

SAT. JAN. 31. 1914

Sld Rpt No 25993

Rpt. 5a.

REPORT ON BOILERS.

No. 8247

Received at London Office

MON. DEC. 29. 1913

Date of writing Report 23/12/13 1913 When handed in at Local Office 23. 12. 1913 Port of MIDDLESBRO'
 No. in Survey held at Stockton-on-Tees Date, First Survey 23rd Sept. Last Survey 12th Dec 1913.
 Reg. Book. New Steel S.S. Kelsomoor (Number of Visits 10) Gross 3174
 on the New Steel S.S. Kelsomoor (S.S. No 221) Tons Net 1962
 Master W. Waddle Built at Sunderland By whom built John Blumer & Co When built 1914
 Engines made at Sunderland By whom made North Eastern Nav Eng Co Ltd. When made 1914
 Boilers made at Stockton By whom made Thos Riley Bros Ltd (No 4543) When made 1913
 Registered Horse Power _____ Owners Elbow Line Ltd Port belonging to London

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel John Spencer Stous

Letter for record (S) Total Heating Surface of Boilers 765 sq ft Is forced draft fitted no No. and Description of Boilers One single ended Working Pressure 100 Tested by hydraulic pressure to 200 Date of test 13.12.13
 No. of Certificate 5208 Can each boiler be worked separately ✓ Area of fire grate in each boiler 28.4 sq ft No. and Description of safety valves to each boiler Two spring loaded Area of each valve 5.9 sq in Pressure to which they are adjusted 103 lbs
 Are they fitted with casing 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 10 in main deck Mean dia. of boilers 9'-6" Length 9'-6"
 Material of shell plates steel Thickness 17/32" Range of tensile strength 28-32 Are the shell plates welded or flanged no
 Descrip. of riveting: cir. seams 2-R. lap long. seams 2B-2 Riv Diameter of rivet holes in long. seams 13/16" Pitch of rivets 4 1/2"
3 Rivts per pitch
 Width of butt straps 8 1/2 x 17/32" Per centages of strength of longitudinal joint rivets 97.5 Working pressure of shell by plate 82.0
 Rules 103 Size of manhole in shell 19 x 15" Size of compensating ring 7 x 7/8 in No. and Description of Furnaces in each boiler 2 plain Material steel Outside diameter 35" Length of plain part 70" Thickness of plates 3/8" crown 3/8" bottom 1/2" mean 1/2"
 Description of longitudinal joint Weld No. of strengthening rings none Working pressure of furnace by the rules 110 Combustion chamber plates: Material steel Thickness: Sides 5/8" Back 1/2" Top 1/2" Bottom 5/8" Pitch of stays to ditto: Sides 9 in Back 9 1/2 x 8 1/2"
 Top 9 x 8 stays are fitted with nuts or riveted heads nuts Working pressure by rules 103 Material of stays steel Diameter at smallest part 9/16" Area supported by each stay 74 Working pressure by rules 104 End plates in steam space: Material steel Thickness 3/4"
 Pitch of stays 14 1/2 to tubes 6 x 1/2 washers Working pressure by rules 101 Material of stays steel Diameter at smallest part 2.87
 Area supported by each stay 271.5 Working pressure by rules 110 Material of Front plates at bottom steel Thickness 3/4" Material of lower back plate steel Thickness 3/4" Greatest pitch of stays 13 x 8 1/2" Working pressure of plate by rules 166 Diameter of tubes 3 1/4"
 Pitch of tubes 4 1/2 x 4 1/2" Material of tube plates steel Thickness: Front 3/4" Back 5/8" Mean pitch of stays 10 1/2" Pitch across wide water spaces 13 1/2" Working pressures by rules 106 Girders to Chamber tops: Material steel Depth and thickness of girder at centre 6 1/2 x 1 1/2" Length as per rule 28" Distance apart 9" Number and pitch of Stays in each 208"
 Working pressure by rules 103 Superheater or Steam chest: how connected to boiler none 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 _____
 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 NO. 761 ATTACHED

FOR RILEY BROS. (BOILERMAKERS) LIMITED, The foregoing is a correct description,

Manufacturer.

Dates of Survey: During progress of work in shops - 23rd Sept. 27th Oct. 2. 7. 9. Dec. 8. 13.
 while building: During erection on board vessel - Dec. 31. Jan 6. 9. 16.

Is the approved plan of boiler forwarded herewith yes
 Total No. of visits 11

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under special survey; is of good material and workmanship and on completion was tested by hydraulic pressure with satisfactory results. It has been securely fitted in place, mountings fitted & safety valves adjusted under steam.

Survey Fee ... £ 2-11-0 When applied for, 191
 Travelling Expenses (if any) £ ? When received, 191

Wm Morrison William Dutton
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute

TUE. FEB. 3-1914

Assigned



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