

REPORT ON MACHINERY.

Port of SunderlandReceived at London Office **MON. FEB 25, 1901**Survey held at SunderlandDate, first Survey 20th April 1900 Last Survey 11th Feb 1901

Book.

(Number of Visits 30)

Ship on the

S S Ville de Majunga

Built at

Sunderland

By whom built

Sir J. Laing & Sons LtdGross 3676Net 2374When built 1901

Machinery made at

Sunderland

By whom made

George Clark Ltdwhen made 1901

Machinery made at

Sunderland

By whom made

George Clark Ltdwhen made 1901

Horse Power

Owners

Compagnie Havraise Pen de Nav a VapPort belonging to HavreHorse Power as per Section 28 316Is Refrigerating Machinery fitted NoIs Electric Light fitted YesENGINES, &c.—Description of Engines Triple-ExpansionNo. of Cylinders 3No. of Cranks 3

Diameter of Cylinders

24 1/2" 40" 66"Length of Stroke 45"Revs. per minute 70

Dia. of Screw shaft

as per rule 12.8"Lgth. of stern bush 4'-4 1/2"

Tunnel shaft

as per rule 11.57"

Dia. of Crank shaft journals

as per rule 12.21"

Dia. of Crank pin

as fitted 12.57"

Size of Crank webs

18 1/2" x 8 1/2"

Dia. of thrust shaft under

13"

Dia. of screw

17'-0"

Pitch of screw

17'-3"No. of blades 4

State whether moveable

NoTotal surface 87.6 sq ft

Feed pumps

2

Diameter of ditto

3 1/4"

Stroke

26"

Can one be overhauled while the other is at work

Yes

Bilge pumps

2

Diameter of ditto

4 1/4"

Stroke

26"

Can one be overhauled while the other is at work

Yes

Donkey Engines

2

Sizes of Pumps

7" dia x 10" + 4 1/2" dia x 6"

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

duplex

In Holds, &c.

Two in each hold of 3 1/2" dia

Bilge injections

1 size 6"

Connected to condenser, or to circulating pump

6"

Is a separate donkey suction fitted in Engine room & size

Yes 4"

Are the roses in Engine room always accessible

Yes

Are the sluices on Engine room bulkheads always accessible

None

connections with the sea direct on the skin of the ship

Yes

Are they Valves or Cocks

both

Are the discharge pipes above or below the deep water line

above

Are the blow off cocks fitted with a spigot and brass covering plate

Yes

How are they protected

Yes

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

connections with the sea direct on the skin of the ship

Yes

Are they Valves or Cocks

both

Are the discharge pipes above or below the deep water line

above

Are the blow off cocks fitted with a spigot and brass covering plate

Yes

How are they protected

Yes

Bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges

Yes

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

Yes

Is the screw shaft tunnel watertight

Yes

worked from

Top platform

ENGINES, &c.—

(Letter for record S)

Total Heating Surface of Boilers

3908.1 sq ft

Is forced draft fitted

Yes

Description of Boilers

3 Single Ended

Working Pressure

180 lbs

Tested by hydraulic pressure to

360 lbs

Can each boiler be worked separately

Yes

Area of fire grate in each boiler

34 sq ft

No. and Description of safety valves to

2 Spring loaded

Area of each valve

9.62 sq ft

Pressure to which they are adjusted

180 lbs

Are they fitted with easing gear

Yes

Distance between boilers or uptakes and bunkers or woodwork

2'-3"

Mean dia. of boilers

11'-6"

Length

11'-0"

Range of tensile strength

29-32

Are they welded or flanged

shell ends

Descrip. of riveting: cir. seams

double riv. lap

long. seams

treble riv. butt

Pitch of rivets

7 1/2"

Lap of plates or width of butt straps

17 1/8" butt strap

Stages of strength of longitudinal joint

9.1

Working pressure of shell by rules

194 lbs

Size of manhole in shell

16" x 13"

Compensating ring

8 3/4" x 1 1/8"

No. and Description of Furnaces in each boiler

2 Adamson

Material

S

Outside diameter

3'-6"

Thickness of plates

2'-0"

Description of longitudinal joint

Weld

No. of strengthening rings

3

Working pressure of furnace by the rules

184 lbs

Combustion chamber plates: Material

S

Stays to ditto: Sides

8" x 8 3/4"

Back

8 1/2"

Top

9"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

183 lbs

Diameter at smallest part

1.67 x .85

Area supported by each stay

81 sq in

Working pressure by rules

221 lbs

End plates in steam space:

