

ENGINES.

Description *Compound Inverted Direct action* Are all the bilge suction pipes fitted with roses

18233 Jan

Port

Glasgow April 18th 1879

Test req'd per Rule.

Details of Main Boilers of the Steam Ship

"Laymouth Castle" 1172 tons

30. 2/20
30 2/20
26 1/2

Diameter

14 1/2"

Length

15' 9"

Thickness of shell plates

3/32" full

Description of riveting of longitudinal joints

Double riveted

of circumferential joints

Double riveted

Pitch of rivets

ditto

4 3/8"

ditto

3 1/2"

Diameter of rivets

ditto

1 1/8"

ditto

1"

Lap of plating

ditto

8"

ditto

5 1/2"

Size of manholes in circular shell

16" x 12"

How compensated for

By flat ring

Number of furnaces in boiler

Six (three in each end)

Diameter of furnaces

3' 6"

Length of furnaces

6 ft 8"

Thickness of furnace plates

8/16"

Description of joint of furnaces

Lapped & single riveted

Whether strengthened with rings

Greatest length between rings

Thickness of combustion chamber plating

8/16"

Diameter of screw stays to ditto

1 1/4"

pitch of stays

8" x 9"

End plates, thickness

12/16"

Diameter of longitudinal stays to end plates

2"

pitch of ditto

16 1/2" x 10 1/2"

How stays are secured

By double nuts

Diameter of tubes

3"

pitch of tubes

4 1/4"

Thickness of tube plates

Subs plates 1/16"

Stayed by

Subs

pitch of stays

9" x 12 1/2"

Description of steam

Superheater Annular, Vertical with single tube

Diameter of ditto

4' 10 1/2" tube 5' 4"

length of ditto

10 ft

Thickness of plating of ditto

About 1/16"

ends

1/16"

Ends, how stayed

Attached to angles round shell & tube

... break into or through the seams or butts of the plating ... in *good* condition, and sufficient in size and length. If of Iron or Steel give ... showing how the lower Masts and Bowsprit are constructed, showing ...

... EQUIPMENT ...
...AILS...
...Sails...
...Top Sails...
...Topmast
...ay Sails...
...Sails...
...Top Sails...
...Running Rigging...
...s is *Rapiers*...
...m Skylights... How
...ements for deadlight
...r Openings... How
...c... What arranger
...hways... How for
...in Hatch...
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...Certificate ... *Grant*
...enses, if any, £ *4.48* =

18233 From

Formula for Shell $\frac{57620 \times 1.845 \times 45\%}{166 \times 6.5} = 67 \text{ lbs}$

Formula for flat plate $\frac{100 \times 64}{42} = 88 \text{ lbs}$

Formula for ~~flat plate~~ ^{Stays} $\frac{89600 \times .20}{42 \times 6.5} = 82$

Longitudinal Stays 2" dia $16\frac{1}{2} \times 10\frac{1}{2}$ pitch = 4886

Me