

REPORT ON OIL ENGINE MACHINERY

No. 102330

Received at London Office 23 DEC 1935

Date of writing Report 21 OCT 1935 When handed in at Local Office 21 OCT 1935 Port of London
No. in Survey held at Newbury Date, First Survey 12 April 1935 Last Survey 27 Oct. 1935
Reg. Book. Number of Visits 13.

on the ^{Single} ~~Twin~~ ~~Triple~~ ~~Quadruple~~ Screw vessel *Sc. S. motor vessel ADAPTITY* Tons { Gross Net
Built at *Yarmouth* By whom built *Hellows & Co. Ld.* Yard No. *337* When built *1935*
Engines made at *Newbury* By whom made *Newbury Diesel Co. Ld.* Engine No. *670* When made *1935*
Donkey Boilers made at *-* By whom made *-* Boiler No. *-* When made *-*
Brake Horse Power *300* Owners *A. T. Everard & Sons Ld.* Port belonging to *-*
Nom. Horse Power as per Rule *84* Is Refrigerating Machinery fitted for cargo purposes *-* Is Electric Light fitted *Yes*
Trade for which vessel is intended *12 5/8 15 3/4*

ENGINES, &c.—Type of Engines *Airless injection - boosted* 2 or 4 stroke cycle *2*. Single or double acting *Single*
Maximum pressure in cylinders *650 lb/sq. in.* Diameter of cylinders *320 mm* Length of stroke *400 mm* No. of cylinders *3* No. of cranks *3*
M.I.P. *85 lb/sq. in.* Span of bearings, adjacent to the Crank, measured from inner edge to inner edge *448 mm* Is there a bearing between each crank *Yes*
Revolutions per minute *300* Flywheel dia. *1000 mm* Weight *35 cwt* Means of ignition *Compression* Kind of fuel used *Heavy oil*
Crank Shaft, dia. of journals as per Rule *183.4 mm* as fitted *190 mm* Crank pin dia. *190 mm* Crank Webs Mid. length breadth *252 mm* Thickness parallel to axis *shrunk*
Flywheel Shaft, diameter as per Rule *-* as fitted *Crank shaft* Intermediate Shaft, diameter as per Rule *4.2"* as fitted *5 1/4"* Thrust Shaft, diameter at collars as per Rule *4.42"* as fitted *130 mm*
Tube Shaft, diameter as per Rule *-* as fitted *-* Screw Shaft, diameter as per Rule *4.9"* as fitted *5 1/4"* Is the tube screw shaft fitted with a continuous liner *No. liners*

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 *Yes*
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 *Yes*
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 *Yes*

Propeller, dia. *5'-7"* Pitch *3'-2"* No. of blades *3* Material *Bronze* whether Moveable *Solid*. Total Developed Surface *10 1/2* sq. feet
Method of reversing Engines *Eng. reversible by an actuated gear* Is a governor or other arrangement fitted to prevent racing of the engine when declutched *Yes* Means of lubrication *Forced*
Thickness of cylinder liners *32.5 mm* Are the cylinders fitted with safety valves *Yes* Are the exhaust pipes and silencers water cooled or lagged with non-conducting material *Yes* If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine *Funnel*
Cooling Water Pumps, No. *1* - *125 mm dia x 120 mm stroke* Is the sea suction provided with an efficient strainer which can be cleared within the vessel *Yes*
Bilge Pumps worked from the Main Engines, No. *1* Diameter *125 mm SA*, Stroke *120 mm* Can one be overhauled while the other is at work *Yes*

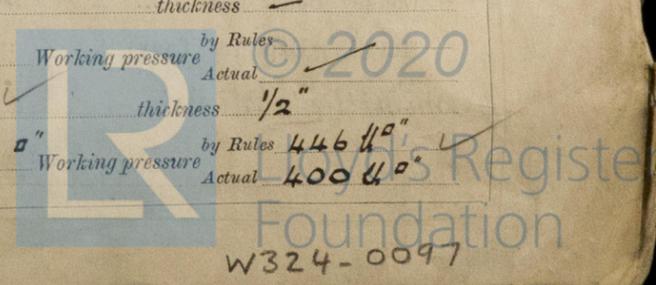
Pumps connected to the Main Bilge Line { No. and Size *1. S.A. 125 x BORE 120 x STROKE: 1 DA. 125 x BORE 120 x STROKE*
How driven *MAIN ENGINE DIRECT + AUX. ENGINE GEARED.*
Ballast Pumps, No. and size *1. DA. 125 mm dia x 120 mm stroke* Lubricating Oil Pumps, including Spare Pump, No. and size *2. Rotary. 8 gal. per min each.*
Are two independent means arranged for circulating water through the Oil Cooler *Yes* Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps, No. and size:—In Machinery Spaces *3 @ 2 1/2"* In Pump Room *-*
In Holds, &c. *2 @ 2 1/2"*

