

REPORT ON BOILERS.

Aberdeen No 10989

THU. NOV. 15 1912

WED. OCT. 30 1912

Received at London Office

Date of writing Report 28/10/12 When handed in at Local Office Port of Greenock
 No. in Survey held at Port Glasgow Date, First Survey 15th June 1912 Last Survey 21st Oct. 1912
 Reg. Book. on the S.S. Loch Morar mess: The John Dunbar Tonnage & Co. Ltd. 4000 Tons (Number of Visits 13) Gross 228.14 Net 86.48
 Master J. B. Booth Built at Aberdeen By whom built The John Dunbar Tonnage & Co. Ltd. When built 1912
 Engines made at Coatbridge By whom made W. V. Lidgerwood when made 1912
 Boilers made at Port Glasgow By whom made Clyde Iron Works, Coy. Ltd. when made 1912
 Registered Horse Power 41 Owners United Steam Fishing Coy. of Aberdeen Port belonging to Aberdeen

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Steel Coy of Scotland
 Letter for record S. Total Heating Surface of Boilers 1250 sq. ft. Is forced draft fitted No. No. and Description of Boilers One Cylinder Multi-Tube Single Working Pressure 180 lbs Tested by hydraulic pressure to 260 lbs Date of test 21/10/12
 No. of Certificate 1079 Can each boiler be worked separately ✓ Area of fire grate in each boiler 48.5 sq. ft. No. and Description of Safety valves to each boiler ✓ Area of each valve ✓ Pressure to which they are adjusted ✓
 Are they fitted with easing gear ✓ 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 ✓ Mean dia. of boilers 12' 6" Length 10' 3"
 Material of shell plates Steel Thickness 1 1/2" Range of tensile strength 28 & 32 tons Are the shell plates welded or flanged No.
 Description of riveting: cir. seams Lap Double long seams D. Butt Straps Diameter of rivet holes in long. seams 1 1/8" Pitch of rivets 7 1/8" 3 1/16"
 Gap of plates or width of butt straps 16 1/2" Per centages of strength of longitudinal joint rivets 91.2 Working pressure of shell by plate 85.7
 Plates 182 lbs Size of manhole in shell 16 x 12" Size of compensating ring No. and Description of Furnaces in each boiler
 Boiler 3: Plain Material Steel Outside diameter 39 1/8" Length of plain part 44' Thickness of plates 3 1/2" crown 3 1/2" bottom 4"
 Description of longitudinal joint Weld No. of strengthening rings 1 Ring Working pressure of furnace by the rules 186 lbs Combustion chamber plates: Material Steel Thickness: Sides 2 1/2" Back 2 1/2" Top 2 1/2" Bottom 3/4" Pitch of stays to ditto: Sides 9 1/2 x 8" Back 9 1/2 x 8"
 Top 9 1/2 x 8" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 181 lbs Material of stays Steel Diameter at smallest part 1 5/8" Area supported by each stay 78" Working pressure by rules 235 lbs End plates in steam space: Material Steel Thickness 1 3/32"
 Pitch of stays 23 x 17" How are stays secured Double Nuts Working pressure by rules 181 lbs Material of stays Steel Diameter at smallest part 2.09"
 Area supported by each stay 391" Working pressure by rules 200 lbs Material of Front plates at bottom Steel Thickness 3/8" Material of lower back plate Steel Thickness 2 1/2" Greatest pitch of stays 12 3/4" Working pressure of plate by rules 193 lbs Diameter of tubes 3 1/2"
 Pitch of tubes 4 1/4 x 4 5/8" Material of tube plates Steel Thickness: Front 1/8" Back 3/4" Mean pitch of stays 10.3" Pitch across wide inter spaces 13 1/2" Working pressures by rules 182 lbs 190 lbs Girders to Chamber tops: Material Steel Depth and thickness of order at centre 8' x 12" Length as per rule 30 1/2" Distance apart 5 3/8" Number and pitch of Stays in each 2: 9 1/4"
 Working pressure by rules 180 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 ✓
 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,
 THE CLYDE SHIPBUILDING & ENGINEERING CO. LIMITED, Manufacturer.
 John Brown

Dates Survey while building: During progress of work in shops -- 1912. June 15. 19. 29. July 26. 30. Aug. 8. Sept. 2. Is the approved plan of boiler forwarded herewith With report on main boiler for 10379 91.
 During erection on board vessel --- 17. 25. Oct. 1. 6. 15. 21. Total No. of visits 13.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)
 This main Boiler was built under special survey and the materials and workmanship all good. It has been despatched to Aberdeen where it will be fitted on board of the vessel. The boiler has now been fitted on board above named vessel. For recommendation of class See Aberdeen No 10989.

Survey Fee ... £ 4.00 When applied for, 19
 Travelling Expenses (if any) £ : : When received, 9-12-12
 Wm. Austin, Engineer
 Ridley Howell

Committee's Minute GLASGOW 29 OCT. 1912
 Assigned Transmit to London