

Shipbuilder *Palmers* S/S No. *459* Engineer *Palmers* No. *698*

WORKING PRESSURE *100* lbs.

TENSILE RANGE Shell = *29* tons *32* tons  
Stays = *29* tons *32* tons

LBS.

LBS.

% Plate.	$\frac{P - d}{P}$	= <i>73.7</i>	Back Bottom with doubling.	$\frac{c \times (t + \frac{t}{2})^2}{\frac{1}{2} (P^2 + P^2)}$	= <i>✓</i>	
% Rivets.	$\frac{a \times \text{No.} \times 1.75 \times 85}{P \times t}$	= <i>80.5</i>	Girders.	$\frac{c \times d^2 \times t}{(L - P \times \text{dis. apart} \times L)}$	= <i>6.600 \times 6 \times 1.25 = 21.6</i>	
Shell.	$\frac{c (t - 2) \%}{D}$	= <i>20.9(9.5-2) 73.4 = 108.</i>	Plain Furnaces.	$\frac{50(300T - L)}{D}$	= <i>50(300 \times 5) - 72 = 33.</i>	<i>118.</i>
Front and Back Tops.	$\frac{c \times t^2}{\frac{1}{2} (P^2 + P^2)}$	= <i>185 \times 12^2 = 264.</i>	Do. where length exceeds 120 times plate.	$\frac{1,075,200 \times T^2}{L \times D}$	= <i>✓</i>	
Front Tube Plate.	$\frac{c \times t^2}{P^2}$	= <i>140 \times 12^2 = 132.</i>	Patent.		= <i>✓</i>	
Front Tube Plate with doubling.	$\frac{c \times (t + \frac{t}{2})^2}{P^2}$	= <i>✓</i>	Main Stays.	$\frac{c \times a}{\text{surface supported}}$	= <i>2.66 \times 9000 = 19 \times 15</i>	
Back Tube Plate.	$\frac{c \times t^2}{P^2}$	= <i>✓</i>	<i>14</i> Screw Stays.	$\frac{c \times a}{\text{surface supported}}$	= <i>8000 \times 1.01 = 8.0 \times 10</i>	<i>105 110</i>
Compress. Tube Plate.	$\frac{c (D - d) \times t}{W \times D}$	= <i>✓</i>	<i>1 3/4</i> " Screw Stays.	$\frac{c \times a}{\text{surface supported}}$	= <i>✓</i>	
C. Chbr. Plate Sides.	$\frac{c \times t^2}{\frac{1}{2} (P^2 + P^2)}$	= <i>135 \times 8^2 = 852.</i>	<i>1 5/8</i> " Screw Stays.	$\frac{c \times a}{\text{surface supported}}$	= <i>✓</i>	
C. Chbr. Plate Top.	$\frac{c \times t^2}{\frac{1}{2} (P^2 + P^2)}$	= <i>852</i>	Stay Tubes.	$\frac{A \times c}{\text{surface supported}}$	= <i>✓</i>	
C. Chbr. Plate Backs.	$\frac{c \times t^2}{\frac{1}{2} (P^2 + P^2)}$	= <i>135 \times 8^2 = 852</i>			= <i>✓</i>	
Back Bottom.	$\frac{c \times t^2}{\frac{1}{2} (P^2 + P^2)}$	= <i>135 \times 12^2 = 14^2 \times 85 = 144</i>			= <i>✓</i>	

© 2019

Lloyd's Register Foundation

W 128-0090