

16131, Iron.

Port

Glasgow April 11th 1876

Details of Main Boilers of the Steam Ship

"Lary Queen" 230 tons

Diameter 11' 6" Length 9' 0"

Thickness of shell plates 1 1/16"

Description of riveting of longitudinal joints Double riveted of circumferential joints Lapped & double riveted

Pitch of rivets ditto 4 1/4" ditto 3 3/4"

Diameter of rivets ditto 1" ditto 1"

Lap of plating ditto Double butt straps 12" broad x 1/16" ditto 5"

Size of manholes in circular shell 12" x 15"

How compensated for angle iron rings

Number of furnaces in boiler Three

Diameter of furnaces 2' 9" Length of furnaces 5' 9"

Thickness of furnace plates 8/16"

Description of joint of furnaces Welded

Whether strengthened with rings No rings Greatest length between rings

Thickness of combustion chamber plating 9/16" on top & 7/16" on sides

Diameter of screw stays to ditto 1 3/8" pitch of stays 8 1/2" x 8 1/2"

End plates, thickness 1/16"

Diameter of longitudinal stays to end plates 1 1/8" pitch of ditto 13 1/2" x 13 1/2"

How stays are secured with double nuts

Diameter of tubes 3" pitch of tubes 4"

Thickness of tube plates 1/16"

Stayed by tubes screwed & fitted with double nuts pitch of stays 8" x 12" (mean)

Description of steam receiver Dome

Diameter of ditto 2' 6" height of ditto 4' 0"

Thickness of plating of ditto sides 9/16" top 7/16" all welded & double riveted to shell

how stayed an angle iron 4" x 3 1/2" x 1/2" is fitted round steam

aperture, in shell with two stays 1 1/4" dia, attached thereto and

to top of dome

Donkey boiler 7' 6" high x 3' 10" dia plating 7/16" thick

James Morrison

Engineer Surveyor to Lloyd's Register of Shipping.

Foundation

IRON 465-0494

16131. Iron.

Formulae $\frac{51,520 \times 1.75 \times 76\%}{136.25 \times 6.5} = 74 \text{ lbs}$

Formula for flat plates $\frac{100 \times 64}{42.25} = 88 \text{ lbs}$

Formula for Lurnaces $\frac{89,600 \times .25}{38 \times 5.75} = 114 \text{ lbs}$

Longitudinal Stays $1\frac{1}{8}" \text{ dia, } 13\frac{1}{2}" \times 13\frac{1}{2}" \text{ pitch} = 4622 \text{ lbs}$
@ 40 lbs per inch.

JM
11.4.46



© 2019

Lloyd's Register
Foundation