

Rpt. 4.

REPORT ON MACHINERY.

No. 16284
WED. JUL. 10. 1912

Received at London Office

Date of writing Report 19 When handed in at Local Office 5/7/1912 Port of Greenock
 No. in Survey held at Port Glasgow Date, First Survey 24th May Last Survey 30th May 1912
 Reg. Book. on the S.S. "TONTONI" (Number of Visits 2) Tons { Gross 3884
 Net 2504
 Master Built at Port Glasgow By whom built Wm Hamilton & Co. Ltd. When built 1912
 Engines made at Glasgow By whom made Dunsmuir & Jackson Ltd. when made 1912
 Boilers made at _____ By whom made _____ when made _____
 Registered Horse Power _____ Owners The Sharratt & Co. Ltd. Port belonging to Liverpool
 Nom. Horse Power as per Section 28 _____ Is Refrigerating Machinery fitted for cargo purposes _____ Is Electric Light fitted _____

ENGINES, &c.—Description of Engines

Description of Engines		No. of Cylinders	No. of Cranks
Dia. of Cylinders	Length of Stroke	Revs. per minute	Dia. of Screw shaft
		as per rule	as fitted
			Material of screw shaft
Is the screw shaft fitted with a continuous liner the whole length of the stern tube		Is the after end of the liner made water tight	
in the propeller boss		If the liner does not fit tightly at the part	
If the liner is in more than one length are the joints burned		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	
Dia. of Tunnel shaft	Dia. of Crank shaft journals	Dia. of Crank pin	Size of Crank webs
as per rule	as per rule		
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		Are they Valves or Cocks	
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		Are the Blow Off Cocks fitted with a spigot and brass covering plate	
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>24/5/12</u> of Stern Tube <u>24/5/12</u> Screw shaft and Propeller <u>30/5/12</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
Per centages of strength of longitudinal joint	Working pressure of shell by rules	Size of manhole in shell
rivets		
plate		
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
top	bottom	
		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
		Bottom
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

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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 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 _____ 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 - - } 1912. May 24. 30
 { During erection on board vessel - - - }
 Total No. of visits 2

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 30/5/12. 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, stern tube, and fastenings of sea connections examined before launching and found in order.*)

Certificate (if required) to be sent to _____

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

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

Committee's Minute **GLASCOW 9-JUL-1912**
 Assigned *See minute on Gls Report No. 31636*



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8/1/12