

REPORT ON BOILERS.

No. 42003

Received at London Office JUN 14 1922

Date of writing Report 12.6.22 When handed in at Local Office 13.6.22 Port of Glasgow
 No. in Survey held at Dalmuir Date, First Survey 26.5.1914 Last Survey 7.6.1922
 Reg. Book. on the S.S. Tyrrenia (Number of Visits 85) Gross 16243 Tons Net 9645
 Master Built at Dalmuir By whom built Tom Beardmore & Co. When built 1922
 Engines made at Dalmuir By whom made Tom Beardmore & Co. (P. 557) When made 1922
 Boilers made at Dalmuir By whom made Tom Beardmore & Co. (P. 507) When made 1922
 Registered Horse Power Owners The Lunan Steamship Co. Ltd. Port belonging to Liverpool

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Tom Beardmore & Co.

(Letter for record) Total Heating Surface of Boilers 9721.26 ✓ Is forced draft fitted yes ✓ No. and Description of Boilers 3 Single ended ✓ Working Pressure 220 ✓ Tested by hydraulic pressure to 386 ✓ Date of test 23/2/20, 4/4/20
 No. of Certificate 15406, 15327 Can each boiler be worked separately yes ✓ Area of fire grate in each boiler 82.9 ✓ No. and Description of safety valves to each boiler double, spring loaded ✓ No. of each valve 9.62" ✓ Pressure to which they are adjusted 225 ✓
 Are they fitted with easing gear yes ✓ 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 well clear ✓ diam. of boilers 17.6" Length 11.6" ✓
 Material of shell plates steel ✓ Thickness 1 3/32 ✓ Range of tensile strength 30 to 34 tons ✓ Are the shell plates welded or flanged 220 ✓
 Descrip. of riveting: cir. seams double lap ✓ longitudinal seams triple butt ✓ Diameter of rivet holes in long. seams 1 3/32 ✓ Pitch of rivets 10 1/2" ✓
 Lap of plates or width of butt straps 23 1/2" ✓ Per centages of strength of longitudinal joint rivets 92.0 ✓ plate 84.2 ✓ Working pressure of shell by rules 230 ✓ Size of manhole in shell 16 x 12 ✓ Size of compensating ring 40 x 36 1/2 x 1 3/32 ✓ No. and Description of Furnaces in each boiler 4 Mousens ✓ Material steel ✓ Outside diameter 48 7/8" ✓ Length of plain part top 1 ✓ bottom 1 ✓ Thickness of plates crown 2 1/16 ✓ bottom 3 1/16 ✓
 Description of longitudinal joint weld ✓ No. of strengthening rings ✓ Working pressure of furnace by the rules 231 ✓ Combustion chamber plates: Material steel ✓ Thickness: Sides 2 3/32 ✓ Back 2 3/32 ✓ Top 2 3/32 ✓ Bottom 1 1/2 ✓ Pitch of stays to ditto: Sides 9 1/2 x 9 1/2 ✓ Back 10 x 7 3/8" ✓
 Top 9 1/2 x 8" ✓ If stays are fitted with nuts or riveted heads nuts ✓ Working pressure by rules 237 ✓ Material of stays steel ✓ Area at smallest part 2.03 ✓ Area supported by each stay 89" ✓ Working pressure by rules 230 ✓ End plates in steam space: Material steel ✓ Thickness 1 1/2" ✓
 Pitch of stays 17 3/8" ✓ How are stays secured 2 nuts ✓ Working pressure by rules 221 ✓ Material of stays steel ✓ Area at smallest part 7.06 ✓
 Area supported by each stay 318 ✓ Working pressure by rules 231 ✓ Material of Front plates at bottom steel ✓ Thickness 1 ✓ Material of Lower back plate steel ✓ Thickness 3/32 ✓ Greatest pitch of stays 13 3/4" ✓ Working pressure of plate by rules 400 ✓ Diameter of tubes 2 3/4" ✓
 Pitch of tubes 4" x 4" ✓ Material of tube plates steel ✓ Thickness: Front 1" ✓ Back 1 1/2" ✓ Mean pitch of stays 10" ✓ Pitch across wide water spaces 13 3/4" ✓ Working pressures by rules 292 ✓ Girders to Chamber tops: Material steel ✓ Depth and thickness of girder at centre 9 x 3/4" ✓ Length as per rule 30 3/2 ✓ Distance apart 8" ✓ Number and pitch of Stays in each 2) 9 1/2" ✓
 Working pressure by rules 260 ✓ Steam dome: description of joint to shell none ✓ % of strength of joint
 Diameter Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes
 Pitch of rivets Working pressure of shell by rules Crown plates Thickness How stayed

SUPERHEATER. Type Schmidt Date of Approval of Plan 3rd Manchester Rept. Tested by Hydraulic Pressure to 660

Date of Test Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler
 Diameter of Safety Valve 2" Pressure to which each is adjusted 230 Is Easing Gear fitted yes

The foregoing is a correct description,
 FOR WILLIAM BEARDMORE & CO., LIMITED
 Manufacturer.

Dates of Survey During progress of work in shops - - See machinery report attached Is the approved plan of boiler forwarded herewith
 while building During erection on board vessel - - Total No. of visits 85

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have been built under special survey. The materials and workmanship are of good description. They have been well fitted on board this vessel and will work steam.

Survey Fee ... £ 6 charges
 Travelling Expenses (if any) £ on max. 19

A.M. McKeand
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 13 JUN 1922

Assigned See accompanying Mach. Report.



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