

175 77 Iron

Port of Newcastle Dept: 1876  
"Lloyd's" Rec 4/1/76 tons

Details of Main Boilers of the Steam Ship

Diameter 14'-9" Length 10'-0"

Thickness of shell plates 1 1/8"

Description of riveting of longitudinal joints double Butt, "cham" of circumferential joints lap, double riveted "cham"

Pitch of rivets ditto 3 13/16" ditto 3 1/2"

Diameter of rivets ditto 1 1/8" ditto 1 1/8"

Lap of plating ditto 13 1/2" strap ditto 6"

No. Size of manholes in circular shell at dome neck 12" x 16", at Back end plate 11" x 15 1/2"

How compensated for dome neck + wrought iron ring 3 1/2" x 3/4"

Number of furnaces in boiler (14)

Diameter of furnaces 3'-0" Length of furnaces 4'-0"

Thickness of furnace plates 1/2" top 9/16" bottom,

Description of joint of furnaces single lap

Port Whether strengthened with rings None Greatest length between rings

Report (if any) on Hull of Vessel. Thickness of combustion chamber plating 5/8"

Diameter of screw stays to ditto 1 1/4" pitch of stays 10" x 7"

End plates, thickness 3/4"

Diameter of longitudinal stays to end plates 2 1/4" pitch of ditto 16 1/2" x 14 1/2"

How stays are secured Ribs + Washers, washers 9" dia x 3/4" thick

Diameter of tubes 3 1/2" outside pitch of tubes 5" x 14 3/4"

Thickness of tube plates 3/4"

Stayed by Tube Stay pitch of stays 15" x 9 1/2"

Description of steam receiver dome with spherical top + contracted neck

Diameter of ditto 3'-6" length of ditto 5'-1 1/2"

Thickness of plating of ditto 7/16" ends 7/16"

Ends, how stayed No stays contracted neck 12" x 16"

Cylindrical shell  $\frac{51520 + 2.5 + 70}{177 + 6.5} = 72 \text{ lbs.}$

Furnaces  $\frac{89600 + 25}{252} = 88 \text{ lbs.}$

Longitudinal Way Steam Space  $\frac{16.5 + 14.5 + 67}{3.9} = 42 \text{ lbs.}$

George W. Manuel

Engineer Surveyor to Lloyd's Register of Shipping.

North Shields