

REPORT ON BOILERS.

No. 61988

Received at London Office

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Date of writing Report 19... When handed in at Local Office 19... Port of *Newcastle on Tyne*
 No. in Survey held at *Newcastle* Date, First Survey *10th April 1911* Last Survey *9th March 1912*
 Reg. Book. on the *S. S. Birma* (Number of Visits) (Gross Tons) *4896*
 (Net Tons) *3045*
 Master Built at *Walleud* By whom built *Swan Hunter & Wigham Richardson* when built *1912*
 Engines made at *Walleud* By whom made *Walleud Shipway & Engineering Co.* when made *1912*
 Boilers made at *Walker* By whom made *Swan Hunter & Wigham Richardson L^{td}* when made *1912*
 Registered Horse Power Owners *Rotterdamse Lloyd* Port belonging to *Rotterdam*

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel *J. Spencer & Son*

(Letter for record *X*) Total Heating Surface of Boilers *1006* Is forced draft fitted *no* No. and Description of Boilers *one S. E. Cylindrical Mult.* Working Pressure *100 lbs* Tested by hydraulic pressure to *200 lbs* Date of test *8.8.11*
 No. of Certificate *8174* Can each boiler be worked separately Area of fire grate in each boiler *34.5* No. and Description of safety valves to each boiler *3" double* Area of each valve *4.06* Pressure to which they are adjusted *100 lbs*
 Are they fitted with easing gear *Yes* In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler *no*
 Smallest distance between boilers or uptakes and bunkers or woodwork *on deck* Mean dia. of boilers *10.10* Length *9.6*
 Material of shell plates *steel* Thickness *11/16* Range of tensile strength *28 3/4/32* Are the shell plates welded or flanged *no*
 Descrip. of riveting: cir. seams *d. r. lap.* long. seams *t. r. lap.* Diameter of rivet holes in long. seams *1 1/2* Pitch of rivets *3 7/8*
 Lap of plates or width of butt straps *7 7/8* Per centages of strength of longitudinal joint rivets *80.4* Working pressure of shell by rules *106.2* Size of manhole in shell *16 x 12* Size of compensating ring *7 1/2 x 11/16* plate *73.3*
 boiler *2 plain* Material *steel* Outside diameter *38 7/8* Length of plain part *72 1/2* Thickness of plates *9/16*
 Description of longitudinal joint *double butt* No. of strengthening rings Working pressure of furnace by the rules *121.5* Combustion chamber plates: Material *steel* Thickness: Sides *15/32* Back *15/32* Top *15/32* Bottom *13/16* Pitch of stays to ditto: Sides *7 7/8 x 7 7/8* Back *7 7/8 x 7 7/8*
 Top *7 7/8 x 7 7/8* If stays are fitted with nuts or riveted heads *nuts* Working pressure by rules *108* Material of stays *iron* Diameter at smallest part *1.19* Area supported by each stay *62* Working pressure by rules *115* End plates in steam space: Material *steel* Thickness *13/16*
 Pitch of stays *15 1/4 x 17* How are stays secured *d. r. w. 6 1/2 dia.* Working pressure by rules *119.5* Material of stays *steel* Diameter at smallest part *3.26*
 Area supported by each stay *259.25* Working pressure by rules *130* Material of Front plates at bottom *steel* Thickness *13/16* Material of Lower back plate *steel* Thickness *13/16* Greatest pitch of stays *13 x 7 7/8* Working pressure of plate by rules *197.5* Diameter of tubes *3*
 Pitch of tubes *4 1/8 x 4 1/4* Material of tube plates *steel* Thickness: Front *13/16* Back *13/32* Mean pitch of stays *12 3/4 x 8 1/4* Pitch across wide water spaces *14* Working pressures by rules *120.7* Girders to Chamber tops: Material *steel* Depth and thickness of girder at centre *6 1/2 x 1* Length as per rule *27 7/8* Distance apart *7 7/8* Number and pitch of Stays in each *2 - 7 7/8*
 Working pressure by rules *111.7* 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 holes Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness
 If 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

For The foregoing is a correct description.
 SWAN, HUNTER, & WIGHAM RICHARDSON, LTD. Manufacturer.

G. J. Dwyer
 Is the approved plan of boiler forwarded herewith
 DIRECTOR

Total No. of visits

Dates of Survey } During progress of work in shops - - } See Weekly Report
 while building } During erection on board vessel - - - }

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *This donkey boiler has been constructed under special survey, the workmanship and materials used are both of good quality, it has been properly fitted and secured and the safety valves have been adjusted.*

Survey Fee ... £ *2.2.0* When applied for *See Weekly Report*
 Travelling Expenses (if any) £ ... When received 19...

R. W. Coomber & C. Cooper
 Engineer Surveyors to Lloyd's Register of British and Foreign Shipping.

Committee's Minute TUE. APR. 2 - 1912

Assigned

