

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office.

17 DEC 1942

Date of writing Report 16/12/1942 When handed in at Local Office 16/12/1942 Port of H. Hartlepool
 No. in Survey held at Hartlepool Date, First Survey 19th June, 1942 Last Survey 14th December, 1942
 Reg. Book 5/3 "EMPIRE COBBETT" (Number of Visits 87) Tons { Gross 9811 Net 5779
 on the 5/3 "EMPIRE COBBETT"
 Built at Hawthorn Hill By whom built Turner Shipbuilding Co. Ltd. Yard No. 350 When built 1942
 Engines made at Hartlepool By whom made Richardson Westgarth & Co. Ltd. Engine No. 2430 When made "
 Boilers made at " By whom made " Boiler No. " When made "
 Registered Horse Power 674 Owners Ministry of War Transport Port belonging to "
 (Mgt: Eagle Oil & Shipping Co. Ltd.)
 Nom. Horse Power as per Rule 674 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
 Trade for which vessel is intended "

ENGINES, &c.—Description of Engines Triple expansion Vertical Surface Condensing Revs. per minute 85.5
 Dia. of Cylinders 24" x 44" x 76" Length of Stroke 51" No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule 15.214 Crank pin dia. 16" Crank webs Mid. length breadth Thickness parallel to axis 95" 108"
as fitted 15 1/2" Mid. length thickness shrunk Thickness around eye-hole 8 1/2"
 Intermediate Shafts, diameter as per Rule 14.49" Thrust shaft, diameter at collars as per Rule 15.214"
as fitted 14 3/4" as fitted 15 3/4" - 15 1/2"
 Tube Shafts, diameter as per Rule Screw Shaft, diameter as per Rule 16.01" Is the tube shaft fitted with a continuous liner Yes
as fitted as fitted 16 1/4" as fitted 15 9"
 Bronze Liners, thickness in way of bushes as per Rule 79" Thickness between bushes as per Rule 13 1/6" Is the after end of the liner made watertight in the
as fitted 13 1/6" as fitted 13 1/6" 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 Yes
 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. Yes
 If two liners are fitted, is the shaft lapped or protected between the liners. Yes Is an approved Oil Gland or other appliance fitted at the after end of the tube
 at Yes If so, state type Yes Length of Bearing in Stern Bush next to and supporting propeller 5'-5"
 Propeller, dia. 18'-3" Pitch Varying No. of Blades 4 Material bronze whether Moveable No Total Developed Surface 131.75 sq. feet
 Feed Pumps worked from the Main Engines, No. 2 Diameter 5" Stroke 27" Can one be overhauled while the other is at work Yes
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 5" Stroke 27" Can one be overhauled while the other is at work Yes
 Feed { No. and size 2-12" x 9" + 24" 1-9" x 6" x 10" Pumps connected to the { No. and size 2-5" x 27" 5" Conn. Ballast Pump
 Pumps { How driven Steam Main Bilge Line { How driven Main Eng. Steam
 Ballast Pumps, No. and size 1-10" x 12" x 12" Lubricating Oil Pumps, including Spare Pump, No. and size Yes
 Are two independent means arranged for circulating water through the Oil Cooler Yes Suctions, connected to both Main Bilge Pumps and Auxiliary
 Bilge Pumps:—In Engine and Boiler Room 3 1/2" off main, 3 1/2" E.R. p 3 1/2" E.R.S. 2 1/2" off main 3 1/2" B.R. p 3 1/2" B.R.S.
 In Pump Room main 2 1/4" F.A.D. 1 1/2" In Holds, &c. F. PEAK 1 1/4" DEFTANK 2 1/2" F. COFF. DAM 1 1/4"
Aft PR. 1 1/4" Aft Coff. Dam. 1 3" ejector.
 Main Water Circulating Pump Direct Bilge Suctions, No. and size 1-10" p Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size 1-5" S. Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes mudbox valve & lead pipe
 Are the Bilge Suctions in the Machinery Space 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 stokehold 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 Yes
 What pipes pass through the deep tanks Yes Have they been tested as per Rule Yes
 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 Yes worked from Yes

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 10020 ft
 Which Boilers are fitted with Forced Draft all Which Boilers are fitted with Superheaters all
 No. and Description of Boilers 3 S.E. Multitubular Working Pressure 220 LB./sq. in.
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes If so, is a report now forwarded? Yes
 IS A DONKEY BOILER FITTED? Yes Can the donkey boiler be used for domestic purposes only Yes
 PLANS. Are approved plans forwarded herewith for Shafting Yes Main Boilers Yes Auxiliary Boilers Yes Donkey Boilers Yes
 (If not state date of approval)
 Superheaters Yes General Pumping Arrangements Yes Oil fuel Burning Piping Arrangements Yes

SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes
 State the principal additional spare gear supplied Spare gear supplied in conformity with list supplied by A.D.M.B.(M) of 1st Nov
dated 30/11/42 with the exception of a few minor details which are to be supplied at a later date if required.

