

REPORT ON OIL ENGINE MACHINERY.

No. 23493.Received at London Office 14 MAY 1947Date of writing Report 5th MAY 1947 When handed in at Local Office 8th MAY 1947 Port of GREENOCK.Survey held at GREENOCK. Date, First Survey 31st OCTOBER 1946 Last Survey 29th APRIL 1947
Number of Visits 34277. on the Single "TEDDY" Screw vessel Tons Gross 789.58
Triple Net 454.30Built at GREENOCK By whom built G. BROWN & CO (MARINE) LTD Yard No. 241 When built 1947.Engines made at HAZEL GROVE By whom made MIRRELEES, BICKERTON & DAY. Engine No. 19841. When made 1946.Monkey Boilers made at - By whom made - Boiler No. - When made -Indicated Horse Power - Owners HANS SVENNINGSEN Port belonging to COPENHAGEN.Nominal Horse Power as per Rule - Is Refrigerating Machinery fitted for cargo purposes - Is Electric Light fitted YES.Trade for which vessel is intended -Main Engines, &c. — Type of Engines AIRLESS INJECTION DIRECT REVERSING 2 or 4 stroke cycle 4 Single or double acting SINGLE.Maximum pressure in cylinders ✓ Diameter of cylinders ✓ Length of stroke ✓ No. of cylinders ✓ No. of cranks ✓Mean Indicated Pressure ✓ Span of bearings, adjacent to the crank, measured from inner edge to inner edge ✓ Is there a bearing between each crank ✓Revolutions per minute 280. Flywheel dia. ✓ Weight ✓ Means of ignition ✓ Kind of fuel used ✓Crankshaft, Solid forged as per Rule ✓ Crank pin dia. ✓ Crank webs Mid. length breadth ✓ Thickness parallel to axis ✓
Semi built dia. of journals as fitted ✓ Crank webs Mid. length thickness shrunk Thickness around eyehole ✓
All built as fitted ✓Flywheel Shaft, diameter as per Rule ✓ Intermediate Shafts, diameter as per Rule APPROVED. Thrust Shaft, diameter at collars as per Rule ✓
as fitted ✓ as fitted 8 1/2 ✓ as fitted ✓ Calc. shaft = 5.79" reqd. as fitted ✓Tube Shaft, diameter as per Rule ✓ Screw Shaft, diameter as per Rule APPROVED. Is the tube shaft fitted with a continuous liner ✓
as fitted ✓ as fitted 8 1/4 ✓ as fitted ✓ screw ✓Bronze 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
as fitted ✓ as fitted ✓ propeller boss ✓ If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner ✓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 ✓ Is an approved Oil Gland or other appliance fitted at the after
end of tube shaft YES If so, state type NEWARK TYPE Length of bearing in Stern Bush next to and supporting propeller 37" ✓Propeller, dia. 7'-2" Pitch 4'-7" No. of blades 4 RH. Material BRONZE. whether moveable No. Total developed surface 20 sq. feet ✓Method of reversing Engines ✓ Is a governor or other arrangement fitted to prevent racing of the engine when declutched ✓ Means of
lubrication ✓ Thickness of cylinder liners ✓ Are the cylinders fitted with safety valves ✓ Are the exhaust pipes and silencers water cooled
lagged with non-conducting material LAGGED. 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. ✓ 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. ✓ Diameter ✓ Stroke ✓ Can one be overhauled while the other is at work ✓Pumps connected to the Main Bilge Line { No. and size ONE 4 3/4 DIA. BY 5 1/2 STROKE } ONE CENTRIFUGAL PUMP 50 TONS & ONE CENTRAL PUMP 30 TONS CAPACITY }
{ How driven BY MAIN ENGINE } BOTH DRIVEN BY ITS OWN ELECTRIC MOTOR. }Is the 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
arrangements ✓Ballast Pumps, No. and size 1 @ 50 TONS CAPACITY Power Driven Lubricating Oil Pumps, including spare pump, No. and size ✓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 4 @ 2 1/2 DIA. VIZ: { 1 - ER. AFT
1 - ER. PS.
1 - ER. SS.
1 - ER. FWD. } In pump room ✓In holds, &c. 2 @ 2 1/2 DIA: FWD HOLD & 2 @ 2 1/2 DIA: AFT HOLD.Independent Power Pump Direct Suctions to the engine room bilges, No. and size 2 @ 3" DIA:Are all the bilge suction pipes in holds and tunnel well fitted with strum-boxes YES Are the bilge suction 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 YES ✓Are all Sea Connections fitted direct on the skin of the Ship YES Are they fitted with valves or cocks BOTH 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 ABOVEAre 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 NONEWhat pipes pass through the bunkers NONE How are they protected ✓What pipes pass through the deep tanks NONE 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 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 NONE Is it fitted with a watertight door NONE 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 STEEL VESSEL.Main Air Compressors, No. ONE TYPE No. 20. No. 70926 of stages TWO diameters 4 1/2 & 2" stroke 4 1/2 driven by 10 HP. ELEC. MOTOR
SEE SOUTHAMPTON CERT. No. D. 2691 - 5. 3. 41.Auxiliary Air Compressors, No. SEE No. of stages MANCHESTER diameters REPORT stroke No. 12697 driven by MAIN ENGINE.What provision is made for first charging the air receivers 10 HP. ELEC. MOTOR AS ABOVE ✓Scavenging Air Pumps, No. ✓ diameter ✓ stroke ✓ driven by ✓Auxiliary Engines crank shafts, diameter as per Rule SEE LEEDS REPORTS NOS 191 & 192. No. ✓ Position ON S.S. IN LINE FORE & AFT.Have the auxiliary engines been constructed under special survey YES Is a report sent herewith YESSent
17/6/47

