

REPORT ON BOILERS

No. 39597
FEB. 11. 1920

Date of writing Report 1919 When handed in at Local Office 9. 2. 1920 Port of Glasgow
 No. in Survey held at Dalmuir Date, First Survey 14/10/18 Last Survey 20/5/19
 Reg. Book. on the T.S.S. OTAKI (Number of Visits 15) Gross Tons 4964
 Master Built at Glasgow By whom built Barclay Curle & Co. Ltd. 574 When built 1920
 Engines made at Glasgow By whom made Do. When made 1920
 Boilers made at Dalmuir By whom made Tom Beardmore & Co. (808) When made 1919
 Registered Horse Power Owners Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Steel Co. of Scotland 10 Colville Street

(Letter for record S) Total Heating Surface of Boilers 5112 Is forced draft fitted Yes No. and Description of Boilers 2 Single ended Working Pressure 200 Tested by hydraulic pressure to 400 Date of test 20/5/19

No. of Certificate 14734 Can each boiler be worked separately Yes Area of fire grate in each boiler 63.3 No. and Description of safety valves to each boiler 2 Spring loaded Area of each valve 9.62 Pressure to which they are adjusted 200 lb

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 Mean dia. of boilers 15' 6" Length 11' 6"

Material of shell plates Steel Thickness 1 1/2" Range of tensile strength 28 & 32 Are the shell plates welded or flanged Yes

Descrip. of riveting: cir. seams Lap double long seams Butt table Diameter of rivet holes in long. seams 1 1/4" Pitch of rivets 9.8125

Lap of plates or width of butt straps 2 1/2" Per centages of strength of longitudinal joint rivets 89.4 Working pressure of shell by rules 200 Size of manhole in shell 16 x 12 Size of compensating ring flanged 37 1/2 x 33 No. and Description of Furnaces in each boiler 3 Deighton Material Steel Outside diameter 50 1/2" Length of plain part top Thickness of plates crown 3/8"

Description of longitudinal joint weld No. of strengthening rings Working pressure of furnace by the rules 200 Combustion chamber plates: Material Steel Thickness: Sides 25/32 Back 3/4 Top 25/32 Bottom 25/32 Pitch of stays to ditto: Sides 0 7/8 x 9 1/4 Back 10 1/4 x 8 3/4

Top 9 1/4 x 10 3/8 If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 212 Material of stays Steel Diameter at smallest part 2.36 Area supported by each stay 99 Working pressure by rules 215 End plates in steam space: Material Steel Thickness 1 1/16"

Pitch of stays 20 1/2 x 2 3/4" How are stays secured 2 1/2" Working pressure by rules 200 Material of stays Steel Diameter at smallest part 9.62"

Area supported by each stay 445 Working pressure by rules 207 Material of Front plates at bottom Steel Thickness 7/8" Material of lower back plate Steel Thickness 7/8" Greatest pitch of stays 13 5/8" Working pressure of plate by rules 202 Diameter of tubes 2 3/4"

Pitch of tubes 3 3/8 x 4" Material of tube plates Steel Thickness: Front 1" Back 3/4" Mean pitch of stays 9.6875 Pitch across wide water spaces 13 5/8" Working pressures by rules 205 Girders to Chamber tops: Material Steel Depth and thickness of

Order at centre 10 1/2 x 7/8 Length as per rule 34 1/2" Distance apart 10 5/8" Number and pitch of Stays in each (3) 9 1/4"

Working pressure by rules 220 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

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

Survey request form 2203 attached to G.L.B. Rpt No. 393 H H The foregoing is a correct description, Manufacturer.

Dates During progress of work in shops 1918 Oct 14 Nov 5 Dec 5 18 1919 Jan 19 Feb 25 Is the approved plan of boiler forwarded herewith Yes

During erection on board vessel Mar 18 20 24 Apr 22 May 6 15 20 Total No. of visits 15

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.

These boilers have now been satisfactorily fitted to the vessel Jan Bastin 9/2/20

Survey Fee ... £ : : } When applied for, 191

Travelling Expenses (if any) £ : : } When received, 191

A. McKeand
Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute GLASGOW 10 FEB 1920

See accompanying machinery report



W208-0081