

Mult^l Steel Main Boilers by Rankine & Blackmore
for Mess^{rs} Russell & Co^s R^o 544 Vessel.

180 lbs "Working Pressure."

$$\text{plate } \frac{9.6845 - 1.406}{9.6845} \times 100 = 85.48.$$

$$\text{Rivet } \frac{5 \times 1.55 \times 1.45 \times 85}{9.6845 \times 1.345} = 87$$

$$\text{Shell } \frac{28.5}{24} \cdot \frac{21 \times 85.5 (22-2)}{210} = 180 \text{ lbs.}$$

$$\text{Furnace } \frac{1259 (875-2)}{46.21} = 184 \text{ lbs.}$$

$$\text{Comb. Ch. } \frac{135 \times 11.5}{17.5} = 184 \text{ lbs.}$$

$$\text{Stays } \frac{1.74 \times 9000}{85} = 184 \text{ lbs.}$$

$$\text{"Swiss. } \frac{135 \times 10^2}{72} = 188 \text{ lbs.}$$

$$\text{"Stays } \frac{1.74 \times 9000}{72} = 221 \text{ lbs.}$$

$$\text{Girders } \frac{9900 \times 10.45^2 \times 1.5}{(33.59-8) 10.5 \times 33.59} = 149 \text{ lbs.}$$

$$\text{Ends top } \frac{185 \times 19^2}{361} = 185 \text{ lbs.}$$

$$\text{"Stays } \frac{6.35 \times 10000}{20.45 \times 14} = 180 \text{ lbs.}$$

$$\text{Front tube } \frac{140 \times (12+2)^2}{13.25^2} = 218 \text{ lbs.}$$

$$\text{Back " } \frac{140 \times 12^2}{105} = 192 \text{ lbs.}$$

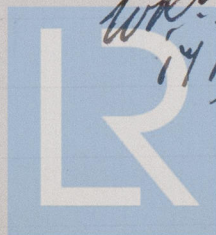
$$\text{Boiler Back } \frac{135 \times 12.5^2}{2.03} = 180 \text{ lbs.}$$

$$\text{Stays } \frac{1.74 \times 9000}{10.45 \times 8.845} = 193 \text{ lbs.}$$

$$\text{"bottom } \frac{185 \times 13^2}{29.5} = 167 \text{ lbs.}$$

Stay fitted.

$$\frac{4.84375}{1.406} = 3.44675$$



Lloyd's Register
Foundation

W747-0044