

REPORT ON BOILERS.

No. 35584.
WED. 17. NOV. 1915

Received at London Office

Date of writing Report *17th Nov 1915* When handed in at Local Office *9th Nov 1915* Port of *Glasgow*

No. in Survey held at *Glasgow* Date, First Survey *22/3/15* Last Survey *21st Oct 1915*

Reg. Book. *on the Boiler No 666 to the order of Messrs A Jeffrey & Co Alloa S/S 14* (Number of Visits *18*) } Gross
Tons } Net

Master _____ Built at _____ By whom built _____ When built _____

Engines made at _____ By whom made _____ When made _____

Boilers made at *Glasgow* By whom made *Messrs A & W Dalglisk* When made *1915*

Registered Horse Power _____ Owners _____ Port belonging to _____

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel *David Colville & Sons Ltd The Lanarkshire Steel Co Ltd*

Letter for record *S* Total Heating Surface of Boilers *1050 sq ft* Is forced draft fitted *no* No. and Description of Boilers *1 Single ended Marine* Working Pressure *135 lb* Tested by hydraulic pressure to *270 lb* Date of test *21-10-15*

No. of Certificate *13273* Can each boiler be worked separately _____ Area of fire grate in each boiler *35.5 sq ft* No. and Description of safety valves to each boiler *2 Spring valves* Area of each valve *5.94 sq in* Pressure to which they are adjusted *135 lb*

Are they fitted with casing gear *no* 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 *11"* Inside Mean dia. of boilers *11' 0"* Length *10' 0"*

Material of shell plates *Steel* Thickness *3/4"* Range of tensile strength *28632* Are the shell plates welded or flanged *no*

Descrip. of riveting: cir. seams *DR* long. seams *TR DBS* Diameter of rivet holes in long. seams *7/8"* Pitch of rivets *5 5/8"*

Gap of plates or width of butt straps *13 3/4"* Percentages of strength of longitudinal joint rivets *84.8* plate *84.4* Working pressure of shell by rules *141 lb* Size of manhole in shell *16" x 12"* Size of compensating ring *6" x 3/4"* No. and Description of Furnaces in each boiler *2 Plain* Material *Steel* Outside diameter *3'-6"* Length of plain part *top 78 3/4"* Thickness of plates *top 4 3/8"* *bottom 8 6"* *bottom 6 4"*

Description of longitudinal joint *weld* No. of strengthening rings *nil* Working pressure of furnace by the rules *135 lb* Combustion chamber plates: Material *Steel* Thickness: Sides *17/32"* Back *17/32"* Top *17/32"* Bottom *15/16"* Pitch of stays to ditto: Sides *8 x 7 1/2"* Back *7 1/2 x 7 1/2"*

Top *8 x 7 1/2"* If stays are fitted with nuts or riveted heads *nuts* Working pressure by rules *146 lb* Material of stays *Steel* Diameter at smallest part of area supported by each stay *60 sq in* Working pressure by rules *135 lb* End plates in steam space: Material *Steel* Thickness *1 3/8"*

Pitch of stays *15 x 14 1/2"* How are stays secured *nuts* Working pressure by rules *143 lb* Material of stays *Steel* Diameter at smallest part *3' 0 3/4" area*

Area supported by each stay *217 sq in* Working pressure by rules *144 lb* Material of Front plates at bottom *Steel* Thickness *1 1/8"* Material of Lower back plate *Steel* Thickness *1 1/8"* Greatest pitch of stays *13"* Working pressure of plate by rules *147 lb* Diameter of tubes *3 1/4"*

Pitch of tubes *4 1/2" x 4 1/2"* Material of tube plates *Steel* Thickness: Front *1 1/8"* Back *5/8"* Mean pitch of stays *10 1/2"* Pitch across wide water spaces *14" 8 5/8" DP* Working pressures by rules *183 lb* Girders to Chamber tops: Material *Steel* Depth and thickness of girder at centre *6 3/4" x 1 1/8"* Length as per rule *26.8"* Distance apart *7 1/2"* Number and pitch of Stays in each *Two 8"*

Working pressure by rules *144 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 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 casing gear _____

Survey request form No *1739* attached

The foregoing is a correct description,
A. W. Dalglisk Manufacturers

Dates of Survey } During progress of work in shops - - } 1915. March 22. Apr 9. 20. May 6. 12. 26. Jun. 3. 23. July 13. 27. Is the approved plan of boiler forwarded herewith *yes* a duplicate while building } During erection on board vessel - - - } Aug 18. Sept 8. 15. 23. 27. Oct 8. 13. 21. Total No. of visits *18*

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *This boiler has been built under special survey and the workmanship is good*

Survey Fee £ *3 : 10 :* } When applied for, 191.....
Travelling Expenses (if any) £ : : } When received, 191.....

Committee's Minute *GLASGOW 16 NOV. 1915*
Assigned *TRANSMIT TO LONDON*

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

FRI. JAN. 14. 1916

