

REPORT ON MACHINERY.

No. *6442*

THURSDAY 20 NOV 1884

No. in Survey held at

Reg. Book.

on the

Date, first Survey

Last Survey

1884

(Number of Visits)

2290.05

Tons 1443.90

Master

Rosacco

Built at

Glasgow

By whom built

Messrs. Durrant & Son

When built

1884

Engines made at

Glasgow

By whom made

Messrs. D. Stewart & Co

when made

Boilers made at

By whom made

when made

Registered Horse Power

220

Owners

Messrs. Raggio & Co

Port belonging to

Genoa

ENGINES, &c.—

Description of Engines

Compound Inverted direct acting Surface Condensing

Diameter of Cylinders

35" & 64"

Length of Stroke

42"

No. of Rev. per minute

80

Point of Cut off, High Pressure

21"

Low Pressure *21"*

Diameter of Screw shaft

11 1/2"

Diam. of Tunnel shaft

11"

Diam. of Crank shaft journals

11 1/2"

Diam. of Crank pin

11 3/4"

size of Crank webs

7 x 14"

Diameter of screw

16 ft.

Pitch of screw

14 3/8"

No. of blades

4

state whether moveable

Yes

total surface

75 sq ft

No. of Fed pumps

two

diameter of ditto

4"

Stroke

22 1/2"

Can one be overhauled while the other is at work

Yes

No. of Bilge pumps

two

diameter of ditto

4"

Stroke

22 1/2"

Can one be overhauled while the other is at work

Yes

Where do they pump from

Sea and Bilges of each compartment

No. of Donkey Engines

two

Size of Pumps

4 1/2" cyl 8 1/2" str 10"

Where do they pump from

Sea Ballast tanks

hotwell and bilges of each compartment

Are all the bilge suction pipes fitted with roses

Yes

Are the roses always accessible

Yes

Are the sluices on Engine room bulkheads always accessible

Yes

No. of bilge injections

One

and sizes

4 1/2" dia

Are they connected to condenser, or to circulating pump

Yes

How are the pumps worked

By levers

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

None

How are they protected

✓

Are all pipes, cocks, valves, and pumps in connection with the machinery accessible at all times

Yes

Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilges

Yes

When were stern tube, propeller, screw shaft, and all connections examined in dry dock

previous to launching

Is the screw shaft tunnel watertight

Yes

and fitted with a sluice door

Yes

worked from

top platform

BOILERS, &c.—

Number of Boilers

Two

Description

Large Mult Single Ended

Whether Steel or Iron

Steel

Working Pressure

80 lbs

Tested by hydraulic pressure to

160 lbs

Date of test

September 25th 1884

Description of superheating apparatus or steam chest

Horizontal dome

Can each boiler be worked separately

Yes

Can the superheater be shut off and the boiler worked separately

✓

No. of square feet of fire grate surface in each boiler

63 sq ft

Description of safety valves

direct spring

No. to each boiler

two

Area of each valve

15.9 sq"

Are they fitted with easing gear

Yes

No. of safety valves to superheater

✓

area of each valve

✓

Are they fitted with easing gear

✓

Smallest distance between boilers and bunkers or woodwork

3' 6"

Diameter of boilers

14 ft

Length of boilers

10' 6"

description of riveting of shell long. seams

dbl riv butt

circum. seams

dbl riv lap

Thickness of shell plates

3/4" full

Diameter of rivet holes

1 1/8"

whether punched or drilled

drilled

pitch of rivets

5"

Lap of plating

Straps 1 1/2" x 3/4"

Per centage of strength of longitudinal joint

77%

working pressure of shell by rules

85 lbs

size of manholes in shell

12 1/2" x 15 1/4"

Size of compensating rings

5 1/2" x 3 1/4"

No. of Furnaces in each boiler

three

Outside diameter

3' 7"

length, top

6' 6"

bottom

9' 6"

thickness of plates

5/8"

description of joint

Single riv butt

if rings are fitted

Greatest length between rings

6' 6"

working pressure of furnace by the rules

80 lbs

combustion chamber plating, thickness, sides

5/8"

back

5/8"

top

5/8"

