

REPORT ON MACHINERY.

No. 25741
TUES. 17 SEP 1907

Date of writing Report *10 Sept 1907* When handed in at Local Office *10 Sept 1907* Port of *Glasgow*
 No. in Survey held at *Irvine & Bowling* Date, First Survey *10th January* Last Survey *17th Sept 1907*
 Reg. Book. on the *S S Le Scorf* (Number of Visits)
 Master *Scott & Son* Built at *Bowling* By whom built *Scott & Son* Tons { Gross
 Engines made at *Irvine* By whom made *Renfrew Bros & Co* when made *1907* Net
 Boilers made at *Port Glasgow* By whom made *Clyde CB & Engineering Co* when made *1907*
Donkey Bunk at Govan Owners *Harruth & Co* Port belonging to *Orient*
 Registered Horse Power *99* Is Refrigerating Machinery fitted for cargo purposes *No* Is Electric Light fitted *No*

ENGINES, &c.—Description of Engines *Triple Expansion* No. of Cylinders *Three* No. of Cranks *3*
 Dia. of Cylinders *15, 25 & 40* Length of Stroke *27* Revs. per minute *94* Dia. of Screw shaft *8.26* Material of *Iron*
 as per rule *8.26* as fitted *8.26* screw shaft
 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 *34 1/2"*
 Dia. of Tunnel shaft *8"* as per rule *8"* Dia. of Crank shaft journals *8"* as per rule *8"* Dia. of Crank pin *8"* Size of Crank web *15 1/2 x 4 3/4"* Dia. of thrust shaft under
 collars *8"* Dia. of screw *10-0"* Pitch of Screw *13-3"* No. of Blades *4* State whether moveable *No* Total surface *43 sq ft*
 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 *3"* Stroke *10 1/2"* Can one be overhauled while the other is at work *Yes*
 No. of Donkey Engines *Three* Sizes of Pumps *6, 4, 3* Duplex No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room *One 2 1/2"* In Holds, &c. *Two 2 1/2"*

No. of Bilge Injections *1* sizes *4"* 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 *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*
 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 *Bilge to hold* How are they protected *Wood boxing*
 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 *24/7/07* of Stern Tube *24/7/07* Screw shaft and Propeller *24/7/07*
 Is the Screw Shaft Tunnel watertight *None* Is it fitted with a watertight door *Yes* worked from *Yes*

BOILERS, &c.—(Letter for record) Manufacturers of Steel *See Crane Report in 15148 now sent*

Total Heating Surface of Boilers *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* *53 sq ft* No. and Description of Safety Valves to
 each boiler *No, direct spring* Area of each valve *5.94 sq in* 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 *4-0"* 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*
 Per centages of strength of longitudinal joint *Working pressure of shell by rules* Size of manhole in shell
 Size 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*
 Pitch 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

VERTICAL DONKEY BOILER—

Manufacturers of Steel

Glydebridge Steel Co. Ltd

No. One Description Vertical Cross Tube
 Made at Govan By whom made Marriott & Graham When made 1907 Where fixed Stokehold
 Working pressure 100 lb Tested by hydraulic pressure to 200 lb Date of test 2/7/07 No. of Certificate 529 Fire grate area 11 1/2 sq ft Description of Safety
 Valves Two direct opening No. of Safety Valves 2 Area of each 3 1/4 sq in Pressure to which they are adjusted 105 lb Date of adjustment 4/9/07
 If fitted with easing gear Yes If steam from main boilers can enter the donkey boiler No Dia. of donkey boiler 4'-6" Length 19'-0"
 Material of shell plates Steel Thickness 3/8" Range of tensile strength 27/32 Descrip. of riveting long. seams A R Lap Rivets 85-5
 Dia. of rivet holes 3/16" Whether punched or drilled drilled Pitch of rivets 2 3/4" Lap of plating 4 1/4" Per centage of strength of joint 70% Plates 70%
 Working pressure of shell by rules 100 lb Thickness of shell crown plates 1/2" Radius of do. 5'-0" No. of stays to do. 4 Dia. of stays 2 1/8"
 Diameter of furnace 46" Mean Length of furnace 4'-9 1/2" Thickness of furnace plates 1/2" Description of joint Welded
 Working pressure of furnace by rules 100 lb Thickness of furnace crown plates 1/2" Stayed by four stays 2 1/8" diam
 Diameter of uptake 14 1/2" Thickness of uptake plates 1/2" Thickness of water tubes 3/8" Dates of survey

SPARE GEAR. State the articles supplied:— Two top and two bottom end bolts & nuts, two
main bearing bolts & nuts, one set of coupling bolts & nuts, one set of
fuel & bilge pump valves, assorted bolts & nuts and a few bars
of iron. (Extra one propeller)

The foregoing is a correct description,

Renfrew Brothers & Co. Manufacturer.

Dates of Survey while building
 During progress of work in shops— 1907 Jan 10 17 23 31 Feb 11 26 Mar 8 15 22 29 Apr 10 17 24 31 May 25 29 June 11 20 25 July 1 8 26
 During erection on board vessel— Aug 2 12 21 27 30 Sep 2 4 5 6 7
 Total No. of visits 26
 Is the approved plan of main boiler forwarded herewith Yes
 " " " donkey " " Yes

Dates of Examination of principal parts—Cylinder 20/25/07 Slides 29/6 Covers 29/5/07 Pistons 25/6/07 Rods 1/7/07
 Connecting rods 1/7/07 Crank shaft 20/6 Thrust shaft 1/7/07 Tunnel shafts ✓ Screw shaft 1/7/07 Propeller 1/7/07
 Stern tube 1/7/07 Steam pipes tested 30/8/07 Engine and boiler seatings 12/8/07 Engines holding down bolts 21/8/07
 Completion of pumping arrangements 27/8/07 Boilers fixed 27/8/07 Engines tried under steam 6/7/07
 Main boiler safety valves adjusted 4/9/07 Thickness of adjusting washers M.B. 3/8 10/32 D.B. 5/32 3/16
 Material of Crank shaft Iron Identification Mark on Do. 1797 Material of Thrust shaft Steel Identification Mark on Do. 1797
 Material of Tunnel shafts ✓ Identification Marks on Do. ✓ Material of Screw shafts Iron Identification Marks on Do. do
 Material of Steam Pipes Copper Test pressure 360 lb per sq in

General Remarks (State quality of workmanship, opinions as to class, &c.) The machinery of this vessel
has been built under special survey, the materials and workmanship
are of good quality, it has been securely fitted on board and set
factorily tried under full steam.
In our opinion, the machinery of this vessel is now eligible
for record of LMC 9-07 (mixed) in register book.

Plans of main & donkey boilers, forging report and CR report
on Lib No 15148 now attached.

It is submitted that
 this vessel is eligible for
 THE RECORD.

÷ LMC 907

18/9/07

The amount of Entry Fee—
 Special £ 9 18 0
 Donkey Boiler Fee £ 4 19 0
 Travelling Expenses (if any) £ 2 2 0
 Total £ 15 19 0

When applied for,

When received,

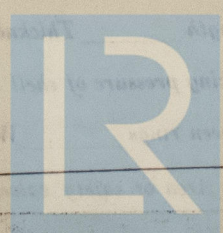
27.9.07

18.9.07

Committee's Minute

Assigned

When fee is paid



Lloyd's Register
 Foundation