

REPORT ON BOILERS.

No. 56030

7. 28. 29 Dec.
18. 22. 26 Mar
June 6. 10. 18

Received at London Office 28 AUG 1935

Date of writing Report 10 When handed in at Local Office 22. 8. 1935 Port of Glasgow

No. in Survey held at Glasgow Date, First Survey 23. 8. 35 Last Survey 17-8-1935

on the new steel 315 "ARGENTINE TRANSPORT" (Number of Visits 95) Tons {Gross 4684 Net 2825}

Master Built at Glasgow By whom built Blythwood S.B.C. Yard No. 35 When built 1935

Engines made at Glasgow By whom made David Rowan & Co Ltd Engine No. 966 When made 1935

Boilers made at Glasgow By whom made David Rowan & Co Ltd Boiler No. 966 When made 1935

Indicinal Horse Power 362 Owners Port belonging to London

34

LLOYD'S REGISTER LONDON 10-6-35

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

24-7-35

Manufacturers of Steel B. Whittles Ltd (Letter for Record (S))

Total Heating Surface of Boilers 4642 sq ft Is forced draught fitted yes Coal or Oil fired coal

No. and Description of Boilers Two single ended Working Pressure 220

Tested by hydraulic pressure to 380 Date of test 1-3-35 No. of Certificate 19517 Can each boiler be worked separately yes

Area of Firegrate in each Boiler 53.75 sq ft No. and Description of safety valves to each boiler Two, Improved High Lift

Area of each set of valves per boiler {per Rule 6190" as fitted 6280" Pressure to which they are adjusted 220 Are they fitted with easing gear yes

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 21" Is oil fuel carried in the double bottom under boilers no

Smallest distance between shell of boiler and tank top plating 2-0" Is the bottom of the boiler insulated yes

Largest internal dia. of boilers 15-0" Length 11-6" Shell plates: Material Steel Tensile strength 29-33 tons

Thickness 1 7/16" Are the shell plates welded or flanged no Description of riveting: circ. seams {end W.P. inter. F3.396" B4.125" Pitch of rivets {10 1/4" long. seams 1 1/2"

End seams WBS.T.R Diameter of rivet holes in {circ. seams F 1 3/8" B 1 1/2" long. seams 1 1/2" Percentage of strength of circ. intermediate seam {plate rivets ✓

Percentage of strength of circ. end seams {plate F 59.5 B 63.6 rivets F 48.4 B 47.3 Working pressure of shell by Rules 223

Percentage of strength of longitudinal joint {plate 85.36 rivets 89 combined 88.5

Thickness of butt straps {outer 1 3/32" inner 1 7/32" No. and Description of Furnaces in each Boiler Three Weighton

Material steel Tensile strength 26-30 tons Smallest outside diameter 3'-8 1/2"

Length of plain part {top bottom Thickness of plates {crown 4 3/4" bottom 6 1/4" Description of longitudinal joint welded

Dimensions of stiffening rings on furnace or c.c. bottom Working pressure of furnace by Rules 222

Stays in steam space: Material steel Tensile strength 26-30 tons Thickness 1 1/2" Pitch of stays 22" x 17 3/4"

Are stays secured W.N. Working pressure by Rules 220

End plates: Material {front steel back " Tensile strength {26-30 tons Thickness {15 1/16" 25 1/32" Working pressure {front 229 back 236

Pitch of stay tubes in nests 9.6" Pitch across wide water spaces 14" Working pressure by Rules 221

Boilers to combustion chamber tops: Material steel Tensile strength 28-32 tons Depth and thickness of girder

Centre 2 @ 9 1/8" x 7 1/8" Length as per Rule 34 1/2" Distance apart 8 1/2" No. and pitch of stays

Each 3 @ 8 1/4" Working pressure by Rules 225 Combustion chamber plates: Material steel

Tensile strength 26-30 tons Thickness: Sides 11/16" Back 23 1/32" Top 11/16" Bottom 13/16"

Pitch of stays to ditto: Sides 8 1/2" x 8 1/4" Back 10" x 8" Top 8 1/2" x 8 1/4" Are stays fitted with nuts or riveted over nuts

Working pressure by Rules 221 Front plate at bottom: Material steel Tensile strength 26-30 tons

