

REPORT ON OIL ENGINE MACHINERY.

No. 106268

20 AUG 1938

Received at London Office
 Date of writing Report *Aug 5th 1938* When handed in at Local Office *Aug 15th 1938* Port of *London*
 Date, First Survey *12 Nov 1937* Last Survey *July 21st 1938*
 Number of Visits *22*

Single *Triple* *Quadruple* *Screw* *M/V. SODALITY.* Tons *Gross* *Net*
 Built at *Gardiner & Theobalds* By whom built *R. Williamson & Son Ltd.* Yard No. *1938.*
 Engines made at *Newbury* By whom made *Newbury Steel Co Ltd* Engine No *708* When made *1938.*
 Monkey Boilers made at *Newbury* By whom made *S. I. Curran & Sons Ltd.* Boiler No. *✓* When made *✓*
 Brake Horse Power *700* Owners *S. I. Curran & Sons Ltd.* Port belonging to *✓*
 Indicated Horse Power as per Rule *195* Is Refrigerating Machinery fitted for cargo purposes *✓* Is Electric Light fitted *Yes.*
 Trade for which vessel is intended *Coast Trade.*

ENGINES, &c. Type of Engines *Heavy Oil. Air starting* 2 or 4 stroke cycle *2* Single or double acting *S.A.*
 Maximum pressure in cylinders *800* Diameter of cylinders *320 mm* Length of stroke *426 mm* No. of cylinders *7* No. of cranks *7*
 Position 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. *900 mm* Weight *988 LBS.* Means of ignition *Compression* Kind of fuel used *Heavy Oil.*
 Crank Shaft, dia. of journals *as per Rule 185.5 mm* Crank pin dia. *190 mm* Crank Webs *Mid. length breadth 260* Thickness parallel to axis *✓*
 as fitted *192 mm* Mid. length thickness *106* Thickness around eye-hole *✓*
 Wheel Shaft, diameter *as per Rule 5.37"* Thrust Shaft, diameter at collars *as per Rule 5.64"*
 as fitted *Crankshaft.* as fitted *7 1/2"* as fitted *7 1/2"*
 Main Shaft, diameter *as per Rule 6.21"* Is the tube *Is the screw* shaft fitted with a continuous liner *no*
 as fitted *7 1/2"* as fitted *7 1/2"*
 Bronze Liners, thickness in way of bushes *as per Rule* Thickness between bushes *as fitted* Is the after end of the liner made watertight in the
 as fitted *✓* as fitted *✓* bell boss *✓*
 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner *✓*
 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 *✓*
 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 *hwaub.* Length of Bearing in Stern Bush next to and supporting propeller *2-7 1/8"*

Propeller, dia. *7-2 1/2* Pitch *4'0"* No. of blades *4* Material *SEMI-STEEL* Whether Moveable *no.* Total Developed Surface *20 sq. feet*
 Method of reversing Engines *Air (direct)* Is a governor or other arrangement fitted to prevent racing of the engine when declutched *Yes.* Means of lubrication *Yes.*
 Thickness of cylinder liners *32 mm* Are the cylinders fitted with safety valves *Yes.* Are the exhaust pipes and silencers water cooled or lagged with
 conducting material *Cooled* Is the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine *✓*

Bolting Water Pumps, No. *1/150 mm x 120 mm* Is the sea suction provided with an efficient strainer which can be cleared within the vessel *Yes.*
 Main Engines, No. *2* Diameter *110 mm* Stroke *120 mm S/A.* Can one be overhauled while the other is at work *Yes.*
 Pumps connected to the Main Bilge Line *No. and Size* *One - 2 cylinder D/A. 125 mm x 120 mm, stroke 6.*
 How driven *Geared from crankshaft.*
 Lubricating Oil Pumps, including Spare Pump, No. and size *2 each 16 galls per min.*
 Are there 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 *✓* In Pump Room *✓*

Holds, &c. *✓*
 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
 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 any pipes pass through the bunkers *✓* How are they protected *✓*
 Do any 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 *✓*

