

REPORT ON MACHINERY.

No. 18256

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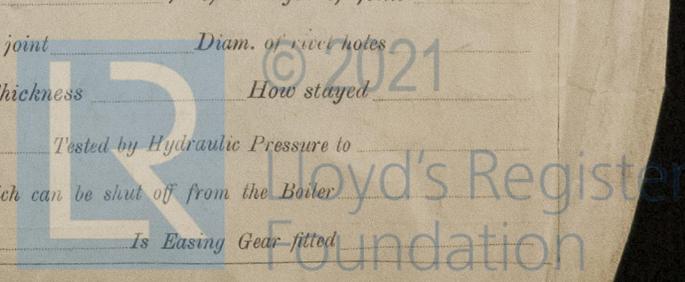
Date of Report 26 June 1924 When handed in at Local Office 1st July 1924 Port of Greenock
 No. of Survey held at Port Glasgow Date, First Survey 31st March, 1920. Last Survey 28th June, 1924
 Re. Book. on the single screw steel steamer "LOWANA" (Number of Visits 65)
 Master [Signature] Built at Port Glasgow By whom built Dunlop Bremner & Co. Ltd. (No. 343) When built 1924
 Engines made at Port Glasgow By whom made Dunlop Bremner & Co. Ltd. (No. 343) when made 1924
 Boilers made at Glasgow By whom made D. Rowan & Co. Ltd. when made 1923
 Registered Horse Power 362 Owners The Melbourne Steamship Co. Ltd. Port belonging to Melbourne
 Nom. Horse Power as per Section 28 362 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

Gross 3021.41
 Net 1686.73
 Tons

ENGINES, &c.—Description of Engines Triple No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 25" x 41" x 68" Length of Stroke 45" Revs. per minute 70 Dia. of Screw shaft 13.93 Material of screw shaft steel
 as per rule 14.02 as fitted 14 1/2"
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube Yes Is the after end of the liner made water tight in the propeller boss Yes
 If the liner is in more than one length are the joints burned No 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 No
 If two liners are fitted, is the shaft lapped or protected between the liners Yes Length of stern bush 58"
 Dia. of Tunnel shaft 12.41 Dia. of Crank shaft journals 13.03 Dia. of Crank pin 13 1/4" Size of Crank webs 13 1/2" x 8 1/2" Dia. of thrust shaft under collars 13 1/4" Dia. of screw 17.0" Pitch of Screw 17.0" No. of Blades 4 State whether moceable No Total surface 90 sq ft
 No. of Feed pumps 2 Diameter of ditto 3 1/2" Stroke 24" Can one be overhauled while the other is at work Yes
 No. of Bilge pumps 2 Diameter of ditto 4" Stroke 24" Can one be overhauled while the other is at work Yes
 No. of Donkey Engines Three Sizes of Pumps 5 1/2" x 12" x 12" No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room 4 @ 3" Tunnel 2 1/2" 2 5/8" x 5" x 8" In Holds, &c. 4 @ 3" aft 2 @ 2 1/2" + 1 @ 3 1/2"
 No. of Bilge Injections one sizes 8" Connected to condenser, or to circulating pump pump Is a separate Donkey Suction fitted in Engine room & size yes 3 1/2"
 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 Both
 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 & 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 are carried through the bunkers None How are they protected Yes
 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 Yes Is it fitted with a watertight door Yes worked from upper platform - engine room

BOILERS, &c.—(Letter for record 5) Manufacturers of Steel [Blank]
 Total Heating Surface of Boilers 5925 Is Forced Draft fitted No No. and Description of Boilers Three single ended
 Working Pressure 180 lbs/sq in Tested by hydraulic pressure to [Blank] Date of test [Blank] No. of Certificate [Blank]
 Can each boiler be worked separately Yes Area of fire grate in each boiler 55 sq ft No. and Description of Safety Valves to each boiler Double Spring loaded Area of each valve 5.94 sq in Pressure to which they are adjusted 185 lbs/sq in Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 3.0" Mean dia. of boilers 28.5" Length [Blank] Material of shell plates [Blank]
 Thickness [Blank] Range of tensile strength [Blank] Are the shell plates [Blank] or flanged [Blank] Descrip. of riveting: cir. seams [Blank]
 long. seams [Blank] Diameter of rivet holes in long. seams [Blank] Pitch of rivets [Blank] Lap of plates or width of butt straps [Blank]
 Per centages of strength of longitudinal joint [Blank] Working pressure of shell by rules [Blank] Size of manhole in shell [Blank]
 Size of compensating ring JOR No. and Description of Furnaces in each boiler [Blank] Material [Blank] Outside diameter [Blank]
 Length of plain part [Blank] Thickness of plates [Blank] Description of longitudinal joint [Blank] No. of strengthening rings [Blank]
 Working pressure of furnace by the rules [Blank] Combustion chamber plates: Material [Blank] Thickness: Sides [Blank] Back [Blank] Top [Blank] Bottom [Blank]
 Pitch of stays to ditto: Sides [Blank] Back [Blank] Top [Blank] If stays are fitted with nuts or riveted heads [Blank] Working pressure by rules [Blank]
 Material of stays [Blank] Area at smallest part [Blank] Area supported by each stay [Blank] Working pressure by rules [Blank] End plates in steam space: [Blank]
 Material [Blank] Thickness [Blank] Pitch of stays [Blank] How are stays secured [Blank] Working pressure by rules [Blank] Material of stays [Blank]
 Area at smallest part [Blank] Area supported by each stay [Blank] Working pressure by rules [Blank] Material of Front plates at bottom [Blank]
 Thickness [Blank] Material of Lower back plate [Blank] Thickness [Blank] Greatest pitch of stays [Blank] Working pressure of plate by rules [Blank]
 Diameter of tubes [Blank] Pitch of tubes [Blank] Material of tube plates [Blank] Thickness: Front [Blank] Back [Blank] Mean pitch of stays [Blank]
 Pitch across wide water spaces [Blank] Working pressures by rules [Blank] Girders to Chamber tops: Material [Blank] Depth and thickness of girder at centre [Blank] Length as per rule [Blank] Distance apart [Blank] Number and pitch of stays in each [Blank]
 Working pressure by rules [Blank] Steam dome: description of joint to shell [Blank] % of strength of joint [Blank]
 Diameter [Blank] Thickness of shell plates [Blank] Material [Blank] Description of longitudinal joint [Blank] Diam. of rivet holes [Blank]
 Pitch of rivets [Blank] Working pressure of shell by rules [Blank] Crown plates [Blank] Thickness [Blank] How stayed [Blank]

