

Stockton 6867

"S. S. John Schöning"

Rev 21/10/75

Size and Description of Boiler

The Boiler is Flat sided, Horizontal 12'0" wide x 10'0" long x 16'0" high. with 3 Furnaces fired from left.

Working pressure 65 lbs

Shell plating $\frac{1}{16}$ " (Flat Boiler) 4 plates in the circumference and 4 widths in the length, Circumferential joints, lapped Single riveted rivets 1" dia x $3\frac{1}{2}$ " pitch. Longitudinal joints have double butt Straps $\frac{1}{16}$ " & $\frac{1}{16}$ " Double riveted rivets 1" dia x $3\frac{1}{2}$ " pitch. End plating attached to angle iron $4\frac{1}{2}$ " x $4\frac{1}{2}$ " x $\frac{3}{8}$ " single riveted. 3 angle iron stiffeners on flat of sides 4 " x $3\frac{1}{2}$ " x $\frac{1}{2}$ ". One web plate along each side of top $\frac{3}{16}$ " x 16" broad attached to angle iron $3\frac{1}{2}$ " x $3\frac{1}{2}$ " x $\frac{1}{2}$ ". Manholes have rings fitted round them;

$$\text{Formula } \frac{57520 \times 1.75 \times 41.4\%}{142.25 \times 6.5} = 72.9 \text{ lbs}$$

Combustion Chamber plating $\frac{3}{16}$ " (Larnley) The top is supported by screws passing through Bridge Bearers $1\frac{1}{4}$ " dia. B. Bearers are 5" deep x $\frac{3}{8}$ " thick. Screw Stays $1\frac{1}{4}$ " = 1.22" Sect. Area, $7\frac{1}{2}$ " x 10" pitch = 45" area = 3996 lbs per inch. —

$$\text{Formula } \frac{100 \times 64}{45} = 85.3 \text{ lbs}$$

Furnaces 6'6" long x $3'2\frac{1}{2}$ " dia. plating $\frac{3}{16}$ " (Larnley) butt joints, fitted with double Straps, & riveted to front plate which is flanged. No Anticollapsing rings fitted

$$\text{Formula for Lines } \frac{84600 \times .25}{6.5 \times 38.5} = 88.8 \text{ lbs}$$

Longitudinal Stays $1\frac{3}{4}$ " dia. = 2.406 Sect. Area 14 " x $15\frac{1}{2}$ " pitch = 217" area = 5874 lbs per inch. Cross Stays $1\frac{3}{4}$ " dia. 4 rows 13" longitudinal pitch x $1\frac{1}{4}$ " vertical pitch. —

Lube plates $\frac{1}{16}$ " protected by 55 tubes in Side Chambers $3\frac{1}{4}$ " dia. and 9 solid Stays $1\frac{3}{4}$ " dia, 58 tubes and 8 solid stays $1\frac{3}{4}$ " dia in centre Chamber. —

James Morrison
Greenock Oct. 20th 1845



Lloyd's Register
Foundation