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REPORT ON OIL ENGINE MACHINERY.

No. 113082

25 SEP 1945

Date of writing Report Aug 24th 1945. When handed in at Local Office Aug 24th 1945 Port of London
 Survey held at Shrewsbury. Date, First Survey 11 May 1944 Last Survey 21 August 1945
 Book. Number of Visits 33

Single Tons Gross —
 on the Screw vessel. Triple —
 Quadruple — Net. —

uilt at Gaile. By whom built Gaile & Rep. Co. Ltd. Yard No 426. When built 1945.
 gines made at Shrewsbury. By whom made Shrewsbury Diesel Co. Ltd. Engine No. 806. When made 1945.
 key Boilers made at. By whom made. Boiler No. — When made. ✓
 like Horse Power 600. Owners S. T. Gurnard & Sons. Ltd. Port belonging to London
 n. Horse Power as per Rule 168. Is Refrigerating Machinery fitted for cargo purposes. No. Is Electric Light fitted. Yes.
 de for which vessel is intended. ✓

ENGINES, &c. — Type of Engines *Crank Ignition*. 2 or 4 stroke cycle. Single or double acting.
 imum pressure in cylinders 400-600. ✓ Diameter of cylinders 320 mm. ✓ Length of stroke 426 mm. ✓ No. of cylinders 6. ✓ No. of cranks 6.
 m Indicated Pressure 80. ✓
 n of bearings, adjacent to the crank, measured from inner edge to inner edge 1452 mm. ✓ Is there a bearing between each crank. Yes.
 olutions per minute 300. ✓ Flywheel dia. 900 mm. Weight 500 kg. Means of ignition *Crank*. Kind of fuel used *Shell oil*.
 nk Solid forged. ✓ Semi-forged dia. of journals as per Rule. ✓ All forged as fitted. ✓ Crank pin dia. 195 mm. ✓ Crank webs Mid. length breadth 260 mm. Thickness parallel to axis. —
 aft, All built as per Rule. ✓ wheel Shaft, diameter as per Rule. ✓ Intermediate Shafts, diameter as per Rule. ✓ Thrust Shaft, diameter at collars as per Rule. ✓ 195 mm
 wheel Shaft, diameter as fitted. ✓ Intermediate Shafts, diameter as fitted. ✓ Thrust Shaft, diameter at collars as fitted. ✓ 195 mm
 e Shaft, diameter as per Rule. ✓ Screw Shaft, diameter as per Rule. ✓ Is the tube shaft fitted with a continuous liner? Yes.
 nze Liners, thickness in way of bushes as per Rule. ✓ Thickness between bushes as per Rule. ✓ 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-
 osive. ✓ 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
 of tube shaft. ✓ If so, state type. ✓ Length of bearing in Stern Bush next to and supporting propeller. ✓
 peller, dia. ✓ Pitch. ✓ No. of blades. ✓ Material. ✓ whether moveable. ✓ Total developed surface. sq. feet
 rod of reversing Engines *Silent Air*. Is a governor or other arrangement fitted to prevent racing of the engine when declutched. Yes. Means of
 ication *Forced*. Thickness of cylinder liners 32 mm. Are the cylinders fitted with safety valves. Yes. Are the exhaust pipes and silencers water cooled
 E. F. C. Fitted with non-conducting material. ✓ If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned
 to the engine. ✓ Cooling Water Pumps, No. One. Is the sea suction provided with an efficient strainer which can be cleared within the vessel. ✓
 e Pumps worked from the Main Engines, No. Two. Diameter 110 mm. Stroke 120 mm. Can one be overhauled while the other is at work. Yes.
 ips connected to the Main Bilge Line No. and size. G54 Pump (40000 per hour). ✓ Auxiliary Engines. ✓
 e cooling water led to the bilges. No. If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping
 ngements. ✓
 ast Pumps, No. and size. G54 Pump (70000 per hour). Power Driven Lubricating Oil Pumps, including spare pump, No. and size. Two Gear type 8.75 liters per min. ?
 two independent means arranged for circulating water through the Oil Cooler. ✓ Suctions, connected to both main bilge pumps and auxiliary
 pumps, No. and size: In machinery spaces. ✓ In pump room. ✓
 olds, &c. ✓
 pendent Power Pump Direct Suctions to the engine room bilges, No. and size. ✓
 ill the bilge suction pipes in holds and tunnel well fitted with strum-boxes. ✓ Are the bilge suctions in the machinery spaces led from easily
 sible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges. ✓
 ill Sea Connections fitted direct on the skin of the Ship. ✓ Are they fitted with valves or cocks. ✓ Are they fixed
 iently 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. ✓
 key 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.
 pipes pass through the bunkers. ✓ How are they protected. ✓
 pipes pass through the deep tanks. ✓ Have they been tested as per Rule. ✓
 ll pipes, cocks, valves and pumps in connection with the machinery and all boiler mountings accessible at all times. ✓
 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
 s, or from one compartment 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. ✓
 Air Compressors, No. ✓ No. of stages. ✓ diameters. ✓ stroke. ✓ driven by. —
 iary Air Compressors, No. One. ✓ No. of stages. ✓ diameters. ✓ stroke. ✓ driven by. M. Eng.
 uxiliary Air Compressors, No. One. ✓ No. of stages. ✓ diameters. ✓ stroke. ✓ driven by. M. Eng.
 provision is made for first charging the air receivers. Hand starting and Engine. ✓
 nging Air Pumps, No. One. ✓ diameter 670 mm (D.A.). stroke 426 mm. ✓ driven by. M. Eng.
 iary Engines crank shafts, diameter as per Rule. As approach. ✓ Position. ✓
 as fitted. ✓ 85 mm. ✓ Is a report sent herewith. Yes. ✓
 the auxiliary engines been constructed under special survey. Yes. ✓

