

19374 Iron

Port

Liverpool 28 Feb 1877
"Thessaly" 1243 tons

Details of Main Boilers of the Steam Ship

Diameter	13' 3"	Length	10' 6"
Thickness of shell plates	1"		
Description of riveting of longitudinal joints	{ Double butt straps riveted	of circumferential joints	Double riveted laps
Pitch of rivets	ditto 3 1/2"	ditto	3"
Diameter of rivets	ditto 1"	ditto	1"
Breadth of butt straps Lap of plating	ditto 12 1/2"	ditto	5 1/2"
No. Size of manholes in circular shell	16 1/2 x 12 1/2 through steam chest.		
How compensated for	plate ring		
Number of furnaces in boiler	Three		
Diameter of furnaces	3' 3"	Length of furnaces	6' 10"
Thickness of furnace plates	5/8"		
Description of joint of furnaces	Lap joints under bars.		
Whether strengthened with rings	Yes	Greatest length between rings	3' 8"
Thickness of combustion chamber plating	5/8"		
Diameter of screw stays to ditto	1 3/8"	pitch of stays	9" x 9"
End plates, thickness	10/16"		
Diameter of longitudinal stays to end plates	2 1/4"	pitch of ditto	16 1/2" x 18 1/2"
How stays are secured	Double nuts and washers 10" diam.		
Diameter of tubes	3 1/2" Q. I.	pitch of tubes	4 3/4"
Thickness of tube plates	3/4"		
Stayed by	Tube stays	pitch of stays	14 1/4" x 14 1/4"
Description of steam receiver	Cylindrical horizontal egg ended		
Diameter of ditto	4' 0"	length of ditto	13' 6"
Thickness of plating of ditto	9/16"	ends	9/16"
Ends, how stayed	Egg ended. 2 Bracket plates fitted from back of boiler to shell plating at bottom of boiler. Screwed stays are fitted with nuts.		

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Engineer Surveyor to Lloyd's Register of Shipping.
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S. S. Thessaly 19374 Iron.

Shell plating $\frac{515.20 \times 2 \times .86}{159 \times 6.5} \} = 84 \text{ lbs.}$

Percentage of strength
in rivets $\left\{ \frac{(.785 \times 4) \times 100}{3.5 \times 1} \right\} = 86\%$

Percentage of strength
in joints $\left\{ \frac{(3.5 - 1) \times 100}{2.5} \right\} = 100\%$

Furnaces. $\frac{89600 \times .26}{3.66 \times 39} \} = 156 \text{ lbs.}$

Flat plates $\frac{120 \times 64}{81} \} = 94 \text{ lbs.}$

Steam chest. $\frac{515.20 \times 1.12 \times .60}{48 \times 6.5} \} = 117 \text{ lbs.}$

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