

REPORT ON BOILERS.

No. 45409

6 JUL 1950

Received at London Office

RECEIVED

Rpt. 5a.

D.O.

Date of writing Report 21-6-50 When handed in at Local Office 30-6-50 Port of GLASGOW

No. in Survey held at PAISLEY Date, First Survey 22. 2. 50 Last Survey 8-6-1950

Reg. Book. on the M.T. ISLAS. ORCADAS. (Number of Visits 10) Gross Net

Master Built at By whom built Yard No. When built

Engines made at By whom made Engine No. When made

Boilers made at PAISLEY By whom made A.F. CRAIG & CO LTD Boiler No. 950/951 When made 1950

Nominal Horse Power 250 Owners ARGENTINE Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel COLVILLES LTD (Letter for Record S)

Total Heating Surface of Boilers 1518 sq ft (OIL) Is forced draught fitted YES Coal or Oil fired OIL

No. and Description of Boilers 2-SE Working Pressure 150 lbs/sq in

Tested by hydraulic pressure to 275 lbs Date of test 5-6-50 No. of Certificate 23176/23178 Can each boiler be worked separately

Area of Firegrate in each Boiler 40.25 sq ft No. and Description of safety valves to each boiler

Area of each set of valves per boiler per Rule as fitted Pressure to which they are adjusted 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 Is oil fuel carried in the double bottom under boilers

Smallest distance between shell of boiler and tank top plating Is the bottom of the boiler insulated

Largest internal dia. of boilers 11'-8" Length 11'-4" Shell plates: Material Steel Tensile strength 29-33 Tons

Thickness 13/16" Are the shell plates welded or flanged NO Description of riveting: circ. seams end OR inter

Long. seams T.R.D.B.S Diameter of rivet holes in circ. seams 13/16" long. seams 15/16" Pitch of rivets 3-6 8/16" 6.5"

Percentage of strength of circ. end seams plate 67.75 rivets 58.4 Percentage of strength of circ. intermediate seam plate rivets

Percentage of strength of longitudinal joint plate 85.6 rivets 97.2 combined 90.6 Working pressure of shell by Rules

Thickness of butt straps outer 5/8" inner 5/4" No. and Description of Furnaces in each Boiler 2-Morison

Material Steel Tensile strength 26-30 Tons Smallest outside diameter 3'-7 3/16"

Length of plain part top bottom Thickness of plates crown 15/32" bottom 15/32" Description of longitudinal joint welded

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

End plates in steam space: Material Steel Tensile strength 26-30 Tons Thickness 27/32" Pitch of stays 1'-0 1/2" x 1'-3"

How are stays secured D. Nuts & washers Working pressure by Rules 27/32"

End plates: Material front back Steel Tensile strength 26-30 Tons Thickness 13/16"

Minimum pitch of stay tubes in nests 10" Pitch across wide water spaces 1'-1" Working pressure front back

End plates to combustion chamber tops: Material Steel Tensile strength 26-30 Tons Depth and thickness of girder

Distance from centre 8 1/4" - 27/32" Length as per Rule 2'-6" Distance apart 4" No. and pitch of stays

Each Electric welded Working pressure by Rules Combustion chamber plates: Material Steel

Tensile strength 26-30 Tons Thickness: Sides 5/8" Back 21/32" Top 5/8" Bottom 5/8"

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

Working pressure by Rules Front plate at bottom: Material Steel Tensile strength 26-30 Tons

Thickness 27/32" Lower back plate: Material Steel Tensile strength 26-30 Tons Thickness 27/32"

Pitch of stays at wide water space 1'-1" x 10" Are stays fitted with nuts or riveted over Nuts

Working Pressure Main stays: Material Steel Tensile strength 28-32 Tons

Diameter At body of stay, or Over threads 2 1/4" No. of threads per inch 6 Area supported by each stay

Working pressure by Rules Screw stays: Material Steel Tensile strength 26-30 Tons

Diameter At turned off part, or Over threads 1 5/8" No. of threads per inch 9 Area supported by each stay

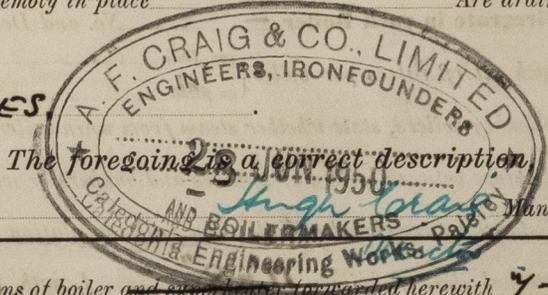


Working pressure by Rules - Are the stays drilled at the outer ends **NO** Margin stays: Diameter ^(At turned off part) ^{or} ^{Over threads} **1 3/4"** ✓
 No. of threads per inch **9** ✓ Area supported by each stay - Working pressure by Rules -
Tubes: Material **HRW Steel** External diameter ^{Plain} ^{Stay} **2 1/2"** ✓ Thickness ^{10 SWG} ^{5 1/16"} ✓ No. of threads per inch **9** ✓
 Pitch of tubes **3 1/2" x 3 3/4"** ✓ Working pressure by Rules - Manhole compensation: Size of opening in
 shell plate **16" x 20"** ✓ Section of compensating ring **Flanged plate 1" thick** ✓ No. of rivets and diameter of rivet holes **52 - 15/16"** ✓
 Outer row rivet pitch at ends **6 1/2"** ✓ Depth of flange if manhole flanged - 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

Manufacturers of ^{Tubes} ^{Steel forgings} ^{Steel castings}
 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
 Area of each safety valve Are the safety valves fitted with casing gear Working pressure as per
 Rules Pressure to which the safety valves are adjusted Hydraulic test pressure:
 tubes forgings and castings and after assembly in place Are drain cocks or
 valves fitted to free the superheater from water where necessary

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



Dates of Survey ^{During progress of} ^{work in shops - -} **1950 - 1950 Feb. 22, Mar. 1, May 8-22, 31, Jun. 5** Are the approved plans of boiler and superheater forwarded herewith **7-12-48**
^{while building} ^{During erection on} ^{board vessel - - -} **1951 - 1950 Feb. 22, May, 8, 22, Jun. 8** (If not state date of approval.)
 Total No. of visits

Is this Boiler a duplicate of a previous case **YES** If so, state Vessel's name and Report No. **GLS RPL N° 75207**

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) **These boilers have been constructed under Special Survey, in accordance with the Rule Requirements - & approved plans. The materials & workmanship are good. These boilers have been dispatched for installation, & made to the order of Alfred J. Lowes, Sunderland, for the Argentine.**

Survey Fee £ **50: 6: -** When applied for, **19**
 Travelling Expenses (if any) £ : : When received, **19**

R. J. Easthorne
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **GLASGOW 5 - JUL 1950**

Assigned

Transmit to London with

