

REPORT ON MACHINERY.

No. 64996
THU. OCT. 23. 1913

Slid. Npt. 25901

Received at London Office

Date of writing Report 10 When handed in at Local Office OCT 22 1913 Port of NEWCASTLE-ON-TYNE

No. in Survey held at South Shields Date, First Survey 4th April 1913 Last Survey 3-11-1913
 Reg. Book. 15 m upon the S.S. Sigulina (Number of Visits 47) Tons { Gross 1087
 Master Le Loch Built at Sunderland By whom built Osborne Graham & Co. When built 1913
 Engines made at South Shields By whom made George J. Grey when made 1913
 Boilers made at South Shields By whom made So. J. Coltingham & Co. when made 1913
 Registered Horse Power _____ Owners J. Anquetil (Agent) Port belonging to Rouen
 Nom. Horse Power as per Section 28 744 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No

ENGINES, &c.—Description of Engines Triple Expansion surface Contouring No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 17"-28"-46" Length of Stroke 30" Revs. per minute _____ Dia. of Screw shaft 9.5" Material of S.M. 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 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 3'-4"
 Dia. of Tunnel shaft 8.39" as per rule 8.39" Dia. of Crank shaft journals 8.8" as per rule 8.8" Dia. of Crank pin 9.8" Size of Crank webs 17 1/2" x 5 1/4" Dia. of thrust shaft under
 collars 9.8" Dia. of screw 11'-9" Pitch of Screw 12'-9" No. of Blades 4 State whether moveable No Total surface 46.5 sq
 No. of Feed pumps 2 Diameter of ditto 2 3/4" Stroke 16" Can one be overhauled while the other is at work Yes
 No. of Bilge pumps 2 Diameter of ditto 3 1/4" Stroke 16" Can one be overhauled while the other is at work Yes
 No. of Donkey Engines 2 Sizes of Pumps 6"x4"x6"; 7"x9"x8" No. and size of Suctions connected to both Bilge and Donkey pumps
 in Engine Room 3 - (2 1/2" port 2 1/2" centre 2 1/2" star) In Holds, &c. / Stokehold: Port 2 1/2"; 1 Star 2 1/2"
After Hold well 1-2 1/2"; Sunnel well 1-2 1/2"
 No. of Bilge Injections 1 sizes 3 1/2" Connected to condenser, or to circulating pump pumps 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 None
 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 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
 Dates of examination of completion of fitting of Sea Connections 15.9.13 of Stern Tube 22.9.13 Screw shaft and Propeller 29.9.13
 Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Top Platform

BOILERS, &c.—(Letter for record _____) Manufacturers of Steel _____
 Total Heating Surface of Boilers 2400 Is Forced Draft fitted _____ No. and Description of Boilers _____
 Working Pressure _____ Tested by hydraulic pressure to _____ Date of test _____ No. of Certificate _____
 Can each boiler be worked separately _____ Area of fire grate in each boiler _____ No. and Description of Safety Valves to
 each boiler _____ Area of each valve _____ Pressure to which they are adjusted _____ Are they fitted with easing gear _____
 Smallest distance between boilers or uptakes and bunkers or woodwork _____ Mean dia. of boilers _____ Length _____ Material of shell plates _____
 Thickness _____ Range of tensile strength _____ Are the shell plates welded or flanged _____ Descrip. of riveting: cir. seams _____
 Long. seams _____ Diameter of rivet holes in long. seams _____ Pitch of rivets _____ Lap of plates or width of butt straps _____
 Percentages of strength of longitudinal joint _____ Working pressure of shell by rules _____ Size of manhole in shell _____
 No. of compensating ring _____ No. and Description of Furnaces in each boiler _____ Material _____ Outside diameter _____
 Length of plain part _____ Thickness of plates _____ Description of longitudinal joint _____ No. of strengthening rings _____
 Working pressure of furnace by the rules _____ Combustion chamber plates: Material _____ Thickness: Sides _____ Back _____ Top _____ Bottom _____
 No. of stays to ditto: Sides _____ Back _____ Top _____ If stays are fitted with nuts or riveted heads _____ Working pressure by rules _____
 Material of stays _____ Diameter at smallest part _____ Area supported by each stay _____ Working pressure by rules _____ End plates in steam space: _____
 Material _____ Thickness _____ Pitch of stays _____ How are stays secured _____ Working pressure by rules _____ Material of stays _____
 Diameter at smallest part _____ Area supported by each stay _____ Working pressure by rules _____ Material of Front plates at bottom _____
 Thickness _____ Material of lower back plate _____ Thickness _____ Greatest pitch of stays _____ Working pressure of plate by rules _____
 Diameter of tubes _____ Pitch of tubes _____ Material of tube plates _____ Thickness: Front _____ Back _____ Mean pitch of stays _____
 Pitch across wide water spaces _____ Working pressures by rules _____ Girders to Chamber tops: Material _____ Depth and
 thickness of girder at centre _____ Length as per rule _____ Distance apart _____ Number and pitch of stays in each _____
 Working pressure by rules _____ Superheater or Steam chest; how connected to boiler _____ Can the superheater be shut off and the boiler worked
 separately _____ Diameter _____ Length _____ Thickness of shell plates _____ Material _____ Description of longitudinal joint _____ Diam. of rivet
 holes _____ Pitch of rivets _____ Working pressure of shell by rules _____ Diameter of flue _____ Material of flue plates _____ Thickness _____
 If stiffened with rings _____ Distance between rings _____ Working pressure by rules _____ End plates: Thickness _____ How stayed _____
 Working pressure of end plates _____ Area of safety valves to superheater _____ Are they fitted with easing gear _____

* Seen in Sunderland.



