

# REPORT ON BOILERS.

No. 40671

Received at London Office TUE. DEC. 15 1920  
 Date of writing Report 3<sup>rd</sup> Dec 1920 When handed in at Local Office 9<sup>th</sup> Dec. 1920 Port of Glasgow  
 No. in Survey held at Glasgow Date, First Survey 2<sup>nd</sup> Sept. 1919 Last Survey 7<sup>th</sup> Dec 1920  
 Reg. Book. on the S.S. "Blan Maenab" (Number of Visits 74) Tons { Gross Net  
 Master Irving Built at Irving By whom built Agnes Lochyard. 11 No 485 When built 1920  
 Engines made at Glasgow By whom made Burnmuir & Jackson. 11 No 518 When made 1920  
 Boilers made at Glasgow By whom made Burnmuir & Jackson. 11 No 518 When made 1920  
 Registered Horse Power Owners Blan Line Ltd. Port belonging to Glasgow

## MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Lanarkshire S.S. Beardmore & Co

(Letter for record S) Total Heating Surface of Boilers 1282 Is forced draft fitted no No. and Description of Boilers 1 single ended multitubular Working Pressure 100 lbs Tested by hydraulic pressure to 200 lbs Date of test 28-8-20  
 No. of Certificate 15447 Can each boiler be worked separately ✓ Area of fire grate in each boiler 31 No. and Description of safety valves to each boiler Two spring loaded Area of each valve 5.9 Pressure to which they are adjusted 105 lbs  
 Are they fitted with easing gear yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler no  
 Best distance between boilers or uptakes and bunkers or woodwork 15" dia. of boilers 12'-0" Length 9'-0"  
 Material of shell plates S Thickness 23/32" Range of tensile strength 28/32 tons Are the shell plates welded or flanged no  
 Strip of riveting: cir. seams L.D.R. long. seams T.R. LAP Diameter of rivet holes in long. seams 15/64" Pitch of rivets 4 3/16"  
 No. of plates or width of butt straps 7 3/8" Per centages of strength of longitudinal joint 77.2 Working pressure of shell by rules 100 lbs Size of manhole in shell 16" x 12" Size of compensating ring Sides 3/4" No. and Description of Furnaces in each boiler Two plain Material S Outside diameter 42 1/2" Length of plain part 66" Thickness of plates 3 9/16"  
 Description of longitudinal joint weld No. of strengthening rings ✓ Working pressure of furnace by the rules 114 Combustion chamber plates: Material S Thickness: Sides 17/32" Back 9/16" Top 17/32" Bottom 3/4" Pitch of stays to ditto: Sides 9 1/2" x 9" Back 10" x 10"  
 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 109 Material of stays S Area at smallest part 147 Area supported by each stay 100 Working pressure by rules 117 End plates in steam space: Material S Thickness 13/16"  
 Pitch of stays 17" x 16" How are stays secured all nuts Working pressure by rules 108 Material of stays S Area at smallest part 3.03  
 Area supported by each stay 2 1/4 Working pressure by rules 114 Material of Front plates at bottom S Thickness 25/32" Material of lower back plate S Thickness 1 1/16" Greatest pitch of stays 15" x 10" Working pressure of plate by rules 100 Diameter of tubes 3 1/4"  
 Pitch of tubes 4 9/16" x 4 3/8" Material of tube plates S Thickness: Front 25/32" Back 23/32" Mean pitch of stays 13 13/32" Pitch across wide water spaces 14 1/4" Working pressures by rules 109 Girders to Chamber tops: Material Iron Depth and thickness of girder at centre 6" x 1 1/2" Length as per rule 26 23/32" Distance apart 9 1/8" Number and pitch of Stays in each 2 @ 9"  
 Working pressure by rules 113 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 ✓

**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 Plates 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  
 plates Radius of do. Stayed by Diameter of uptake Thickness of uptake plates  
 Thickness of water tubes

BURNMUIR & JACKSON, Limited.  
 The foregoing is a correct description,  
James Fletcher Manufacturer.

Dates of Survey while building  
 During progress of work in shops - -  
 During erection on board vessel - - -  
 Total No. of visits

See attached machinery report

Is the approved plan of main boiler forwarded herewith  
 " " " donkey " "



W362-0264

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

This boiler has been built under Special Survey and in accordance with the Rules: the materials and workmanship are sound and good. On completion it was tested by water pressure to 200 lbs per square inch with satisfactory results, it has been fitted on board in an efficient manner, tried under steam & found satisfactory.

Certificate (if required) to be sent to Glasgow.

The amount of Entry Fee .. £ .. When applied for.  
 Special .. £ ..  
 Donkey Boiler Fee .. £ .. When received.  
 Travelling Expenses (if any) £ ..

*Charged on machinery*

*J. S. Sellar*

Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute

Glasgow 14 DEC 1920

Assigned See attached machinery report.

FRI. MAY. 13 1921



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