

# REPORT ON MACHINERY.

No. 16408

THU. MAR. 20. 1913

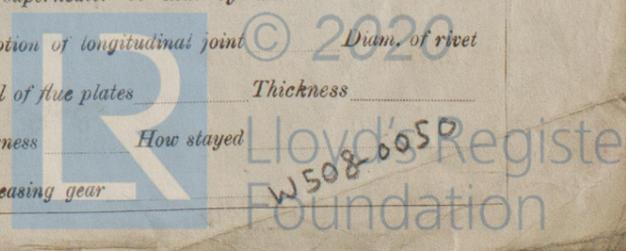
Received at London Office  
 Date, First Survey 17/3/1913. Port of Glasgow  
 Last Survey 4<sup>th</sup> Febry 1913 (Number of Visits 3)  
 Date, Survey held at Port Glasgow  
 on the S.S. "CLOSA"  
 Master Port Glasgow Built at Port Glasgow. By whom built W. Hamilton & Co. Ltd.  
 Engines made at Glasgow. By whom made J. Rowan & Co.  
 Boilers made at \_\_\_\_\_ By whom made \_\_\_\_\_  
 Registered Horse Power \_\_\_\_\_ Owners \_\_\_\_\_  
 Port belonging to \_\_\_\_\_  
 Tom. Horse Power as per Section 28 \_\_\_\_\_ Is Refrigerating Machinery fitted for cargo purposes \_\_\_\_\_  
 Is Electric Light fitted \_\_\_\_\_

**ENGINES, &c.—Description of Engines**

No. of Cylinders	Length of Stroke	Revs. per minute	No. of Cranks
Dia. of Cylinders			
Is the screw shaft fitted with a continuous liner the whole length of the stern tube			Material of screw shaft
Is the after end of the liner made water tight			
Is the propeller boss	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			
Is the shaft lapped or protected between the liners			If two
			Length of stern bush
Dia. of Tunnel shaft as per rule	Dia. of Crank shaft journals as per rule	Dia. of Crank pin	Size of Crank webs
as fitted	as fitted		Dia. of thrust shaft under
Collars	Dia. of screw	Pitch of Screw	No. of Blades
			State whether moveable
			Total surface
No. of Feed pumps	Diameter of ditto	Stroke	Can one be overhauled while the other is at work
No. of Bilge pumps	Diameter of ditto	Stroke	Can one be overhauled while the other is at work
No. of Donkey Engines	Sizes of Pumps		No. and size of Suctions connected to both Bilge and Donkey pumps
In Engine Room			In Holds, &c.
No. of Bilge Injections	sizes	Connected to condenser, or to circulating pump	Is a separate Donkey Suction fitted in Engine room & size
Are all the bilge suction pipes fitted with roses		Are the roses in Engine room always accessible	Are the sluices on Engine room bulkheads always accessible
Are all connections with the sea direct on the skin of the ship	<u>Yes</u>	Are they Valves or Cocks	<u>Both</u>
Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates		Are the Discharge Pipes above or below the deep water line	
Are they each fitted with a Discharge Valve always accessible on the plating of the vessel	<u>Yes</u>	Are the Blow Off Cocks fitted with a spigot and brass covering plate	<u>Yes</u>
What pipes are carried through the bunkers		How are they protected	
Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times			
Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges			
Dates of examination of completion of fitting of Sea Connections	<u>28/1/13</u>	of Stern Tube	<u>28/1/13</u>
Screw shaft and Propeller			<u>4/2/13</u>
Is the Screw Shaft Tunnel watertight		Is it fitted with a watertight door	worked from

**BOILERS, &c.—(Letter for record) Manufacturers of Steel**

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	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		
Percentage of strength of longitudinal joint	Working pressure of shell by rules	Size of manhole in shell
Material		
Outside diameter		
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		
Pitch of rivets	Working pressure of shell by rules	Diameter of flue
Material of flue plates		Thickness
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*

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 casing 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 \_\_\_\_\_ 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:—

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops - - - 1913. Jan'y 10-28 Feb'y 4.  
 { During erection on board vessel - - -  
 Total No. of visits 3

Is the approved plan of main boiler forwarded herewith

“ “ “ donkey “ “ “

Dates of Examination of principal parts—Cylinders \_\_\_\_\_ Slides \_\_\_\_\_ Covers \_\_\_\_\_ Pistons \_\_\_\_\_ Rods \_\_\_\_\_

Connecting rods \_\_\_\_\_ Crank shaft \_\_\_\_\_ Thrust shaft \_\_\_\_\_ Tunnel shafts \_\_\_\_\_ Screw shaft \_\_\_\_\_ Propeller \_\_\_\_\_

Stern tube \_\_\_\_\_ Steam pipes tested \_\_\_\_\_ Engine and boiler seatings \_\_\_\_\_ Engines holding down bolts \_\_\_\_\_

Completion of pumping arrangements \_\_\_\_\_ Boilers fixed \_\_\_\_\_ Engines tried under steam \_\_\_\_\_

Main boiler safety valves adjusted \_\_\_\_\_ Thickness of adjusting washers \_\_\_\_\_

Material of Crank shaft \_\_\_\_\_ Identification Mark on Do. \_\_\_\_\_ Material of Thrust shaft \_\_\_\_\_ Identification Mark on Do. \_\_\_\_\_

Material of Tunnel shafts \_\_\_\_\_ Identification Marks on Do. \_\_\_\_\_ Material of Screw shafts \_\_\_\_\_ Identification Marks on Do. \_\_\_\_\_

Material of Steam Pipes \_\_\_\_\_ Test pressure \_\_\_\_\_

**General Remarks** (State quality of workmanship, opinions as to class, &c. *The propeller stem bush & fastenings of sea connections examined before launching & found in order. The engine & boiler seatings were not complete when the vessel left this port see letter to Secretary, Glasgow. dated 11/2/13.*

Certificate (if required) to be sent to  
 (The Surveys are requested not to write on or below the space for Committee's Minute.)

The amount of Entry Fee .. £	:	:	When applied for,
Special .. .. . £	:	:	.....19.....
Donkey Boiler Fee .. .. £	:	:	When received,
Travelling Expenses (if any) £	:	:	.....19.....

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

Committee's Minute

FRI. APR. 4—1913

TUE. APR. 15. 1913

Assigned

