

REPORT ON BOILERS.

No. 34057

Received at London Office 1 AUG 1917

Date of writing Report 4.4.1917 When handed in at Local Office 1917 Port of Glasgow
 No. in Survey held at Glasgow Date, First Survey 8th March 1916 Last Survey 11th April 1917
 Req. Book. 515 "Broompark" (Number of Visits 34) Gross Tons }
 on the } Net
 Master Built at Mangemouth By whom built Cunard Mangemouth & Co. Ltd. When built 1917
 Engines made at Glasgow By whom made Dunsmuir Jackson Ltd (462) When made
 Boilers made at Glasgow By whom made Dunsmuir Jackson Ltd (1368) When made 1917
 Registered Horse Power Owners Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Edwille, Gb & Steel Co, Glasgow

(Letter for record R) Total Heating Surface of Boilers 3734 # Is forced draft fitted No. and Description of Boilers 2 Single Ended Working Pressure 180 Tested by hydraulic pressure to 300 Date of test 4-4-17
 No. of Certificate 13450 Can each boiler be worked separately Yes Area of fire grate in each boiler 563/4 # No. and Description of safety valves to each boiler 2 Spring valves Area of each valve 7.07 # Pressure to which they are adjusted 185 lbs
 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 10" Mean dia. of boilers 14.7 1/16" Length 10-6"
 Material of shell plates S Thickness 1 1/16" Range of tensile strength 28-32 Are the shell plates welded or flanged
 Descrip. of riveting: cir. seams DR long. seams TRIDBS Diameter of rivet holes in long. seams 1 1/4" Pitch of rivets 8 1/2"
 Lap of plates or width of butt straps 1-6 3/4" Per centages of strength of longitudinal joint rivets 91.4 plate 85.29 # Working pressure of shell by rules 181. Size of manhole in shell 16x12 Size of compensating ring 6 3/4 x 13 1/16 No. and Description of Furnaces in each boiler 3 Corrugated Material S Outside diameter 3-9 Length of plain part top Thickness of plates crown 14 1/32 bottom 14 1/32
 Description of longitudinal joint weld No. of strengthening rings Working pressure of furnace by the rules 182 Combustion chamber plates: Material S Thickness: Sides 5/8" Back 6/8" Top 5/8" Bottom 13/16" Pitch of stays to ditto: Sides 4 7/8 + 8 1/2" Back 8 3/4 + 8"
 Top 4 7/8 + 8 1/2" If stays are fitted with nuts or riveted heads DN Working pressure by rules 194 Material of stays Iron Area at smallest part 199 2/3 + 303 # Area supported by each stay 40 # Working pressure by rules 210 End plates in steam space: Material S Thickness 1 5/32
 Pitch of stays 19 3/8 + 18 # How are stays secured DN Working pressure by rules 186 Material of stays S Area at smallest part 5 7/8 #
 Area supported by each stay 335 # Working pressure by rules 181 Material of Front plates at bottom S Thickness 1 1/32 Material of Lower back plate S Thickness 29/32 Greatest pitch of stays 15 + 8 3/4 Working pressure of plate by rules 188 Diameter of tubes 3 1/2
 Pitch of tubes 4 7/8 + 5 # Material of tube plates S Thickness: Front 1 1/32 Back 29/32 Mean pitch of stays 12 5/16 Pitch across wide water spaces 14 1/2 Working pressures by rules 181 Girders to Chamber tops: Material Iron Depth and thickness of girder at centre 8x1 (2) Length as per rule 2-6 3/16 Distance apart 8 3/4 Number and pitch of Stays in each 3 at 7 7/8
 Working pressure by rules 184 Steam dome: description of joint to shell % 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 Date of Approval of Plan Tested by Hydraulic Pressure to
 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 Pressure to which each is adjusted Is Easing Gear fitted
 DUNSMUIR & JACKSON, Limited.
 The foregoing is a correct description,
 James Hitches Director Manufacturer.

Dates of Survey During progress of work in shops 1916 March 8, 17, 24, 31, April 6, 14, 18, May 2, 9, 16, 23, June 2, 9, 16, July 6, 13, 20, 27, 31. Is the approved plan of boiler forwarded herewith Yes
 while building During erection on board vessel 1917 Feb. 2, 9, 15, 22, Mar. 1, 8, 15, 22, Apr. 5, 12, 19, 26, May 3, 10, 17, 24, 31. Total No. of visits 34

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have been built under special survey in accordance with the approved plan & the workmanship & material are of good quality. These boilers are duplicate of No. 405. L.S. Ref. No. 35846
 This Report accompanies trial of the Machinery

Survey Fee ... When applied for, 191
 Travelling Expenses ... When received, 191
 charged on Machinery

Committee's Minute GLASGOW. 31 JUL 1917. TUE. 18 SEP. 1917
 Assigned See accompanying machinery report.
 W. Gordon Muclian 2021
 Engineer Surveyor to Lloyd's Register of Shipping.
 Lloyd's Register Foundation W489 0013