

IRON 467-0468

16832 Iron
16831

Reu 31/8/76

Port

Glasgow Aug 10th 1876
Atholl 1436.30
992.5 tons

Details of Main Boilers of the Steam Ship

Diameter 12' 6", height 14' 6" Length 15' 0"

Thickness of shell plates $\frac{14}{16}$ "

Description of riveting of longitudinal joints *Double riveted* of circumferential joints *Double riveted*

Pitch of rivets ditto 4" ditto 4"

Diameter of rivets ditto 1" ditto 1"

Lap of plating ditto $4\frac{1}{2}$ " ditto $5\frac{1}{2}$ "

Size of manholes in circular shell 10' 2" x 12"

How compensated for *By angle iron 3" x 3" x $\frac{7}{16}$ "*

Number of furnaces in boiler *Six, three in each end*

Diameter of furnaces 3' 0" Length of furnaces 6' 0"

Thickness of furnace plates $\frac{8}{16}$ *lapped*

Description of joint of furnaces *welded*

Whether strengthened with rings _____ Greatest length between rings _____

Thickness of combustion chamber plating $\frac{8}{16}$ "

Diameter of screw stays to ditto $1\frac{1}{4}$ " pitch of stays 8" x 9' 4"

End plates, thickness $\frac{11}{16}$ "

Diameter of longitudinal stays to end plates 2' 8" pitch of ditto 16" x 16' 2"

How stays are secured *By double nuts*

Diameter of tubes 3" pitch of tubes 4' 4"

Thickness of tube plates $\frac{11}{16}$ "

Stayed by *Lubes* pitch of stays 9' 2" x 12' 4"

Description of steam receiver *None*

Diameter of ditto 1' 8" height 3' 0"

Thickness of plating of ditto $\frac{10}{16}$ " length of ditto $\frac{12}{16}$ "

It is all welded

Low Key 5' 8" dia x 6' long

Engineer Surveyor to Lloyd's Register of Shipping

Survey Fee £5.5.0 paid

[Signature]

Formula for Shell $\frac{510.20 \times 1.45 \times 45\%}{148.25 \times 6.5} = \text{yolbs}$

Formula for flat plates $\frac{100 \times 64}{\frac{1}{4}} = 86.5 \text{ lbs}$

Formula for Linc. $\frac{89600 \times .25}{6 \times 36} = 103 \text{ lb.}$

Longitudinal Stay. 28" dia. 162" x 16" pitch = 4847 lbs

Cross Stays 28" dia (2 bows) 18 1/2" Vertical pitch x 14" Longitudinal