SUPERHEATER. Type [Blank] Date of Approval of Plan [Blank] Tested by Hydraulic Pressure to [Blank]
 Date of Test [Blank] Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler [Blank]
 Diameter of Safety Valve [Blank] Pressure to which each is adjusted [Blank] Is Easing Gear fitted [Blank]



IS A DONKEY BOILER FITTED? *No*

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— *Two top-end bolts and nuts, two bottom end bolts and nuts, two main bearing bolts, a set of coupling bolts, one set of feed & bilge pump valves, quantity of assorted bolts & nuts, iron of various sizes, one propeller shaft.*

The foregoing is a correct description,

JUNLOP, BREMNER & COY., LIMITED

Shoo Patou

Manufacturer.

Dates of Survey while building: During progress of work in shops: 1920. Mar 31. Apr 7. Aug 14. 30. Sept 21. Oct 27. Dec 15. 27. 1921. Jan 12. Mar 14. Apr 5. 1922. Feb 9. 22. Mar 14. 21. 31. Apr 11. 17. 20. 24. May 29. 16. 23. 31. June 15. 26. During erection on board vessel: July 17. Aug 14. Sept 1. 1923. Oct 5. Mar 14. 22. Apr 11. 25. May 7. 11. 21. 29. June 8. 12. 19. 21. July 25. Aug 23. Nov 2. Dec. 3. 6. 28. 1924. Jan 31. Apr 23. May 16. 19. 23. Total No. of visits: June 2. 9. 11. 13. 14. 16. 18. 20. 25. 28. *65* Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts—Cylinders *HP 11.5.23, MP 28.12.23, LP 29.5.23* Slides *HP 21.5.23, MP 8.6.23, LP 21.5.23* Covers *11.5.23* Pistons *HP 21.5.23, MP 8.6.23, LP 8.6.23* Rods *21.6.23*
Connecting rods *17/4/22* Crank shaft *21.3.22* Thrust shaft *20.4.22* Tunnel shafts *20.4.22* Screw shaft *11.5.23* Propeller *21.5.23*
Stern tube *11.4.23* Steam pipes tested *23.5.24, 13.6.24* Engine and boiler seatings *11.5.23* Engines holding down bolts *11.6.24*
Completion of pumping arrangements *11.6.24* Boilers fixed *3.6.24* Engines tried under steam *28-6-24*
Completion of fitting sea connections *29.6.24* Stern tube *11.5.23* Screw shaft and propeller *19.6.24*
Main boiler safety valves adjusted *20.6.24* Thickness of adjusting washers *Port Mr. P 7/8 5/16, Center Mr. P 7/8 5/16, Star Mr. P 7/8 5/16*
Material of Crank shaft *Steel* Identification Mark on Do. *645* Material of Thrust shaft *Steel* Identification Mark on Do. *645*
Material of Tunnel shafts *Steel* Identification Marks on Do. *645* Material of Screw shafts *Steel* Identification Marks on Do. *645*
Material of Steam Pipes *S.D. Copper* Test pressure *360 lb/12"*
Is an installation fitted for burning oil fuel 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 engines of this vessel have been built under special survey and in accordance with the Rules; the workmanship and materials are good.

The boilers and engines have been securely fitted on board, tried under steam and found satisfactory.

The machinery of this vessel is eligible in my opinion for the record of + L.M.C. 6.24

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 6.24. CL.

J.W.D.
10/7/24

S. F. Dorey

Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ *5 : 0 : 0* When applied for: *FRI. 25 1929*
Special *3/5* ... £ *47 : 11 : 6* 1-7-1924
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : : *19.7.24*

Committee's Minute **GLASGOW** -8 JUL 1924

Assigned + L.M.C. 6.24

FRI. 21 NOV 1924
TUE. 11 DEC 1928
FRI. 4 DEC 1925
FRI. 4 MAR 1927
TUE. 30 JUL 1929
FRI. 17 DEC 1926
TUE. 2 OCT 1928
FRI. 1 JAN 1926
FRI. 9 MAR 1928

Lloyd's Register Foundation

DESTINATE WHITMAN 9.7.24
TUE. 29 APR 1930

487M
30/6/24

Certificate (if required) to be sent to
The Surveyors are requested not to write on or below the space for Committee's Minute.