

17254 Iron

Port *Sunderland* *Sept 1876*  
*Rev 26/10/76*  
*415 tons*

## Details of Main Boilers of the Steam Ship

*"Hartlepool"*Diameter *13' 6"* Length *10' 1"*Thickness of shell plates *1/2"*Description of riveting of longitudinal joints *double* of circumferential joints *double*Pitch of rivets ditto *2 1/2"* ditto *2 1/2"*Diameter of rivets ditto *3/4"* ditto *3/4"*Lap of plating ditto *4 1/2"* ditto *4 1/2"*Size of manholes in circular shell *15 x 11"*How compensated for *by a ring 4" x 3/4"*Number of furnaces in boiler *3*Diameter of furnaces *3' 0"* Length of furnaces *7' 2"*Thickness of furnace plates *7/16"*Description of joint of furnaces *lapped and single riveted*Whether strengthened with rings *none* Greatest length between ringsThickness of combustion chamber plating *7/16"*Diameter of screw stays to ditto *1 1/8" over threads* pitch of stays *9" x 9"*End plates, thickness *1/2"*Diameter of longitudinal stays to end plates *1 1/2" square* pitch of ditto *18" x 16"*How stays are secured *round end of stay between 2 angle irons 5" x 3" x 1/2" x 1 1/8" pin through them*Diameter of tubes *3 1/2"* pitch of tubes *5" x 4 3/4"*Thickness of tube plates *1/16"*Stayed by *stay tubes* pitch of stays *15" x 14 1/2"*Description of steam receiver *dome with a contracted neck*Diameter of ditto *3' 9"* length of ditto *7' 0"*Thickness of plating of ditto *3/8"* ends *1/2"*Ends, how stayed *No stays (ends are dished - 4ft radius)*

$$\text{Shells} = \frac{51520 \times 1 \times 70}{161 \times 6.5} = 36 \text{ lbs working pressure}$$

$$\text{Furnaces} = \frac{89600 \times 7/16^2}{76 \times 36} = 66 \text{ " " "}$$