

Date of writing Report

When handed in at Local Office

23. 4. 1912 Port of Glasgow.

Received at London Office

WED. APR. 24. 1912

No. in Survey held at

Glasgow

Date, First Survey

2-8-10

Last Survey

20-4-1912.

Reg. Book.

(Number of Visits)

44

90. on the

S.S. "TAQUARY"

Gross 1942

Net 1598

Master T. J. Evangelista

Built at

Glasgow.

By whom built

Macrie & Thompson (N^o 426)

When built

1912

Engines made at

Glasgow.

By whom made

Muir & Houston (N^o 641)

when made

1912.

Boilers made at

Glasgow

By whom made

Muir & Houston (N^o 641)

when made

1912.

Registered Horse Power

243.4

Owners

Cia Comercio e Navegacao

Port belonging to Rio de Janeiro

Nom. Horse Power as per Section 28

243.4

Is Refrigerating Machinery fitted for cargo purposes

Yes

Is Electric Light fitted

Yes

ENGINES, &c.—Description of Engines

Twin screw Triple Surf. End?

No. of Cylinders 6

No. of Cranks 6

Dia. of Cylinders

15"-25"-40"

Length of Stroke

24"

Revs. per minute

110

Dia. of Screw shaft

as per rule

4.9

Material of

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

Yes

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

Yes

If two

liners are fitted, is the shaft lapped or protected between the liners

Yes

Length of stern bush

2'-8 1/2"

Dia. of Tunnel shaft

as per rule

4.4

Dia. of Crank shaft journals

as per rule

4.8

Dia. of Crank pin

8"

Size of Crank webs

5" x 11"

Dia. of thrust shaft under

collars

8"

collars

Dia. of screw

9'-0"

Pitch of Screw

12'-3"

No. of Blades

4

State whether moveable

No

Total surface

35 #

No. of Feed pumps

4

Diameter of ditto

2 3/4"

Stroke

13 1/2"

Can one be overhauled while the other is at work

Yes

No. of Bilge pumps

4

Diameter of ditto

2 3/4"

Stroke

13 1/2"

Can one be overhauled while the other is at work

Yes

No. of Donkey Engines

4

Sizes of Pumps

1 1/2" duplex 8" x 8" 3" Ballad

No. and size of Suctions connected to both Bilge and Donkey pumps

1" 1/2" 3" x 6"

In Engine Room

5-2 3/4" E.R. (P. 18 1/2") 2 3/4" E.R. (P. 18 1/2") 2 3/4"

In Holds, &c.

7-2 3/4" thru. N^o 1 Hold (S-P) 2 3/4"; N^o 2 Hold(S-P) 2 3/4"; N^o 3 Hold (S-P) 2 3/4"; N^o 4 Hold + Tunnel well 2 3/4"

No. of Bilge Injections

2

sizes

3 1/2"

Connected to condenser, or to circulating pump

Pump

Is a separate Donkey Suction fitted in Engine room & size

Yes - 3"

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

None

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 4" hold bilge suction

How are they protected

Wood casings

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

15-1-12

of Stern Tube

14-1-12

Screw shaft and Propeller

17-1-12

23-1-12

Is the Screw Shaft Tunnel watertight

Yes

Is it fitted with a watertight door

Yes

worked from

Top platform in E.R.

BOILERS, &c.—(Letter for record (S))

Manufacturers of Steel Glasgow & Co., Glasgow; Stewart & Lloyd, Glasgow; Steel Co. of Scotland.

Total Heating Surface of Boilers

Main Hrs. 3600 #

4620 #

Is Forced Draft fitted

Yes

No. and Description of Boilers

2- Single ended

Working Pressure

180 lbs.

Tested by hydraulic pressure to

360 lbs.

Date of test

24-11-1911

No. of Certificate

11299

Can each boiler be worked separately

Yes

Area of fire grate in each boiler

52 1/2 #

No. and Description of Safety Valves to

each boiler

2- 2 1/2" spring loaded

Area of each valve

5.93 #

Smallest distance between boilers or uptakes and bunkers or woodwork

13"

Mean dia. of boilers

14'-6"

Length

10'-6"

Material of shell plates

Steel

Thickness

1 3/16"

Range of tensile strength

28/32

Are the shell plates welded or flanged

Yes

Descrip. of riveting: cir. seams

D.R.

long. seams

T.R. D.B.S.

Diameter of rivet holes in long. seams

1 3/16"

Pitch of rivets

8"

Lap of plates or width of butt straps

1'-5 1/2"

Per centages of strength of longitudinal joint

rivets 84

plate 85

Working pressure of shell by rules

182 lbs.

Size of manhole in shell

16" x 12"

Size of compensating ring

24" x 31" x 1 1/4"

No. and Description of Furnaces in each boiler

3- Morrison suspension

Material

Steel

Outside diameter

3'-9 1/2"

Length of plain part

top

Thickness of plates

crown

5 9/16"

Description of longitudinal joint

Weld

No. of strengthening rings

Nil

Working pressure of furnace by the rules

193 lbs.

Combustion chamber plates: Material

Steel

Thickness: Sides

4 1/4"

Back

4 1/4"

Top

4 1/4"

Bottom

1 3/16"

Pitch of stays to ditto: Sides

8 1/2" x 9"

Back

8 1/2" x 9"

Top

8 1/2" x 9"

If stays are fitted with nuts or riveted heads

Nuts

Working pressure by rules

185 lbs.

Material of stays

Steel

Diameter at smallest part

1.43 #

Area supported by each stay

46.5 #

Working pressure by rules

181 lbs.

End plates in steam space:

Material of stays

Steel

Material

Steel

Thickness

1 1/32"

Pitch of stays

18" x 19 1/2"

How are stays secured

D.N.

Working pressure by rules

186 lbs.

Material of Front plates at bottom

Steel

Diameter at smallest part

6.1 #

Area supported by each stay

351 #

Working pressure by rules

180

Material of tube plates

Steel

Thickness: Front

13 1/16"

Back

13 1/16"

Thickness

13 1/16"

Material of Lower back plate

Steel

Thickness

1/8"

Greatest pitch of stays

14" x 14"

Working pressure of plate by rules

185 lbs.

Diameter of tubes

3 1/4"

Pitch of tubes

4 1/2" x 4 1/2"

Material of tube plates

Steel

Thickness: Front

13 1/16"

Back

13 1/16"

Mean pitch of stays

9"

Pitch across wide water spaces

14 1/4"

Working pressures by rules

249 lbs.

Girders to Chamber tops: Material

Steel

Depth and

thickness of girder at centre

8 1/2" x 1" (double)

length as per rule

2'-10"

Working pressure by rules

196 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

Manufacturers of Steel

Manufacturer.

MUIR & HOUSTON, LIMITED.

Is the approved plan of main boiler forwarded herewith Yes Tadvice no

General Remarks (State quality of workmanship, opinions as to class, &c. The materials and workmanship) are good. The machinery and boilers of this vessel have been built under special survey in accordance with the rules and approved plans, securely fitted on board and satisfactorily tried under steam and is, in my opinion, eligible for classification with record + L.M.C. 4, 12.

It is submitted that
this vessel is eligible for
THE RECORD. + LMC 412

Ref. Mac

24/4/12

When received.

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

GLASGOW 23 APR. 1912

Assigned + LMC 4 12

PROPERTY CERTIFICATE

29/4/12

29/4/12