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15 MAR 1946

REPORT ON OIL ENGINE MACHINERY.

No. 53363

Date of writing Report 14 March 1946 When handed in at Local Office 15 MAR 1946 Port of HULL
No. in Survey held at Gainborough Date, First Survey 19.6.45 Last Survey 4.3.1946
Reg. Book. Single on the TRV.7 Screw vessel Tons { Gross 193 Net 59

Built at Gainborough By whom built J. S. Watson (Gainborough) Ltd Yard No. 1550 When built 1946/2
Engines made at Heighley By whom made H. Widdop & Co. Ltd Engine No. 4377 When made 1945
Donkey Boilers made at ✓ By whom made ✓ Boiler No. ✓ When made ✓
Brake Horse Power 300 Owners The Admiralty Port belonging to ✓
Nom. Horse Power as per Rule 139 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
Trade for which vessel is intended Torpedo Recovery

OIL ENGINES, &c.—Type of Engines Oilless injection Heavy oil. 2 or 4 stroke cycle Single or double acting
Maximum pressure in cylinders ✓ Diameter of cylinders 137 and 138 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 350 Flywheel dia. ✓ Weight ✓ Means of ignition ✓ Kind of fuel used ✓
Crank Shaft, { Solid forged ✓ as per Rule ✓ Crank pin dia. ✓ Crank Webs ✓ Mid. length breadth ✓ Thickness parallel to axis ✓
Semi built dia. of journals ✓ as fitted ✓ Mid. length thickness ✓ Thickness around eyehole ✓
All built ✓
Flywheel Shaft, diameter ✓ as per Rule ✓ Intermediate Shafts, diameter ✓ as per Rule ✓ Thrust Shaft, diameter at collars ✓ as per Rule ✓
as fitted ✓ as fitted ✓ as fitted ✓
Tube Shaft, diameter ✓ as per Rule ✓ Screw Shaft, diameter ✓ as per Rule ✓ Is the ✓ shaft fitted with a continuous liner ✓
as fitted ✓ as fitted ✓ as fitted ✓
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 ✓ 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 the tube
shaft ✓ If so, state type Widdop's Patent 3536 app. 27.10.41 Length of Bearing in Stern Bush next to and supporting propeller 17 1/4"
Propeller, dia. 56" Pitch 43" No. of blades 4 Material Carbon whether Moveable Solid Total Developed Surface 9 sq. feet
Method of reversing Engines Direct Is a governor or other arrangement fitted to prevent racing of the engine when declutched ✓ Means of lubrication
Forced Thickness of cylinder liners ✓ Are the cylinders fitted with safety valves ✓ Are the exhaust pipes and silencers water cooled or lagged with
non-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 up funnel
Cooling Water Pumps, No. 1 M.E. diam 4 1/4" dia x 3" stroke working ✓ Is the sea suction provided with an efficient strainer which can be cleared within the vessel ✓
Bilge Pumps worked from the Main Engines, No. one Diameter 4 1/4" Stroke 3" Can one be overhauled while the other is at work ✓
Pumps connected to the Main Bilge Line { No. and size 1 Main Eng. diam. 4 1/4" dia x 3" stroke — 1 Hamworthy 2 1/2" suction (hand)
How driven 32 ton per hour Capacity — 1 Donson pump
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 Hamworthy 32 ton per hour Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size as per fuel oil 136
Are two independent means arranged for circulating water through the Oil Cooler ✓ Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge
Pumps, No. and size:—In Machinery Spaces 3 - 2 1/2" dia of which one is direct to Hamworthy pump In Pump Room ✓
In Hold, &c. 3 - 2 1/2" dia
Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size One 2 1/2" dia
Are all the Bilge Suction pipes in Hold and Tunnel Well fitted with strum-boxes ✓ Are the Bilge Suctions 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 ✓
Are all Sea Connections fitted direct on the skin of the ship ✓ Are they fitted with Valves or Cocks 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 Above
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 None fitted
What pipes pass through the bunkers 3 - 2 1/2" hold bilge suction - one peak suction - How are they protected Not protected
What pipes pass through the deep tanks work deck fire line + 1 1/2" gutterway suction 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 None Is it fitted with a watertight door ✓ 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 ✓
Main Air Compressors, No. as per Rpt 136 No. of stages 2 Diameters 6" and 2.75" Stroke 3" Driven by M. Eng
Auxiliary Air Compressors, No. ✓ No. of stages 2 Diameters 6" - 2.75" Stroke 3" Driven by Aux Eng
Small Auxiliary Air Compressors, No. ✓ No. of stages ✓ Diameters ✓ Stroke ✓ Driven by ✓
What provision is made for first Charging the Air Receivers ✓ ✓
Scavenging Air Pumps, No. Under side of piston Diameter ✓ Stroke ✓ Driven by ✓
Auxiliary Engines crank shafts, diameter as per Rule as fitted ✓ Position ✓
Have the Auxiliary Engines been constructed under special survey ✓ Is a report sent herewith ✓

