

REPORT ON OIL ENGINE MACHINERY.

No. 53209.

28 NOV 1945

Received at London Office

HULL

27 NOV 1945

Port of

of writing Report

19 When handed in at Local Office

in Survey held at GAINS BOROUGH & Humber Date, First Survey 27. 3. 45 Last Survey 31. 10. 19 45. Number of Visits 4.

on the Single Screw vessel H.M. "T.R.V. 6". Tons Gross 193 Net 59.

at GAINS BOROUGH By whom built J.S. Watson (GAINS BOROUGH) & Co. Yard No. 549. When built 1945.

Engines made at KEIGHTLEY By whom made H. Widdop & Co. Ltd Engine No. 4374 When made 1945.

Boilers made at NONE By whom made - Boiler No. - When made -

Indicated Horse Power 300 Owners THE ADMIRALTY Port belonging to

Indicated Horse Power as per Rule 139. Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted Yes.

Use for which vessel is intended

ENGINES, &c. Type of Engines For particulars of Main and 2 or 4 stroke cycle Single or double acting Indicated Pressure Auxiliary Engines please see LEEDS Rpt. No. 124.

Diameter of cylinders Length of stroke No. of cylinders No. of cranks

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

Revolutions per minute Flywheel dia. Weight Means of ignition Kind of fuel used

Material of crank shaft, as per Rule as fitted Solid forged dia. of journals as per Rule as fitted Semi built dia. of journals as fitted All built Crank pin dia. Crank Webs Mid. length breadth Mid. length thickness Thickness parallel to axis shrunk Thickness around eye-hole

Propeller Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted Thrust Shaft, diameter at collars as per Rule as fitted

Shaft, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted Is the tube screw shaft fitted with a continuous liner No.

Size of 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 stern boss

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

If 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

Are 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

Yes. If so, state type Dry No. 3536. Approved 27/10/41. Length of Bearing in Stern Bush next to and supporting propeller 17 1/2" Propeller, dia. 56" Pitch 43" No. of blades 4. Material C.I. whether Moveable Solid Total Developed Surface 9 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 or lagged with conducting material Lapped If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine

Working Water Pumps, No. M.E. 4 1/2 Dia. 3" 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. ONE Diameter 4 1/2" Stroke 3" Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line No. and Size M.E. 4 1/2 Dia 3" Stroke Centrifugal pump attached to Starboard Auxiliary. How driven 1/2" line Down on Pump.

Is 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

Oil Pumps, No. and size 3 @ 2 1/2" Bore x 3" Stroke Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 3 @ 1 3/4" Bore x 3" Stroke

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 3 @ 2 1/2" Bore In Pump Room NONE

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 3 @ 2 1/2" Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Yes. 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 Yes.

Are all Sea Connections fitted direct on the skin of the ship Yes. Are they fitted with Valves or Cocks Yes.

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 (H. W. L.)

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 No. N.Y. Br.

Do all pipes pass through the bunkers 3. Hold Suction, Fire Service, F.P. Suction, discharge, 1 1/2" Suction from Hold Bilge Well How are they protected (oil fuel tank pipes not protected)

Do all 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 worked from

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

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

Small Auxiliary Air Compressors, No. Rpt. 124. No. of stages Diameters Stroke Driven by

What provision is made for first Charging the Air Receivers

Scavenging Air Pumps, No. Diameter Stroke Driven by

Auxiliary Engines crank shafts, diameter as per Rule as fitted No. Position

Have the Auxiliary Engines been constructed under special survey Is a report sent herewith



AIR RECEIVERS:—Have they been made under survey Yes ✓ State No. of Report or Certificate See Leeds Rpt 124
 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 — Is a drain fitted at the lowest part of each receiver Yes ✓

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 _____
Starting Air Receivers, No. 2 @ 7 1/2 cu ft. Total cubic capacity 18.17.85. Internal diameter 2 @ 12 1/2" Working pressure _____ Actual _____
2 @ 3.85 cu ft. Internal diameter 2 @ 9 1/8" thickness 1/4" and _____
 Seamless, lap welded or riveted longitudinal joint Seamless. Material Mild Steel Range of tensile strength 28/32 tons. Working pressure _____ by Rules _____
 Actual 350

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 See Leeds Rpt 124 Receivers _____ Separate Fuel Tanks _____
 (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 A specification.

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building
 During progress of work in shops --
 During erection on board vessel --
 Total No. of visits
1945. Mar. 27. June 19. July 24. Aug 22. Sept 10. Oct 29. 31.
4.

Dates of Examination of principal parts—Cylinders _____ Covers _____ Pistons _____ Rods _____ Connecting rods _____
 Crank shaft _____ Flywheel shaft _____ Thrust shaft 19.6.45. Intermediate shafts 19.6.45 Tube shaft _____
 Screw shaft 19.6.45. Propeller 24.7.45. Stern tube 24.7.45. Engine seatings 19.6.45. Engines holding down bolts 19.6.45
 Completion of fitting sea connections 24.7.45. Completion of pumping arrangements 22.8.45. Engines tried under working conditions 22.8.45.
 Crank shaft, Material _____ Identification Mark _____ Flywheel shaft, Material _____ Identification Mark _____
 Thrust shaft, Material _____ Identification Mark 2347. D.R.W. Intermediate shafts, Material _____ Identification Marks 505 D.R.
 Tube shaft, Material _____ Identification Mark _____ Screw shaft, Material _____ Identification Mark 829 D.R.
 Identification Marks on Air Receivers C.T. Co. 878560. Am. 22.3.42. Taked. 27.5.42. T.P. 1000.
C.T. Co. 890442. Am 18.4.40. Taked 9.5.40. T.P. 1000.
Lod. 1153. Taked 18.6.43. N.B. 43/81/42. T.P. 1000 W.P. 400.

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 ✓
 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 Water Yard No. 1527 (Leeds Rpt. No 24.)

General Remarks (State quality of workmanship, opinions as to class, &c.)
This Engine, having been constructed under special survey, of tested material in accordance with the Secretary's letters, approved plans, and Rule requirements, and the machinery and auxiliaries being now fitted aboard, and tried under full power at the moorings, and subsequently in the Humber with satisfactory results is, in my opinion, eligible, when classed to have the records of LMC 10.45. T.S., O.G.

The amount of Entry Fee .. £ : :
 Special £ 29 : -
 Donkey Boiler Fee ... £ : :
 Travelling Expenses (if any) £ : :
 When applied for, 27 NOV 1945
 When received, 19

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

Committee's Minute

Assigned + LMC 10.45 Oil Eng.
O.G.