

REPORT ON BOILERS

No. 24592

RECEIVED 13 SEP 1910

Received at London Office

Date of writing Report Sept. 1st 1910 When handed in at Local Office Sept. 5th 1910. Port of Sunderland
 No. in Survey held at Sunderland Date, First Survey August 22 1910 Last Survey Sept. 2nd 1910
 Reg. Book. S. S. Moorlands (Number of Visits 1) Gross 3600
 on the S. S. Moorlands Tons Net 2281
 Master S. Hird Built at Sunderland By whom built William Doxford & Sons Ltd. When built 1910
 Engines made at Sunderland By whom made William Doxford & Sons Ltd. when made 1910
 Boilers made at Sunderland By whom made William Doxford & Sons Ltd. when made 1910
 Registered Horse Power _____ Owners The Eskdale Steam Shipping Co. Port belonging to Whitby

MULTITUBULAR BOILERS ~~FOR DONKEY~~ FOR DONKEY.—Manufacturers of Steel John Spencer & Sons
 (Letter for record \$ _____) Total Heating Surface of Boilers 1004.1 sq. ft. Is forced draft fitted no No. and Description of Boilers One single ended
 Working Pressure 100 lbs Tested by hydraulic pressure to 200 lbs Date of test 25-9-10
 No. of Certificate 2846 Can each boiler be worked separately ✓ Area of fire grate in each boiler 28.125 sq. ft. No. and Description of safety valves to each boiler One double, spring loaded Area of each valve 7.0686 sq. in. Pressure to which they are adjusted 104 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 6" Mean dia. of boilers 10'-6" Length 10'-0"
 Material of shell plates Steel Thickness 2 1/2" Range of tensile strength 28-32 tons. Are the shell plates welded or flanged no
 Descrip. of riveting: cir. seams S. R. long. seams T. R. Lap Diameter of rivet holes in long. seams 1 5/16" Pitch of rivets 3 1/2"
 Lap of plates or width of butt straps 6 9/16" Per centages of strength of longitudinal joint: rivets 46 Working pressure of shell by rules 101.5 lbs. Size of manhole in shell 16" x 12" Size of compensating ring 8 x 2 1/2" No. and Description of Furnaces in each boiler 2. Plain
 Material Steel Outside diameter 38 1/2" Length of plain part top 76" Thickness of plates crown 1 1/2" bottom 3/8"
 Description of longitudinal joint Weld No. of strengthening rings ✓ Working pressure of furnace by the rules 104 lbs Combustion chamber plates: Material Steel Thickness: Sides 1 1/2" Back 1 1/2" Top 1 1/2" Bottom 5/8" Pitch of stays to ditto: Sides 9 x 8 1/4" Back 9 1/4 x 9 1/4"
 Top 7 1/2 x 10 1/2" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 100 lbs Material of stays Steel Diameter at smallest part 1.12 Area supported by each stay 74.3 Working pressure by rules 106 lbs End plates in steam space: Material Steel Thickness 2 3/8"
 Pitch of stays 15 1/2" x 15" How are stays secured D. N. Wash Working pressure by rules 105 lbs Material of stays Steel Diameter at smallest part 1 23/32"
 Area supported by each stay 237.5 Working pressure by rules 105 lbs Material of Front plates at bottom Steel Thickness 7/8" Material of Lower back plate Steel Thickness 1 1/2" Greatest pitch of stays 12 1/2" Working pressure of plate by rules 100 lbs Diameter of tubes 3 1/2"
 Pitch of tubes 4 1/2" x 4 3/4" Material of tube plates Steel Thickness: Front 23/32" Back 5/8" Mean pitch of stays 10 1/16" Pitch across wide water spaces 13 1/2" Working pressures by rules 108 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 6 7/8" x 1 1/4" Length as per rule 2'-9" Distance apart 10 1/2" Number and pitch of Stays in each 2 @ 7 1/8"
 Working pressure by rules 103 lbs 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 _____
 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 _____

WILLIAM DOXFORD & SONS, Limited
 The foregoing is a correct description,
Wm Doxford Manufacturer.

Dates of Survey: During progress of work in shops - - - 1910. Aug. 22, 24, 29. Sep. 2. Is the approved plan of boiler forwarded herewith yes
 while building (During erection on board vessel - - -) Total No. of visits 1

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This Boiler has been built under special survey, the materials and workmanship are of good quality and the hydraulic test proved satisfactory. It has been securely fitted on board & its safety valves adjusted under steam to the above pressure.

Survey Fee £ _____ : _____ : _____ When applied for. 19.....
 Travelling Expenses (if any) £ _____ : _____ : _____ When received. 19.....
William Butler
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute FRI. 16 SEP 1910
 Assigned See minute on Sld Rpt 24592 attached
 Lloyd's Register Foundation W850-0022