

REPORT ON OIL ENGINE MACHINERY.

No.

92530

92,980

Date of writing Report 3 APR 1928

When handed in at Local Office

3 APR 1928

Port of

London & Ipswich

No. in Survey held at

Newbury

Date, First Survey

18.8.1927

Last Survey 26. March 1928

Reg. Book.

(INSTALLATION)

14 MAR 1928

31 JULY 1928

8 (12 Visits)

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

AMENITY

Tons

Gross

262.24

Net

Built at

Lowestoft

By whom built

Messrs. Fellows & Co.

Yard No.

320

When built 1928.

Engines made at

Newbury

By whom made

Messrs. Bentley & Sons Ltd

Engine No.

554

When made 1928.

Donkey Boilers made at

By whom made

Boiler No.

When made

Brake Horse Power

250

Owners

Messrs. F.T. Gerard & Son.

Port belonging to

London

Nom. Horse Power as per Rule

71

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

No

Trade for which vessel is intended

Coasting

OIL ENGINES, &c.—Type of Engines

Heavy Oil

2 or 4 stroke cycle 2

Single or double acting SH

Maximum pressure in cylinders

425

Diameter of cylinders

335

Length of stroke

390

No. of cylinders

5

No. of cranks

5

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

425

Is there a bearing between each crank

Yes

Revolutions per minute

300

Flywheel dia.

1050

Weight

17 cwt.

Means of ignition

Hot gas

Kind of fuel used

Diesel

Crank Shaft, dia. of journals

as per Rule 146

as fitted 174

Crank pin dia.

174

Crank Webs

Mid. length breadth

120

Mid. length thickness

100

shrink

SOLID FORGED

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

126

130

Tube Shaft, diameter

as per Rule

as fitted

Screw Shaft, diameter

as per Rule

as fitted

Is the

shaft fitted with a continuous liner

Yes

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

Yes

If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner

Yes

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

Yes

Is an approved Oil Gland or other appliance fitted at the after

end of the tube shaft

No

Propeller, dia.

5'-6"

Pitch

3'-9"

No. of blades

3

Material

C.I.

whether Moveable

No

Total Developed Surface

13

sq. feet

Method of reversing Engines

Gear

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

Yes

Means of lubrication

Oil

Thickness of cylinder liners

22.5

Are the cylinders fitted with safety valves

No

Are the exhaust pipes and silencers water cooled or lagged with

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

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.

One

Diameter

125

Stroke

120

Can one be overhauled while the other is at work

Yes

Pumps connected to the Main Bilge Line

No. and Size

Two 125

How driven

One from Main & one from Auxiliary Engine

Ballast Pumps, No. and size

None

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

One

Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

Are two independent means arranged for circulating water through the Oil Cooler

Pumps, No. and size:—In Machinery Spaces

Three

In Holds, &c.

Four

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

Two

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

Are all Sea Connections fitted direct on the skin of the ship

Yes

Are they fitted with Valves or Cocks

Valves

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

Yes

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

What pipes pass through the bunkers

None

How are they protected

Yes

What pipes pass through the deep tanks

Yes

Have they been tested as per Rule

Yes

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

Yes

Is it fitted with a watertight door

Yes

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.

None

No. of stages

Two

Diameters

Stroke

Driven by

Aux. Engine

Auxiliary Air Compressors, No.

One

No. of stages

Two

Diameters

Stroke

Driven by

Aux. Engine

Small Auxiliary Air Compressors, No.

None

No. of stages

Two

Diameters

Stroke

Driven by

Aux. Engine

Scavenging Air Pumps, No.

None

Diameter

Stroke

Driven by

Aux. Engine

Auxiliary Engines crank shafts, diameter

as per Rule

as fitted

75

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

Yes

What means are provided for cleaning their inner surfaces

Yes

Is there a drain arrangement fitted at the lowest part of each receiver

Yes

High Pressure Air Receivers, No.

Yes

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.

Three

Total cubic capacity

12 cu. ft.

Internal diameter

thickness

Seamless, lap welded or riveted longitudinal joint

Material

Range of tensile strength

Working pressure by Rules

29

W326-0143

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

PLANS. Are approved plans forwarded herewith for Shafting (If not, state date of approval)

Receivers

Separate Tanks

Donkey Boilers

General Pumping Arrangements

Oil Fuel Burning Arrangements

SPARE GEAR

1 Cyl. Head - 1 Piston - 1 Journal brass - 1 Set valves for crankcase doors.
1 Set leathers for Bilge and circulating pumps - 1 Set Springs
1 Set fuel pump valves - 1 Set fuel injection pipes - 1 Set blow lamp glass.
5 Igniters complete - 5 Pilot injection nozzles - 5 Piston rings
5 Main jets complete.

The foregoing is a correct description.

FOR AND ON BEHALF OF

PLENTY & SON, LIMITED.

Manufacturer.

Dates of Survey while building

During progress of work in shops -
During erection on board vessel -
Total No. of visits

1927 Feb. 16, 23. 26. 27. Dec. 6, 1928. March 9, 15, 26
1928. Mar. 14, 19 April 13. May 4-29, June 21-27 July 2-17-26-30-31
8 (In Shops) 12 (On board) Total 20.

Dates of Examination of principal parts - Cylinders 15-3-28 17-10-27 23-8-27 Pistons 23-8-27 Rods 17-10-27

Crank shaft 15-3-28 Flywheel shaft 15-3-28 Thrust shaft 15-3-28 Intermediate shafts 17-10-27 Tube shaft 17-10-27

Screw shaft 16-8-27 Propeller 16-8-27 Stern tube 16-8-27 Engine seatings 4-5-28 Engines holding down bolts 29-5-28

Completion of fitting sea connections 13-4-28 Completion of pumping arrangements 27-6-28 Engines tried under working conditions 31-7-28

Crank shaft, Material Steel Identification Mark CRANK SHAFT 29-12-26 Flywheel shaft, Material CRANK SHAFT Identification Mark

Thrust shaft, Material CRANK SHAFT Identification Mark Intermediate shafts, Material Identification Marks

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

Is the flash point of the oil to be used over 150° F. Yes

Is this machinery duplicate of a previous case Yes. If so, state name of vessel "ABILITY" "ABILITY"

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

This machinery which has been constructed under survey to approved plans & rule requirements has been despatched to Garmouth for installation on board.

The Workmanship and materials, so far as can be seen, are good and, in my opinion, the machinery will be eligible for classification and the record of +L.M.C. (with date) when it has been fitted aboard the vessel under survey and tried under working conditions.

The machinery examined whilst being installed in the vessel, tried under working conditions & found satisfactory, & in my opinion eligible for the record of +L.M.C. 7-28

The amount of Entry Fee ... £ 20-0-0
Special ... £ 17-15-0
Donkey Boiler Fee ... £ :
Travelling Expenses (if any) £ 4-4-7

When applied for, -3 APR 1928

When received, 30-6-28

Committee's Minute TUES. 21 AUG 1928

Assigned + June 7. 28
Oil Engines

Richard A. Lebrons
Engineer Surveyor to Lloyd's Register of Shipping.

A.E. Farmanier



Lloyd's Register Foundation