

Port of GlasgowReceived at London Office TUES. 20 AUG 1907

22.8.07

No. in Survey held at Glasgow Date, first Survey 7th Dec^r 05 Last Survey Aug 8th 19
 Reg. Book. 1719 on the "J. J. Strathgarry" (Number of Visits 76)
 Master Built at St Glasgow By whom built W Hamilton & Co Ltd Tons 1907
 Engines made at Glasgow By whom made David Rowan & Co (2-455) when made 1907
 Boilers made at do By whom made do when made 1907
 Registered Horse Power 366 Owners Burrell & Son Port belonging to Glasgow
 Nom. Horse Power as per Section 28 366 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 25"-41"-68" Length of Stroke 48" Revs. per minute 142 Dia. of Screw shaft 14.2" Material of screw shaft 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 — 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 — If two
 liners are fitted, is the shaft lapped or protected between the liners — Length of stern bush 4'-10"
 Dia. of Tunnel shaft 12.68" as per rule 13" Dia. of Crank shaft journals 13.32" as per rule 13.58" Dia. of Crank pin 13.78" Size of Crank webs 8.5" Dia. of thrust shaft under
 collars 14.4" Dia. of screw 17'-6" Pitch of Screw 17'-9" No. of Blades 4 State whether moveable no Total surface 93'
 No. of Feed pumps 2 Diameter of ditto 3.5" 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 3 Sizes of Pumps 9" x 12" x 10", 8" x 5" x 8", 5.4" x 3.2" x 5" No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room 4 - 3.5" In Holds, &c. 2 - 3.5" each hold

No. of Bilge Injections 1 sizes 6 Connected to condenser, or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size Yes - 3.5"
 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 For 2 suction How are they protected wood covering
 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 7 of Stern Tube 7 Screw shaft and Propeller Ingram
 Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Top grating
 Manufacturers of Steel Glyde Bridge Steel Co Ltd.

BOILERS, &c.—(Letter for record (6)) Manufacturers of Steel Glyde Bridge Steel Co Ltd.
 Total Heating Surface of Boilers 5868 Is Forced Draft fitted no No. and Description of Boilers 3 Single Indid
 Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs Date of test 29/6/07 No. of Certificate 9019
 Can each boiler be worked separately Yes Area of fire grate in each boiler 55' No. and Description of Safety Valves to
 each boiler 2 Cockburn Area of each valve 5.94" 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 Width 9" Mean dia. of boilers 14'-0" Length 11'-0" Material of shell plates Steel
 Thickness 13/16" Range of tensile strength 28.2 to 31.7 Are the shell plates welded or flanged no Descrip. of riveting: cir. seams D. R. L.
 long. seams D. B. S. Diameter of rivet holes in long. seams 1.7/16" Pitch of rivets 8.3/4" Lap of plates or width of butt straps 19.1/4"
 Per centages of strength of longitudinal joint 96.8 Working pressure of shell by rules 188 lbs Size of manhole in shell 16" x 12"
 Size of compensating ring Flanged No. and Description of Furnaces in each boiler 3 Dighton Material Steel Outside diameter 3'-8.1/4"
 Length of plain part top 1.7/16" Thickness of plates bottom 1.7/16" Description of longitudinal joint weld No. of strengthening rings —
 Working pressure of furnace by the rules 185 Combustion chamber plates: Material Steel Thickness: Sides 7/8" Back 7/8" Top 7/8" Bottom 7/8"
 Pitch of stays to ditto: Sides 7.7/8" Back 7.7/8" Top 7.7/8" If stays are fitted with nuts or riveted heads no Working pressure by rules 218 lbs
 Material of stays Steel Diameter at smallest part 1.48" Area supported by each stay 6.2" Working pressure by rules 190 End plates in steam space:
 Material Steel Thickness 1.1/4" Pitch of stays 18" x 18" How are stays secured D. nuts Working pressure by rules 216 lbs Material of stays Steel
 Diameter at smallest part 7.59" Area supported by each stay 32.4" Working pressure by rules 216 Material of Front plates at bottom Steel
 Thickness 7/8" Material of Lower back plate Steel Thickness 13/16" Greatest pitch of stays 13.1/4" Working pressure of plate by rules 193
 Diameter of tubes 3.1/4" Pitch of tubes 4.1/2" x 4.1/2" Material of tube plates Steel Thickness: Front 7/8" Back 27/32" Mean pitch of stays 9"
 Pitch across wide water spaces 13.1/4" Working pressures by rules 180 lbs Girders to Chamber tops: Material Steel Depth and
 thickness of girder at centre (8.1/2" x 7.1/2") 2 Length as per rule 30" Distance apart 8.1/4" Number and pitch of stays in each 3 - 7.1/4"
 Working pressure by rules 200 lbs Superheater or Steam chest; how connected to boiler none 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

