or 4 stroke cycle 2 Single or double acting Single

Maximum pressure in cylinders

640 lb/sq. in.

Diameter of cylinders

600 mm

Length of stroke

Upper 980 mm

Mean Indicated Pressure

85 lb/sq. in.

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

886 mm

F. 1.33

No. of cylinders

4

No. of cranks

4 (3 throws)

Revolutions per minute

F. 1690

F. 1.33

Weight

A. 3.26

Means of ignition

Compression

Kind of fuel used

—

Crank

Shaft, dia. of journals

as per Rule

as fitted

Crank pin dia.

as per Rule

as fitted

Crank webs

Mid. length breadth

Mid. length thickness

Thrust Shaft, diameter at collars

Flywheel Shaft, diameter

as per Rule

as fitted

Intermediate Shafts, diameter

as per Rule

as fitted

Thrust Shaft, diameter at collars

as per Rule

as fitted

Tube Shaft, diameter

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

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

Hand lever

Is a governor or other arrangement fitted to prevent racing of the engine

when decelerated

Yes

Means of lubrication

Forced

Thickness of cylinder liners

25 mm

Are the cylinders fitted with safety valves

Yes

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

one engine driven

Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Diameter

Stroke

Can one be overhauled while the other is at work

No. and Size

How driven

Cooling Water Pumps, No.

Main Engines, No.

Bilge Pumps worked from 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

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

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

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

On 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

Is provision made for first Charging the Air Receivers

Serving Air Pumps, No.

Diameter

Stroke

Driven by

Auxiliary Engines crank shafts, diameter

No.

Position

Is a report sent herewith

Have the Auxiliary Engines been constructed under special survey

Is a report sent herewith

Lloyd's Register

Foundation

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

Is provision made for first Charging the Air Receivers

Serving Air Pumps, No.

Diameter

Stroke

Driven by

Auxiliary Engines crank shafts, diameter

No.

Position

Is a report sent herewith

Have the Auxiliary Engines been constructed under special survey

Is a report sent herewith

Lloyd's Register

Foundation



AIR RECEIVERS:—Have they been made under survey

State No. of Report or Certificate

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

Injection 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?

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

Circ. 1803

23/1/45

Receivers

Separate Fuel Tanks

Donkey Boilers

General Pumping Arrangements

Pumping Arrangements in Machinery Space

Oil Fuel Burning Arrangements

SPARE GEAR.

Has the spare gear required by the Rules been supplied

Yes. (For Engine only)

State the principal additional spare gear supplied

1 Cylinder liner Complete with jacket, 1 upper & 1 lower piston skirt, 4 scraper rings, 40 main piston rings, 1 piston head, 4 fuel valves complete, 8 spray plugs, 1 Centre Conn. rod ball end spherical bearing, 2 Side Conn. rod ball end spherical bearings, 1 main (sph?) bearing, 2 main bearing slide & nuts, 4 Centre & Side (each) top & ball end bearing bolts & nuts, 2 top Side rod ball & nuts, 2 air starting valves, 2 cyl. relief valves, 1 fuel pump Suct. Chamber Complete, 2 fuel pump bodies Complete with valves, 1 Scav. Pump Suct. & Del. valve, 8 rubber hoses for upper piston cooling system, 1 roller chain for camshaft drive.

The foregoing is a correct description.

WILLIAM DORFORD & SONS, Limited.

W.D. Dorford

Manufacturer.

Director.

Dates of Survey while building  
During progress of work in shops-- 1945. Oct 9, 11, 15, 17, 19, 21, 24, 25, 30, 31. Nov. 1, 6, 8, 9, 12, 13, 15, 16, 19, 22, 26, 27, 29, 30. Dec. 5, 6, 7, 11, 12, 14, 17, 18, 19.  
During erection on board vessel-- 20, 27, 28, 31. 1946. Jan 3, 4, 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 22, 23, 24, 25, 30, 31. Feb. 1, 5, 6.  
Total No. of visits 59

Dates of Examination of principal parts—Cylinders 8/11/45, 12/11/45, 18/12/45, 28/12/45. Pistons 18/12/45, 28/12/45. Rods 18/12/45, 28/12/45. Connecting rods 10/1/46.  
Crank shaft 21/1/46. Flywheel shaft as crank. Thrust shaft as crank. Intermediate shafts. Tube shaft.

Screw shaft. Propeller. Stern tube. Engine seatings. Engines holding down bolts. Engines tried under working conditions 5/6/2/46.

Completion of filling sea connections. Completion of pumping arrangements. Engines tried under working conditions.

Crank shaft, Material Ingot Steel Identification Mark 21/1/46 Flywheel shaft, Material as crank Identification Mark as crank

Thrust shaft, Material as crank Identification Mark as crank Intermediate shafts, Material Identification Marks

Tube shaft, Material Identification Mark Screw shaft, Material Identification Mark

Identification Marks on Air Receivers.

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

Description of fire extinguishing apparatus fitted

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 has been built under Special Survey in accordance with the approved plans & the rules of the Society. The materials & workmanship are good.

On Completion it has been tried under full load conditions on test bed with satisfactory results.

It has now been despatched to Haverton Hill for installation on board the vessel & upon this being completed satisfactorily the machinery will be eligible, in my opinion, to have No. 1 MC (with date) entered in the Register Book

The amount of Entry Fee .. £ 6 : : When applied for,  
2/3 Special ... .. £ 1/2 : 18 : 23 FEB 1946  
Hull & Boiler Fee ... .. £ 1/2 : 12 :  
Travelling Expenses (if any) £ : : 19

Committee's Minute

Assigned

See F.E. mch. rpt.

D. T. Law.

Engineer Surveyor to Lloyd's Register of Shipping.



© 2020

Lloyd's Register Foundation