

# REPORT ON BOILERS.

No. 38162

Received at London Office

18.1918

Date of writing Report

191

When handed in at Local Office

191

Port of Glasgow

No. in Survey held at Glasgow

Date, First Survey

Last Survey

191

Reg. Book.

on the

S.S. "Macharda"

(Number of Visits)

Gross Tons  
Net

Master

Built at Port Glasgow

By whom built Russell & Co (710)

When built 1918

Engines made at Glasgow

By whom made D Rowan & Co Ltd (683)

When made 1918

Boilers made at Glasgow

By whom made D Rowan & Co Ltd (683)

When made 1918

Registered Horse Power

Owners

Port belonging to

MULTITUBULAR BOILERS ~~MAIN~~, AUXILIARY OR ~~DONKEY~~.—Manufacturers of Steel The Steel Company of Scotland Ltd

(Letter for record) 3 Total Heating Surface of Boilers 2775 sq ft Is forced draft fitted  No. and Description of Boilers one single ended Working Pressure 220 Tested by hydraulic pressure to 440 Date of test 7.5.18

No. of Certificate 14265 Can each boiler be worked separately  Area of fire grate in each boiler 62 sq ft No. and Description of safety valves to each boiler 1 pair direct spring Area of each valve 15.94 sq in Pressure to which they are adjusted 22.5 lbs

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 about 1-3" Int. Mean dia. of boilers 15'-6" Length 12'-0"

Material of shell plates steel Thickness 1/2" Range of tensile strength 28-32 Are the shell plates welded or flanged

Descrip. of riveting: cir. seams lap 50% long. seams  Diameter of rivet holes in long. seams 1 1/16" Pitch of rivets 10 1/8"

Lap of plates or width of butt straps 23" Per centages of strength of longitudinal joint rivets 94 plate 84.6 Working pressure of shell by rules 220

Size of manhole in shell 16 x 18" Size of compensating ring 33 x 37 x 1 1/2" No. and Description of Furnaces in each boiler 3 Deighton Material steel Outside diameter 49 1/32" Length of plain part top bottom Thickness of plates crown 4 1/2 bottom 6 1/4

Description of longitudinal joint welded No. of strengthening rings 212 Working pressure of furnace by the rules 222 Combustion chamber plates: Material steel Thickness: Sides 23/32 Back 23/32 Top 23/32 Bottom 15/16 Pitch of stays to ditto: Sides 9 x 10 1/2 Back 8 3/4 x 10 3/4

Top 10 1/2 x 9 If stays are fitted with nuts or riveted heads  Working pressure by rules 220 Material of stays steel Diameter at smallest part 2.395 Area supported by each stay 94.5 Working pressure by rules 220 End plates in steam space: Material steel Thickness 1 1/32

Pitch of stays 20 3/4 x 21 How are stays secured 2 nuts Working pressure by rules 220 Material of stays steel Diameter at smallest part 9.62 8.19

Area supported by each stay 435 Working pressure by rules 223 Material of Front plates at bottom steel Thickness 15/16 Material of Lower back plate steel Thickness 23/32 Greatest pitch of stays 13 3/16 Working pressure of plate by rules 226 Diameter of tubes 3"

Pitch of tubes 4 1/4 x 4 1/16 Material of tube plates steel Thickness: Front 15/16 Back 27/32 Mean pitch of stays 10 1/32 Pitch across wide water spaces 13 3/16 Working pressures by rules 220 Girders to Chamber tops: Material steel Depth and thickness of girder at centre 11 1/4 x 15/16 double Length as per rule 37 3/8 Distance apart 10 1/2 Number and pitch of Stays in each 3 @ 9"

Working pressure by rules 221 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 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

The foregoing is a correct description,

David Rowan & Co Ltd Manufacturer.

Dates of Survey During progress of work in shops - - while building During erection on board vessel - - -

See accompanying machinery Report.

Is the approved plan of boiler forwarded herewith

Total No. of visits

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under special survey the materials and workmanship are of good description.

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

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

A. McKeand & W. H. Copeman Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute GLASGOW 17 SEP 1918

Assigned See accompanying machinery report.



Lloyd's Register Foundation

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