

Mult. Steel natural draught Boiler by Rankine & Blackmore for Russell & Co No 614-5-6 Vessels.

"210 lbs" working pressure.

$$\text{Plate \% } \frac{10 - 1.6845}{10} \times 100 = 83.1$$

$$\text{Endo. bp } \frac{185 \times 19.5^2}{306.5} = 231 \text{ lbs.}$$

$$\text{Rivet \% } \frac{5 \times 2.24 \times 1.75 \times 85}{10 \times 1.6845} = 98.5$$

$$\text{Stays } \frac{4.22 \times 10400}{18 \times 17} = 244 \text{ lbs}$$

$$\text{Sheet } \frac{22 \times 83.1 (27-2)}{204} = 2248 \text{ lbs}$$

$$\text{Front htr } \frac{140 \times (14 + \frac{11}{2})^2}{13.75^2} = 280 \text{ lbs}$$

$$\text{Furnace } \frac{1259 (10.5-2)}{46.25} = 232 \text{ lbs}$$

$$\text{Back } \frac{140 \times 14^2}{9^2} = 340 \text{ lbs}$$

$$\text{Com. btr } \frac{135 \times 10^2}{63.5} = 213 \text{ lbs}$$

$$\text{Boiler Back } \frac{135 \times 13^2}{110} = 207 \text{ lbs}$$

$$\text{Stays } \frac{1.78 \times 8000}{63.5} = 222 \text{ lbs.}$$

$$\text{Stays } \frac{2.08 \times 9000}{10.1 \times 8} = 228 \text{ lbs.}$$

$$\text{Top } \frac{135 \times 11^2}{73} = 224 \text{ lbs}$$

$$\text{Stays } \frac{1.76 \times 8000}{63} = 223 \text{ lbs}$$

$$\text{Under } \frac{11850 \times 11.5^2 \times 1.625}{(37.5 - 845) 10.5 \times 34.5} = 223 \text{ lbs}$$

