

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

Date of writing Report 19... When handed in at Local Office 1-12-1942 Port of Glasgow
 No. in Survey held at Glasgow Date, First Survey 17-8-42 Last Survey 11-11-1942
 Reg. Book on the s.s. EMPIRE GIPSY Tons (Gross) Net
 Built at Glasgow By whom built A. J. Inglis Ltd Yard No. 1175 When built 1942
 Engines made at Glasgow By whom made D. Rowan & Co Engine No. 1111 When made 1942
 Boilers made at Glasgow By whom made D. Rowan & Co Boiler No. 1111 When made 1942
 Registered Horse Power 145 Owners Ministry of War Transport Port belonging to Glasgow
 Nom. Horse Power as per Rule 139 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
 Trade for which vessel is intended Ocean - Trading Service

ENGINES, &c.—Description of Engines. See BE Report. Revs. per minute
 Dia. of Cylinders 15 x 25 1/2 x 41 Length of Stroke 30" No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule 8.167 Crank pin dia. 8 1/2 Crank webs Mid. length breadth 16 1/2 Thickness parallel to axis 5 3/8
 as fitted 8 1/2 Crank webs Mid. length thickness 5 3/8 shrunk Thickness around eye-hole 4
 Intermediate Shafts, diameter as per Rule 7.776 Thrust shaft, diameter at collars as per Rule 8.167
 as fitted Tube Shafts, diameter as per Rule Screw Shaft, diameter as per Rule 8.67
 as fitted Is the { tube screw } shaft fitted with a continuous liner { Yes.
 Bronze Liners, thickness in way of bushes as per Rule .56 Thickness between bushes as per Rule .42
 as fitted 9/16 Is the after end of the liner made watertight in the 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
 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 If so, state type Length of Bearing in Stern Bush next to and supporting propeller 3'-0"
 Propeller, dia. 10' 9" Pitch 11'-3" No. of Blades 4 Material CI whether Moveable No Total Developed Surface 41 sq. feet
 Feed Pumps worked from the Main Engines, No. None Diameter Stroke Can one be overhauled while the other is at work
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 3 3/4 Stroke 15 Can one be overhauled while the other is at work Yes
 Feed Pumps { No. and size 2 - 7 x 5 x 12 Pumps connected to the Main Bilge Line { No. and size 1 - 6 1/2 x 7 x 15
 How driven Steam How driven Steam
 Ballast Pumps, No. and size 1 - 6 1/2 - 7 x 15 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 3 @ 2 1/2 1 @ 2
 In Pump Room 1 @ 3 In Holds, &c.

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1-4" Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size 1-3" 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 Back
 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 How are they protected
 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 Is it fitted with a watertight door worked from

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 2100 fr² 2237 See Ltr 4/6/44 from P.C.
 Which Boilers are fitted with Forced Draft Main Which Boilers are fitted with Superheaters
 No. and Description of Boilers One - Single-ended Working Pressure 190 lbs/in²
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes
 IS A DONKEY BOILER FITTED? No If so, is a report now forwarded?

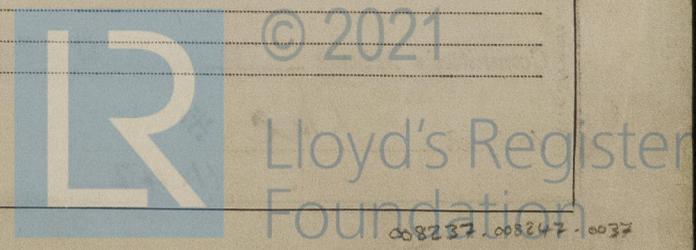
Can the donkey boiler be used for domestic purposes only
PLANS. Are approved plans forwarded herewith for Shafting 25-11-41 Main Boilers 10-10-41 Auxiliary Boilers Donkey Boilers
 (If not state date of approval)
 Superheaters General Pumping Arrangements 24-4-41 Oil fuel Burning Piping Arrangements 7-10-41

SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes
 State the principal additional spare gear supplied 1 - HP piston valve

The foregoing is a correct description.

Manufacturer.



During progress of work in shops - - *See R/S Report.*

Dates of Survey while building { During erection on board vessel - - - } *1942: Aug 17-22. Sept 3-7-10-14-15-22-23. Oct 14. Nov 14-11.*

Total No. of visits *12*

Dates of Examination of principal parts—Cylinders _____ Slides _____ Covers _____

Pistons _____ Piston Rods _____ Connecting rods _____

Crank shaft _____ Thrust shaft _____ Intermediate shafts _____

Tube shaft _____ Screw shaft _____ Propeller _____

Stern tube *17-8-42* Engine and boiler seatings *17-9-42* Engines holding down bolts *14-9-42*

Completion of fitting sea connections *22-8-42*

Completion of pumping arrangements *4-11-42* Boilers fixed *7-9-42* Engines tried under steam *11-11-42*

Main boiler safety valves adjusted *4-11-42* Thickness of adjusting washers *all 3/8"*

Crank shaft material *S.M. Forged Steel* Identification Mark *BC 6234* Thrust shaft material *S.M. Forged Steel* Identification Mark *BC F5469*
E.F. 19-6-42 R.S. 18-5-42

Intermediate shafts, material Identification Marks Tube shaft, material Identification Mark

Screw shaft, material *S.M. Forged Steel* Identification Mark *BC F5470* Steam Pipes, material *Steel* Test pressure *570 lb.* Date of Test vs.s. 5-6-42.

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 *SS EMPIRE BARRON R/S Report N° 64862.*

General Remarks (State quality of workmanship, opinions as to class, &c. *This machinery has been constructed under the Survey of The British Corporation Register of Shipping and Aircraft (see reports) The machinery has been securely fitted on board the vessel in accordance with the approved plans, the Society's Rules and the Ministry of War Transport Specification and satisfactorily tested under working conditions. The machinery is eligible in my opinion to have a record in the Register Book of * LMC 11-42 * (CL)*

*Ciob
1/12/42*

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 | £ 3 | When applied for, |
| Special | £ 6 | = 1 DEC 1942 |
| Donkey Boiler Fee | £ 1 | |
| Travelling Expenses (if any) | £ | When received, |
| | | 19 |

F.R. Dale
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute *GLASGOW* = 1 DEC 1942

Assigned *LMC **
11.42