003252-003262-0059



AIR RECEIVERS:—Have they been made under survey. YES. SEE MANCHESTER RPT. No. 12697. State No. of report or certificate NOTTINGHAM C. 4051

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. NONE Cubic capacity of each. Internal diameter. thickness.

Seamless, lap welded or riveted longitudinal joint. Material. Range of tensile strength. Working pressure.

Starting Air Receivers, No. SEE MANCHESTER Total cubic capacity. REPORT Internal diameter. No. 12697 thickness.

Seamless, lap welded or riveted longitudinal joint. Material. Range of tensile strength. Working pressure.

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. SCREW SHAFT 13.6.46 YES Receivers. Separate fuel tanks.

Donkey boilers. General pumping arrangements. 14.3.46 Pumping arrangements in machinery space. 24.9.46. YES.

Oil fuel buring arrangements.

SPARE GEAR.

Has the spare gear required by the Rules been supplied. YES.

State the principal additional spare gear supplied. AS PER LIST ATTACHED HERETO.

The foregoing is a correct description, GEORGE BROWN & CO. (MARINE) LTD. Manufacturer.

Geo. Brown Director.

Dates of Survey while building { During progress of work in shops - - }
{ During erection on board vessel - - } (1946) OCT. 31. NOV. 11. DEC. 12. 19. 26. (1947) JAN. 6. 10. 16. 24. 28. FEB. 3. 10. 17. MAR. 3. 14. 17. 20. 26. 28. 29. 30. 31. APR. 2. 3. 4. 6. 8. 9. 11.
21. 23. 25. 28. 29.
Total No. of visits. 34

Dates of examination of principal parts—Cylinders. SEE MANCHESTER REPORT No. 12697. Covers. Pistons. Rods. Connecting rods.

Crank shaft. Flywheel shaft. Thrust shaft. 11.11.46 Intermediate shafts. 11.11.46 Tube shaft.

Screw shaft. 11.11.46 Propeller. 11.11.46 Stern tube. 31.10.46 Engine seatings. 31.10.46 Engine holding down bolts. 2.4.47

Completion of fitting sea connections. 31.10.46 Completion of pumping arrangements. 4.4.47 Engines tried under working conditions. 11.12.23.28

Crank shaft, material. SEE MANCHESTER Identification mark. REPORT Flywheel shaft, material. No. 12697 Identification mark. SAME

Thrust shaft, material. SAME Identification mark. SAME. Intermediate shafts, material. SM. STEEL Identification marks. LLOYDS. 750. 28. 8.

Tube shaft, material. Identification mark. Screw shaft, material. SM. STEEL Identification mark. LLOYDS. 751. 23. 8. 46

Identification marks on air receivers. AS PER NOTTINGHAM CERTS. C. 4051 & C. 4052.

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

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

Description of fire extinguishing apparatus fitted. 2 M TYPE FIRE EXTINGUISHERS PHOMENE FOAM. & SAND.

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. YES.

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 Engine No. 19841, made by Messrs Mirreles Bickerton & Day - Hazel Grove - Manchester Report No. 12697, has been efficiently & securely installed in this vessel, in accordance with the approved plans, tested under working conditions on Basin & Full Power Sea Trials, & found satisfactory.

The machinery in my opinion is eligible to be Classed in the Society's Register Book with the following records: Oil Engine. * LMC 4.47. O.G.

The amount of Entry Fee ... £ : :
1/3 Special (£51) ... £ 17. 0. 0. When applied for. 9th MAY 1947.
Donkey Boiler Fee... £ : : When received. 19
Travelling Expenses (if any) £ : :

W. Brechman
Engineer Surveyor to Lloyd's Register of Shipping
Lloyd's Register Foundation

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

Committee's Minute GLASGOW 13 MAY 1947
Assigned -/- LMC 4.47

Greenock
Mk-D