

Port Sunderland

July 7⁸⁷
Re 22/2/99
1225 tons

Details of Main Boilers of the Steam Ship "Commonwealth"

Diameter 12' 3" Length 10' 6"

Thickness of shell plates 15/16"

Description of riveting of longitudinal joints double & double butt straps of circumferential joints double

Pitch of rivets ditto 4 1/8" ditto 3 1/2"

Diameter of rivets ditto 1 1/8" ditto 1 1/8"

Lap of plating ditto 10 3/8" ditto 5 1/8"

Size of manholes in circular shell 16" x 13"

How compensated for by a ring 7" x 7/8" thick

Number of furnaces in boiler 3

Diameter of furnaces 3' 0" Length of furnaces 7' 6"

Thickness of furnace plates 1/2"

Description of joint of furnaces double butt strapped and single riveted

Whether strengthened with rings none Greatest length between rings

Thickness of combustion chamber plating 7/16"

Diameter of screw stays to ditto 1 3/16" at bottom of thread pitch of stays 7 3/4" x 7 1/4"

End plates, thickness 11/16"

Diameter of longitudinal stays to end plates 2" pitch of ditto 14" x 14"

How stays are secured they are bolts extending through both end plates

Diameter of tubes 3 3/4" outside pitch of tubes 5 1/4" x 5"

Thickness of tube plates 5/8"

Stayed by stay tubes pitch of stays 10 1/2" x 10"

Description of steam receiver Horizontal dome

Diameter of ditto 4' 0" length of ditto 11' 6"

Thickness of plating of ditto 7/16" ends 7/16"

Ends, how stayed no stays the ends are spherical

Shells - $\frac{51520 \times 1 1/8 \times 726}{145 \times 6.5} = 74$ lbs working pressure.

Furnaces - $\frac{89600 \times 1/2^2}{7 1/2 \times 36} = 82$ " " "

No. of Sunderland Iron

