

REPORT ON BOILERS.

No. 6998.

Received at London Office

FRI. OCT. 13. 1911

Date of writing Report 11<sup>th</sup> Oct. 1911 When handed in at Local Office 11<sup>th</sup> Oct. 1911 Port of Belfast  
No. in Survey held at Belfast Date, First Survey See other sheet Last Survey 19  
Reg. Book. 42. on the J.S.S. "Galway Castle" (Number of Visits) Gross 7988  
Master T.H. McFarland Built at Belfast By whom built Harland & Wolff Ltd Net 4985  
Engines made at Belfast By whom made when made  
Boilers made at By whom made when made  
Registered Horse Power Own Union Cable Mail S.S. Co. Ltd Port belonging to London

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel E. Colville & Sons Ltd  
Letter for record S Total Heating Surface of Boilers 2624 sq ft As forced draft fitted No No. and Description of  
Boilers 1—Single End Cylinder Working Pressure 220 lb Tested by hydraulic pressure to 440 lb Date of test 13-4-11  
No. of Certificate 443 Can each boiler be worked separately Yes Area of fire grate in each boiler 64 sq ft No. and Description of  
Safety valves to each boiler Two—Direct Springs Area of each valve 5'4" sq Pressure to which they are adjusted 225 lb  
Are they fitted with easing gear Yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler  
Smallest distance between boilers or uptakes and bunkers or woodwork about 18" Mean dia. of boilers 15'-8" Length 11'-9"  
Material of shell plates Steel Thickness 1 1/2" Range of tensile strength 30-34 tons Are the shell plates welded or flanged No  
Descrip. of riveting: cir. seams Lap double, seams Butt Single Diameter of rivet holes in long. seams 1 1/2" Pitch of rivets 10 1/2"  
Pitch of plates or width of butt straps 23 1/2" Per centages of strength of longitudinal joint rivets 92.0 plate 84.2 Working pressure of shell by  
Rules 250 lb Size of manhole in shell 16"x12" Size of compensating ring 12" No. and Description of Furnaces in each  
Boiler 3 Suspended Material Steel Outside diameter 50 1/2" Length of plain part top 10" Thickness of plates crown 3 1/2" bottom 3 1/2"  
Description of longitudinal joint Weld No. of strengthening rings Working pressure of furnace by the rules 246 lb Combustion chamber  
Plates: Material Steel Thickness: Sides 3/2" Back 3/2" Top 3/2" Bottom 1" Pitch of stays to ditto: Sides 8"x8" Back 7 1/2"x7 1/2"  
Top 8"x8" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 223 lb Material of stays Steel Diameter at  
Smallest part 1 1/2"x1 1/2" Area supported by each stay 64 sq Working pressure by rules 247 lb Plates in steam space: Material Steel Thickness 1 1/2"  
Pitch of stays 16"x16" How are stays secured Nuts & screws into plates Working pressure by rules 234 lb Material of stays Steel Diameter at smallest part 2 1/2"  
Area supported by each stay 256 sq Working pressure by rules 234 lb Material of Front plates at bottom Steel Thickness 1 1/2" Material of  
Lower back plate Steel Thickness 1 1/2" Greatest pitch of stays 13" Working pressure of plate by rules 245 lb with 4 double  
Pitch of tubes 4"x4" Material of tube plates Steel Thickness: Front 3/2" Back 3/2" Mean pitch of stays 8"x8" Pitch across wide  
Water spaces 13 1/2" Working pressures by rules 265 lb with 4 double Girders to Chamber tops: Material Steel Depth and thickness of  
Order at centre 10 1/2"x(7"x2) Length as per rule 39" Distance apart 8" Number and pitch of Stays in each 4-8"  
Working pressure by rules 224 lb Superheater or Steam chest: how connected to boiler Can the superheater be shut off and the boiler worked  
separately Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet  
Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness  
stiffened with rings Distance between rings Working pressure by rules End plates: Thickness How stayed  
Working pressure of end plates Area of safety valves to superheater Are they fitted with easing gear

The foregoing is a correct description,  
for Harland & Wolff Ltd.,  
Manufacturers.

Is the approved plan of boiler forwarded herewith Yes  
See other sheet Total No. of visits

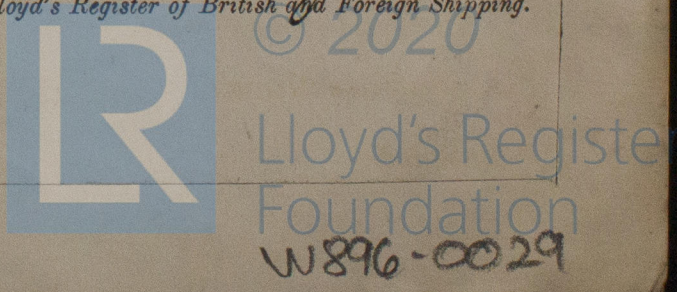
GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

See other sheet

Survey Fee ... £ : : When applied for, 19  
Travelling Expenses (if any) £ : : When received, 19

Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute TUE. OCT. 17. 1911  
Assigned



## List of Pumps

|   |                        |  |
|---|------------------------|--|
| 2   | Meas Feed              | $10\frac{1}{2}'' \times 7\frac{7}{8}'' \times 24''$        |
| 2   | Sanitary               | $10'' \times 4'' \times 10''$ Duplex                       |
| 1   | Meas Aux. Feed         | $10\frac{1}{2}'' \times 7\frac{7}{8}'' \times 24''$ Single |
| 1   | Ballast                | $12'' \times 13'' \times 12''$                             |
| 1   | Fresh Water            | $3\frac{1}{2}'' \times 3'' \times 4''$ Duplex              |
| 1   | Evapor. Feed           | $3\frac{1}{2}'' \times 3'' \times 4''$                     |
| 1   | Brine                  | $3\frac{1}{2}'' \times 3'' \times 4''$                     |
| 2   | Main Centrifugal Pumps | 11" Pipes $\times$ 8 $\frac{1}{2}$ cyls $\times$ 7 stroke  |
| 1 Lugging Feed Heater, 2 Feed Filters, 1 Distiller, 1 Evapor. |                        |  |

## Spare Gear

- 2 Bronze Propeller Blades
- 1 Pair Connecting rod brasses top end
- 1 Pair Connecting rod brasses bottom
- 1 set H. P. piston rings, and 1 set M. P. rings
- 1 Air pump bucket with valves, guards, rod & nuts
- 1 head valve
- Block packing rings for U. S. piston rod packing
- Set suction and delivery valves for lower <sup>duplex</sup> salt water pump
- 1 Propeller blade studs & nuts
- Set studs & nuts, guards & pin valves for air pump
- 1 Feed check valve & seat for boilers
- Several springs for each side steam & water spring
- Loaded valves on main & auxiliary stock machinery
- Spare safety valve springs, etc. etc.
- and all gear to Lloyd's Rules additional