

Details of Main Boilers of the Steam Ship

Port

Hull October 5th
China

19423 Iron

Rev 15/10/42 7877 tons

Diameter

13' 6"

Length

10' 6 1/2"

Thickness of shell plates

1"

Description of riveting of longitudinal joints

Double butt straps

of circumferential joints

Lap, double riv.

Pitch of rivets

ditto

4 1/8"

ditto

3 1/8"

Diameter of rivets

ditto

1 1/8"

ditto

1 1/8"

Lap of plating

ditto

6"

ditto

5 1/2"

No. Size of manholes in circular shell

17' x 13'

How compensated for

By angle iron 4 1/2" x 3 1/2" x 5/8"

Number of furnaces in boiler

3

Diameter of furnaces

3' 0"

Length of furnaces

7' 6"

Thickness of furnace plates

1/2"

Description of joint of furnaces

Welded

Whether strengthened with rings

No

Greatest length between rings

—

Thickness of combustion chamber plating

9/16"

Diameter of screw stays to ditto

1 1/2" over thread

pitch of stays

9 1/2" x 9 1/2"

End plates, thickness

3/4"

Diameter of longitudinal stays to end plates

2 1/8 eff.

pitch of ditto

15" x 15"

How stays are secured

By double nuts and washers

Diameter of tubes

3"

pitch of tubes

4 1/2" x 4 1/8"

Thickness of tube plates

5/8 back, 3/4 front

Stayed by

Solid stays 2" dia, 22 screwed tubes

pitch of stays (solid)

18" x 12 3/8"

Description of steam receiver

Vertical chest

Diameter of ditto

4' 8"

length of ditto

4' 3"

Thickness of plating of ditto

7/16"

ends

9/16"

Ends, how stayed

By four solid stays, 2" dia.
Manhole 11" x 14" compensated by angle iron
3 1/2" x 3" x 1/2" double riv.

19423 Jan

Working pressure of Mainshell 70 lb p. sq. inch
 Turnace plates 82 " " " "
 Mainstays 94 " " " "
 Combustion Chamber stays 81 " " " "
 Flat plates 70 " " " "

The Spring Safety valves manufactured by Bailey and Leatham are set at 70 lb pressure, and have been tested under steam on board in the usual way on the 3rd of October in my presence.

The result was as follows:

Starboard Boiler:

M. 15 : 70 lb of steam
 M. 20 : 75 lb of steam; valves blowing off
 M. 25 : 75 lb " " " "
 M. 30 : 75 lb " " " "
 M. 35 : 75 lb " " " "
 M. 40 : 75 lb " " " "
 M. 45 : 75 lb " " " "

Port Boiler

1. 0 : 70 lb of steam
 1. 5 : 72 lb " " valves blowing off
 1. 10 : 74 lb " " " "
 1. 15 : 74 lb " " " "
 1. 20 : 74 lb " " " "
 1. 25 : 74 lb " " " "

Steam valves and feed valves closed during the trial, and firing continued, as though engines working at full speed.

Tracing of Safety valves enclosed.

AEH



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