

LR. 12765
Glasgow No. 18071

Rpt. 4.

REPORT ON MACHINERY.

1890. 14 AUG 1890

received from

Surveyor
29 JUN 1900

Port of *Glasgow*

Received at London Office

1890. 3 JUL 1900

No. in Survey held at *Glasgow* Date, first Survey *17 March* Last Survey *15 June 1900*
Reg. Book. *320* on the *SS "Jupiter"* (Number of Visits *5*)
Master *A. B. de la Gaste* Built at *Port Glasgow* by whom built *Russell & Co (No 455)* When built *1900*
Engines made at *Grunoek* By whom made *Rankin & Blackman* when made *1900*
Boilers made at *Glasgow* By whom made *Lindsay Burnett & Co* when made *1900*
Registered Horse Power *403* Owners *Francisco Martinez Rodas* Port belonging to *Bilbao*
Nom. Hors. Power as per Section 28 *403* Is Refrigerating Machinery fitted *no* Is Electric Light fitted *no*

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	Lyth. of stern bush
Dia. of Tunnel shaft	Dia. of Crank shaft journals	Dia. of Crank pin	Size of Crank webs	Dia. of thrust shaft under
collars	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				
When were stern tube, propeller, screw shaft, and all connections examined in dry dock			Is the screw shaft tunnel watertight	
Is it fitted with a watertight door			worked from	

Donkey
BOILERS, &c.— (Letter for record) Total Heating Surface of Boilers *7824* Is forced draft fitted *no*
No. and Description of Boilers *one single ended return tube* Working Pressure *80 lbs* Tested by hydraulic pressure to *160 lbs*
Date of test *15/10/00* Can each boiler be worked separately *✓* Area of fire grate in each boiler *30.47* No. and Description of safety valves to
each boiler *Two direct spring* Area of each valve *7.06 sq. in.* Pressure to which they are adjusted *80 lbs* Are they fitted with easing gear *yes*
Smallest distance between boilers or uptakes and bunkers or woodwork *boiler on deck, 4 in.* dia. of boilers *10-0* Length *9-0* Material of shell plates *steel*
Thickness *3/16* Range of tensile strength *27/32* Are they welded or flanged *no* Descrip. of riveting: cir. seams *top & bottom* long. seams *top & bottom*
Diameter of rivet holes in long. seams *28* Pitch of rivets *3 5/8* Lap of plates *6 1/2*
Per centages of strength of longitudinal joint *75.1* Working pressure of shell by rules *84 lbs* Size of manhole in shell *16 x 12*
Size of compensating ring *25 x 29 1/2* No. and Description of Furnaces in each boiler *2 plain* Material *steel* Outside diameter *35 3/4*
of plain part *35-6* Thickness of plates *3/16* Description of longitudinal joint *welded* No. of strengthening rings *none*
Working pressure of furnace by the rules *86* Combustion chamber plates: Material *steel* Thickness: Sides *1/2* Back *3/2* Top *3/16* Bottom *1/2*
Pitch of stays to ditto: Sides *9 x 10* Back *9 x 9* Top *9 x 12* If stays are fitted with nuts or riveted heads *nuts inside* Working pressure by rules *107.86-98*
Material of stays *steel* at smallest part *7/8* Area supported by *one stay 90 1/2 sq. in.* Working pressure by rules *85 lbs* End plates in steam space:
Material *steel* Thickness *7/8* Pitch of stays *14 1/2 x 14 1/2* How are stays secured *2 nuts* Working pressure by rules *80 lbs* Material of stays *steel*
at smallest part *2-03* Area supported by each stay *242 sq. in.* Working pressure by rules *94 lbs* Material of Front plates at bottom *steel*
Thickness *4/16* Material of Lower back plate *steel* Thickness *3/16* Greatest pitch of stays *9 x 9* Working pressure of plate by rules *105 lbs*
Diameter of tubes *3 1/2* Pitch of tubes *4 5/8 x 4 3/4* Material of tube plates *steel* Thickness: Front *4/16* Back *4/16* Mean pitch of stays *13*
Pitch across wide water spaces *14* Working pressures by rules *86 lbs + 10 lbs* Girders to Chamber tops: Material *steel* Depth and
Thickness of girder at centre *6 1/2 x 9 3/8 double* Length as per rule *26* Distance apart *12* Number and pitch of Stays in each *two 9*
Working pressure by rules *98 lbs* Superheaters or Steam chest; how connected to boiler *none* Can the superheater be shut off and the boiler worked
separately *no* 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
Fitted 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

DONKEY BOILER—
No.
Description

Made at

By whom made

When made

Where fixed

Working pressure

tested by hydraulic pressure to

No. of Certificate

Fire grate area

Description of safety valves

No. of safety valves

Area of each

Pressure to which they are adjusted

If fitted with casing gear

If steam from main boilers can enter the donkey boiler

no.

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

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

Thickness of furnace crown plates

Stayed by

Working pressure of shell by rules

Working pressure of furnace by rules

Diameter of uptake

Thickness of uptake plates

Thickness of water tubes

SPARE GEAR. State the articles supplied :—

The foregoing is a correct description,

Manufacturers.

Dates of Survey while building

During progress of work in shops—

During erection on board vessel—

Total No. of visits

1900: March. 17. April. 20. May. 3. 16. June. 15.

Five.

Is the approved plan of main boiler forwarded herewith

donkey ..

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

This boiler has been constructed under special survey the materials and workmanship are of good description

The boiler has now been forwarded to Greenock where it is to be fitted on board

The amount of Entry Fee..

Special

Donkey Boiler Fee

Travelling Expenses (if any) £

When applied for.

When received.

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

Committee's Minute Glasgow. 2 JUL 1900

Assigned

Deferred for Completion