The foregoing is a correct description
 For RICHARDSONS, WESTGARTH & CO. LIMITED.

DIRECTOR

Manufacturer.



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005307-0000000000

Dates of Survey while building
 During progress of work in shops - - 1942. June 19, 29, July 6, 8, 9, 15, 16, 17, 20, 21, 22, August 6, 8, 10, 12, 14, 17, 18, 19, 20, 21, 24, 25, 27, 31, Sept. 1, 2, 3, 4, 7, 8, 11, 14, 15, 16, 17, 18, 22, 23, 24, 30, Oct. 1, 2, 3, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 17, 19, 20, 21, 22, 23, 24, 27, 29, 30, 31, Nov. 2, 4, 5, 6, 9, 10, 11, 12, 18, 20, 26, 27, 30, Dec. 1, 2, 3, 7, 8, 9, 10, 12, 14, 1942. October 5, 15, 20, 24, 30, November 3, 10, 12, 14, 21, 25, 27, December 1, 4, 8, 11, 14, 18, 21, 22, 24, 28.
 During erection on board vessel - -
 Total No. of visits 87 (Incl. 22.)

Dates of Examination of principal parts—Cylinders 21/7/42 Slides 10/8/42 Covers 10/8/42
 Pistons 10/8/42 Piston Rods 7/8/42 Connecting rods 21/7/42
 Crank shaft 6/7/42 Thrust shaft 8/7/42 Intermediate shafts 21/10/42
 Tube shaft ✓ Screw shaft 21/10/42 Propeller 3/11/42 + 17/11/42
 Stern tube 23/10/42 Engine and boiler seatings 10/11/42 Engines holding down bolts 4/12/42
 Completion of fitting sea connections 17/11/42
 Completion of pumping arrangements 23/12/42 Boilers fixed 27/11/42 Engines tried under steam 18th + 21st /12/42
 Main boiler safety valves adjusted 21/12/42 Thickness of adjusting washers P.B. P. 3/8 S. 3/8, C.B. P. 1/2 S. 1/2, S. B. P. 1/4 S. 1/2
 Crank shaft material Steel Identification Mark 11271 HAI Thrust shaft material Steel Identification Mark 11378 HAI
 Intermediate shafts, material " Identification Marks 11378 HAI Tube shaft, material " Identification Mark
 Screw shaft, material Steel Identification Mark 11378 HAI Steam Pipes, material S.D. Steel Test pressure 660 lb. Date of Test 14/12/42
 Is an installation fitted for burning oil fuel Yes Is the flash point of the oil to be used over 150° F. Yes.
 Have the requirements of the Rules for the use of oil as fuel been complied with Yes.
 Is the vessel (not being an oil tanker) fitted for carrying oil as cargo. ✓ 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 2729 ✓
 General Remarks (State quality of workmanship, opinions as to class, &c.)

The engines & boilers of this vessel have been constructed under Special Survey & in accordance with the Specification & approved plans.
 The workmanship & materials have been found good.
 The machinery has been forwarded to Haverton Hill to be fitted on board by Messrs. Furness Shipbuilding Co. in their Yard No 350.
 In my opinion, this vessel will be eligible to have record of + LMC-with date-on completion.
 The Machinery has now been fitted on board in accordance with the approved plans & Rule Requirements, tried out under working conditions & found satisfactory & in my opinion is eligible for record of + LMC-12.42 & notation TS(cc)12.42.

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

The amount of Entry Fee ... £ 6 : 0 :
 Special 4 LMC ... £ 86 : 19 :
 Donkey Boiler Fee ... £ 21 : 15 :
 Special 5 LMC
 Travelling Expenses (if any) £ 21 : 15 :
 Supervision £ 5 : 8
 When applied for, 1942
 When received, 1943
 Committee's Minute ... 22 JAN 1943
 Assigned ... 22, CH

Clive Bell.
 Engineer Surveyor to Lloyd's Register of Shipping.
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