

## 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 Barrow.

No. in Survey held at Barrow Date, First Survey 11.7.41 Last Survey 13.12.1941  
Reg. Book. on the EMPIRE BAXTER. (Number of Visits 34)

Gross Tons 7023.65  
Net Tons 5066.10

Built at Barrow By whom built Vickers Armstrong Ltd. Yard No. 787 When built 1941

Engines made at Glasgow By whom made Barclay Curle & Co. Engine No. EW 133 When made 1941

Boilers made at Barrow & Grimsby By whom made Vickers Armstrong Ltd. Boiler No. 249 When made 1941

Registered Horse Power Owners Ministry of War Transport Port belonging to Barrow.

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

ENGINES, &c.—Description of Engines Triple Expansion Revs. per minute

Dia. of Cylinders Length of Stroke No. of Cylinders No. of Cranks

Crank shaft, dia. of journals as per Rule See also Glasgow Report No. 64149 Thickness parallel to axis shrunk  
as fitted 12.88" Crank pin dia. 14.465" Mid. length of crank 14.5" Thickness around eye-hole 13.63"

Intermediate Shafts, diameter as per Rule 13.0" Thrust shaft, diameter at collars as per Rule 13.75"  
as fitted 13.0" as fitted 13.75"

Tube Shafts, diameter as per Rule 7.4" Screw Shaft, diameter as per Rule 14.465" Is the screw shaft fitted with a continuous liner? Yes  
as fitted 7.4" as fitted 14.465"

Bronze Liners, thickness in way of bushes as per Rule 7.5" Thickness between bushes as per Rule 6.35" Is the after end of the liner made watertight in the propeller boss Yes  
as fitted 7.5" as fitted 6.35"

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

Propeller, dia. 18.3" Pitch 17.3" No. of Blades 4 Material CS whether Moveable No Total Developed Surface 108 sq. feet

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

Bilge Pumps worked from the Main Engines, No. 2 Diameter Stroke Can one be overhauled while the other is at work

Feed Pumps { No. and size 2 at 9 1/2" x 24" x 7" Pumps connected to the { No. and size 1 Ballast 10 1/2" x 24" x 13" 165 9 1/2" x 24" x 7"  
How driven Steam Main Bilge Line How driven 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" No. 4. 2 at 3" In Holds, &c. No. 1. 2 at 3" No. 2. 2 at 3 1/2" Long Bunks 2 at 2 1/2"

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1-5" (65) 1 Pulley hose 4" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1-5" (65)

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 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 down 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. 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

Is the donkey boiler intended to be used for domestic purposes only Yes

PLANS. Are approved plans forwarded herewith for Shafting Yes Main Boilers 10.3.40 Auxiliary Boilers 7.3.41 Donkey Boilers Yes

(If not state date of approval)

Superheaters Yes General Pumping Arrangements Yes Oil fuel Burning Piping Arrangements Yes

## SPARE GEAR.

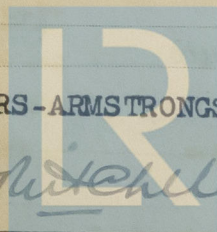
Is the spare gear required by the Rules been supplied Yes

Is the principal additional spare gear supplied See list attached to Glasgow Report

The foregoing is a correct description.

For VICKERS-ARMSTRONGS LIMITED,

Manufacturer.



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Lloyd's Register  
Foundation

003409-003416-0141



1941.  
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 Aux 26.11.41 Thickness of adjusting washers Main 15.11.41 S. 370" S. 350" Aux 15.11.41 S. 345" S. 345"  
Crank shaft material Identification Mark Thrust shaft material S M Steel Identification Mark 6133-015  
Intermediate shafts, material S M Steel Identification Marks 4AC 0W. 4 Tube shaft, material Identification Mark  
Screw shaft, material S M Steel Identification Mark 5702 4AC 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 - 0  
Travelling Expenses (if any) £ 4 - 0 - 0  
When applied for, 22.12.19.41  
When received, 19.

Committee's Minute  
Assigned + LMC 12.41  
FD. CH

McMullan  
Engineer Surveyor to Lloyd's Register of Shipping.