

REPORT ON MACHINERY

No. 35572

WED. NOV. 10. 1915

Received at London Office

Date of writing Report 10. When handed in at Local Office 10. Port of Glasgow

No. in Survey held at Glasgow Date, First Survey 7/1/15 Last Survey 2/1/15 19

Reg. Book. on the Machinery of S.S. GALACON (Tonnage 224) Gross 585 Net 243

Master Williamson Built at Norkington By whom built A. Williamson & Son When built 1915

Engines made at Glasgow By whom made Ross & Duncan Eng. 996 when made 1915

Boilers made at S By whom made S Date 1/4/15 when made 1915

Registered Horse Power 87 Owners A. Williamson & Son Port belonging to Norkington

Nom. Horse Power as per Section 28 87 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 13 2 1/2 Length of Stroke 27 Revs. per minute 83 Dia. of Screw shaft 7 3/8 Material of 1. Iron

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 2' 9 1/4"

Dia. of Tunnel shaft 6 1/2 Dia. of Crank shaft journals 7 1/8 Dia. of Crank pin 7 1/8 Size of Crank webs 13 1/2 x 4 1/2 Dia. of thrust shaft under

collars 7 1/8 Dia. of screw 10 1/2 Pitch of Screw 13 1/2 No. of Blades 4 State whether moveable no Total surface 41 1/2

No. of Feed pumps 2 Diameter of ditto 2 1/2 Stroke 13 1/2 Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2 Diameter of ditto 2 1/2 Stroke 13 1/2 Can one be overhauled while the other is at work Yes

No. of Donkey Engines 3 Sizes of Pumps 6 x 6 x 6 No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room 2-2 1/2 In Holds, &c. One each side 2 1/2

No. of Bilge Injections 3 Connected to condenser, or to circulating pump Pump Is a separate Donkey Suction fitted in Engine room & size Yes 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 no

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 1650

What pipes are carried through the bunkers Forward Suctions How are they protected boxed in

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 Sept. 1650 of Stern Tube Screw shaft and Propeller

Is the Screw Shaft Tunnel watertight no tunnel Is it fitted with a watertight door worked from

BOILERS, &c.—(Letter for record S Manufacturers of Steel J. Colville & Sons

Total Heating Surface of Boilers 1594 1/2 Is Forced Draft fitted no No. and Description of Boilers One single ended

Working Pressure 170 lbs Tested by hydraulic pressure to 340 lbs Date of test 3/8/15 No. of Certificate 13227

Can each boiler be worked separately Yes Area of fire grate in each boiler 50 1/2 No. and Description of Safety Valves to

each boiler 2 direct spring Area of each valve 5 1/4 Pressure to which they are adjusted 175 lbs Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 3-6 Mean dia. of boilers 13-6 Length 10-0 Material of shell plates Steel

Thickness 1 1/2 Range of tensile strength 28/32 tons Are the shell plates welded or flanged no Descrip. of riveting: cir. seams lap 5A

long. seams lap 5A Diameter of rivet holes in long. seams 1 3/16 Pitch of rivets 7 1/4 Lap of plates or width of butt straps 18 1/2

Per centages of strength of longitudinal joint 87 1/2 Working pressure of shell by rules 170 lbs Size of manhole in shell 16 x 12

Size of compensating ring 26 x 30 x 1 1/2 No. and Description of Furnaces in each boiler 3 Plain Material Steel Outside diameter 42

Length of plain part 5-9 1/2 Thickness of plates 13 1/2 Description of longitudinal joint Weld No. of strengthening rings 1-3 1/2

Working pressure of furnace by the rules 174 lbs Combustion chamber plates: Material Steel Thickness: Sides 2 1/2 Back 2 1/2 Top 2 1/2 Bottom 2 1/2

Pitch of stays to ditto: Sides 8 1/4 x 10 Back 10 x 8 1/4 Top 10 x 8 1/4 If stays are fitted with nuts or riveted heads no Working pressure by rules 177 lbs

Material of stays Steel Diameter at smallest part 1 7/8 Area supported by each stay 72 1/2 Working pressure by rules 195 lbs End plates in steam space