None

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 drilled Pitch of rivets Lap of plating Per centage of strength of joint Rivets
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 Stayed by
Diameter of uptake Thickness of uptake plates Thickness of water tubes Dates of survey

SPARE GEAR. State the articles supplied:— Propeller shaft, propeller, set of piston rings, set of air & circulating pump valves, etc., & the bolts & nuts etc. required by the Rules.

The foregoing is a correct description,

For David Rowan & Co. Manufacturer.

Dates of Survey while building
During progress of work in shops— 1905 Dec 7, 16, 21, 28, 1906 Jan 12, 19 Feb 6, 11, 18, 21, 28 Mar 5, 9, 12, 16 Apr 12, 14, 21, 26 May 24, 31 Jun 1, 6, 13, 18, 25 Aug 1, 6, 13, 18, 25
During erection on board vessel— 1905 Oct 2, 5, 11, 18, 24, 31 Nov 2, 13, 19 Dec 13, 20, 30 1906 Jan 6, 14, 21, 26 Feb 11, 21, 28 Mar 12, 22, 25 Apr 2, 13, 26 May 2, 13, 20, 27, 29 Jun 4, 18, 24, 29 July 5, 10, 30 Aug 5, 8
Total No. of visits 76
Is the approved plan of main boiler forwarded herewith Yes

" " " donkey " " "
Dates of Examination of principal parts—Cylinders 30/4/07 Crank shaft 30/4/07 Thrust shaft 30/4/07 Funnel shafts 13/3/07 Screw shaft 13/5/07 Propeller 29/5/07
Connecting rods 30/4/07 Crank shaft 30/4/07 Thrust shaft 30/4/07 Funnel shafts 13/3/07 Screw shaft 13/5/07 Propeller 29/5/07
Stern tube 13/5/07 Steam pipes tested 30/7/07 Engine and boiler seatings 10/7/07 Engines holding down bolts 10/7/07
Completion of pumping arrangements 3/8/07 Boilers fixed 3/8/07 Engines tried under steam Aug. 8th 1907
Main boiler safety valves adjusted Aug 5th Thickness of adjusting washers S. 5 5/16 P 5/16 C. 5 3/4 P 5/4 P 5 3/4 P 5/16
Material of Crank shaft steel Identification Mark on Do. H.C. Material of Thrust shaft steel Identification Mark on Do. H.C.
Material of Tunnel shafts steel Identification Marks on Do. Material of Screw shafts iron Identification Marks on Do.
Material of Steam Pipes Copper Test pressure 360 lb.

General Remarks (State quality of workmanship, opinions as to class, &c.)
These engines & boilers have been constructed under Special Survey & are of good materials & workmanship. They have been securely fitted on board & satisfactorily tried under steam.

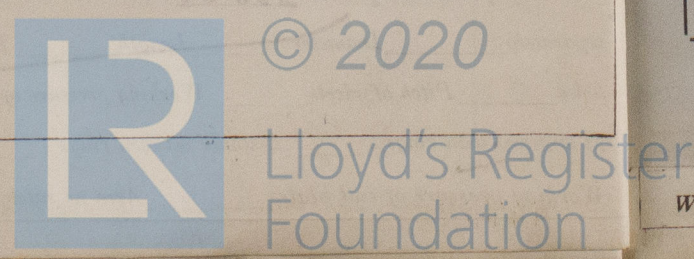
This vessel is in my opinion eligible for notation
* L M C 8, 07 in the Register Book.

It is submitted that
this vessel is eligible for
THE RECORD. * L M C. 8. 07.

The amount of Entry Fee. £ 3 : : When applied for, 19 AUG 1907
Special £ 38 : 6 : :
Donkey Boiler Fee £ : : : When received, 23/8/07
Travelling Expenses (if any) £ : : :
Glasgow 19 AUG 1907

Committee's Minute
Assigned + L M C. 8, 07.

H.C. 21.8.07
H.S.
22.8.07
H. Gardner-Smith.
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.



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