

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

Date of writing Report 21/7/1945 When handed in at Local Office 24/7/1945 Port of WEST HARTLEPOOL
 No. in Survey held at WEST HARTLEPOOL Date, First Survey 5/4/44 Last Survey 14/7/1945
 Reg. Book (Number of Visits 60)
 on the STEEL SCREW STEAMER EMPIRE EDDYSTONE Tons { Gross 7317.88
 Net 5115.24
 Built at WEST HARTLEPOOL By whom built WM. GRAY & CO. LTD Yard No. 1176 When built 1945
 Engines made at WEST HARTLEPOOL By whom made CENTRAL MARINE ENG. WORKS Engine No. 1176 When made 1945
 Boilers made at GREENOCK By whom made JOHN G. KINCAID & CO. LTD Boiler No. A/MS/M/455 When made 1943
 Registered Horse Power N° 284 Owners MINISTRY OF WAR TRANSPORT Port belonging to WEST HARTLEPOOL
 Nom. Horse Power as per Rule 510 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
 Trade for which vessel is intended OCEAN GOING

ENGINES, &c.—Description of Engines INVERTED TRIPLE EXPANSION Revs. per minute 76
 Dia. of Cylinders 24 1/2" x 37" x 70" Length of Stroke 48" No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule 13.99" Crank pin dia. 14 1/4" Crank webs Mid. length breadth 21" Thickness parallel to axis 9"
 as fitted 14 1/4" Mid. length thickness 9" Thickness around eye-hole 6 1/4"
 Intermediate Shafts, diameter as per Rule 13.32" Thrust shaft, diameter at collars as per Rule 13.99"
 as fitted 13 3/8" as fitted 14 1/4"
 Tube Shafts, diameter as per Rule Screw Shaft, diameter as per Rule 14.84" Is the tube shaft fitted with a continuous liner Yes
 as fitted as fitted 15 1/4"
 Bronze Liners, thickness in way of bushes as per Rule .753" Thickness between bushes as per Rule .56" Is the after end of the liner made watertight in the
 as fitted .812" as fitted 2 1/2" 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 One length
 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
 at No If so, state type - Length of Bearing in Stern Bush next to and supporting propeller 5'-1"
 Propeller, dia. 18'-3" Pitch 15'-10" No. of Blades 4 Material CAST IRON whether Moveable No Total Developed Surface 98.5 sq. feet
 Feed Pumps worked from the Main Engines, No. 2 Diameter 4 1/2" Stroke 26" Can one be overhauled while the other is at work Yes
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 4 1/2" Stroke 26" Can one be overhauled while the other is at work Yes
 Feed Pumps { No. and size 3 @ 9 1/2" x 7" x 21" SINGLEX Pumps connected to the { No. and size 2 @ 4 1/2" x 26" | 1 @ 10" x 12" x 12" | 1 @ 9 1/2" x 7" x 21"
 How driven INDEPENDENT STEAM Main Bilge Line { How driven MAIN ENGINE | INDEPENDENT STEAM
 Ballast Pumps, No. and size 1 @ 10" x 12" x 12" DUPLEX 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
 Bilge Pumps: —In Engine and Boiler Room 4 @ 3" | 1 @ 5"
 In Pump Room - In Holds, &c. N° 1. 2 @ 3" N° 2. 2 @ 3 1/2" N° 3. 2 @ 3"
N° 4. 2 @ 2 1/2" BILGE 2 @ 3" ENG RM 2 @ 3" N° 5. 2 @ 3" N° 6. 3 @ 2 1/2" TUNNEL WELL 1 @ 2 1/2"
 Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 @ 9" Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size 1 @ 5" Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes Yes
 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 On recesses 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 BILGE PIPES TO FORWARD HOLDS How are they protected WOOD CEILING
 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 Yes Is it fitted with a watertight door No worked from -

MAIN BOILERS, &c.—(Letter for record 5) Total Heating Surface of Boilers 7248 sq. ft.
 Which Boilers are fitted with Forced Draft Yes Which Boilers are fitted with Superheaters Yes
 No. and Description of Boilers 3 Single ended tubular Working Pressure 220 lb. sq. in.
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes
 IS A DONKEY BOILER FITTED? No If so, is a report now forwarded? -
 Can the donkey boiler be used for domestic purposes only -
 PLANS. Are approved plans forwarded herewith for Shafting 9-5-41 Main Boilers - Auxiliary Boilers - Donkey Boilers -
 (If not state date of approval) 22-11-43
 Superheaters - General Pumping Arrangements - Oil fuel Burning Piping Arrangements -

SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes
 State the principal additional spare gear supplied -

The foregoing is a correct description.
 FOR THE CENTRAL MARINE ENGINE WORKS

(Sd. Genl. & Co. Secy.)

J. H. Gurney
 GENERAL MANAGER

Manufacturer.



© 2020

Lloyd's Register
 Foundation

008751-008752-0052

Dates		
Date of Survey while building	During progress of work in shops - - - 18-10-23-25-26-30 May 2-3-14-15-16-17-23-30 June 1-11-13-19-20-22-25-26-27-28-29 July 3-4 1945 April 9-24 May 30 June 12-15 July 4-6-10-13-14	Total No. of visits 60
Dates of Examination of principal parts	Cylinders 2-11-HH-XO 20-A-H-S Slides 20-A-H-S Covers 20-A-H-S	Pistons 20-A-H-S Piston Rods 20-A-H-S Connecting rods 20-A-H-S
Crank shaft	8-1-HS-11-H-S Thrust shaft 29-3-HS-XO 11-A-H-S Intermediate shafts 29-3-HS-XO 3-5-H-S	Tube shaft - Screw shaft 29-3-HS-XO 3-5-H-S Propeller 3-5-H-S
Stern tube	3-5-H-S Engine and boiler seatings 2A-H-H-S Engines holding down bolts 15-6-H-S	Completion of fitting sea connections 2A-H-H-S
Main boiler safety valves adjusted	10-T-H-S Boilers fixed 15-6-H-S Engines tried under steam 11-7-H-S	Thrust shaft material Bugat Steel Identification Mark N° 3765 CP Thrust shaft material Bugat Steel Identification Mark N° 3983 CP.
Intermediate shafts, material	Bugat Steel Identification Marks 31580, 31584, 31391 Tube shaft, material - Identification Mark -	Screw shaft, material Bugat Steel Identification Mark N° 1529 NK Steam Pipes, material SP Steel Test pressure 660 lbs Date of Test 19-6-45
Is an installation fitted for burning oil fuel	No Is the flash point of the oil to be used over 150° F. -	Have the requirements of the Rules for the use of oil as fuel been complied with -
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 SS PACHUMBA RPTN° 18654	General Remarks (State quality of workmanship, opinions as to class, &c.) The engines and boilers of this vessel have been constructed under Special Survey and in accordance with the approved plans and specification. The materials and workmanship have been found good upon completion they were examined under full working conditions and found satisfactory. It is recommended that the Machinery of this vessel be classed in the Register Book § LMC T.H.S. 3SB (AM) FD.C.L.
The amount of Entry Fee ... £ 6 : 0 :	When applied for, Special ... £ 52 : 4 : Donkey Boiler Fee ... £ 13 : 2 : Travelling Expenses (if any) £ : : When received,	Assigned + LMC 745 Spt. FD. C.L.



© 2020

Lloyd's Register
Foundation