Material Steel Thickness 1 1/2 Pitch of stays 17 x 18 1/2 How are stays secured Staked Working pressure by rules 172 Material of stays Steel

Diameter at smallest part 5 1/4 Area supported by each stay 310 1/2 Working pressure by rules 182 lbs Material of Front plates at bottom Steel

Thickness 3 1/4 Material of Lower back plate Steel Thickness 1 1/2 Greatest pitch of stays 13 1/4 x 8 Working pressure of plate by rules 176 lbs

Diameter of tubes 5 1/4 Pitch of tubes 4 1/2 x 4 5/8 Material of tube plates Steel Thickness: Front 3/4 Back 3/4 Mean pitch of stays 10-12

Pitch across wide water spaces 5 1/4 x 5 1/4 Working pressures by rules 197 lbs Girders to Chamber tops: Material Steel Depth and

thickness of girder at centre 7 1/2 x 1 1/4 Length as per rule 2-8 3/4 Distance apart 8 1/4 Number and pitch of stays in each 2-10"

Working pressure by rules 172 lbs Superheater or Steam chest; how connected to boiler Can the superheater be shut off and the boiler worked

separately no 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

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

See Sept. 35/16

SPARE GEAR. State the articles supplied:-

Rings for J.P. & P. pistons, 2 each of top & bottom and
main bearing bolts & nuts, a set of coupling bolts & nuts, spare valve
for all pumps, assorted bolts & nuts, iron of various sizes.

The foregoing is a correct description,

Ross & Duncan, 10 Monmouth

Manufacturers.

Dates of Survey while building { During progress of work in shops - 1915 Jan 25 Feb 6 12 17 22 25 Mar 4 12 26 29 Apr 1 13 15 22 30 May 7 11 17 24 31 Jun 9 14 18 July 2 9 13 20
During erection on board vessel - 5 12 17 25 29 Sept 20 27 Oct 5 12 21 29 Nov 2
Total No. of visits 39

Is the approved plan of main boiler forwarded herewith?

Yes

Dates of Examination of principal parts - Cylinders 4 12 29 3/5 Slides 18 6 1/5 Covers 17 25 2/5 Pistons 7 11 1/5 Rods 17 5 1/5
Connecting rods 17 5 1/5 Crank shaft 7 5 1/5 Thrust shaft 5 8 1/5 Tunnel shafts none Screw shaft 5 8 1/5 Propeller 5 8 1/5
Stern tube 5 8 1/5 Steam pipes tested 12 4 1/5 Engine and boiler seatings 29 9 1/5 Engines holding down bolts 2 4 1/5
Completion of pumping arrangements 2 4 1/5 Boilers fixed 5 10 1/5 Engines tried under steam 2 4 1/5
Main boiler safety valves adjusted 19 10 1/5 Thickness of adjusting washers Port & Star 3/16
Material of Crank shaft Iron Identification Mark on Do. 18998 Material of Thrust shaft Iron Identification Mark on Do. 7183
Material of Tunnel shafts Iron Identification Marks on Do. Material of Screw shafts Iron Identification Marks on Do. 7183
Material of Steam Pipes Solid drawn Copper Test pressure 340 lb
Is an installation fitted for burning oil fuel No Is the flash point of the oil to be used over 150°F. Yes

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.)

This machinery has been built under special survey the materials & workmanship are good. It has been properly fitted on board & secured & tried under steam & the case is eligible in my opinion for the notation + LMC 11.15.

It is submitted that
this vessel is eligible for
THE RECORD + LMC 11.15.

ARK

FUR
11/11/15

Mitchell

Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

The amount of Entry Fee ... £ 1 : 0 : 0 When applied for,

Special ... £ 13 : 1 : 0 9/11/15

Donkey Boiler Fee ... £ 1 : 0 : 0 When received,

Travelling Expenses (if any) £ 1 : 0 : 0 11/11/15

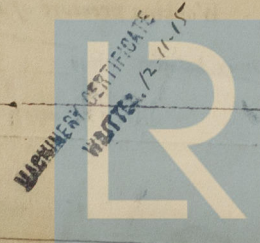
Committee's Minute GLASGOW

9 NOV 1915

FRI 12 NOV 1915

Assigned + LMC 11.15

subject to classification
of hull



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