

17290 Iron 13/11/76

Port Sunderland Oct 21 1876
"Pera" 1102.44 tons

Details of Main Boilers of the Steam Ship

Diameter 10" 4 3/8 inches Length 16" 0"

Thickness of shell plates 3/16"

Description of riveting of longitudinal joints Double Yag Yag of circumferential joints Yag Yag

Pitch of rivets ditto 4" ditto 3 1/8"

Diameter of rivets ditto 1" ditto 1"

Lap of plating ditto Double straps 10 1/4 broad ditto 5"

Size of manholes in circular shell 15 x 12

How compensated for Flange round holes 6 x 3 1/8"

Number of furnaces in boiler 4

Diameter of furnaces 3' 3" inside Length of furnaces 6' 0"

Thickness of furnace plates 1/2"

Description of joint of furnaces Gull joint, Single straps

Whether strengthened with rings No Greatest length between rings ~

Thickness of combustion chamber plating 1/16"

Diameter of screw stays to ditto 1 1/4 inch thread pitch of stays 7" x 7 3/4"

End plates, thickness 9/16"

Diameter of longitudinal stays to end plates 1 3/4" effective pitch of ditto 11" x 12"

How stays are secured Nuts inside & out

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

Thickness of tube plates 3/4 back 4/16 front

Stayed by Stay tubes pitch of stays 9" x 13 1/2"

Description of steam receiver Neck ended dome

Diameter of ditto 3' 6" Dia of neck 18" length of ditto 6' 6"

Thickness of plating of ditto 3/8" ends 1/2"

Ends, how stayed 3 stays in dome 1 3/4" dia

Shell $\frac{51520 \times 1.58 \times .75}{124 \times 3/8 \times 6.5} = 47 \text{ lbs. Working Pressure}$

Spanners $\frac{89600 \times 1/2^2}{6 \times 39} = 95 \text{ lbs. "}$

Stays in Combustion Chamber $\frac{109 \times 1/2^2}{7 \times 1/4 \times 1/4} = 90 \text{ lbs. "}$

Ames Bani
Engineer Surveyor to Lloyd's Register of Shipping.
Lloyd's Register Foundation

Report (if any) on Hull of Vessel. Port Newcastle No. 17290