

Amended plan of masts: Double Single ended  
Steel Boilers by Mess. The Fairfield Ship & Engine  
Co<sup>rs</sup> Ltd for their No. 4044

180 lbs working pressure.

plate 70  $\frac{10 - 1.5}{10} \times 100 = 85$

Front Tube  $\frac{150 \times (11 + \frac{10}{2})^2}{13.5} = 210 \text{ lbs.}$

Rivet 2.  $\frac{1.46 \times 8 \times 1.75 \times 85}{10 \times 1.484} = 88.5$

Back Tube  $\frac{140 \times 11^2}{9.6 \times 8.5} = 183 \text{ lbs.}$

Shell  $\frac{29 \times 21 \times 85 (2.45 - 2)}{27 \times 2.02} = 206 \text{ lbs.}$

Stay Tubes  $\frac{7500 (4.43 - 2.46)}{10.5 \times 7.5 - 14.7} = 195 \text{ lbs.}$

Furnace  $\frac{1160 (8.45 - 2)}{42.03} = 186 \text{ lbs.}$

Boiler Back  $\frac{135 \times (10 + \frac{10}{2})^2}{12.4 \times 7^2} = 316 \text{ lbs.}$

Combustion  $\frac{135 \times 9^2}{7.375^2} = 202 \text{ lbs.}$

Stays  $\frac{1.48 \times 8000}{9.625 \times 7} = 144 \text{ lbs.}$

Stays  $\frac{1.23 \times 8000}{7.375^2} = 181 \text{ lbs.}$

Inside Butt Stays  $\frac{3}{4} \times 1.484 \times \frac{85}{70} = 1.35$

Girders  $\frac{9000 \times 8^2 \times 1.5}{(29.5 - 7.375) \times 29.5} = 190 \text{ lbs.}$

$\frac{1.35 \times 180}{206} = 1.18$

End top  $\frac{145 \times 14^2}{14.5^2} = 241 \text{ lbs.}$

Stays  $\frac{4.77 \times 10000}{14.75 \times 14.25} = 198 \text{ lbs.}$

Furnace bottoms 50  $\frac{(300 \times 7.5 - 148)}{44} = 190 \text{ lbs.}$

Girders Stays 2  $\frac{2.4 \times 1.75 \times 9000}{7 \times 5.1} = 212 \text{ lbs.}$

W.L.H.  
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