VERTICAL DONKEY BOILER— Manufacturers of Steel

No. _____ Description _____

Made at _____ By whom made _____ When made _____ Where fixed _____

Working pressure _____ tested by hydraulic pressure to _____ Date of test _____ No. of Certificate _____ Fire grate area _____ Description of Safety _____

Valves _____ No. of Safety Valves _____ Area of each _____ Pressure to which they are adjusted _____ Date of adjustment _____

If fitted with easing gear _____ If steam from main boilers can enter the donkey boiler _____ Dia. of donkey boiler _____ Length _____

Material of shell plates _____ Thickness _____ Range of tensile strength _____ Descrip. of riveting long. seams _____

Dia. of rivet holes _____ Whether punched or _____ Pitch of rivets _____ Lap of plating _____ Per centage of strength of joint _____ Rivets _____ Plates _____

Working pressure of shell by rules _____ Thickness of shell crown plates _____ Radius of do. _____ No. of stays to do. _____ Dia. of stays _____

Diameter of furnace Top _____ Bottom _____ Length of furnace _____ Thickness of furnace plates _____ Description of joint _____

Working pressure of furnace by rules _____ Thickness of furnace crown plates _____ Radius of do. _____ Stayed by _____

Diameter of uptake _____ Thickness of uptake plates _____ Thickness of water tubes _____ Dates of survey _____

SPARE GEAR. State the articles supplied:— 1 Propeller, 2 Top end Bolt nuts, 2 Bottom end Bolt nuts, 2 main Bearing Bolts, 1 set coupling Bolts, 1 set of junk ring Bolts, 1 set each of air, circulating, feed & bilge pump valves, 1 main & 1 Donkey feed check valve, 1 piston ring for each cylinder, 2 safety valve springs, assorted bolts and nuts & iron of various sizes.

The foregoing is a correct description,
G. G. G. G. Manufacturer.

Dates of Survey while building	During progress of work in shops --	1913 Apr. 4 8 9 14 15 22 30 May 14 22 27 Jun 3 6 11 19 30 Jul 3 7 10 14 23 25 29 Aug 6
	During erection on board vessel ---	11 18 21 28 29 30 Sep 3 9 10 15 17 19 29 Oct 1 4 8 Sep 24 Jul 23 Sep 5 15 22 Oct 16 20 27
	Total No. of visits	40 (at R.W.C.) + 7 = 47

Is the approved plan of main boiler forwarded herewith Yes

Dates of Examination of principal parts—	Cylinders 14: 5: 13	Slides 3: 6: 13	Covers 22: 5: 13	Pistons 3: 6: 13	Rods 3: 6: 13
Connecting rods	22: 5: 13	Crank shaft 3: 7: 13	Thrust shaft 10: 9: 13	Tunnel shafts 9: 9: 13	Screw shaft 9: 9: 13
Stern tube	28: 7: 13	Steam pipes tested 4: 10: 13	Engine and boiler seatings 29: 9: 13	Engines holding down bolts 8: 10: 13	Propeller 9: 9: 13
Completion of pumping arrangements	8: 10: 13	Boilers fixed 8: 10: 13	Engines tried under steam 8: 10: 13		
Main boiler safety valves adjusted	8: 10: 13	Thickness of adjusting washers	Pat Boilers 5 7/16"	Star Boilers 5 15/32"	
Material of Crank shaft	S.M. Steel	Identification Mark on Do.	339S.W.D.M.	Material of Thrust shaft	S.M. Steel
Material of Tunnel shafts	S.M. Steel	Identification Marks on Do.	159 W.S. 3129 M.B.	Material of Screw shaft	S.M. Steel
Material of Steam Pipes	Solid Drawn Copper	Test pressure	360 lbs. sq. in.	Identification Marks on Do.	117.R.L.A.

General Remarks (State quality of workmanship, opinions as to class, &c. The machinery of this vessel has been constructed under special survey. The materials and workmanship are sound & good. The main & auxiliary machinery have been tried under steam. The boiler safety valves have been adjusted to their working pressure under steam. The machinery is now in good and safe working condition & is eligible, in my opinion to have the notation **L.M.C. 11.13** in the Register Book

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 11.13.

J.W.D.
 24/10/13
R. Lee Ames
 Lewis & Davis
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

The amount of Entry Fee	£ 2 : 06	When applied for	OCT 22 1913
Special	£ 21	When received	1/11/13
Donkey Boiler Fee	£		
Travelling Expenses (if any)	£		

Committee's Minute
 Assigned
 FRI. NOV. 7 - 1913
 + L.M.C. 11.13

MACHINERY CERTIFICATE WRITTEN



NEWCASTLE-ON-TYNE

Certificate (if required) to be sent to

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

Date of writing
 No. in Sur
 Reg. Book.
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