

REPORT ON MACHINERY

No. L2499

THU. 4 AUG. 1921

Received at London Office

Date of writing Report 30th July 1921 When handed in at Local Office 3rd Aug. 1921 Port of Cardiff
 No. in Survey held at Cardiff Date First Survey 18th July Last Survey 29th July 1921
 Reg. Book. 333 on the Steam Steamer Maggie O'Regan (Number of Visits 11)
 Master Built at Sligo By whom built Z.V. Schips, De Meers Tons { Gross 457
 Engines made at Kengels By whom made Gebr. Stork Net 229
 Boilers made at By whom made When built 1918
 Registered Horse Power 55 Owners Thos. Murray (Quemstown) & Co. (P. O'Regan) Port belonging to Cork
 Nom. Horse Power as per Section 28 71 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No

ENGINES, &c.—Description of Engines Triple Expansion No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 12⁵/₈ x 20⁷/₈ x 3¹/₂ Length of Stroke 19¹/₁₆ Revs. per minute 135 Dia. of Screw shaft as per rule 6¹/₁₆ Material of screw shaft as fitted 6¹/₁₆
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube No Is the after end of the liner made water tight
 the propeller boss Yes If the liner is in more than one length are the joints burned 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 Length of stern bush 2' 5"
 Dia. of Tunnel shaft as per rule 6" Dia. of Crank shaft journals as per rule 6⁵/₁₆ Dia. of Crank pin 6¹/₄ Size of Crank webs 9³/₄ x 4¹/₂ Dia. of thrust shaft under
 collars 6¹/₄ Dia. of screw 7' 9" Pitch of Screw 7' 6" No. of Blades 4 State whether moveable No Total surface 16 sq
 No. of Feed pumps 1 Diameter of ditto 3¹/₈ Stroke 6¹/₂ Can one be overhauled while the other is at work Yes
 No. of Bilge pumps 1 Diameter of ditto 3¹/₈ Stroke 6¹/₂ Can one be overhauled while the other is at work Yes
 No. of Donkey Engines Two single acting Sizes of Pumps 5¹/₈ x 3¹/₄ x 6¹/₂ 5¹/₈ x 6¹/₂ x 7¹/₂ No. and size of Suctions connected to both Bilge and Donkey pumps
 in Engine Room Two from main Eng. 1 Port, 1 Starboard & direct from Donkey Aft 2⁵/₈ In Holds, &c. Aft end of Hold 1 Port and 1 Star 2⁵/₈
 No. of Bilge Injections 1 sizes 3¹/₂ Connected to condenser, or to circulating pump Circulating Pump Is a separate Donkey Suction fitted in Engine room & size Yes 2⁵/₈
 Are all the bilge suction pipes fitted with roses Yes Are the roses in Engine room always accessible Yes Are the sluices on Engine room bulkheads always accessible Yes
 Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Valves and cocks
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Yes Are the Discharge Pipes 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 are carried through the bunkers None except Hold suction carried through How are they protected by ceiling
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes
 Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges Yes
 Is the Screw Shaft Tunnel watertight None fitted Is it fitted with a watertight door Engines aft worked from Engines aft
 OILERS, &c.—(Letter for record See) Manufacturers of Steel See

