

REPORT ON BOILERS

No. 16497

WED. JUL. 2nd 1913

Received at London Office

Date of writing Report 1913 When handed in at Local Office 27/6/1913 Port of Greenock
 No. in Survey held at Greenock Date, First Survey 4th Dec. 1911 Last Survey 26th June 1913
 Reg. Book. UNCAS. (Number of Visits 101) Gross 4722 Tons Net 2897
 on the SCREW STEAMER
 Master P. Stewart Built at Greenock By whom built Greenock Grangemouth Dry Dock Co. When built 1913
 Engines made at Greenock By whom made Rankin & Blackmore When made 1913
 Boilers made at Greenock By whom made Rankin & Blackmore When made 1913
 Registered Horse Power _____ Owners Bank Storage & Carriage Co. Ltd Port belonging to Greenock

MULTITUBULAR BOILERS—~~MAIN, AUXILIARY OR DONKEY.~~—Manufacturers of Steel Steel Coy. of Scotland.

(Letter for record X) Total Heating Surface of Boilers 12885 sq. ft. Is forced draft fitted no No. and Description of Boilers 1 plant hull single Working Pressure 120 lbs Tested by hydraulic pressure to 240 lbs Date of test 21/4/13
 No. of Certificate 1110 Can each boiler be worked separately ✓ Area of fire grate in each boiler 38 sq. ft. No. and Description of safety valves to each boiler 2: Over Spring Area of each valve 4.06 sq. in. 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 about 12 in. Mean dia. of boilers 12' 0" Length 11' 0"
 Material of shell plates Steel Thickness 23/32 Range of tensile strength 28 to 32 tons Are the shell plates welded or flanged no
 Descrip. of riveting: cir. seams Lap Double long. seams Double Butt Diameter of rivet holes in long. seams 31/32 Pitch of rivets 5 1/2 2 1/2
 Lap of plates or width of butt straps 10 1/2 Per centages of strength of longitudinal joint rivets 83.2 Working pressure of shell by rules 121 lbs Size of manhole in shell 16" x 12" Size of compensating ring 30 x 26 x 2 3/32 No. and Description of Furnaces in each boiler 2: Plain Material Steel Outside diameter 44 1/2 Length of plain part 49 Thickness of plates 21 32
 Description of longitudinal joint S. S. No. of strengthening rings none Working pressure of furnace by the rules 133 lbs Combustion chamber plates: Material Steel Thickness: Sides 13/32 Back 13/32 Top 13/32 Bottom 3/4 Pitch of stays to ditto: Sides 8" x 4 1/8" Back 8" x 8"
 Top 8" x 4 1/8" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 135 lbs Material of stays Sp. Iron Diameter at smallest part 1 1/2 Area supported by each stay 64 Working pressure by rules 153 lbs End plates in steam space: Material Steel Thickness 59 64
 Pitch of stays 18 x 16 How are stays secured Double nut washers Working pressure by rules 135 lbs Material of stays Steel Diameter at smallest part 2 3/8
 Area supported by each stay 288 Working pressure by rules 153 lbs Material of Front plates at bottom Steel Thickness 76 Material of Lower back plate Steel Thickness 76 Greatest pitch of stays 8 Working pressure of plate by rules 141 lbs Diameter of tubes 3 1/4
 Pitch of tubes 4 3/8 x 4 1/2 Material of tube plates Steel Thickness: Front 15/16 Back 15/16 Mean pitch of stays 11 1/4 Pitch across wide water spaces 14 Working pressures by rules 160 lbs 228 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 8 1/2 x 17 1/2 Length as per rule 34 1/2 Distance apart 8 Number and pitch of Stays in each 3: 4 1/4
 Working pressure by rules 124 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,
Rankin & Blackmore Manufacturer.

Dates of Survey During progress of work in shops - - Is the approved plan of boiler forwarded herewith yes
while building During erection on board vessel - - - See accompanying report. Total No. of visits 101

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)
This Boiler was built under special survey and the materials and workmanship are good.
For recommendations see the accompanying sheet.

Survey Fee £ : _____ When applied for, 191
 Travelling Expenses (if any) £ : _____ When received, 191

Wm. R. Austin
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute GLASGOW 17-JUL-1913
 Assigned See minute on accompanying machinery report.



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