

Rpt. 5a.

## REPORT ON BOILERS.

No. 41461

WED. 26 OCT. 1921

Received at London Office

Date of writing Report 24. 10. 1921 When handed in at Local Office 24. 10. 1921 Port of Glasgow

No. in Survey held at Glasgow

Date, First Survey 2. 9. 1919

Last Survey 15. 10. 1921

Reg. Book.

(Number of Visits 85)

Gross 3727 6094  
Net 3727

Master Built at Irvine By whom built Ayrshire Dockyard Ltd &amp; Co When built 1921

Engines made at Glasgow By whom made Dunsmuir &amp; Jackson. Engs No 519 When made 1921

Boilers made at Glasgow By whom made Dunsmuir &amp; Jackson Blos 519 When made 1921

Registered Horse Power Owners Baynes Irvine &amp; Co Port belonging to Glasgow

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Larkhall &amp; Co. Beardsmore &amp; Co.

(Letter for record S) Total Heating Surface of Boilers 1282 sq ft Is forced draft fitted No. and Description of

Boilers 1 single ended multitubular Working Pressure 100 lbs Tested by hydraulic pressure to 200 Date of test 9/11/20

No. of Certificate 15572 Can each boiler be worked separately Area of fire grate in each boiler 31 sq ft No. and Description of

safety valves to each boiler Two spring loaded Area of each valve 5.9 sq ft Pressure to which they are adjusted 104.46 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

Smallest 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

Descrip. of riveting: cir. seams L.D.R. long. seams L.T.R. Diameter of rivet holes in long. seams 1 3/4" Pitch of rivets 4 3/16"

Lap of plates 7 3/8" Per centages of strength of longitudinal joint rivets 77.2 Working pressure of shell by

rules 100 lbs Size of manhole in shell 16" x 12" Size of compensating ring 16" x 12" No. and Description of Furnaces in each

boiler Two plain Material S Outside diameter 42 1/2" Length of plain part top 11' bottom 7 1/2" Thickness of plates crown 3 9/16" bottom 3 9/16"

Description of longitudinal joint welded No. of strengthening rings none 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 1/4" x 9" Back 10" x 10"

Top 9 1/4" x 9" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 109 Material of stays S Diameter at

smallest part 1 1/4" 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 S.H. nuts Working pressure by rules 108 Material of stays S Diameter at smallest part 3' 03"

Area supported by each stay 274 Working pressure by rules 114 Material of Front plates at bottom S Thickness 23/32 Material of

Lower back plate S Thickness 11/16 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 3/32 Pitch across wide

water spaces 11 1/4" Working pressures by rules 109 Girders to Chamber tops: Material Steel 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 Superheater or Steam chest: how connected to boiler 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

holes Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness

If 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

DUNSMUIR &amp; JACKSON, Limited.

The foregoing is a correct description,

James Hetherington Manufacturer.

Dates of Survey During progress of work in shops - - - See accompanying Machinery Report Is the approved plan of boiler forwarded herewith

while building During erection on board vessel - - - Total No. of visits 85.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &amp;c.) This boiler has been built under Special

Survey &amp; in accordance with the Rules; the materials &amp; workmanship are sound &amp; good; on

completion it was tested to 200 lbs per square inch with satisfactory results, &amp; securely

fitted on board.

This Report accompanies Part of the Machinery

Survey Fee ... £ 4 : 4 : When applied for 191

Travelling Expenses (if any) £ When received, 191

Glasgow 25 OCT. 1921

Committee's Minute

Assigned See attached machinery report

TUE. MAR. 28 1922

FRI. JUN. 16 1922

FRI. OCT. 20 1922

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