

REPORT ON MACHINERY.

No. 67408

Port of London.

Received at London Office

MON. 5 JUN 1905

No. in Survey held at
Reg. Book.

London.

Date, first Survey Dec 13/1904 Last Survey May 25 1905

(Number of Visits 35)

on the Eugenie No. 772 for the S. Morris

Master

Boiler No. 772 London

Built at

By whom built

Thames Iron Works Ltd

Tons { Gross 125.70
Net 122.70
When built 1905

Engines made at London

By whom made

The Thames Iron Works Ltd

when made 1905

Boilers made at London

By whom made

do:

when made 1905

Registered Horse Power

Owners

London County Council

Port belonging to

London

Nom. Horse Power as per Section 28

53

Is Refrigerating Machinery fitted

no

Is Electric Light fitted

yes

ENGINES, &c.—Description of Engines Diagonal compound

No. of Cylinders

2

No. of Cranks

2

Dia. of Cylinders

16 x 31

Length of Stroke

36

Revs. per minute

Dia. of screw shaft

as per rule

as fitted

Material of

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

Is the after end of the liner made water tight

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

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

If two

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

Length of stern bush

Dia. of Tunnel shaft

as per rule

Dia. of Crank shaft journals

as per rule

as fitted

Dia. of Crank pin

Size of Crank webs

Dia. of thrust shaft under

collars

Dia. of screw

Pitch of screw

No. of blades

State whether moveable

Total surface

No. of Feed pumps

one

Diameter of ditto

3 1/2

Stroke

10

Can one be overhauled while the other is at work

No. of Bilge pumps

one

Diameter of ditto

3 1/2

Stroke

10

Can one be overhauled while the other is at work

No. of Donkey Engines

one

Sizes of Pumps

4 1/4 x 3 1/4 w x 8

stroke

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

In Engine Room

one 2' engine + 2' donkey

In Holds, &c.

2' forward + 2' aft

No. of bilge injections

one

sizes

3"

Connected to condenser, or to circulating pump

Is a separate donkey suction fitted in Engine room & size

yes - 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

—

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 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

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

Is the screw shaft tunnel watertight

Is it fitted with a watertight door

worked from

BOILERS, &c.—

(Letter for record

S)

Total Heating Surface of Boilers

7000

Is forced draft fitted

yes

No. and Description of Boilers

one S.E. return tube

Working Pressure

115

Tested by hydraulic pressure to

230

Date of test

27.2.05

Can each boiler be worked separately

Area of fire grate in each boiler

250

No. and Description of safety valves to

each boiler

2 direct spring

Area of each valve

7.07

Pressure to which they are adjusted

115

Are they fitted with easing gear

yes

Smallest distance between boilers or uptakes and bunkers or woodwork

12

Mean dia. of boilers

9-0

Length

8-9

Material of shell plates

S

Thickness

9/16

Range of tensile strength

29-32

Are they welded or flanged

no

Descrip. of riveting: cir. seams

single

long. seams

treble butt

Diameter of rivet holes in long. seams

3/4

Pitch of rivets

4 7/8

Lap of plates or width of butt straps

12

Per centages of strength of longitudinal joint

rivets

83.7

Working pressure of shell by rules

119

Size of manhole in shell

16 x 12

Size of compensating ring

12

No. and Description of Furnaces in each boiler

2 plain

Material

S

Outside diameter

34 7/8

Length of plain part

top

70

Thickness of plates

crown

9/16

Description of longitudinal joint

welded

No. of strengthening rings

none

Working pressure of furnace by the rules

142

Combustion chamber plates: Material

S

Thickness: Sides

1/2

Back

1/2

Top

9/16

Bottom

Pitch of stays to ditto:

Sides

8 1/4 x 7 3/4

Back

8 1/4 x 7 3/4

Top

9 1/4 x 8 1/4

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

120

Material of stays

S

Diameter at smallest part

.93

Area supported by each stay

64

Working pressure by rules

116

End plates in steam space:

Material

S

Thickness

1/16

Pitch of stays

17 1/2 x 12 1/2

How are stays secured

riv. washers

Working pressure by rules

115

Material of stays

S

Diameter at smallest part

2.87

Area supported by each stay

218

Working pressure by rules

133

Material of Front plates at bottom

S

Thickness

1/16

Material of Lower back plate

S

Thickness

1/16

Greatest pitch of stays

11 3/4

Working pressure of plate by rules

115

Diameter of tubes

2 1/2

Pitch of tubes

3 1/2

Material of tube plates

S

Thickness: Front

1/16

Back

1/16

Mean pitch of stays

11.4

Pitch across wide water spaces

12 1/2

Working pressures by rules

116

Girders to Chamber tops: Material

S

Depth and

thickness of girder at centre

6 1/2 x 7 1/2 - 2

Length as per rule

25

Distance apart

Working pressure by rules

135

Superheater or Steam chest; how connected to boiler

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

Stiffened with rings

Distance between rings

Working pressure by rules

End plates: Thickness

How stayed

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

Lloyd's Register

Foundation

W 1537-0049

