



**DONKEY BOILER**— No. *0112*. Description *Cylinder & Gull with 2 Mouson furnaces.*  
 Made at *Greenock*. By whom made *Scott & Co Greenock Foundry*. When made *5/2/1903* Where fixed on main deck.  
 Working pressure *120 lbs* tested by hydraulic pressure to *240 lbs*. No. of Certificate *597*. Fire grate area *21* <sup>sq ft</sup>. Description of safety valves *Direct Spring*.  
 No. of safety valves *2*. Area of each *7.06* <sup>sq in</sup>. Pressure to which they are adjusted *125 lbs*. If fitted with easing gear *Yes*. If steam from main boilers can enter the donkey boiler *No*.  
 Dia. of donkey boiler *12' 0"*. Length *10' 6"*. Material of shell plates *Steel*. Thickness *2 3/32"*. Range of tensile strength *28-326*.  
 Descrip. of riveting long. seams *LR Shaps = Quadruple*. Dia. of rivet holes *2 1/2"*. Whether punched or drilled *Drilled*. Pitch of rivets *5 3/4" & 2 3/4"*.  
 Lap of plating *1 3/4"*. Per centage of strength of joint *86.5*. Rivets *86.5*. Thickness of shell plates *2 3/32"*. Radius of do. *1 1/2"*. No. of Stays to do. *14 1/2 x 1 1/4"*.  
 Dia. of stays *2 1/4"*. Diameter of furnace *Top 14 1/2"*. Bottom *14"*. Length of furnace *6' 10 1/2"*. Thickness of furnace plates *7/16"*. Description of joint *Weld*.  
 Thickness of furnace-*iron* plates *9/16"*. Stayed by *1 3/4" x 1 1/2" Clap*. Working pressure of shell by rules *121 lbs*.  
 Working pressure of furnace by rules *145 lbs*. Diameter of *water* tubes *5 1/2"*. Thickness of *water* tubes *5/16"*.

**SPARE GEAR.** State the articles supplied:— *3 Crank shaft, 1 Intermediate shaft, 1 Propeller shaft, 2 Propeller blades bronze, 1 set blades & nuts for 1 blade, 1 set packing rings for 4 hp & 1 mp pistons, 1 Air pump rod, 1 set for centrifugal pump, 1 set valve guide with head & quadrant block, 2 eccentric straps, 1 pair crank pin brances, 2 pair cross head brances, 2 set piston rings, 2 set metallic valves for air pump, 1 set safety valve pump, 1 set valves & seats for Diesel Pumps & main pumps, 25 Boiler tubes, 21 Condenser tubes, 2 set valves for 2 set feed water pumps, 1 set escape valve springs, and lot of spare gear*  
 The foregoing is a correct description, for *Scott & Co* Manufacturer, required by the Society's Rules.

Dates of Survey while building	During progress of work in shops -	1902. Jan 26, 27, 28, 30. Feb 1, 7, 11. March 24, 28. April 7, 10, 18, 21, 24, 29. May 3, 14, 20, 21, 25, 26, 29. June 9, 11, 16, 20. July 9, 10, 17, 25, 30. Aug 1, 4, 8, 11, 13, 19, 22, 25.	
		During erection on board vessel -	1903. Jan 9, 12, 14, 15, 16, 19, 20, 21, 24, 28, 30. Feb 2, 3, 4, 5, 10, 16, 19, 21, 24, 25. March 2, 3, 4, 10, 13, 17, 24, 25, 26, 27. April 2, 3, 10, 16, 15, 21, 22, 23. May 4.
		Total No. of visits	119.

Is the approved plan of main boiler forwarded herewith *Yes*.  
 " " " donkey " " " *Yes*.

**General Remarks** (State quality of workmanship, opinions as to class, &c.)

The engines and Boilers of this vessel have been built under special survey and the materials and workmanship are good. When completed they were examined while on a trial in the Firth of Clyde and found to work satisfactorily.

The machinery throughout is now in good and efficient condition and eligible in my opinion to have the record of **LMC 5.03** marked in the Society's Register Book.

It is submitted that this vessel is eligible for THE RECORD **LMC 5.03** Clc. Light.

*W. Austin*  
 14.5.03  
 Engineer, Surveyor to Lloyd's Register of British & Foreign Shipping.

The amount of Entry Fee..	£ 3 : 0 : 0	When applied for,	7.5.1903
Special .. .. .	£ 59 : 10 : 0	When received,	9/5/1903
Donkey Boiler Fee .. .. .	£ . : . : .		
Travelling Expenses (if any) £	. : . : .		

Committee's Minute *Glasgow 11 MAY 1903*

Assigned

*+ L.M.C. 5.03.*

MACHINERY CERTIFICATE  
 WRITTEN 15.5.03