

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 25 DEC 1941

Date of writing Report 16.12.1941 When handed in at Local Office 19 Port of Barron.  
 No. in Survey held at Barron. Date, First Survey 11.7.41 Last Survey 13.12.1941  
 Reg. Book. EMPIRE BAXTER. (Number of Visits 34)  
 on the EMPIRE BAXTER. Tons { Gross 7023.65  
 Net 5056.10  
 Built at Barron. By whom built Vickers Armstrongs Ltd. Yard No. 707 When built 1941  
 Engines made at Glasgow. By whom made Burley Curle & Co. Engine No. EW 133 When made 1941  
 Boilers made at Barron + Grimsby By whom made Vickers Armstrongs Ltd. & J. G. Kincaid & Co. Ltd. Boiler No. 249 When made 1941  
 Registered Horse Power 516 Owners Ministry of War Transport Port belonging to Barron.  
 Nom. Horse Power as per Rule 516 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes  
 Trade for which Vessel is intended 1941

ENGINES, &c.—Description of Engines Triple Expansion. Revs. per minute  
 Dia. of Cylinders as per Rule Length of Stroke as per Rule No. of Cylinders as per Rule No. of Cranks as per Rule  
 Crank shaft, dia. of journals as per Rule Crank pin dia. as per Rule Crank webs as per Rule Mid. length of web as per Rule Thickness parallel to axis as per Rule  
See also Glasgow Report No 64149 - shrunk Thickness around eye-hole as per Rule  
 Intermediate Shafts, diameter as per Rule 12.98" Thrust shaft, diameter at collars as per Rule 13.63"  
as fitted 13.0" as fitted 13.75"  
 Tube Shafts, diameter as per Rule Screw Shaft, diameter as per Rule 14.465" 14.5"  
as fitted 10.75" Is the tube shaft fitted with a continuous liner? Yes  
 Bronze Liners, thickness in way of bushes as per Rule .74" Thickness between bushes as per Rule .55" Is the after end of the liner made watertight in the  
as fitted .75" as fitted .625" 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  
 shaft No If so, state type Yes Length of Bearing in Stern Bush next to and supporting propeller 5' 0 1/2"  
 Propeller, dia. 18' 3" Pitch 17' 3" No. of Blades 4 Material CI whether Moveable No Total Developed Surface 108 sq. feet  
 Feed Pumps worked from the Main Engines, No. 2 Diameter as per Rule Stroke as per Rule Can one be overhauled while the other is at work Yes  
 Bilge Pumps worked from the Main Engines, No. 2 Diameter as per Rule Stroke as per Rule Can one be overhauled while the other is at work Yes  
 Feed Pumps { No. and size 2 at 9 1/2" x 21" x 7" Pumps connected to the { No. and size 1 Ballast 10 1/2" x 24" x 13" 165 9 1/2" x 21" x 7"  
 How driven Steam Main Bilge Line { How driven Steam Steam  
 Ballast Pumps, No. and size 1 - 10 1/2" x 24" x 13" 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 at 3" (2P. 15)  
 In Pump Room No 3 - 2 at 3" In Holds, &c. No 1 2 at 3" No 2 2 at 3 1/2" Cross Bunks 2 at 2 1/2"  
No 4 2 at 3" Jurnal hull 1 at 3 1/2"  
 Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 - 8 1/2" Independent Power Pump Direct Suctions to the Engine Room Bilges, 39  
 No. and size 1 - 5" (65) 1 Pulable hose - 4" 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 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 LWL + 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  
 That Pipes pass through the bunkers Yes How are they protected hood ceiling + steel plate  
 That 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 Yes Is it fitted with a watertight door No door worked from Yes

MAIN BOILERS, &c.—(Letter for record S.) Total Heating Surface of Boilers 7616 sq ft  
 Forced Draft fitted Yes No. and Description of Boilers 2 SE Main + 1 SE aux? all cylindrical type Working Pressure 220 lb  
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes  
 IS A DONKEY BOILER FITTED? No If so, is a report now forwarded? Yes

Are approved plans forwarded herewith for Shafting London letter 17.9.49 Main Boilers 10.3.40 Auxiliary Boilers 7.3.40 Donkey Boilers Yes  
 Superheaters Yes General Pumping Arrangements London letter 17.9.40 Oil fuel Burning Piping Arrangements Yes

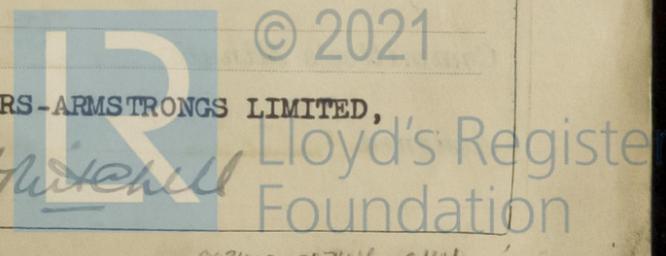
### SPARE GEAR.

Is the spare gear required by the Rules been supplied Yes  
 State the principal additional spare gear supplied See list attached to Glasgow Report

The foregoing is a correct description.

For VICKERS-ARMSTRONGS LIMITED,

Manufacturer.



003409-003416-0141

1941: July 11, 26, Sept 3, 11, 15, 17, 19, 24, 26, Oct 12, 10

During progress of work in shops - -

Dates of Survey while building

During erection on board vessel - - -

Total No. of visits 34

Dates of Examination of principal parts—Cylinders Slides Covers

Pistons Piston Rods Connecting rods

Crank shaft Thrust shaft 18.9.41 Intermediate shafts 15.9.41 - 15.9.41

Tube shaft Screw shaft 18.9.41 Propeller 29.8.41 - 7.10.41

Stern tube 21.5.41 - 29.5.41 Engine and boiler seatings 6.11.41 & 27.10.41 Engines holding down bolts 6.11.41

Completion of fitting sea connections 7.10.41

Completion of pumping arrangements 15.11.41 Boilers fixed 27.10.41 Engines tried under steam 15.11.41

Main boiler safety valves adjusted Main 15.11.41 Ann 26.11.41 Thickness of adjusting washers Main 15.11.41 Ann 26.11.41

Crank shaft material Identification Mark Thrust shaft material S M Steel Identification Mark 6133-015

Intermediate shafts, material S M Steel - Identification Marks 4AC 5702 4AC 5702 4AC 5702 Tube shaft, material Identification Mark

Screw shaft, material S M Steel - Identification Mark 7.7.40 Steam Pipes, material Steel Test pressure 640 lb Date of Test

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 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 If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.)

The machinery of this vessel has been efficiently installed on board in accordance with the Rules & approved Plans. Tried under working conditions found satisfactory and is in my opinion eligible for the notation + LMC 12.41.

The amount of Entry Fee ... £ 48 - 12 - 0

Special 3/5 (for ... ) £ 15 - 2 - 0

Donkey Boiler Fee ... £ 4 - 0 - 6

Travelling Expenses (if any) £

When applied for, 22.12.19.41

When received, 19.

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned + LMC 12.41

FD. CH

