

REPORT ON BOILERS.

No. 41917

Received at London Office

Date of writing Report 8.5.1922 When handed in at Local Office 8.5.1922 Port of Glasgow
 Date, First Survey 19th May 1919 Last Survey 2nd May 1922
 (Number of Visits 188) Gross Tons 21517 Net Tons 12811
 Survey held at Glasgow
 on the T/S S Empress of Canada
 Built at Glasgow By whom built Fairfield & Co. Ltd. (528) When built 1922
 Engines made at Glasgow By whom made Fairfield & Co. Ltd. (528) When made 1922
 Boilers made at ditto By whom made ditto (528) When made 1922
 Registered Horse Power _____ Owners The Canadian Pacific Steamship Co. Port belonging to London

MULTITUBULAR BOILERS—MAIN, _____—Manufacturers of Steel Bolton, Spencer, & Co. Ltd. 1800
 Letter for record R Total Heating Surface of Boilers 9864 sq ft Is forced draft fitted Yes No. and Description of Boilers 4 Single Ended
 Working Pressure 210 Tested by hydraulic pressure to 380 Date of test 15.11.1922
 of Certificate 15281, 15286 Can each boiler be worked separately Yes Area of fire grate in each boiler 62.5 sq ft (60 Full) No. and Description of Safety valves to each boiler Double Spring Area of each valve 5.9 sq in Pressure to which they are adjusted 215
 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 12" Mean dia. of boilers 14.9" Length 11-6"
 Material of shell plates S Thickness 1 1/32" Range of tensile strength 30-34 Are the shell plates welded or flanged _____
 Description of riveting: cir. seams DR long. seams TRIDBS Diameter of rivet holes in long. seams 13/32" Pitch of rivets 9 1/16"
 Width of butt straps 20 5/8" Per centages of strength of longitudinal joint rivets 85.45% Working pressure of shell by rules 212
 Size of manhole in shell 16 x 12" Size of compensating ring 33 x 29 x 1 1/2" No. and Description of Furnaces in each boiler 3 Corrugated
 Material S Outside diameter 44 1/4" Length of plain part top Thickness of plates 2 1/32"
 Description of longitudinal joint weld No. of strengthening rings _____ Working pressure of furnace by the rules 226 Combustion chamber
 Material S Thickness: Sides 5/8" Back 5/8" Top 5/8" Bottom 7/8" Pitch of stays to ditto: Sides 7 1/2 x 8 1/8" Back 7 1/2 x 7 5/8"
 If stays are fitted with nuts or riveted heads Yes Working pressure by rules 214 Material of stays Iron Area at smallest part 1.76 sq ft
 Area supported by each stay 62.9 sq ft Working pressure by rules 210 End plates in steam space: Material S Thickness 1 1/32"
 How are stays secured DN Working pressure by rules 211 Material of stays S Area at smallest part 6.268 sq ft
 Area supported by each stay 225 sq ft Working pressure by rules 243 Material of Front plates at bottom S Thickness 1" Material of
 over back plate S Thickness 2 1/32" Greatest pitch of stays 13 x 7 1/2" Working pressure of plate by rules 218 Diameter of tubes 2 1/2"
 Pitch of tubes 33 1/4 x 33 1/4" Material of tube plates S Thickness: Front 1" Back 3/4" Mean pitch of stays 9 3/8" Pitch across wide
 inter spaces 13 1/2" Working pressures by rules 210 Girders to Chamber tops: Material S Depth and thickness of
 order at centre 8 7/8 x 3 1/4 (2) Length as per rule 2-8" Distance apart 4 3/4" Number and pitch of Stays in each 3 at 8 1/8"
 Working pressure by rules 210 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 _____

For THE FOREGOING IS A CORRECT DESCRIPTION,
 AND ENGINEERING CO., LTD. Manufacturer.
R. Strachan

Dates of Survey: During progress of work in shops - - - See accompanying Machinery Report
 while building: During erection on board vessel - - -
 Is the approved plan of boiler forwarded herewith _____
 Total No. of visits 188

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have been built under special survey in accordance with the approved plans. The workmanship & material are of good quality. They have now been securely fitted on board. This Report accompanies that of the Machinery.

Survey Fee ... £ _____ When applied for, _____ 19_____
 Travelling Expenses (if charged on Machinery Report) _____ When received, _____ 19_____
W. Gordon-Mitchell
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 9 MAY 1922
 Assigned See attached machinery report

