

REPORT ON BOILERS.

No. 26442

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Date of writing Report 1915 When handed in at Local Office - 5. MAY 1915 Port of Sunderland

No. in Survey held at **SUNDERLAND.** Date, First Survey *June 8* Last Survey *30th April 1915*
 Reg. Book. on the *Steel 3/5. Hartfield.* (Number of Visits) } Gross *4651*
 } Net *2885*
 Master *B. J. Kully* Built at *Siland* By whom built *Bartram & Sons Ltd* When built *1915*
 Engines made at *Siland* By whom made *J. Dickinson & Sons Ltd* When made *1915*
 Boilers made at " By whom made " " When made *1915*
 Registered Horse Power *461.* Owners *Woodfield Shipping Co. Ltd* Port belonging to *London*

MULTITUBULAR BOILERS - MAIN, AUXILIARY OR DONKEY. - Manufacturers of Steel *Amsterdam, Ver. en. Staalhandel*

(Letter for record *S.*) Total Heating Surface of Boilers *1152 sq ft* Is forced draft fitted *no.* No. and Description of Boilers *One Multitubular* Working Pressure *120* Tested by hydraulic pressure to *240* Date of test *17. 2. 15.*
 No. of Certificate *3247* *see sec. 11a 8/5/15.* Can each boiler be worked separately Area of fire grate in each boiler *33.7 sq ft* No. and Description of safety valves to each boiler *two Spring* Area of each valve *3" dia.* Pressure to which they are adjusted *123 1/2*
 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 *2 feet* Mean dia. of boilers *11 ft* Length *11 ft*
 Material of shell plates *S.* Thickness *3/16* Range of tensile strength *28-32* Are the shell plates welded or flanged *no.*
 Descrip. of riveting: cir. seams *DR lap* long. seams *DR. DBS.* Diameter of rivet holes in long. seams *15/16* Pitch of rivets *4 3/4*
 Esp. of plates or width of butt straps *9 1/8"* Per centages of strength of longitudinal joint rivets *94.32* Working pressure of shell by rules *80.26*
 No. and Description of Furnaces in each boiler *two plain* Material *S.* Outside diameter *3' 2"* Length of plain part *top 80"* Thickness of plates *crown 5/8"* Description of longitudinal joint *S. R. S. B. S.* No. of strengthening rings *-* Working pressure of furnace by the rules *132.* Combustion chamber plates: Material *S.* Thickness: Sides *5/8* Back *5/8* Top *5/8* Bottom *3/4* Pitch of stays to ditto: Sides *9 x 10 1/2* Back *10 x 10 5/8* Top *8 x 10 1/2* If stays are fitted with nuts or riveted heads *nuts* Working pressure by rules *127 1/10* Material of stays *S.* Diameter at smallest part *1.48"* Area supported by each stay *106"* Working pressure by rules *130* End plates in steam space: Material *S.* Thickness *3/4"* Pitch of stays *14 1/2, 15* How are stays secured *2 nuts* Working pressure by rules *123* Material of stays *S.* Diameter at smallest part *1.78"* Area supported by each stay *214 1/2"* Working pressure by rules *120* Material of Front plates at bottom *S.* Thickness *13/16* Material of Lower back plate *S.* Thickness *1/16* Greatest pitch of stays *12 1/2, 10 5/8* Working pressure of plate by rules *122.* Diameter of tubes *3 1/4"* Pitch of tubes *4 1/2 x 4 1/2* Material of tube plates *S.* Thickness: Front *13/16* Back *1/16* Mean pitch of stays *9 x 13 1/2* Pitch across wide water spaces *1' 2"* Working pressures by rules *121 1/10 S.* Girders to Chamber tops: Material *S.* Depth and thickness of girder at centre *6 1/2 x 8 (two)* Length as per rule *33 1/4* Distance apart *8"* Number and pitch of Stays in each *2 @ 10 1/2"*
 Working pressure by rules *131.* 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

per se The foregoing is a correct description, *J. Dickinson & Sons, Limited.* Manufacturer.

Dates of Survey { During progress of work in shops - - } Is the approved plan of boiler forwarded herewith *yes*
 while { During erection on board vessel - - }
 building { } Total No. of visits
see Machinery report

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *Boiler built under Special survey: materials and workmanship good, examined under full pressure & found satisfactory*

Survey Fee ... £ *2 : 2 :* When applied for, *1.5* 1915
 Travelling Expenses (if any) £ : : When received, *2.5* 1915

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

Committee's Minute *FRI. MAY. 7 - 1915*
 Assigned *see minute 10 of rpt attached*