2010-00400-010200

AIR RECEIVERS:—Have they been made under survey.

Yes. ✓

State No. of report or certificate. Sent direct to Surveyor.

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

No. If so, is a report now forwarded.

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

Plans

6/4/44

Receivers

Separate fuel tanks.

PLANS. Are approved plans forwarded herewith for shafting.

(If not state date of approval)

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.

State the principal additional spare gear supplied.

Please see attached list. ✓

F.R. & on behalf of
THE NEWBURY DIESEL CO. LTD.

Manufacturer.
SECRETARY

The foregoing is a correct description,

Dates of Survey while building

During progress of work in shops - 1944 Sept 19, Oct 10, Nov 31, Dec 5, Jan 5, Feb 27, March 13, May 1, June 25, July 26, Aug 10, 14, 21, 1945 Feb 7, 11, 23, 30 June 27, July 18, 21, 25, 28

During erection on board vessel -

Total No. of visits

Sept 19, Oct 31.

Dates of examination of principal parts—Cylinders

Covers

Sept 19, June 25, Pistons, cylinders, rods, pins, connecting rod, Sept 26, June 26

Crank shaft

Aug 25, June 25

Thrust shaft, rods, pins, intermediate shafts, tube shaft

Flywheel shaft

June 25

Intermediate shafts, tube shaft

Screw shaft

Propeller

Stern tube, engine seatings, engine holding down bolts

Completion of fitting sea connections

Completion of pumping arrangements

Engines tried under working conditions

Crank shaft, material

Steel

Flywheel shaft, material, identification mark

Thrust shaft, material

Steel

Intermediate shafts, material, identification marks

Tube shaft, material

Steel

Screw shaft, material, identification mark

Identification marks on air receivers

Not attached

Inter & screw shafts made at Yarmouth by Brown, Brabtree & Co. Ltd.

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

✓

(See page 2)

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with.

✓

If so, have the requirements of the Rules been complied with.

Description of fire extinguishing apparatus fitted.

✓

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. Eng. No. 803, Gauge 500, Yard 14, Adaptation

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

The above engine has been built to approved plans from materials made at works approved by the Committee. The workmanship throughout is considered satisfactory. The engine is in my opinion eligible to have notation of + L.H.C. with date when installed in the vessel. Attested to the Surveyors satisfaction.

Above main engine installed in ACIALITY by Govt Ship Building & Repairing Col., tried under working conditions and found satisfactory to Shirel's rule.

Certificate (if required) to be sent to

(The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Entry Fee £ 3 : 0 : 0

2/3 Special £ 28 : 0 : 0

When applied for 5 SEP 1946

Donkey Boiler Fee £ : : :

When received 19

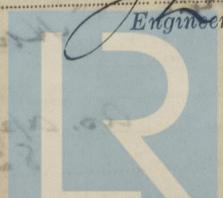
Travelling Expenses (if any) £ 12 : 3 : 7

(A.D. 1946)

Committee's Minute FRI. 18 JAN 1946

Assigned see margin on back

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Lloyd's Register Foundation

J. J. Smith.
Engineer Surveyor to Lloyd's Register of Shipping

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