Total Heating Surface of Boilers 1402 sq Is Forced Draft fitted No No. and Description of Boilers one cylindrical horizontal
 Working Pressure 185 lbs Tested by hydraulic pressure to Not tested at this time Date of test See No. of Certificate See
 Can each boiler be worked separately Yes Area of fire grate in each boiler 40 sq No. and Description of Safety Valves to
 each boiler Two, Spring loaded Area of each valve 4' 43" Pressure to which they are adjusted 185 lbs Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 18" Mean dia. of boilers 11' 10" Length 10' 8" Material of shell plates Steel
 Thickness 1⁵/₁₆" Range of tensile strength Are the shell plates welded or flanged No Descrip. of riveting: cir. seams Double
 long. seams Triple Diameter of rivet holes in long. seams 1¹/₈" Pitch of rivets 8" 07 10 14 09 4 Lap of plates or width of butt straps 17¹/₂"
 Percentages of strength of longitudinal joint 87 Working pressure of shell by rules 202 lbs Size of manhole in shell 17³/₄ x 11¹/₂
 Size of compensating ring Flanged ring 7¹/₄ x 9' 8' 43 No. and Description of Furnaces in each boiler Two, Morrison Material Steel Outside diameter 4' 7¹/₄
 Length of plain part top 9' 1" Thickness of plates bottom 5' 51 Description of longitudinal joint See No. of strengthening rings See
 Working pressure of furnace by the rules 185 lbs Combustion chamber plates: Material Steel Thickness: Sides 7' 29 Back 6' 88 Top 7' 2 Bottom 8' 26
 Pitch of stays to ditto: Sides 8' 66 x 7' 48 Back 8' 62 x 6' 77 Top 8' 66 x 9' 25 If stays are fitted with nuts or riveted heads Yes nuts & rivets Working pressure by rules 185 lbs
 Material of stays DIAGONAL THREADS Area supported by each stay top 50' 15" Working pressure by rules 185 lbs End plates in steam space:
 Material Steel Thickness 1' 023 Pitch of stays 14' 76 x 14' 37 How are stays secured Double nuts Working pressure by rules 229 lbs Material of stays
 at smallest part 2' 48 Area supported by each stay 2' 15 Working pressure by rules 229 lbs Material of Front plates at bottom Steel
 Thickness 1' 028 Material of Lower back plate Steel Thickness 1' 023 Greatest pitch of stays 28¹/₄ x 14¹/₄ Working pressure of plate by rules 229 lbs
 Diameter of tubes 3¹/₄ Pitch of tubes 4' 21 Material of tube plates Steel Thickness: Front 1' 023 Back 9' 84 Mean pitch of stays 28' 19
 Pitch across wide water spaces 15' 15 Working pressures by rules 232 lbs Girders to Chamber tops: Material See Depth and
 thickness of girder at centre 5' 9 x 1" double plate Length as per rule 2' 1 Distance apart 9¹/₄ Number and pitch of stays in each Two 8' 66
 Working pressure by rules 245 lbs Steam dome: description of joint to shell None fitted % of strength of joint See
 Diameter See Thickness of shell plates See Material See Description of longitudinal joint See Diam. of rivet holes See
 Pitch of rivets See Working pressure of shell by rules See Crown plates See Thickness See How stayed See
 SUPERHEATER. Type None fitted Date of Approval of Plan See Tested by Hydraulic Pressure to See
 Date of Test See Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler See
 Diameter of Safety Valve See Pressure to which each is adjusted See Is Easing Gear fitted See

IS A DONKEY BOILER FITTED? *No*

If so, is a report now forwarded? *✓*

SPARE GEAR. State the articles supplied:—

2 Top end bolts. 2 Bottom end bolts. 2 Main bearing bolts. 1 set of Coupling bolts. 1 Slide valve spindle. 1 set of Feed pump and bilge pump valves. 1 set of Air pump valves. 1 Spare propeller. An assortment of Bolts and nuts etc.

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops - -
During erection on board vessel - - -
Total No. of visits *11*

Is the approved plan of main boiler forwarded herewith *yes*

" " " donkey " " " *✓*

Dates of Examination of principal parts—Cylinders *21. 25. 25 July* Slides *21. 7* Covers *21. 7* Pistons *21. 25. 7* Rods *21. 7*

Connecting rods *21. 7* Crank shaft *24. 23. 25* Thrust shaft *19. 7* Tunnel shafts *✓* Screw shaft *19. 7* Propeller *18. 20. 7*

Stern tube *19. 7* Steam pipes tested *25. 29 July* Engine and boiler seatings *33. 7* Engines holding down bolts *23. 7*

Completion of pumping arrangements *29. 7* Boilers fixed *✓* Engines tried under steam *29. 7*

Completion of fitting sea connections *19. 7* Stern tube *19. 7* Screw shaft and propeller *18. 19*

Main boiler safety valves adjusted *29. 7* Thickness of adjusting washers *Found 33" Aft 41"*

Material of Crank shaft Identification Mark on Do. Material of Thrust shaft Identification Mark on Do.

Material of Tunnel shafts Identification Marks on Do. Material of Screw shafts Identification Marks on Do.

Material of Steam Pipes *Steel* Test pressure *550 lbs*

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 Section 49 of the Rules 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 (recently classed in Germanischer Lloyd) also the Boiler has been opened up and examined. See repair report attached - and found or put in good condition. The workmanship and material appears good. The Furnaces show no signs of strain. In my opinion the Boilers and Machinery merits the favourable consideration of the Committee for record in the Register Book of L.T.C. 7. 21. Screw shaft seen 7. 21 Pressure 185 lbs.

2 plans of the pumping arrangement is forwarded herewith.

The amount of Entry Fee ... £
Special ... £
Donkey Boiler Fee ... £
Travelling Expenses (if any) £

When applied for,

When received,

Committee's Minute

Assigned

FRI. AUG. 19 1921

Lmc 7. 21

F. W. Webb

Engineer Surveyor to Lloyd's Register of Shipping.

FRI. 31 MAR. 1922

FRI. SEP. 22 1922

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