Pitch of stays to ditto, sides

9 1/2" x 10"

back

9 1/2" x 10" x 10"

top

8" x 7 1/2"

If stays are fitted with nuts or riveted heads

nuts

working pressure of plating by

rules

80 lbs

Diameter of stays at smallest part

1 1/2" 80 lbs

working pressure of ditto by rules

80 lbs

end plates in steam space, thickness

3/4"

Pitch of stays to ditto

15" x 15"

how stays are secured

dbl nuts

working pressure by rules

96 lbs

diameter of stays at

smallest part

2 1/4"

working pressure by rules

Greatest pitch of stays

12" x 9"

working pressure by rules

160 lbs

Diameter of tubes

3 1/2"

pitch of tubes

4 1/2" x 4 1/2"

thickness of tube

plates, front

11/16"

back

11/16"

how stayed

stay tubes

pitch of stays

15" x 9 1/4"

width of water spaces

5"

Diameter of Superheater or Steam chest

2' 9"

length

10 ft

thickness of plates

1/2"

description of longitudinal joint

dbl riv lap

diam. of rivet holes

Pitch of rivets

3 1/2"

working pressure of shell by rules

125 lbs

diameter of flue

✓

thickness of plates

✓

If stiffened with rings

✓

Distance between rings

DONKEY BOILER

Description *Coal fired single ended*

Made at *Glasgow* by whom made *Messrs D Stewart & Co* when made *1884* where fixed *On main deck*
 Working pressure *60 lbs* tested by hydraulic pressure to *20 lbs* No. of Certificate *1439* fire grate area *24 sq ft* description of safety
 valves *direct spring* No. of safety valves *one* area of each *15 sq in* if fitted with easing gear *yes* if steam from main boilers can
 enter the donkey boiler *no* diameter of donkey boiler *6 1/2* length *7 1/2* description of riveting *all lap*
 Thickness of shell plates *7/16* full diameter of rivet holes *15/16* whether punched or drilled *drilled* pitch of rivets *3 1/2* lap of plating *5 1/2*
 per centage of strength of joint *75%* thickness of crown plates *3/16* full stayed by *2 1/2* stays *15* pitch
 Diameter of furnace, top *3 1/2* bottom *3* length of furnace *6 1/2* thickness of plates *15/32* description of joint *single riv butt*
 Thickness of furnace crown plates *3/16* stayed by *stay tubes & long stays 2 1/2 dia* working pressure of shell by rules *65 lbs*
 Working pressure of furnace by rules *65 lbs* diameter of uptake *4* thickness of plates *1/4* thickness of water tubes *1/8*

SPARE GEAR.

State the articles supplied:—

*2 con rod top end bolts & nuts 2 con rod bottom end bolts
 and nuts 2 main bearing bolts 1 set of coupling bolts 1 set of feed and bridge pump valves
 1 set of piston springs 1 pair of top end brasses 1 pair of bottom end brasses 1 piston rod 1 crank
 shaft (single throw) 1 air pump rod 1 air pump rod 2 propeller blades 2 cond tubes 2 boiler tubes 1 set
 of safety valve springs Assorted bolts & nuts & iron of various sizes*

The foregoing is a correct description,

Duncan Stewart & Co Manufacturer.

General Remarks

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

The Engines & Boilers of this Vessel have been constructed under special Survey, they are of good material and workmanship and are now in good order and safe working condition and eligible in my opinion to be noted in the Register Book *L. M. C. 11-84*

With the exception of the crank shaft, the shafting was examined at the works of Messrs D Stewart & Co (the Engineers) and appeared good and free from defects.

It is submitted that this vessel is eligible to have the registration & LMC recorded
M 20/11/84

The amount of Entry Fee £ *2* : : received by me,

Special £ *31* : : *MS*

Donkey Boiler Fee £ : : :

Certificate (if required) £ : : : *14/11/84*

To be sent as per margin.

(Travelling Expenses, if any, £ *8/-*)

Committee's Minute

FRIDAY 21 NOV 1884

MS

G. L. Hindmarsh
 Engineer/Surveyor to Lloyd's Register of British & Foreign Shipping.



© 2019

Lloyd's Register Foundation