

Greenock 6881

S.S. "Amelia"

15345 Iron

Rev 15/11/78

No. 1 and Description of Boilers

Two, Round, Horizontal, 10'4" dia. x 10'0" long, with Two Furnaces in each fired from forward, and longitudinal Steam Receiver common to both boilers.

Working pressure 65 lbs

Shell plating $\frac{1}{16}$ " (2nd Boiler) 3 plates in the circumference and 3 widths in the length. Circumferential joints lapped, single, riveted, rivets 1" dia x 3" pitch. Longitudinal joints lapped, double riveted, rivets 1" dia, x 3 pitch. End plating flanged and single riveted. Manholes have rings fitted round them.

$$\text{Formula } \frac{51520 \times 1.5 \times 66.6\%}{122 \times 6.5} = 64.3 \text{ lbs per inch}$$

Combustion Chamber $\frac{1}{16}$ " (Larnley) the top of which is radial, and has no stays fitted.

Screw Stays $\frac{1}{4}$ " dia. = 1.22" sec. area, 8" x 8" pitch = 3411 lbs per inch

$$\text{Formula for flat Surfaces } \frac{100 \times 64}{64} = 100 \text{ lbs}$$

Furnace plating $\frac{1}{16}$ " (Larnley) 7'0" long x 3'0" dia. butt joints with double straps, and riveted to front plate which is flanged

$$\text{Formula for Stays } \frac{89600 \times .25}{7 \times 36} = 84.9 \text{ lbs}$$

Sub. plates $\frac{1}{16}$ " protected by 55 tubes in each chamber 13 of which are stay tubes screwed & fitted with nuts, ($3\frac{3}{4}$ " dia.)

Longitudinal Stays 2" dia. = 3.14 sec. area, 16" x 16" pitch = 256 area = 5299 lbs per inch.

Steam Receiver 3'6" dia x 9'0" long (plating $\frac{1}{16}$) with radial ends flanged and single riveted 3 longitudinal Stays are fitted $\frac{1}{2}$ " dia.

James Morrison
Greenock Nov 5th 1895