

## REPORT ON BOILERS.

No. 40912.

Received at London Office

WED. 9 MAR. 1921

Date of writing Report 27/2 1921 When handed in at Local Office 4-3-21 Port of Glasgow  
 No. in Survey held at Glasgow Date, First Survey 15<sup>th</sup> Sept 1920 Last Survey 24<sup>th</sup> Feb 1921  
 Reg. Book. on the SS. MAYFIELD (Number of Visits 13) Gross 642.88 Tons Net 269  
 Master Built at Glasgow By whom built Jarrow & Co. Ltd. (1470) When built 1922  
 Engines made at Glasgow By whom made Jarrow & Co. Ltd. (1470) When made 1922  
 Boilers made at Glasgow By whom made Barclay Curle & Co. Ltd. (1470) When made 1921  
 Registered Horse Power Owners The Cargo Steamships Co. Ltd. Port belonging to Dublin

## MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.

Manufacturers of Steel Glasgow Boiler & Engine Co. Ltd.  
 (Letter for record S) Total Heating Surface of Boilers 2104<sup>sq</sup> Is forced draft fitted No No. and Description of Boilers 2 Single ended Working Pressure 180 Tested by hydraulic pressure to 320 Date of test 24/2/21  
 No. of Certificate 15718 Can each boiler be worked separately Yes Area of fire grate in each boiler 32.77<sup>sq</sup> No. and Description of safety valves to each boiler 2 Spring loaded Area of each valve 3.9<sup>sq</sup> Pressure to which they are adjusted 185 lbs/sq  
 Are they fitted with easing gear Yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler Yes  
 Smallest distance between boilers or uptakes and bunkers or woodwork 4'-0" Mean dia. of boilers 11'-0<sup>11</sup>/<sub>16</sub>" Length 10'-0"  
 Material of shell plates S Thickness 15<sup>1</sup>/<sub>16</sub>" Range of tensile strength 28/32 Are the shell plates welded or flanged No  
 Descrip. of riveting: cir. seams DR long. seams TR & DBS Diameter of rivet holes in long. seams 1" Pitch of rivets 7<sup>1</sup>/<sub>2</sub>"  
 width of butt straps 14<sup>15</sup>/<sub>16</sub>" Per centages of strength of longitudinal joint rivets 85.9% Working pressure of shell by rules 185 Size of manhole in shell 18<sup>1</sup>/<sub>4</sub>" Size of compensating ring 35<sup>1</sup>/<sub>2</sub>" x 31<sup>1</sup>/<sub>2</sub>" x 15<sup>1</sup>/<sub>16</sub>" No. and Description of Furnaces in each boiler 2 Corrugated Material S Outside diameter 40" Length of plain part top 3' 11<sup>1</sup>/<sub>2</sub>" bottom 3' 11<sup>1</sup>/<sub>2</sub>"  
 Description of longitudinal joint welded No. of strengthening rings Working pressure of furnace by the rules 194 Combustion chamber plates: Material S Thickness: Sides 5<sup>1</sup>/<sub>8</sub>" Back 5<sup>1</sup>/<sub>8</sub>" Top 5<sup>1</sup>/<sub>8</sub>" Bottom 3<sup>1</sup>/<sub>4</sub>" Pitch of stays to ditto: Sides 9<sup>1</sup>/<sub>2</sub>" x 7<sup>1</sup>/<sub>2</sub>" Back 9<sup>1</sup>/<sub>2</sub>" x 8<sup>1</sup>/<sub>2</sub>"  
 Top 15<sup>1</sup>/<sub>2</sub>" x 9<sup>1</sup>/<sub>2</sub>" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 188 Material of stays S Area at smallest part 1.43<sup>sq</sup> Area supported by each stay 72<sup>sq</sup> Working pressure by rules 186 End plates in steam space: Material S Thickness 15<sup>1</sup>/<sub>16</sub>"  
 Pitch of stays 14<sup>1</sup>/<sub>2</sub>" x 14<sup>1</sup>/<sub>2</sub>" How are stays secured DN Working pressure by rules 181 Material of stays S Area at smallest part 4.11<sup>sq</sup>  
 Area supported by each stay 220<sup>sq</sup> Working pressure by rules 187 Material of Front plates at bottom S Thickness 15<sup>1</sup>/<sub>16</sub>" Material of Lower back plate S Thickness 25<sup>1</sup>/<sub>32</sub>" Greatest pitch of stays 14 x 8 Working pressure of plate by rules 196 Diameter of tubes 3<sup>1</sup>/<sub>2</sub>"  
 Pitch of tubes 14<sup>3</sup>/<sub>4</sub>" x 14<sup>3</sup>/<sub>4</sub>" Material of tube plates S Thickness: Front 15<sup>1</sup>/<sub>16</sub>" Back 23<sup>1</sup>/<sub>32</sub>" Mean pitch of stays 9<sup>1</sup>/<sub>2</sub>" Pitch across wide water spaces 14<sup>1</sup>/<sub>2</sub>" Working pressures by rules 183 Girders to Chamber tops: Material S Depth and thickness of girder at centre 8<sup>1</sup>/<sub>2</sub>" x 15<sup>1</sup>/<sub>2</sub>" Length as per rule 29<sup>1</sup>/<sub>2</sub>" x 32" Distance apart 4<sup>1</sup>/<sub>2</sub>" Number and pitch of Stays in each 2-9<sup>1</sup>/<sub>2</sub>"  
 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

