

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 13 MAY 1931

Date of writing Report *May 6th 1931* When handed in at Local Office *May 8th 1931* Port of *GLASGOW*
No. in Survey held at *Yroon* Date, First Survey *12th Nov 1930* Last Survey *May 5th 1931*
Reg. Book. on the *SS. GUINNESS* (Number of Visits *34*) Gross *1151*
Tons Net *656*
Built at *Yroon* By whom built *Ailsa S.B. Co Ltd* Yard No. *414* When built *1931*
Engines made at *Yroon* By whom made *Ailsa S.B. Co Ltd* Engine No. *152* When made *1931*
Boilers made at *Greenock* By whom made *J. G. Kincaid & Co Ltd* Boiler No. *202* When made *1931*
Registered Horse Power Owners *A. Guinness Sons & Co Ltd* Port belonging to *London*
Nom. Horse Power as per Rule *194* Is Refrigerating Machinery fitted for cargo purposes *Yes* Is Electric Light fitted *Yes*
Trade for which Vessel is intended

ENGINES, &c.—Description of Engines *Triple Expansion* Revs. per minute *109*
Dia. of Cylinders *16 1/2", 24 1/2", 46"* Length of Stroke *33"* No. of Cylinders *3* No. of Cranks *3*
Crank shaft, dia. of journals *as per Rule 9.16* Crank pin dia. *9 1/2"* Crank webs *18 1/2"* Thickness parallel to axis *6 1/2"*
as fitted 9 1/2" Mid. length breadth *6 1/2"* shrunk Thickness around eye-hole *4 1/2"*
Intermediate Shafts, diameter *as per Rule 8.42* Thrust shaft, diameter at collars *as per Rule 9.16*
as fitted 8 1/2" *as fitted 9 1/2"* *as fitted 9 1/2"* *as fitted 9 1/2"* *as fitted 9 1/2"* *as fitted 9 1/2"*
Tube Shafts, diameter *as per Rule 9.42* Screw Shaft, diameter *as per Rule 10 1/2"* Is the tube shaft fitted with a continuous liner *Yes*
as fitted 9 1/2" *as fitted 10 1/2"* *as fitted 10 1/2"* *as fitted 10 1/2"* *as fitted 10 1/2"* *as fitted 10 1/2"*
Bronze Liners, thickness in way of bushes *as per Rule 5.93* Thickness between bushes *as per Rule 4.45* Is the after end of the liner made watertight in the
as fitted 5 1/2" *as fitted 5 1/2"* *as fitted 5 1/2"* *as fitted 5 1/2"* *as fitted 5 1/2"* *as fitted 5 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
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 *—* Is an approved Oil Gland or other appliance fitted at the after end of the tube
shaft *No* If so, state type *—* Length of Bearing in Stern Bush next to and supporting propeller *3'-4"*
Propeller, dia. *12'-0"* Pitch *12'-3"* No. of Blades *4* Material *Bronze* whether Movable *No* Total Developed Surface *44.5* sq. feet
Feed Pumps worked from the Main Engines, No. *1* Diameter *3"* Stroke *14"* Can one be overhauled while the other is at work *—*
Bilge Pumps worked from the Main Engines, No. *2* Diameter *2 1/2"* Stroke *14"* Can one be overhauled while the other is at work *Yes*
Feed Pumps { No. and size *2 @ 6" x 8 1/2" x 18" (New) 1 @ 4" x 9 1/2" x 21" (New)* Pumps connected to the { No. and size *Gen. Ser. 4 x 9 1/2" x 21"* Ballast *12" x 14" x 12"*
How driven *Steam* Main Bilge Line How driven *Steam*
Ballast Pumps, No. and size *1 @ 12" x 14" x 12"* 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 *1 each P+S. Boiler room 2 1/2" 1 @ 2 1/2" dry tank 1 @ 2 1/2" Engine room aft end*
In Pump Room *—* In Holds, &c. *For 1st Hold 2 @ 3"*

Main Water Circulating Pump Direct Bilge Suctions, No. and size *1 @ 4 1/2"* Independent Power Pump Direct Suctions to the Engine Room Bilges,
No. and size *1 @ 3 1/2" Bilge ejector 2 @ 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 *Both* MAIN DISCHARGE, Below
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 *above*
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 suction from hold. P+S* How are they protected *Wood covering*
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 *None* Is it fitted with a watertight door *—* worked from *—*

MAIN BOILERS, &c.—(Letter for record *S*) Total Heating Surface of Boilers *3410* sq. ft.
Is Forced Draft fitted *No* No. and Description of Boilers *Two S.B.* Working Pressure *200 lbs*
IS A REPORT ON MAIN BOILERS NOW FORWARDED? *Yes*
IS A DONKEY BOILER FITTED? *No* If so, is a report now forwarded? *—*
Is the donkey boiler intended to be used for domestic purposes only *—*
PLANS. Are approved plans forwarded herewith for Shafting *—* Main Boilers *Yes* Duplicate Auxiliary Boilers *—* Donkey Boilers *—*
(If not state date of approval)
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 *One Cast Iron propeller.*

The foregoing is a correct description,
FOR AILSA SHIPBUILDING CO., LIMITED.

Manufacturer.



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Lloyd's Register
Foundation

002450-003450-0258

1930 Nov 12. 18. 21. 26 Dec 3. 9. 19. 30 (1931) Jan 7. 13. 15. 21. 27 Feb 3. 9. 19. 24 Mar 3
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 9-2-31, 21-1-31, 15-1-31 Slides 24-1-31 Covers 24-1-31
Pistons 24-1-31 Piston Rods 3-3-31 Connecting rods 3-2-31
Crank shaft 13-1-31 Thrust shaft 15-1-31 Intermediate shafts -
Tube shaft - Screw shaft 18-3-31 Propeller 13-3-31
Stern tube 11-3-31 Engine and boiler seatings 18-3-31 Engines holding down bolts 10-4-31
Completion of fitting sea connections 28-3-31

Completion of pumping arrangements 29-4-31 Boilers fixed 3-4-31 Engines tried under steam 5-5-31
Main boiler safety valves adjusted 28-4-31 Thickness of adjusting washers PBFV 13" PBAV 25" SBFV 3" SBAY 13"
Crank shaft material S Identification Mark LLOYDS No 940 DCB. Thrust shaft material S Identification Mark LLOYDS No 944 DCB.
Intermediate shafts, material - Identification Marks 13-1-31 Tube shaft, material - Identification Mark 15-1-31
Screw shaft, material S Identification Mark LLOYDS No 946 DCB. Steam Pipes, material SD Copper Test pressure 400 lbs Date of Test 22-4-31.
Is an installation fitted for burning oil fuel 18-3-31 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 No If so, state name of vessel -

General Remarks (State quality of workmanship, opinions as to class, &c. The engines have been constructed under Special Survey in accordance with the Rules of the Society. The workmanship and materials are of good quality. The engines and boilers have been securely fitted on board and tried under steam with satisfactory results. It is submitted that this vessel is eligible for a record of LMC 5-31.

A.B.
9/5/31.

Glasgow.

The amount of Entry Fee ... £ 3 : 0 :
3/5. Special ... £ 24 : 2 :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ 4 : 15 :
When applied for, 11. 5. 1931
When received, 15/5/31

David C. Barr
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 12 MAY 1931

Assigned + L.M.C. 5-31.



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