

17189 Iron

Port

Sunderland

Oct 1876.

1876.

## Details of Main Boilers of the Steam Ship

"Minston"

Rec. 23/10/76

tons

Diameter

11.6.

Length

15.0.

Thickness of shell plates

 $\frac{13}{16}$ .

Description of riveting of longitudinal joints

double &amp; double butt

of circumferential joints

double

Pitch of rivets

ditto

4.5.

ditto

3.8.

Diameter of rivets

ditto

1.8.

ditto

1.8.

Lap of plating

ditto

9" straps,

ditto

5.

Size of manholes in circular shell

16" x 12"

How compensated for

by a rectangular plate 28" x 24" x 3/8."

Number of furnaces in boiler

4

Diameter of furnaces

3.1"

Length of furnaces

6.0

Thickness of furnace plates

1/2" &amp; 9/16" on bottom.

Description of joint of furnaces

lapped and double riveted

Whether strengthened with rings

None

Greatest length between rings

Thickness of combustion chamber plating

1/2"

Diameter of screw stays to ditto

1 5/16" over the threads

pitch of stays

8" x 7 1/2."

End plates, thickness

 $\frac{13}{16}$ .

Diameter of longitudinal stays to end plates

2 1/8"

pitch of ditto

15" x 14 1/2."

How stays are secured

They are bolts extending through both ends, with nuts each side.

Diameter of tubes

3 1/4."

pitch of tubes

4 3/8" x 4 3/8."

Thickness of tube plates

3/4"

pitch of stays

8 3/4" x 13 1/8."

Stayed by

stay tubes

Description of steam receiver

Dome with a attached neck.

Diameter of ditto

3.0."

length of ditto

5.0"

Thickness of plating of ditto

7/16."

ends

1/2."

Ends, how stayed

No stays (the ends are spherical)

$$\text{Shell} = \frac{51520 \times 1 5/8 \times .75}{136 1/2 \times 6.5} = 70 \text{ lbs working pressure}$$

$$\text{Furnace} = \frac{89600 \times 1 1/2^2}{37 \times 6} = 100 \text{ " " " "}$$



© 2019

William Allison.

Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register Foundation

IRON 468-0436