

## REPORT ON OIL ENGINE MACHINERY

No. 101.991

26 SEP 1935

Received at London Office

Date of writing Report 20<sup>th</sup> Sept 1935 When handed in at Local Office 26 SEP 1935

Port of London

in Survey held at Newbury

Date, First Survey 26 January 1935

Number of Visits 11

Tons { Gross  
Neton the ~~Single~~ ~~Triple~~ ~~Quadruple~~ Screw vessel M.V. ACCRUITY

built at Greenock

By whom built George Brown &amp; Co. Ld.

Yard No. 190 When built 1935

engines made at Newbury

By whom made Newbury Diesel Co. Ld.

Engine No. 667 When made 1935

Boilers made at

By whom made

Boiler No. When made

like Horse Power 500

Owners H. T. Zuerard &amp; Son. Ld.

Port belonging to

m. Horse Power as per Rule 140

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

ade for which vessel is intended

ENGINES, &amp;c. Type of Engines Airless Injection - Boosted (SIRRON) 2 or 4 stroke cycle 2. Single or double acting Single

imum pressure in cylinders 650 lb. Diameter of cylinders 320 mm Length of stroke 400 mm No. of cylinders 5 No. of cranks 5

n of bearings, adjacent to the Crank, measured from inner edge to inner edge 448 mm Is there a bearing between each crank Yes

utions per minute 300 Flywheel dia. 900 mm Weight 25 cwt Means of ignition Compression Kind of fuel used Heavy oil

nk Shaft, dia. of journals as per Rule 185.5 mm as fitted 190 mm Crank pin dia. 190 mm Crank Webs Mid. length breadth 252 mm Mid. length thickness 106 mm Thickness parallel to axis shrunk Thickness around eye hole

wheel Shaft, diameter as per Rule as fitted Crank shaft Intermediate Shaft, diameter as per Rule 4.86" as fitted 5 5/8" Clutch Thrust Shaft, diameter at collars as per Rule 129.6 mm as fitted 130 mm

e Shaft, diameter as per Rule as fitted Screw Shaft, diameter as per Rule 5.62" as fitted 5 5/8" Is the tube screw shaft fitted with a continuous liner No liner

nize 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

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

he 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

wo 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 Newark Length of Bearing in Stern Bush next to and supporting propeller 29"

propeller, dia. 6'-4" Pitch 3'-7 1/2" No. of blades 3 Material Bronze whether Moveable Solid Total Developed Surface 12.5 sq. feet

hod of reversing Engines Engine reversible Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication

need. 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

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

ling Water Pumps, No. 1 - 140 mm dia. x 120 mm Stroke 8A Is the sea suction provided with an efficient strainer which can be cleared within the vessel

ge Pumps worked from the Main Engines, No. 2 8A Diameter {140 mm} Stroke 120 mm Can one be overhauled while the other is at work Yes

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

last Pumps, No. and size 1. 2 1/2" 125 mm x 120 mm 150 RPM Lubricating Oil Pumps, including Spare Pump, No. and size 2. Rotary gear type 12 gal per min

two independent means arranged for circulating water through the Oil Cooler Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

nps, No. and size:—In Machinery Spaces In Pump Room

Holds, &amp;c.

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

all the Bilge Suction pipes in Holds and Turret 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

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

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

at pipes pass through the bunkers How are they protected

at pipes pass through the deep tanks Have they been tested as per Rule

all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

he 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

partment to another Is the Shaft Tunnel watertight Is it fitted with a watertight door worked from

wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork

in Air Compressors, No. one No. of stages one Diameters 110 mm Stroke 150 mm Driven by Mam lng &amp; 300 RPM

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

all Auxiliary Air Compressors, No. one No. of stages two Diameters 110 mm - 45 mm Stroke 80 mm Driven by Aux. lng &amp; 1000 RPM

venting Air Pumps, No. 5 Rotary Boosters Diameter Stroke Driven by Mam lng

Auxiliary Engines crank shafts, diameter as per Rule as fitted One 2 1/2" HP &amp; one 20 HP (109623) dated May 1941

RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule

the internal surfaces of the receivers be examined and cleaned Yes Is a drain fitted at the lowest part of each receiver Yes

gh Pressure Air Receivers, No. Cubic capacity of each Internal diameter thickness

mless, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules Actual

urting Air Receivers, No. 3 Total cubic capacity 13 cu ft. each = 39 cu ft Internal diameter 19" thickness 1/2"

mless, lap welded or riveted longitudinal joint D.R. Pap. Material Steel Range of tensile strength 26/30 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 4.7.34

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

See attached list

For & on behalf of

The foregoing is a correct description

THE NEWBURY DIESEL CO. LTD.

SECRETARY

Manufacturer.

Dates of Survey while building

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

1935 Jan. 26. Feb. 19. 27. Mch. 5 April 12 May 2. 29. June 21. July 30 Aug 21. Sept 16 = 11 visits

Dates of Examination of principal parts—Cylinders 12.4.35 Covers 12.4.35 Pistons 12.4.35 Rods — Connecting rods 12.4.35

Crank shaft 12.4.35 Flywheel shaft — Thrust shaft 12.4.35 Intermediate shaft 21.6.35 Tube shaft —

Screw shaft 21.6.35 Propeller — Stern tube 30.7.35 Engine seatings — Engines holding down bolts —

Completion of fitting sea connections — Completion of pumping arrangements — Engines tried under working conditions —

Crank shaft, Material 4.2.35

Identification Mark

LLOYDS 9298  
PK 25.1.35

Flywheel shaft, Material Crank Shaft

Identification Mark

Thrust shaft, Material 4.2.35

Identification Mark

LLOYDS 1995  
CRR 26.2.35  
9AL 12.4.35

Intermediate shafts, Material 4.2.35

Identification Marks

Tube shaft, Material —

Identification Mark

Screw shaft, Material 4.2.35

Identification Mark

LLOYDS 2065  
CRR 17.5.35  
9AL 21.6.35  
LLOYDS 2064  
CRR 17.5.35  
9AL 21.6.35

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

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

Yes

If so, state name of vessel

Newbury Diesel No 659 m/y.

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

Workmanship good.

This main engine has been specially surveyed during construction and is 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 Surveyor to this Society. Full power shop trials were witnessed and found satisfactory. It has now been dispatched to Greenock for fitting onboard.

Attached hereto

Longing Certificate 4 in No.

List of Spare Gear.

Certificate of Acceptance.

1<sup>st</sup> mch. £3.0.0  
140 mch. 35.0.0

The amount of Entry Fee .. £ 3 : 0 : 0

Special 4/5 4. 35.0.0 £ 28 : 0 : 0

Donkey Boiler Fee ... £

Travelling Expenses (if any) £ 3 : 0 : 0

When applied for,

26 SEP 1935

When received,

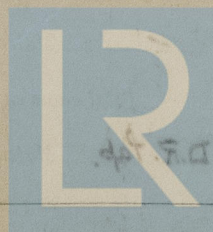
16/12 1935

George Paine

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 29 OCT 1935

Assigned See Gen. Rpt. No 20030.



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