

REPORT ON OIL ENGINE MACHINERY.

No. 18249.

Received at London Office

2 - APR 1947

Date of writing Report 26th Mar 1947. When handed in at Local Office 29th Mar. 1947. Port of MIDDLESBROUGH.

Survey held at MIDDLESBROUGH. Date, First Survey 13th May, 1946; Last Survey 22nd March, 1947. Number of Visits 49.

Trade of vessel Single on the Twin Triple Quadruple Screw vessel n.v. "BRITISH EMPRESS". Tons Gross 8745 Net 4988

Built at Haverton Hill. By whom built Furness S. B. Co. Ltd. Yard No. 391 When built 1947

Engines made at Sunderland. By whom made Wm. Doxford & Sons Ltd. Engine No. 2765 When made 1947

Monkey Boilers made at Wallsend. By whom made N.E. Marine Eng. Co. (1938) Ltd. Boiler No. 2765 When made 1947

Indicated Horse Power 3100 Owners British Tankers Co. Port belonging to London. Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted Yes

Trade for which vessel is intended Tanker

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.

Distance between 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. dia. of journals. Crank pin dia. Crank webs. Mid. length breadth. Thickness parallel to axis.

Intermediate Shafts, diameter. Thrust Shaft, diameter at collars. Is the tube shaft fitted with a continuous liner.

Propeller diameter. Thickness between bushes. Is the after end of the liner made watertight in the stern tube.

Method of reversing Engines. Is a governor or other arrangement fitted to prevent racing of the engine when declutched.

Are the cylinders fitted with safety valves. Are the exhaust pipes and silencers water cooled.

Are the exhaust pipes and silencers water cooled. If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned.

Cooling Water Pumps, No. Is the sea suction provided with an efficient strainer which can be cleared within the vessel.

Bilge Pumps worked from the Main Engines, No. Diameter. Stroke. Can one be overhauled while the other is at work.

Bilge Pumps connected to the Main Bilge Line. No. and size. How driven.

Are the cooling water led to the bilges. If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping arrangements.

Power Driven Lubricating Oil Pumps, including spare pump, No. and size. Are 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.

Are the bilge suction pipes in holds and tunnel well fitted with strum-boxes. Are the bilge suction pipes in the machinery spaces led from easily accessible mud-boxes.

Are the bilge suction pipes in the machinery spaces led from easily accessible mud-boxes. Are they fitted with valves or cocks.

Are they fixed conveniently 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.

Are the overboard discharges above or below the deep water line. 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. How are they protected.

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 shaft tunnel watertight. Is it fitted with a watertight door. Are the arrangements 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.

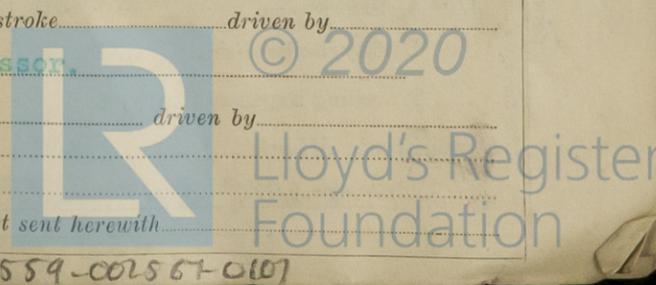
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00559-002567-0107

AIR RECEIVERS:—Have they been made under survey Yes ✓ State No. of report or certificate Explosion disca.
 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 Yes ✓ Is a drain fitted at the lowest part of each receiver Yes ✓

Injection Air Receivers, No. 2 Cubic capacity of each 300 cu. Ft. Internal diameter 4' 1 1/2" thickness 1.5/32"
 Material O.H. Steel Range of tensile strength See W. Hpl. Rpts 1226/7 Working pressure Actual
~~Seamless, lap welded or riveted~~ longitudinal joint Yes ✓

Starting Air Receivers, No. 2 Total cubic capacity 300 cu. Ft. Internal diameter 4' 1 1/2" thickness 1.5/32"
 Material O.H. Steel Range of tensile strength See W. Hpl. Rpts 1226/7 Working pressure Actual
~~Seamless, lap welded or riveted~~ longitudinal joint Yes ✓

IS A DONKEY BOILER FITTED Yes ✓ If so, is a report now forwarded See Newcastle Report No. 104056
 Is the donkey boiler intended to be used for domestic purposes only No

PLANS. Are approved plans forwarded herewith for shafting 3/1/46 Receivers 8/5/46 Separate fuel tanks 21/9/46
 (If not, state date of approval)
 Donkey boilers - General pumping arrangements 17/10/45 Pumping arrangements in machinery space 21/9/46
 Oil fuel buring arrangements 7/8/46

SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes ✓
 State the principal additional spare gear supplied See attached list

~~The foregoing is a correct description,~~ Manufacturer.

Dates of Survey while building
 During progress of work in shops - - 1946. May 13, Aug. 14, 27, Sept. 2, 23, Oct. 2, 4, 9, 14, 18, 22, 30, Nov. 1, 4, 5, 12, 25, 29,
 During erection on board vessel - - Dec. 11, 13, 16, (2), 18, 20, 24, 30, 1947 Jan. 3, 20, 22, 24, 29, 31, Feb. 3, 6, 14, 18, 20, 27,
 Mar. 3, 5, 6, 7, 10, 14, 18, 19, 21, 22.
 Total No. of visits 49.

Dates of examination of principal parts—Cylinders - Covers - Pistons - Rods - Connecting rods -
 Crank shaft - Flywheel shaft - Thrust shaft - Intermediate shafts - Tube shaft -
 Screw shaft 14.10.46 Propeller 7.3.47 Stern tube 4.10.46 Engine seatings 27.8.47 Engine holding down bolts 15.1.47
 Completion of fitting sea connections 14.10.46 Completion of pumping arrangements 5.3.47 Engines tried under working conditions 18.2.47
 Crank shaft, material - Identification mark - Flywheel shaft, material - Identification mark -
 Thrust shaft, material - Identification mark - Intermediate shafts, material O.H. Steel Identification marks 9244 J.
 Tube shaft, material - Identification mark - Screw shaft, material O.H. Steel Identification mark 9232 J.D.
 Identification marks on air receivers 2375 A.O. 25/10/46 and 2367 S.W. 26/9/46.

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 Steam smothering and perforated water pipes and Phomene hand fire extinguishers.
 Is the vessel (not being an oil tanker) fitted for carrying oil as cargo Yes ✓ If so, have the requirements of the Rules been complied with Yes ✓
 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 Yes ✓ If so, state name of vessel M.V. "BRITISH ADMIRAL".

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 W.M.C. 3.47. and notation of T.S. (G.L.) 3.47. Forced draught fitted.

The amount of Entry Fee ... £ :
1/3 Special ... £ 36 : 9 :
 Donkey Boiler Fee... £ :
 Travelling Expenses (if any) £ :
 When applied for 1:4: 19 47.
 When received 19

Shorman Stuart & G.E. Ouch
 Engineer Surveyor to Lloyd's Register of Shipping



Committee's Minute FRL 2 MAY 1947
 Assigned + LMC 3.47 Oil Eng.
C.L. 2DB 150/16.

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