Thickness 15 1/16" Lower back plate: Material steel Tensile strength 26-30 tons Thickness 13/16"

Pitch of stays at wide water space 13 7/16" Are stays fitted with nuts or riveted over nuts

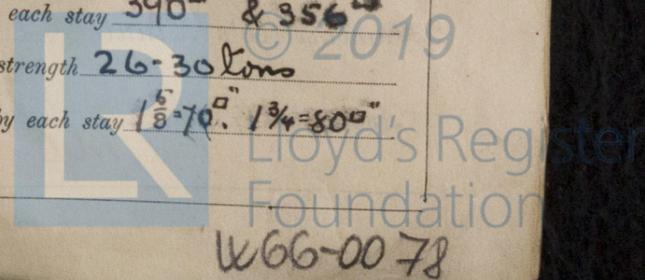
Working Pressure 220 Main stays: Material steel Tensile strength 28-32 tons

At body of stay, 3 1/4" x 3" No. of threads per inch 6 Area supported by each stay 390"² & 356"²

Over threads. Working pressure by Rules 237 & 221 Screw stays: Material steel Tensile strength 26-30 tons

At turned off part, 1 9/8" 1 3/4" 1 7/8" 2" No. of threads per inch 9 Area supported by each stay 1 5/8" x 7 1/4" 1 3/4" x 8 0 1/4"

of Shipping



Working pressure by Rules 221 & 224 Are the stays drilled at the outer ends no Margin stays: Diameter ^{At turned off part,} 1 7/8" or 1 7/8" Over threads

No. of threads per inch 9 Area supported by each stay 940" Working pressure by Rules 227

Tubes: Material Steel External diameter ^{Plain} 3" ^{Stay} 3" Thickness 8 W.G. ^{1/4"} 5/16" ^{3/8"} No. of threads per inch 9

Pitch of tubes 4 3/16" x 4 1/8" Working pressure by Rules 250 Manhole compensation: Size of opening in shell plate 19 1/2" x 15 1/2" Section of compensating ring 10 1/2" x 1 7/16" No. of rivets and diameter of rivet holes 34 @ 1 1/2"

Outer row rivet pitch at ends 10 1/4" Depth of flange if manhole flanged 3" Steam Dome: Material none

Tensile strength _____ Thickness of shell _____ Description of longitudinal joint _____

Diameter of rivet holes _____ Pitch of rivets _____ Percentage of strength of joint ^{Plate} _____ ^{Rivets} _____

Internal diameter _____ Working pressure by Rules _____ Thickness of crown _____ No. and diameter of stays _____

Inner radius of crown _____ Working pressure by Rules _____

How connected to shell _____ Size of doubling plate under dome _____ Diameter of rivet holes and pitch of rivets in outer row in dome connection to shell _____

Type of Superheater Smoke tube Manufacturers of For particulars see NWC cert C 296 copy held

Number of elements _____ Material of tubes _____ Internal diameter and thickness of tubes _____

Material of headers _____ Tensile strength _____ Thickness _____ Can the superheater be shut off and the boiler be worked separately _____

Is a safety valve fitted to every part of the superheater which can be shut off from the boiler yes

Area of each safety valve 1.770" Are the safety valves fitted with easing gear yes Working pressure as per Rules _____

Pressure to which the safety valves are adjusted 227 Hydraulic test pressure _____

tubes _____, castings _____ and after assembly in place 440 lbs Are drain cocks or valves fitted to free the superheater from water where necessary yes

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with yes

The foregoing is a correct description,
 For David Rowan & Co. Ltd
 Arch. H. Grierson

Dates of Survey ^{During progress of work in shops - -} _____ Are the approved plans of boiler and superheater forwarded herewith yes (If not state date of approval.)

^{while building} ^{During erection on board vessel - - -} _____

SEE ACCOMPANYING MACHINERY REPORT.

Is this Boiler a duplicate of a previous case no If so, state Vessel's name and Report No. _____

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

The materials and workmanship are good.

The boiler has been constructed under special survey, satisfactorily fitted in the vessel and their safety valves adjusted under steam.

Survey Fee ... £ : : When applied for, 19

Travelling Expenses (if any) £ : : When received, 19

S. J. Davis
 Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute GLASGOW 27 AUG 1935

Assigned SEE ACCOMPANYING MACHINERY REPORT.