Is the 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 *Main Engine*
 Auxiliary Air Compressors, No. *Two* No. of stages *Two.* Diameters *110 x 45* Stroke *82 mm* Driven by *Aux. Engine*
 All Auxiliary Air Compressors, No. *✓* No. of stages *✓* Diameters *✓* Stroke *✓* Driven by *✓*
 Revolving Air Pumps, No. *One.* Diameter *600 x 426 D/A* Stroke *426.* Driven by *Main Engine*
 Auxiliary Engines crank shafts, diameter *as per Rule 62 mm* as fitted *62 mm*

RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule *✓*
 Are the internal surfaces of the receivers be examined and cleaned *✓* Is a drain fitted at the lowest part of each receiver *✓*
 High Pressure Air Receivers, No. *✓* Cubic capacity of each *✓* Internal diameter *✓* thickness *✓*
 Is the joint, lap welded or riveted longitudinal joint *✓* Material *✓* Range of tensile strength *✓* Working pressure *by Rules*
 Low Pressure Air Receivers, No. *✓* Total cubic capacity *✓* Internal diameter *✓* thickness *✓* Working pressure *by Rules*
 Is the joint, lap welded or riveted longitudinal joint *✓* Material *✓* Range of tensile strength *✓* Working pressure *Actual*

IS A DONKEY BOILER FITTED?

no.

If so, is a report now forwarded?

no.

Is the donkey boiler intended to be used for domestic purposes only?

PLANS. Are approved plans forwarded herewith for Shafting

yes.

Receivers.

yes.

Separate Tanks

Donkey Boilers

General Pumping Arrangements

yes.

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.

The foregoing is a correct description,

For & on behalf of:
THE NEWBURY DIESEL Co. LTD.

Manufacturer.

Dates
of Survey
while
building

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

1937- Apr 12, May 23, (1938) Apr 11, 15
FEB. 1, 15, 22 MAR. 1, 15, 23, 29. APL. 5, 13, 27. MAY. 17, 24. JUNE 21, 28. JULY 5, 19, 21

Dates of Examination of principal parts—Cylinders

FEB. 15, 23.
MAR. 29. APR. 17.
MAY 24.

Covers

MAR. 23, 29
APL. 5, 17, 27
MAY 24

Pistons

APL. 5, 17
MAY 24

Rods

Connecting rods

FEB. 1, 15
APL. 2, 17
MAY 24

Crank shaft

MAR 8th MAY 17

Flywheel shaft

Thrust shaft

JUNE 28th

Intermediate shafts

JUNE 28th

Tube shaft

Screw shaft

JUNE 28th

Propeller

Stern tube

JUNE 28th

Engine seatings

Engines holding down bolts

Completion of fitting sea connections

Completion of pumping arrangements

Engines tried under working conditions

Crank shaft, Material F.I. STEEL.

Identification Mark

LLOYDS 3869
J.F.C. 3/6/38

Flywheel shaft, Material

CRANKSHAFT.

Identification Mark

LLOYDS. 38
J.F.C. 7/6/38

Thrust shaft, Material

F.I. STEEL.

Identification Mark

LLOYDS 3869
J.F.C. 3/6/38

Intermediate shafts, Material

F.I. STEEL.

Identification Marks

LLOYDS. 38
J.F.C. 7/6/38

Tube shaft, Material

Identification Mark

Screw shaft, Material

F.I. STEEL.

Identification Mark

LLOYDS. 38
J.F.C. 7/6/38

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

no.

If so, state name of vessel

General Remarks

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

The above engine has been built under Special Survey & the materials are sound & the workmanship good. The forgings have been made at works approved by the Committee & were examined when finished machined.

This engine has been dispatched to Guala to be fitted into vessel, and is eligible in my opinion to be classed + L.M.C. with date when installation is completed & the engine tested as required by the Rules.

The amount of Entry Fee

£ 3 : 0 : 0

Special

£ 39 : 0 : 0

Donkey Boiler Fee

£ : : :

Travelling Expenses (if any)

£ 4 : 14 : 4

When applied for,

22 AUG 1938

When received,

12 SEP 1938

Committee's Minute

FRI 21 OCT 1938

Assigned

See Minute on 28 March.



© 2021

Lloyd's Register
Foundation