

REPORT ON MACHINERY.

Received at London Office 22 OCT 1924

Date of writing Report 16th Oct. 1924 When handed in at Local Office 17th Oct. 1924 Port of GLASGOW.

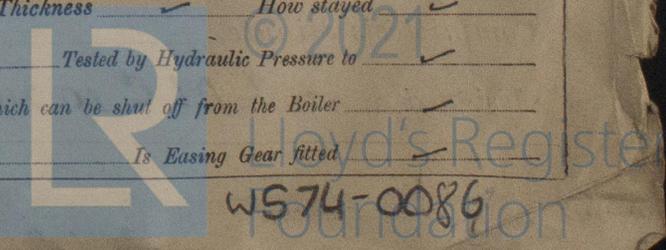
No. in Survey held at Paisley Date, First Survey 8th March 1923 Last Survey 16th Oct. 1924
 Reg. Book. 5262 on the Steel screw Steamer "GRONANT ROSE" (Number of Visits 47)
 Master Built at Paisley By whom built J. Fullerton & Co (N^o 272) When built 1924-10
 Engines made at Paisley By whom made Messrs MacLachlan & Co. Ltd. (N^o 3854) when made 1924-10
 Boilers made at Paisley By whom made do. (N^{os} 1129+30) when made 1924.
 Registered Horse Power Owners R. Hughes & Co. Port belonging to Liverpool
 Nom. Horse Power as per Section 28 169 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

ENGINES, &c.—Description of Engines Triple Expansion Surface Condensing No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 17, 27 + 45 ins. Length of Stroke 33 ins. Revs. per minute 100 Dia. of Screw shaft as per rule 9.52 Material of screw shaft steel
 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 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 In oil gland fitted Length of stern bush 3'-3 1/2"
 Dia. of Tunnel shaft as per rule 8.6 Dia. of Crank shaft journals as per rule 9.0 Dia. of Crank pin 9" Size of Crank webs 16 1/2 x 6" Dia. of thrust shaft under collars 9" Dia. of screw 11'-6" Pitch of Screw 12'-9" No. of Blades 4 State whether moveable no Total surface 53 ft.²
 No. of Feed pumps 2 Diameter of ditto 2 3/4" Stroke 18" Can one be overhauled while the other is at work yes
 No. of Bilge pumps 2 Diameter of ditto 3" Stroke 18" Can one be overhauled while the other is at work yes
 No. of Donkey Engines 2 Sizes of Pumps 6' x 4 1/2' x 6" + 7' x 8' x 8" No. and size of Suctions connected to both Bilge and Donkey pumps In Engine Room 3 @ 2" In Holds, &c. 2 @ 2"

No. of Bilge Injections One size 4 1/2" Connected to condenser, or to circulating pump pump Is a separate Donkey Suction fitted in Engine room & size yes 2 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
 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
 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 Forward bilge & ballast pipes. How are they protected wood casings
 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. Is it fitted with a watertight door worked from

BOILERS, &c.—(Letter for record S.) Manufacturers of Steel W. Beardmore & Co., The Lankashire Steel Co. and the Leeds Forge Co. 25B.
 Total Heating Surface of Boilers 3186 ft.² Is Forced Draft fitted no No. and Description of Boilers 2 Cylindrical S.S. Return Tube.
 Working Pressure 180 lbs. Tested by hydraulic pressure to 320 lbs. Date of test 4-6-24 No. of Certificate 16521
 Can each boiler be worked separately yes Area of fire grate in each boiler 4.5 ft.² No. and Description of Safety Valves to each boiler 2: direct spring Area of each valve 5.94 ins.² Pressure to which they are adjusted 180 lbs./in.² Are they fitted with easing gear yes
 Smallest distance between boilers or uptakes and bunkers or woodwork pell clear Mean dia. of boilers 12'-6" Length 10'-6" Material of shell plates steel
 Thickness 1/32" Range of tensile strength 28-32 tons Are the shell plates welded or flanged no Descrip. of riveting: cir. seams J. R. Lap long. seams T. R. I. B. S. Diameter of rivet holes in long. seams 1 1/8" Pitch of rivets 8" Lap of plates or width of butt straps 1'-4 1/2"
 Per centages of strength of longitudinal joint rivets 93.0 Working pressure of shell by rules 181 lbs. Size of manhole in shell back end plate 16" x 12"
 Depth of flange 3 1/2" No. and Description of Furnaces in each boiler 2 corrugated (Thomas) Material steel Outside diameter 3'-9 3/32"
 Length of plain part top 37" bottom 64" Thickness of plates crown 37" Description of longitudinal joint weld No. of strengthening rings none
 Working pressure of furnace by the rules 182 lbs. Combustion chamber plates: Material steel Thickness: Sides 2 1/32" Back 2 1/32" Top 2 1/32" Bottom 2 3/32"
 Pitch of stays to ditto: Sides 9 3/4" x 8 1/4" Back 8 7/8" x 8 1/2" Top 8 1/4" x 9 3/4" stays are fitted with nuts or riveted heads nuts Working pressure by rules 184 lbs.
 Material of stays steel Area at smallest part 178" Area supported by each stay 75.3 in.² Working pressure by rules 202 lbs. End plates in steam space: Material steel Thickness 1" Pitch of stays P.C.D. 141" How are stays secured 2 nuts Working pressure by rules 184 lbs. Material of stays steel
 Area at smallest part 278" Area supported by each stay 276 in.² Working pressure by rules 184 lbs. Material of Front plates at bottom steel
 Thickness 3/32" Material of Lower back plate steel Thickness 2 1/32" Greatest pitch of stays 8 1/4" x 1 1/2" Working pressure of plate by rules 230 lbs.
 Diameter of tubes 3" Pitch of tubes 4 1/8" x 4 1/8" Material of tube plates steel Thickness: Front 3 1/32" Back 3/4" Mean pitch of stays 12 3/8" x 8 1/4"
 Pitch across wide water spaces 13 1/2" x 8 1/4" Working pressures by rules 187 lbs. Girders to Chamber tops: Material steel Depth and thickness of girder at centre 9" x 1 1/2" Length as per rule 2'-6 1/32" Distance apart 8 1/4" Number and pitch of stays in each 2 @ 9 3/4"
 Working pressure by rules 280 lbs. Steam dome: description of joint to shell none % of strength of joint —
 Diameter Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes
 Pitch of rivets Working pressure of shell by rules Crown plates Thickness How stayed

