

# Details of Main Boilers of the Steam Ship

Port *Kirkcaldy* *15 Oct 1877* *Rec 29/10/77* *441.75 tons*  
*19480 Iron*  
*"Itund"*  
Diameter *11' 10 1/8" inside* Length *10' 0" outside*  
Thickness of shell plates *15 1/16"*  
Description of riveting of longitudinal joints *Double butt* of circumferential joints *Double lap*  
Pitch of rivets ditto *3 3/8"* ditto *3 3/8"*  
Diameter of rivets ditto *1"* ditto *1"*  
Lap of plating ditto *13"* ditto *6 1/2"*  
Size of manholes in circular shell *16" x 12" in doub*  
How compensated for *by angle iron ring 3 1/2" x 3 1/2" x 1/2"*  
Number of furnaces in boiler *Three*  
Diameter of furnaces *2' 11" inside* Length of furnaces *7' 6"*  
Thickness of furnace plates *1/2"*  
Description of joint of furnaces *double butt strap single riveted*  
Whether strengthened with rings *none* Greatest length between rings *—*  
Thickness of combustion chamber plating *1/2"*  
Diameter of screw stays to ditto *1 1/2"* pitch of stays *9 1/2" x 8"*  
End plates, thickness *3/4"*  
Diameter of longitudinal stays to end plates *2 1/4"* pitch of ditto *14 1/2" x 16"*  
How stays are secured *through end plates with nuts & washers both sides*  
Diameter of tubes *3 1/2" external* pitch of tubes *5" x 5"*  
Thickness of tube plates *3/4"*  
Stayed by *Tube stays & nuts* pitch of stays *10" x 10"*  
Description of steam receiver *Horizontal doub*  
Diameter of ditto *3' 0" inside* length of ditto *9' 0"*  
Thickness of plating of ditto *7/16"* ends *1/2"*

Ends, how stayed *by gusset stays*  
Working pressure shell *515.20 x 1.86 x .70 = 72 lb*  
" " *142.12 x 6.5 = 85*  
" " *89600 x .25 = 85*  
" " *35 x 7.5 = 74" = 4093 lb*  
" " *120 x 14.4 = 87 = 3800*  
" " *16 x 14.5 = 87 = 3800*  
" " *100 x 6.4 = 87 = 3800*  
" " *9.5 x 8 = 87 = 3800*

Tested to 140 lbs 28/8/77

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