

REPORT ON BOILERS.

No. 80563

Received at London Office SAT. APR 24 1920

(Boiler No. 2016)

Port of Liverpool

Date of writing Report

When handed in at Local Office

21 APR 1920

Date, First Survey 19th Decr/18 Last Survey 24th Mar 1919

No. in Survey held at Birkenhead

Reg. Book. on the Sps No. 72

(Number of Visits 21) Gross Tons Not

Master Built at Ellesmere Port By whom built Manchester Dry Docks Co. Ltd. When built 1920

Engines made at By whom made When made

Boilers made at Birkenhead By whom made Cammell, Laird & Co. Ltd. When made 1920

Registered Horse Power Owners Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel H. Beardmore & Co. Ltd., J. Walmesley & Co.

(Letter for record S) Total Heating Surface of Boilers 952 sq. ft. Is forced draft fitted No. and Description of Boilers One - Cylindrical Multitubular / Working Pressure 130 lbs Tested by hydraulic pressure to 260 lbs Date of test 21/3/19

No. of Certificate 2061 Can each boiler be worked separately Area of fire grate in each boiler 35 sq. ft. No. and Description of safety valves to each boiler 2 - Spring loaded Area of each valve Pressure to which they are adjusted

Are they fitted with easing gear 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 10'6" Length 10'0"

Material of shell plates Steel Thickness 2 3/32 Range of tensile strength 28/32 tons Are the shell plates welded or flanged No

Descrip. of riveting: cir. seams DR - Lap long. seams DR - double buttstrap Diameter of rivet holes in long. seams 5/16 Pitch of rivets 4'55"

Gap of plates on width of butt straps 9/32 Per centages of strength of longitudinal joint rivets 87.7 Working pressure of shell by plate 80.78

Rules 134 lbs Size of manhole in shell 16" x 12" Size of compensating ring No. and Description of Furnaces in each boiler 2 - Plain Material Steel Outside diameter 3'3 3/4 Length of plain part top 75" Thickness of plates crown 3 5/8" bottom 3 5/8"

Description of longitudinal joint Weld No. of strengthening rings none Working pressure of furnace by the rules 130 lbs Combustion chamber plates: Material Steel Thickness: Sides 17/32 Back 17/32 Top 17/32 Bottom 27/32 Pitch of stays to ditto: Sides 8 1/2" x 7 1/2" Back 8 1/2" x 7 1/2"

Top 8 1/2" x 7 1/2" stays are fitted with nuts or riveted heads Nuts Working pressure by rules 137 lbs Material of stays Steel Area at smallest part 1.19 sq. in. Area supported by each stay 62.68 sq. in. Working pressure by rules 152 lbs End plates in steam space: Material Steel Thickness 27/32

Pitch of stays 16" x 14 1/2" How are stays secured Nuts Working pressure by rules 142 lbs Material of stays Steel Area at smallest part 3.26 sq. in.

Area supported by each stay 236 sq. in. Working pressure by rules 144 lbs Material of Front plates at bottom Steel Thickness 27/32 Material of Lower back plate Steel Thickness 27/32 Greatest pitch of stays 14 1/2" x 7 1/2" Working pressure of plate by rules 181 lbs Diameter of tubes 3" cat.

Pitch of tubes 4 1/2" x 4 1/2" Material of tube plates Steel Thickness: Front 27/32 Back 1/4 Mean pitch of stays 10 5/8 Pitch across wide water spaces 14" Working pressures by rules 130 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 2 - 6" x 2 3/8 Length as per rule 2' 4 3/8 Distance apart 7 1/2 Number and pitch of Stays in each 2 - 8 1/2

Working pressure by rules 137 lbs 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

UPPER HEATER. 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

The foregoing is a correct description,

J. G. Baird Manufacturer.

Dates of Survey (During progress of work in shops - -) 1919 1920 Dec 19, Jan 6, 10, 14, 15, 20, 24, 27, 31, Feb 4, 18, 21, Mar 4, 7, 10, 11, 13, 17, 20, 21, 24 Is the approved plan of boiler forwarded herewith Yes
while (During erection on board vessel - - -) Total No. of visits 21

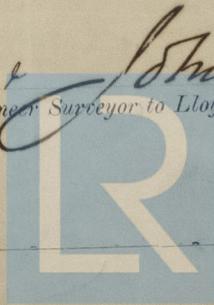
GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been constructed under Special Survey in accordance with the approved plan and the Secretary's letter (E) of 28th October 1918. The materials and workmanship are of good quality. When tested by water pressure to 260 lbs per sq. in., the boiler was found tight and satisfactory in every respect. This boiler has been forwarded to Ellesmere Port to be fitted on board.

Survey Fee ... £ 2 : 5 :
Travelling Expenses (if any) £ :

When applied for, 21 APR 1920
When received, 10/6/20
B. G. Bedford & J. M. Dikes
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned Transmit to London.



Lloyd's Register Foundation

004564-004572-0041