S

Thickness

1/16"

Pitch of stays

18 1/2" x 16 3/8"

How are stays secured

Nuts

Working pressure by rules

183 lbs

Material of stays

S

Area supported by each stay

212 sq in

Working pressure by rules

183 lbs

Material of Front plates at bottom

S

Material of Lower back plate

S

Thickness

29/32" + 1/16"

Greatest pitch of stays

9"

Working pressure of plate by rules

180 lbs

Girders to Chamber tops: Material

S

Depth and

9" x 1 3/8"

Length as per rule

30"

Distance apart

9"

Number and pitch of Stays in

h 2 of 9" pitch

Superheater or Steam chest; how connected to boiler

None

Can the superheater be shut off and the boiler worked

Yes

Diameter

Length

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet

1/16"

Pitch of rivets

Working pressure of shell by rules

194 lbs

Diameter of flue

Material of flue plates

Thickness

End plates: Thickness

How stayed

Yes

Are they fitted with easing gear

Yes

Area of safety valves to superheater

Yes

Pressure of end plates

Yes

Lloyd's Register

Foundation

DONKEY BOILER— No. 1 Description Ordinary. Cyl. Multitube 2 plain furn
Made at Stockton By whom made Sudron & Co Ltd When made 29.10.00 Where fixed on deck
Working pressure 100 lbs tested by hydraulic pressure to 200 lbs No. of Certificate 2329 Fire grate area 23 sq ft Description of safety valves direct
No. of safety valves 2 Area of each 4.9 sq in Pressure to which they are adjusted 100 lbs If fitted with casing gear Yes If steam from main boiler
enter the donkey boiler No Dia. of donkey boiler 8'-0" Length 9'-0" Material of shell plates Iron Thickness 9/16" Range of
strength 27-32 Descrip. of riveting long. seams treb. riv. lap Dia. of rivet holes 7/8" Whether punched or drilled drilled Pitch of rivets
Lap of plating 6 3/8" Per centage of strength of joint 78 Rivets 78 Thickness of shell end plates 3/4" Radius of do. Pitch No. of Stays to do. 10
Dia. of stays 1 3/4" Diameter of furnace Top 27 7/8" Bottom 27" Length of furnace 6'-2" Thickness of furnace plates 7/16" Descrip.
joint welded Thickness of furnace end plates 3/4" Stays by 1 3/8" iff 8" to 8 1/2" Working pressure of shell by rules 105 lbs
Working pressure of furnace by rules 105 lbs Diameter of uptake 3" Thickness of uptake plates 1/16" Thickness of water tubes 7/16"

SPARE GEAR. State the articles supplied:— Top and bottom end connecting rod, bolt
and nuts, two main bearing bolts and nuts, one set of coupling
bolts, feed and bilge pump valves, bolts, nuts, and iron assort
propeller &c

The foregoing is a correct description,
for George Clark, Ltd. Manufacturer. of Main Engine & Boiler

Dates of Survey while building
During progress of work in shops— 1900— April 20. 23. 25 May 2. 7. 9. 11. 14. 18. 22. 25. 28. Oct 2. 25. Nov 1. 6.
During erection on board vessel— 14. 19. 21. 22. 26. Dec 3. 12. 18. 1901— Jan 16. 18. 21. 30. Feb 7. 11.
Total No. of visits 30

Is the approved plan of main boiler forwarded herewith Y
" " " donkey " " " Y

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

The machinery of this vessel has been constructed under
Special Survey, the material and workmanship being good
efficient, and the engines when tried under steam worked
satisfactorily.

The pumps, watertight doors, and steam steering gear
in good working order, and the main steam pipes have been
tested by hydraulic pressure to 400 lbs per square inch

In my opinion this vessel is eligible for the notification
in the Register Book of * L M C. 2-1901

It is submitted that
this vessel is eligible for
THE RECORD. + L.M.C. 2
Elec. Light.

The amount of Entry Fee. £ 3 : :
Special .. £ 35 16 : :
Donkey Boiler Fee .. £ : : :
Travelling Expenses (if any) £ : : :
When applied for, 23.2.01
When received, 27.2.01

Committee's Minute

Assigned

TUES. 26 FEB 1901

+ L M C 2, 01

Sat R Salmon
Engineer Surveyor to Lloyd's Register of British & Foreign Ships

MACHINERY CERTIFICATE
WRITTEN.



© 2019

Lloyd's Register
Foundation