

REPORT ON OIL ENGINE MACHINERY.

No. 18329

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Date of writing Report 4th Sept. 1947. When handed in at Local Office 5th Sept. 1947 Port of MIDDLESBROUGH.

No. in Survey held at MIDDLESBROUGH. Date, First Survey 2nd September, 1946 Last Survey 28th August, 1947. Reg. Book. Number of Visits 65

Single on the Twin Triple Quadruple Screw vessel M.V. "BRITISH ISLES". Tons Gross 8738 Net 4884

Built at Haverton Hill By whom built Furness S.B. Co. Ltd. Yard No. 394 When built 1947-8

Engines made at Sunderland. By whom made Wm. Doxford & Sons Ltd. Engine No. 259 When made 1947-8

Donkey Boilers made at Wallsend By whom made N.E. Marine Eng. Co. (1938) Ltd. Boiler No. 2769 When made 1947

Brake Horse Power 3100 Owners British Tanker Co. Ltd. London. Port belonging to

Nom. Horse Power as per Rule 687 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

Trade for which vessel is intended Tanker, carrying oil fuel in bulk.

IL ENGINES, &c. -Type of Engines 2 or 4 stroke cycle Single or double acting

Maximum pressure in cylinders Diameter of cylinders Length of stroke No. of cylinders No. of cranks

Mean Indicated Pressure See Sunderland No. 34705 Span 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

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

Flywheel Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted 19 5/16" Thrust Shaft, diameter at collars as fitted 431 m/m as per Rule 450 m/m

Tube Shaft, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted 17 1/2" Is the tube screw shaft fitted with a continuous liner Yes

Bronze Liners, thickness in way of bushes as per Rule as fitted 27/32 7/8 Thickness between bushes as per Rule as fitted 21/32 Is the after end of the liner made watertight in the propeller boss Yes 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 No If so, state type

Length of bearing in Stern Bush next to and supporting propeller 5' 11" Propeller, dia. 16' 9 1/2" Pitch 11' 5" No. of blades 4 Material Mang. Bronze whether moveable No Total developed surface 95 sq. feet

Method of reversing Engines Is a governor or other arrangement fitted to prevent racing of the engine when declutched Means of lubrication Force Thickness of cylinder liners Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material Yes If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine

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 2 Bilge & San. 7" x 8" x 8" 1 Ballast 10" x 12" x 10" How driven Steam

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 - 10" x 12" x 10" Power Driven Lubricating Oil Pumps, including spare pump, No. and size One Standby Pump (Weir) 8" x 7" x 18

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 3 - 3 1/2" & 2 - 2 1/2" From Trans. Pump to Bilge In pump room Ford. 1 - 2 Main

holds, &c. Upper Hold 2 - 2" Lower Hold 2 - 2" Deep tank 2 - 4" Fore peak 1 - 4"

Independent Power Pump Direct Suctions to the engine room bilges, No. and size Bilge & San. Direct 1 - 5" & Ballast Pump Bilges Direct 1 - 8"

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 Below

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 Yes

What pipes pass through the bunkers None How are they protected

What 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 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

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. 2 See London Rpt. No. of stages 3 diameters stroke driven by

Auxiliary Air Compressors, No. No. of stages diameters stroke driven by

Small Auxiliary Air Compressors, No. No. of stages diameters stroke driven by

Is provision made for first charging the air receivers By own steam driven compressor

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 Yes Is a report sent herewith

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AIR RECEIVERS:—Have they been made under survey...
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...
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...
Starting Air Receivers, No... Total cubic capacity... Internal diameter... thickness...
Seamless, lap welded or riveted longitudinal joint... Material... Range of tensile strength... Working pressure...

IS A DONKEY BOILER FITTED...
Is the donkey boiler intended to be used for domestic purposes only...
PLANS. Are approved plans forwarded herewith for shafting...
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...
State the principal additional spare gear supplied...
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...
Dates of examination of principal parts—Cylinders... Covers... Pistons... Rods... Connecting rods...
Crank shaft... Flywheel shaft... Thrust shaft... 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... Identification mark... Flywheel shaft, material... Identification mark...
Thrust shaft, material... Identification mark... Intermediate shafts, material... Identification mark...
Tube shaft, material... Identification mark... Screw shaft, material... Identification mark...
Identification marks on air receivers...
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...
Description of fire extinguishing apparatus fitted...
Is the vessel (not being an oil tanker) fitted for carrying oil as cargo...
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... If so, state name of vessel...

General Remarks (State quality of workmanship, opinions as to class, &c...
These engines and boilers were fitted on board this vessel, in accordance with the approved plans and Rule Requirements and on completion the machinery was tried out under working conditions and found satisfactory and in my opinion is now eligible for record of LMC. 8.47. and notation of T.S. (C.L.). 8.47.

The amount of Entry Fee...
Special...
Donkey Boiler Fee...
Travelling Expenses (if any) £...
When applied for...
When received...
Committee's Minute...
Assigned...
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