SUPERHEATER. None Date of Approval of Plan Tested by Hydraulic Pressure to
 Date of Test Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler
 Diameter of Safety Valve Pressure to which each is adjusted Is Easing Gear fitted



W574-0086

IS A DONKEY BOILER FITTED? No ✓ If so, is a report now forwarded? ✓

SPARE GEAR. State the articles supplied: 2 - connecting rod top end bolts & nuts: ✓
2 - connecting rod bottom end bolts & nuts: ✓
2 - main bearing bolts: ✓
1 set - coupling bolts: ✓
1 set - feed & bilge pump valves: ✓
A quantity assorted bolts & nuts and
Iron of various sizes: ✓

The foregoing is a correct description,
How, M. Lachlan & Co. Ltd.

J. Macintosh Manufacturer.

Dates of Survey while building: During progress of work in shops - - (1923) Mar 8. 19. 26 Apr 3. 17. 25 May 1. 4. 17. 23 Jun 11. 22. 28 July 13. 23 Aug 21 Oct 5 Nov 19 Dec 20 26 1924 Jan 9. 17
 During erection on board vessel - - - 28. 30 Feb 4 Mar 13. 19. 28 Apr 9. 17 May 12. 14. 19. 27 Jun 2. 4. 12. 18. 20 July 9 Sep 8. 25 Oct 3. 7. 10. 13. 16
 Total No. of visits 47 Is the approved plan of main boiler forwarded herewith Yes
 " " " donkey " " " None

Dates of Examination of principal parts - Cylinders 27-5-24 Slides 27-5-24 Covers 27-5-24 Pistons 19-5-24 Rods 19-5-24
 Connecting rods 19-5-24 Crank shaft 2-6-24 Thrust shaft 2-6-24 Tunnel shafts None Screw shaft 20-6-24 Propeller 20-6-24
 Stern tube 20-6-24 Steam pipes tested 13-10-24 Engine and boiler seatings 9-7-24 Engines holding down bolts 10-10-24
 Completion of pumping arrangements 16-10-24 Boilers fixed 7-10-24 Engines tried under steam 16-10-24
 Completion of fitting sea connections 8-9-24 Stern tube 9-7-24 Screw shaft and propeller 8-9-24

Main boiler safety valves adjusted 10-10-24 Thickness of adjusting washers P. Ph. 1/32 P. 1/32 S. S. Ph. 5/16 P. 1/32 S.
 Material of Crank shaft steel Identification Mark on Do. LLOYD'S N° 6659 J.D.B. Material of Thrust shaft steel Identification Mark on Do. LLOYD'S N° 6660 J.D.B.
 Material of Tunnel shafts None Identification Marks on Do. — Material of Screw shafts steel Identification Marks on Do. LLOYD'S N° 6623 J.D.B.
 Material of Steam Pipes Solid drawn steel ✓ Test pressure 540 lbs/in² ✓
 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 No ✓ If so, state name of vessel —

General Remarks (State quality of workmanship, opinions as to class, &c. These engines & boilers have been built under special survey in accordance with the Rules & the approved plans: the material & workmanship are good: they have been properly fitted on board and tried under steam with satisfactory result.

This Machinery is eligible, in my opinion, to be classed in the Register Book with notation "1/2" M.C. 10.24. CL.

It is submitted that this vessel is eligible for THE RECORD. + LMC 10.24. CL.

C.W. J.W.D.
 24/10/24.

J.D. Boyle
 Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ 3 : - :
 Special ... £ 42 : 5/-
 Donkey Boiler Fee ... £ - : - :
 Travelling Expenses (if any) £ - : - :
 When applied for, 17.10.1924
 When received, 28.10.1924

Committee's Minute GLASGOW 21 Oct 1924
 Assigned + LMC 10.24

Glasgow. The Surveyors are requested not to write on or below the space for Committee's Minute.

These particulars are Signal Letters (if any) -	
Official Number.	
147,286.	
No., Date, and Port of	
Whether British or Foreign Built.	W an
British	
Number of Decks	
Number of Masts	
Rigged
Stern
Build
Galleries
Head
Framework and des vessel
Number of Bulkheads	...
Number of water bul and their capacity	...
Total to quarter the depth fr to bottom of keel ...	
No. of sets of Engines.	Description
One	Reciproca Triple Ex Direct Ac Vertic
No. of Shafts.	Partic
One	Description ... Me
	Number ...
	Iron or Steel ...
	Loaded Pressure ...
GROS	
Under Tonnage Deck	
Space or spaces betw	
Turret or Trunk ...	
Forecastle ...	
Bridge space ...	
Peep Break ...	
Side Houses ...	
Deck Houses ...	
Chart House ...	
Spaces for machiner Section 78 (2) of 1894 ...	
Excess of Hatchw	
Gross Ton	
Deductions, as per	
Register T	
NOTE 1.—The tonnage propelling	
NOTE 2.—The underm	
Und	
Name of	
No. of Owners	
Name, Residence	
Richa of 17	
Dated 16-	
(830) (334798) Wt.	



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