16446 Iron

Rec 12/6/76

Details of Main Boilers of the Steam Ship "*Silverian*" 79..58 tons

Diameter	11" 6"	Length	10' 6"
Thickness of shell plates	3/4"		
Description of riveting of longitudinal joints	Treble	of circumferential joints	Double
Pitch of rivets ditto	4"	ditto	3"
Diameter of rivets ditto	1"	ditto	1"
Lap of plating ditto	6"	ditto	4½"
Size of manholes in circular shell	15 × 12		
How compensated for	Rings round holes 6" × 1"		
Number of furnaces in boiler	2		
Diameter of furnaces	3' 3"	Length of furnaces	7' 0"
Thickness of furnace plates	½"		
Description of joint of furnaces	Butt joints Double straps		
Whether strengthened with rings	No	Greatest length between rings	—
Thickness of combustion chamber plating	½"		
Diameter of screw stays to ditto	1⅛" to bottom of thread	pitch of stays	9 × 8¼
End plates, thickness	23/32		
Diameter of longitudinal stays to end plates	2"	pitch of ditto	14¾" × 15"
How stays are secured	Nuts inside and out		
Diameter of tubes	3¼" outside	pitch of tubes	5¼" × 5¼"
Thickness of tube plates	25/32		
Stayed by	Stay tubes	pitch of stays	15¾" × 10½"
Description of steam receiver	Horizontal. Cylindrical. Flat ended		
Diameter of ditto	5' 0"	length of ditto	6' 9"
Thickness of plating of ditto	3/8	ends	5/8
Ends, how stayed	12 Stays in receiver 2" dia		

$$\text{Shell} \quad \frac{51520 \times 1½ \times .75}{138 \times 6.3} = 64 \text{ lbs working pressure}$$

$$\text{Furnaces} \quad \frac{89600 \times .5^2}{7 \times 39} = 82 \text{ lbs working pressure}$$

$$\text{Flat plates between screwed stays} = \frac{100 \times 8^2}{9 \times 8¼} = 86 \text{ lbs}$$

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