

REPORT ON BOILERS.

No. 26150
WED. JUN. 24 1914.Received at London Office
Date of writing Report 22 JUN. 1914 When handed in at Local Office 23 JUN. 1914 Port of SUNDERLAND

No. in Survey held at SUNDERLAND Date, First Survey 6 March Last Survey 22 June 1914
 Reg. Book. on the New Steel S.S. "Ladoga" (Number of Visits ✓) Gross 1917 Tons Net 1154
 Master A. W. Reid Built at Sunderland By whom built S. P. Austin & Son Ltd. (2161.C.) When built 1914
 Engines made at Sunderland By whom made North Eastern Marine Eng Co. Ltd. When made 1914
 Boilers made at Sunderland By whom made North Eastern Marine Eng Co. Ltd. When made 1914
 Registered Horse Power 194 Owners W. Thomson & Co. Port belonging to Leith

MULTITUBULAR BOILERS ~~MAIN, AUXILIARY OR~~ **DONKEY.** — Manufacturers of Steel J. Spencer & Son Ltd. Newburn
 (Letter for record (S.)) Total Heating Surface of Boilers 642 sq. ft. Is forced draft fitted No. No. and Description of
 Boilers one single ended Working Pressure 120 lbs. Tested by hydraulic pressure to 240 lbs. Date of test 22-5-14
 No. of Certificate 3214 Can each boiler be worked separately ✓ Area of fire grate in each boiler 26 sq. ft. No. and Description of
 safety valves to each boiler Two spring loaded Area of each valve 3.94 sq. ft. Pressure to which they are adjusted 125 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 10' 6" on main deck Mean dia. of boilers 10' 0" Length 9' 0"
 Material of shell plates Steel Thickness 19/32 Range of tensile strength 28 3/4 to 32 1/2 Are the shell plates welded or flanged No.
 Descrip. of riveting: cir. seams D.R. long. seams D.R.D.B.S. Diameter of rivet holes in long. seams 15/16 Pitch of rivets 6"
 Lap of plates or width of butt straps 10 5/8 Per centages of strength of longitudinal joint rivets 86.5 plate 84.3 Working pressure of shell by
 rules 120.1 lbs Size of manhole in shell 16" x 12" Size of compensating ring 9 1/2" x 19/32 No. and Description of Furnaces in each
 boiler Two plain Material Steel Outside diameter 2' 11 3/4" Length of plain part top 62" Thickness of plates crown 1 1/2" bottom 2"
 Description of longitudinal joint weld. No. of strengthening rings none Working pressure of furnace by the rules 121 lbs Combustion chamber
 plates: Material Steel Thickness: Sides 1/16" Back 1/16" Top 1/16" Bottom 1/16" Pitch of stays to ditto: Sides 14 3/8" x 8" Back 11 1/2" x 11 3/4"
 Top 14" x 8" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 121 lbs. Material of stays Steel Area
 smallest part 1 1/4" x 1 1/4" Area supported by each stay 115 1/2 sq. in Working pressure by rules 140 + 121 End plates in steam space: Material Steel Thickness 13/16"
 Pitch of stays 18" x 14" How are stays secured D.N. Wash Working pressure by rules 120 lbs Material of stays Steel Diameter at smallest part 3-14"
 Area supported by each stay 252 sq. in Working pressure by rules 129 lbs Material of Front plates at bottom Steel Thickness 13/16" Material of
 Lower back plate Steel Thickness 13/16" Greatest pitch of stays 15" x 11 3/4" Working pressure of plate by rules 125 lbs Diameter of tubes 3 1/4"
 Pitch of tubes 14 1/16" x 14 3/8" Material of tube plates Steel Thickness: Front 13/16" Back 11/16" Mean pitch of stays 11-9" Pitch across wide
 water spaces 14 1/8" Working pressures by rules 120 lbs Girders to Chamber tops: Material Steel Depth and thickness of
 girder at centre 2 @ 4 3/4" x 11 3/4" Length as per rule 24 5/8" Distance apart 14" Number and pitch of Stays in each 2 @ 8"
 Working pressure by rules 126 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 ✓

The foregoing is a correct description,

NORTH EASTERN MARINE ENGINEERING CO. LTD.
J. T. Harrison Secy Manufacturer.

Dates of Survey During progress of work in shops - - - See Machinery report
 while building During erection on board vessel - - -

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

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 & the hydraulic test proved satisfactory. It is securely fixed in place, mounted, & safety valves have been adjusted under steam.

Survey Fee ... £ 2. 0. 0. When applied for, 23/6/14
 Travelling Expenses (if any) £ : : When received, 23/6/14

William Butler.
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute

FRI. JUN. 26 1914

Assigned

Lloyd's Register
 Foundation
 W830-0093