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size *one @ 2 1/2"*
Are all the Bilge Suction pipes in Holds *Yes* fitted with strum-boxes *Yes* Are the Bilge Suctions in the Machinery Spaces *Yes*
and from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges *Yes*
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 *Yes*
What pipes pass through the bunkers *Fore peak + Hold suction* How are they protected *by oillight steel trunking*
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 *Yes*

Main Air Compressors, No. *1* No. of stages *1* Diameters *110 mm* Stroke *150 mm* Driven by *M. Eng. at 300 R.P.M.*
Auxiliary Air Compressors, No. *1* No. of stages *1* Diameters *-* Stroke *-* Driven by *-*
Small Auxiliary Air Compressors, No. *1* No. of stages *2* Diameters *110 mm - 45 mm* Stroke *80 mm* Driven by *Auxiliary at 1000 R.P.M.*
Scavenging Air Pumps, No. *3 Rotary Boosters* Diameter *-* Stroke *-* Driven by *Main Eng.*
Auxiliary Engines crank shafts, diameter as per Rule *-* as fitted *See attached report on Eng. No. 2544/A.*

AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule *Yes*
Can the internal surfaces of the receivers be examined and cleaned *Yes* Is a drain fitted at the lowest part of each receiver *Yes*
High Pressure Air Receivers, No. *-* Cubic capacity of each *-* Internal diameter *-* thickness *-*
Seamless, lap welded or riveted longitudinal joint *Yes* Material *-* Range of tensile strength *-* Working pressure by Rules *-* Actual *-*
Starting Air Receivers, No. *3* Total cubic capacity *3 x 13 = 39 cu. ft.* Internal diameter *19"* thickness *1/2"*
Seamless, lap welded or riveted longitudinal joint *D.R. Pap.* Material *Steel* Range of tensile strength *26/30 ton* Working pressure by Rules *446 lb/sq. in.* Actual *400 lb/sq. in.*



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 (If not, state date of approval)

Receivers 5-6-35

Separate Tanks

Donkey Boilers

General Pumping Arrangements Yp.

Oil Fuel Burning Arrangements

SPARE GEAR.

Has the spare gear required by the Rules been supplied? Yes

State the principal additional spare gear supplied See attached list.

For & on behalf of

THE NEWBURY DIESEL Co. LTD.

The foregoing is a correct description,

[Signature]

SECRETARY, Manufacturer.

Dates of Survey while building: During progress of work in shops - 1935. Ap. 12, May. 29, June. 21, July. 30, Aug. 21, Sept. 16, Oct. 27 = 8 visits
During erection on board vessel - Sep. 28, Oct. 15, 17, 23, 27. 5 visits
Total No. of visits 13

Dates of Examination of principal parts - Cylinders 21.6.35 Covers 30.7.35 Pistons 30.7.35 Rods - Connecting rods 30.7.35

Crank shaft 29.5.35 Flywheel shaft Crank shaft Thrust shaft Clutch 30.7.35 Intermediate shaft 16.9.35 Tube shaft

Screw shaft 16.9.35 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 7.2. Steel Identification Mark LLOYDS 9354 PK. 5-4-35 Flywheel shaft, Material Crank shaft Identification Mark

Thrust shaft, Material 7.2. Steel Identification Mark LLOYDS 1962 CRR 11-1-35 SAL 30-7-35 Intermediate shaft, Material 7.2. Steel Identification Marks LLOYDS 2030 CRR 19-4-35 SAL 16-9-35

Tube shaft, Material Identification Mark Screw shaft, Material 7.2. Steel Identification Mark LLOYDS 2128 CRR 6-8-35 SAL 16-9-35

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? Yes

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo? No 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? Yes If so, state name of vessel Brown 192. Newbury (ind 657 m)

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

These main engines have been specially surveyed during construction and are in accordance with the approved plans and the Rules. The materials used have been made at works approved by the Committee and tested by the Surveyors to this Society. The main and auxiliary engines have been installed in the vessel in accordance with the requirements of the Rules & approved plans & afterwards tested under full working conditions and found satisfactory & eligible in our opinion to have the records of T.M.C. 10.35 T.S. O.C.

Attached hereto. Hoisting Certificate 5 in N°
Copy of Certificate for an receiver
List of spare gear.

84 NP at 5% = £21.0.0

The amount of Entry Fee	£ 2 : 0 : 0	When applied for, 21 OCT 1935
Special 1/5 of £21.0.0	£ 4 : 0 : 0	23 DEC 1935
FITTING ON BOARD	£ 4 : 4 : 0	
Donkey Boiler Fee	£ :	
Travelling Expenses (if any)	£ 2 : 0 : 6	When received, 27/10/35 on 3/3/36
7th Sunday Fee (F.O.B)	£ 1 : 4 : 0	20/11/35 on 22/4/36
Committee's Minute	£ 2 :	20/11/35

Geo. A. Paine, H. T. Gannett & Co. Surveyors to Lloyd's Register of Shipping

Assigned

[Handwritten notes] See T.M.C. 10.35 Oil by OJ

