

Rpt. 4

REPORT ON MACHINERY.

No. 15961

Port of *Swiss*

Received at London Office **FRI. 20 MAY 1904**

No. in Survey held at *Swiss*
ok. *1894-5*

Date, first Survey *Feb. 18th*

Last Survey *May 17th 1904.*

(Number of Visits *20*)

on the *Iron screw steamer "Wall" late "Luso"*

Tons }
Gross }
Net }

Built at *London*

By whom built *London Dry Dock Co*

When built *1885*

made at *Swiss*

By whom made *Chas & Thomas Ltd*

when made *1889*

made at *Swiss*

By whom made *Chas & Thomas Ltd*

when made *1904*

red Horse Power

Owners *Independent Trading Co*

Port belonging to

Power as per Section 28

Is Refrigerating Machinery fitted

Is Electric Light fitted

1. &c.—Description of Engines

No. of Cylinders

No. of Cranks

Length of Stroke

Revs. per minute

Dia. of Screw shaft

Material of screw shaft

shaft fitted with a continuous liner the whole length of the stern tube

Is the after end of the liner made water tight

If the liner is in more than one length are the joints burned

If the liner does not fit tightly at the part

bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive

If two

is the shaft lapped or protected between the liners

Length of stern bush

Dia. of Crank shaft journals

as per rule

Dia. of Crank pin

Size of Crank webs

Dia. of thrust shaft under

Dia. of screw

Pitch of screw

No. of blades

State whether moveable

Total surface

pumps

Diameter of ditto

Stroke

Can one be overhauled while the other is at work

pumps

Diameter of ditto

Stroke

Can one be overhauled while the other is at work

key Engines

Sizes of Pumps

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

Room

In Holds, &c.

injections

Connected to condenser, or to circulating pump

Is a separate donkey suction fitted in Engine room & size

bilge suction pipes fitted with roses

Are the roses in Engine room always accessible

Are the sluices on Engine room bulkheads always accessible

connections with the sea direct on the skin of the ship

Are they Valves or Cocks

are 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 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

are carried through the bunkers

How are they protected

are cocks, valves, and pumps in connection with the machinery and all boiler mountings accessible at all times

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

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

Is the screw shaft tunnel watertight

with a watertight door

worked from

2. &c.—

(Letter for record *S*)

Total Heating Surface of Boilers *810 sq ft*

Is forced draft fitted

Description of Boilers

One Cylindrical

Working Pressure *160 lb* Tested by hydraulic pressure to *220 lb*

Can each boiler be worked separately

Area of fire grate in each boiler

No. and Description of safety valves to

Area of each valve *3.97*

Pressure to which they are adjusted

Are they fitted with easing gear

distance between boilers or uptakes and bunkers or woodwork

Mean dia. of boilers *10.6'* Length *9.4 1/2'* Material of shell plates *Steel*

Range of tensile strength *29.32* Are they welded or flanged

Descrip. of riveting: cir. seams *all lap* long. seams *all lap*

of rivet holes in long. seams *1 1/16"* Pitch of rivets *6 1/8"*

Lap of plates or width of butt straps *1 1/2"*

ages of strength of longitudinal joint

rivets *29.97*

plate *25.77* Working pressure of shell by rules *168 lb*

Size of manhole in shell *16 x 12"*

compensating ring *7 1/2"*

1 1/16"

No. and Description of Furnaces in each boiler *two* Material *Steel*

Outside diameter *36"*

plain part

top *15 1/2"* Thickness of plates

bottom *9 1/16"*

Description of longitudinal joint *welded*

No. of strengthening rings *4*

pressure of furnace by the rules *178 lb*

Combustion chamber plates: Material *Steel* Thickness: Sides *2 1/32"* Back *10 1/16"* Top *10 1/16"* Bottom *2 1/32"*

stays to ditto: Sides

9"

Back *9"*

Top *9 7/16"* If stays are fitted with nuts or riveted heads *hubs*

Working pressure by rules *167 lb*

of stays *Steel*

Diameter at smallest part *1 1/2"*

Area supported by each stay *9 x 9"*

Working pressure by rules *166 lb*

End plates in steam space:

at smallest part *27 1/16"*

Area supported by each stay *15 x 15"*

Working pressure by rules *211 lb*

Material of Front plates at bottom *Steel*

Material of stays *Steel*

Material of Lower back plate *Steel*

Thickness *1 1/16"*

Greatest pitch of stays *12"*

Working pressure of plate by rules *160 lb*

Material of tube plates *Steel*

of tubes *3 1/16"*

Pitch of tubes *4 5/16"*

Material of tube plates *Steel*

Thickness: Front *1 1/16"* Back *1 1/16"*

Mean pitch of stays *9 1/16"*

across wide water spaces *1 1/2"*

Working pressures by rules *160 lb*

Girders to Chamber tops: Material *Steel*

Depth and

Distance between rings *7 1/2"*

of girder at centre *7 1/2"*

Length as per rule *20 1/2"*

Distance apart *7 1/2"*

Number and pitch of Stays in each *two 9"*

Superheater or Steam chest; how connected to boiler

Can the superheater be shut off and the boiler worked

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

How stayed

stiffened with rings

Distance between rings

Working pressure by rules

End plates: Thickness

How stayed

Are they fitted with easing gear

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

July 25 - 0064