AIR RECEIVERS:—Have they been made under survey Y State No. of Report or Certificate
 Is each receiver, which can be isolated, fitted with a safety valve as per Rule Y
 Can the internal surfaces of the receivers be examined and cleaned Y Is a drain fitted at the lowest part of each receiver Y
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. — Total cubic capacity — Internal diameter — thickness —
 Seamless, 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? —
 Is the donkey boiler intended to be used for domestic purposes only Y

PLANS. Are approved plans forwarded herewith for Shafting 9.12.43 Receivers 9.12.43 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 Y
 State the principal additional spare gear supplied See attached list.

On Receivers fitted:

Starting Air
 C.T.C.O. 54584
 Flywheel Test
 1000 lb.
 W.P. 500 lb.
 On 14.12.41
 Total 4.4.41

Starting Air
 C.T.C.O. 890445
 Flywheel Test
 1000 lb.
 W.P. 350 lb.
 On 14.12.41
 Total 14.5.41

Whistle
 43.81.42
 Flywheel Test
 1000 lb.
 W.P. 400 lb.
 Total 18.6.43
 71120 JMB

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops -- See Report attached hereto
 During erection on board vessel -- 1945: June 19, July 24, Nov. 23, 1946: Feb 6, 13, 27, Mar 4.
 Total No. of visits 7.

Dates of Examination of principal parts—Cylinders — Covers — Pistons — Rods — Connecting rods —
 Crank shaft — Flywheel shaft — Thrust shaft — Intermediate shafts — Tube shaft —
 Screw shaft 19.7.45 Propeller 19.7.45 Stern tube 19.6.45 Engine seatings 29.11.45 Engines holding down bolts 23.11.45
 Completion of fitting sea connections 19.6.45 Completion of pumping arrangements 13.2.46 Engines tried under working conditions 13 and 27.2.45
 Crank shaft, Material — Identification Mark — Flywheel shaft, Material — Identification Mark —
 Thrust shaft, Material — Identification Mark — Intermediate shafts, Material 9.2.45 Identification Marks LLOYDS 505 DRW. 6.7.44
 Tube shaft, Material — Identification Mark — Screw shaft, Material 9.2.45 Identification Mark LLOYDS 831 DRW. 14.2.45
 Identification Marks on Air Receivers See above.

Is the flash point of the oil to be used over 150° F. Y
 Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with Y
 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 No
 Is this machinery duplicate of a previous case Y If so, state name of vessel T.R.V. 6. J.P. Watson. 1549. Hull No 53209

General Remarks (State quality of workmanship, opinions as to class, etc.) Workmanship good.
This main engine has been specially surveyed during construction. See Report No 136 attached hereto. It has been fitted onboard in accordance with the Rules and Specification, and satisfactory dock and river trials carried. The machinery of this vessel is eligible in my opinion for notation in the Register Book of L.M.C. 2/46 T.S. 09. 2/46 G.C.

Attached hereto. See Report No 136 on main engine
137 " auxiliary "
138 " " "
Copy of Intern Certificate issued
List of Spare gear supplied.

The amount of Entry Fee .. £ — : When applied for, 15 MAR 1946
 Balance Special ... £ 29 : 0 :
 Donkey Boiler Fee ... £ — :
 Travelling Expenses (if any) £ — :
 When received, 19

Committee's Minute FRI. 29 MAR 1946
 Assigned + LMC 3,46 Oil Eng.
O.G.

Geo. A. Long & J. J. Stedman.
 Engineer Surveyor to Lloyd's Register of Shipping.

