

REPORT ON MACHINERY.

No. 24840

Port of

Sunderland

Received at London Office

FRI 19 MAY 1911

No. in Survey held at
Reg. Book.

on the

Sunderland
S S Bohème

Date, first Survey

19 Oct 1910

Last Survey

9 May 1911

(Number of Visits 38)

Gross 4432

Net 2721

When built 1911

Master

Johitovich

Built at

Sunderland

By whom built

W. Delford & Sons Ltd (10427)

Engines made at

Sunderland

By whom made

W. Delford & Sons Ltd (10426)

when made 1911

Boilers made at

Sunderland

By whom made

W. Delford & Sons Ltd (10427)

when made 1911

Registered Horse Power

Owners

Johitovich, Manay & Sanyal

Port belonging to

Russinpicolo

Nom. Hors. Power as per Section 28

383

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

no

ENGINES, &c.—Description of Engines

Triple Expansion

No. of Cylinders

3

No. of Cranks

3

Dia. of Cylinders

25" x 41" x 68"

Length of Stroke

45"

Revs. per minute

40

Dia. of Screw shaft

as per rule 13 1/2"

as fitted 14 1/2"

Material of screw shaft

Steel

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

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

Length of stern bush

6'-0"

Dia. of Tunnel shaft

as per rule 12.41"

as fitted 12.5 1/2"

Dia. of Crank shaft journals

as per rule 12 1/2"

as fitted 12 3/4"

Dia. of Crank pin

13 1/2"

Size of Crank webs

18 1/2" x 9 1/2"

Dia. of thrust shaft under

collars

13 1/2"

Dia. of screw

16' 9"

Pitch of Screw

16'-6"

No. of Blades

4

State whether moveable

no

Total surface

84 sq ft

No. of Feed pumps

7

Diameter of ditto

4 1/2"

Stroke

24"

Can one be overhauled while the other is at work

yes

No. of Bilge pumps

7

Diameter of ditto

4 1/2"

Stroke

24"

Can one be overhauled while the other is at work

yes

No. of Donkey Engines

3

Sizes of Pumps

2 @ 6" x 4" x 6", 1 @ 10" x 10" x 10"

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

In Engine Room

4 @ 3 1/2"

In Holds, &c.

No 1 2 @ 3 1/2", No 2 2 @ 3 1/2",

No 3 2 @ 3 1/2", No 4 (aft hold) 1 @ 3 1/2",

Sund well 1 @ 3 1/2",

No. of Bilge Injections

1 size 6"

Connected to condenser, or to circulating pump

C.P.

Is a separate Donkey Suction fitted in Engine room & size

yes 3 1/2"

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

yes

Are all connections with the sea direct on the skin of the ship

yes

Are they Valves or Cocks

Ball

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

done

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

yes

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

19-4-11

of Stern Tube

12-4-11

Screw shaft and Propeller

21-4-11

Is the Screw Shaft Tunnel watertight

yes

Is it fitted with a watertight door

yes

worked from top platform

BOILERS, &c.—(Letter for record)

Manufacturers of Steel

Spence & Sons

Total Heating Surface of Boilers

6536.4 sq ft

Forced Draft fitted

no

No. and Description of Boilers

Two single ended (aft)

Working Pressure

180 lbs

Tested by hydraulic pressure to

360 lbs

Date of test

20-3-11

No. of Certificate

2900

Can each boiler be worked separately

yes

Area of fire grate in each boiler

61 sq ft

No. and Description of Safety Valves to

each boiler

2 Spring loaded

Area of each valve

12.56 sq in

Pressure to which they are adjusted

185 lbs

Are they fitted with easing gear

yes

Smallest distance between boilers or uptakes and bunkers or woodwork

18"

Mean dia. of boilers

15'-4"

Length

10'-10"

Material of shell plates

Steel

Thickness

1 1/4"

Range of tensile strength

28-32 tons

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

DR

long. seams

T.R.D.B.S.

Diameter of rivet holes in long. seams

1 1/2"

Pitch of rivets

8 3/4"

Lap of plates or width of butt straps

19 1/2" x 1 1/2"

Per centages of strength of longitudinal joint

rivets 92

plate 85

Working pressure of shell by rules

182.9 lbs

Size of manhole in shell

16 x 12

Size of compensating ring

dished

No. and Description of Furnaces in each boiler

Three Corrugated

Material

Steel

Outside diameter

47 1/2"

Length of plain part

top

bottom

Thickness of plates

crown 1 1/4"

bottom 1 1/4"

Description of longitudinal joint

weld

No. of strengthening rings

none

Working pressure of furnace by the rules

184 lbs

Combustion chamber plates: Material

Steel

Thickness: Sides

2 1/2"

Back

2 1/2"

Top

2 1/2"

Bottom

1 3/4"

Pitch of stays to ditto: Sides

9 x 9"

Back

9 x 9"

Top

9 x 9"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

183 lbs

Material of stays

Steel

Diameter at smallest part

1 1/2"

Area supported by each stay

90 sq in

Working pressure by rules

203 lbs

End plates in steam space:

Material

Steel

Thickness

1 3/4"

Pitch of stays

16 x 19"

How are stays secured

D.H. Wash

Working pressure by rules

183 lbs

Material of stays

Steel

Diameter at smallest part

2 1/4"

Area supported by each stay

304 sq in

Working pressure by rules

208 lbs

Material of Front plates at bottom

Steel

Working pressure of plate by rules

182 lbs

Thickness

1 1/2"

Greatest pitch of stays

13"

Working pressure of plate by rules

Diameter of tubes

3 1/2"

Pitch of tubes

4 1/2" x 4 1/2"

Material of tube plates

Steel

Thickness: Front

1 5/8"

Back

1 3/8"

Mean pitch of stays

10 1/2"

Pitch across wide water spaces

13 1/4"

Working pressures by rules

thickness of girder at centre

2 @ 8 1/2" x 3 1/2"

Length as per rule

31"

Distance apart

9"

Number and pitch of stays in each

2 @ 9"

Depth and

Working pressure by rules

188 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

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