## VERTICAL DONKEY BOILER—

No. Description Manufacturers of steel  
 Made at By whom made When made Where fixed Working pressure  
 tested by hydraulic pressure to Date of test No. of Certificate Fire grate area Description of safety valves  
 No. of safety valves Area of each Pressure to which they are adjusted If fitted with easing gear If steam from main boilers can enter the donkey boiler  
 Dia. of donkey boiler Length Material of shell plates Thickness Range of tensile strength  
 Descrip. of riveting long. seams Dia. of rivet holes Whether punched or drilled Pitch of rivets  
 Lap of plating Per centage of strength of joint Rivets Working pressure of shell by rules Thickness of shell crown plates  
 Radius of do. No. of Stays to do. Dia. of stays Diameter of furnace Top Bottom Length of furnace  
 Thickness of furnace plates Description of joint Working pressure of furnace by rules Thickness of furnace crown plates  
 Radius of do. Stayed by Diameter of uptake Thickness of uptake plates  
 Thickness of water tubes

The foregoing is a correct description,  
 FOR BARCLAY, CURLE & CO., LTD. Manufacturer.

John Alpinde Manager

Dates of Survey  
 During progress of work in shops -- 1920 Sep 15 Oct 5 28 Nov 15 26 Dec 7 15 22 (1921) Jan 14 18  
 During erection on board vessel -- Feb 2. 8. 24.  
 Total No. of visits 13.

Is the approved plan of main boiler forwarded herewith

donkey

Lloyd's Register  
 W 472-0114



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 intended for a steam coal building at M. J. Arrow & Co. Seaham.

Port of

No. in Reg. Book

Owners THE

Yard No. 14

DESCRIPTION

One Compound

Boiler 6 1/2"

Capacity of Dy

Where is Dyn

Position of Ma

Positions of a

If fuses are f

circuits

If vessel is wi

Are the fuses

Are all fuses

are perma

Are all switch

Total number

A. 2. 1. 1.

B. 1. 1. 1.

C. 1. 1. 1.

D. 1. 1. 1.

E. 1. 1. 1.

2 Mast

2

12 1/2 in. Blue

If are lights, v

Where are the

DESCRIPTION

Main cable car

Branch cables

Branch cables

Leads to lamps

Cargo light cabl

DESCRIPTION

Conductor

tailed &

armoured

Joints in cables

Are all the join

positions,

Are there any

How are the c

in Galvan

13/4/22

Note:- These boilers have been well fitted and secured on board and their safety valves adjusted under steam as above. S. F. Dorey.

The amount of Entry Fee .. £ : :  
Special .. £ 14 - : :  
Donkey Boiler Fee .. £ : :  
Travelling Expenses (if any) £ : :

When applied for.

7:3:21.

When received.

29.4.22

W. Gordon-Munclun

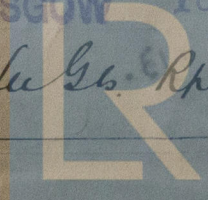
Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute GLASGOW 15 MAR 1921

Assigned TRANSMIT TO LONDON

GLASGOW 18 APR 1922

See G. Rpt. 41876



Lloyd's Register Foundation

Certificate (if required) to be sent to

The Secretaries are requested not to write on or below the space for Committee's Minute.