

REPORT ON BOILERS.

No. 95463

Received at London Office SEP 28 1937

of writing Report

10

When handed in at Local Office

27/9/37

Port of

Newcastle-on-Tyne

in Book.

Survey held at Newcastle on Tyne

Date, First Survey 25 May

Last Survey 17 Sept. 1937

(Number of Visits 17+8)

Gross 6256

Net 3594

on the m/s Ormala

Built at Monfalcone By whom built Cantieri Riuniti dell'Adriatico Yard No. 1136 When built 1938

Lines made at Trieste By whom made Cant. Riuniti dell'Adriatico Engine No. 5257 When made 1938

Boilers made at Newcastle on Tyne By whom made R+W. Hawthorn, Leslie & Co. Ld Boiler No. 9968 When made 1937

Indicated Horse Power $\frac{2464}{15} = 164$. Owners N.V. "La Corona" Port belonging to Greenhage

MULTITUBULAR BOILERS - MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel The Steel Company of Scotland. (Letter for Record 5.)

Heating Surface of Boilers 2464 sq. ft. Is forced draught fitted Yes Coal or Oil fired Oil fired

Description of Boilers One Single ended Multi-tubular Working Pressure 180 lbs

Tested by hydraulic pressure to 320 lbs Date of test 17-9-37 No. of Certificate 737 Can each boiler be worked separately

Number of Firegrate in each Boiler Oil fired No. and Description of safety valves to each boiler Two 3 1/4" dia Spring loaded

Pressure of each set of valves per boiler per Rule 15.8 sq. in. as fitted 16.58. Pressure to which they are adjusted 18.5 lbs Are they fitted with easing gear Yes

Use of donkey boilers, state whether steam from main boilers can enter the donkey boiler

Least distance between boilers or uptakes and bunkers or woodwork Is oil fuel carried in the double bottom under boilers deck

Least distance between shell of boiler and deck top plating 3'-0" Is the bottom of the boiler insulated Yes

Least internal dia. of boilers 14'-3 5/8" Length 11'-6" Shell plates: Material Steel Tensile strength 28-32 tons

Thickness 1 3/16" Are the shell plates welded or flanged No Description of riveting: circ. seams D.R. lap.

Seams T.R. dbl butt straps Diameter of rivet holes in circ. seams 1 1/4" long. seams 1 1/4" Pitch of rivets 3 1/2"

Percentage of strength of circ. end seams plate 64.28 rivets 48.5 Percentage of strength of circ. intermediate seam plate rivets

Percentage of strength of longitudinal joint plate 85.7 rivets 91. Working pressure of shell by Rules 183 lbs.

Thickness of butt straps outer 29/32" inner 1 1/32" No. and Description of Furnaces in each Boiler 3 Morrison

Material Steel Tensile strength 26-30 tons Smallest outside diameter 3'-7 1/8"

Thickness of plain part top 6" bottom 2-6 3/4" c.c. bottom Thickness of plates crown 9/16" bottom 7/8" c.c. bottom Description of longitudinal joint Furnace fire welded

Dimensions of stiffening rings on furnace or c.c. bottom none Working pressure of furnace by Rules 189 lbs

Stays in steam space: Material Steel Tensile strength 26-30 tons Thickness 1 1/32" Pitch of stays 17 3/4" x 21"

Are stays secured Nuts inside & outside Working pressure by Rules 183 lbs

End plates: Material Steel Tensile strength 26-30 tons Thickness 15/16" 13/16"

Pitch of stay tubes in nests 9" Pitch across wide water spaces 13 3/4" Working pressure front 242 lbs back 293 lbs

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

Centre 10" x 1 1/2" Length as per Rule 2'-10 31/64" Distance apart 10" No. and pitch of stays

Each 3 at 8" Working pressure by Rules 194 lbs Combustion chamber plates: Material Steel

Tensile strength 26-30 tons Thickness: Sides 45/64" Back 45/64" Top 45/64" Bottom 7/8"

Thickness of stays to ditto: Sides 8" x 8" Back 8" x 8" Top 8" x 10" Are stays fitted with nuts or riveted over marginal stays - nuts inside & out

Working pressure by Rules 180 lbs Front plate at bottom: Material Steel Tensile strength 26-30 tons

Thickness 15/16" Lower back plate: Material Steel Tensile strength 26-30 tons Thickness 27/32"

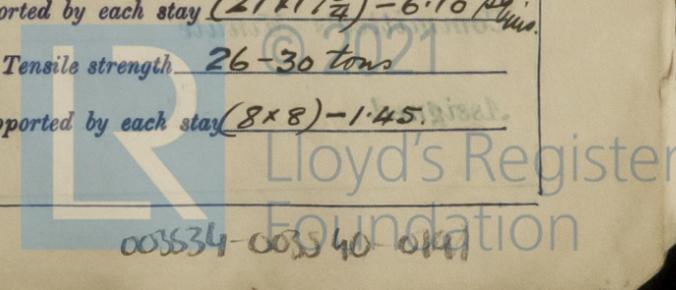
Pitch of stays at wide water space 15" x 8" Are stays fitted with nuts or riveted over Nuts

Working Pressure 200 lbs Main stays: Material Steel Tensile strength 28-32 tons

Thickness of stay meter At body of stay 3" No. of threads per inch 6 Area supported by each stay (21 x 17 3/4) - 6.10 sq. in.

Working pressure by Rules 183 lbs Screw stays: Material Steel Tensile strength 26-30 tons

Thickness of stay meter At turned off part 1 1/2 + 1 5/8" No. of threads per inch 9 Area supported by each stay (8 x 8) - 1.45 sq. in.



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Working pressure by Rules 200 lb Are the stays drilled at the outer ends No Margin stays: Diameter At turned off part, 1 3/4"
 No. of threads per inch 9 Area supported by each stay (1 1/2" x 8") - 2.03 sq in Working pressure by Rules 200 lb
 Tubes: Material "Corrosite" External diameter 2 3/4" Thickness 9. W.G. No. of threads per inch 9
 Pitch of tubes 4" x 3 7/8" Working pressure by Rules 215 lb Manhole compensation: Size of opening 1 1/2"
 shell plate 21" x 17" Section of compensating ring 21" x 1 3/16" No. of rivets and diameter of rivet holes 40 of 1/4" dia
 Outer row rivet pitch at ends 8 3/4" Depth of flange if manhole/flanged 3 1/2" Steam Dome: Material Material
 Tensile strength _____ Thickness of shell _____ Description of longitudinal joint _____
 Diameter of rivet holes _____ Pitch of rivets _____ Percentage of strength of joint Plate
 Internal diameter _____ Working pressure by Rules _____ Thickness of crown _____ No. and diameter _____
 stays _____ Inner radius of crown _____ Working pressure by Rules _____
 How connected to shell _____ Size of doubling plate under dome _____ Diameter of rivet holes and
 of rivets in outer row in dome connection to shell _____

Type of Superheater None Manufacturers of None
 Number of elements _____ Material of tubes _____ Internal diameter and thickness of tubes _____
 Material of headers _____ Tensile strength _____ Thickness _____ Can the superheater be shut off
 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 easing gear _____ Working pressure _____
 Rules _____ Pressure to which the safety valves are adjusted _____ Hydraulic test pressure _____
 tubes _____, castings _____ and after assembly in place _____ Are drain cocks or valves _____
 to free the superheater from water where necessary _____

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with _____
 The foregoing is a correct description,
 R. & W. HAWTHORN, LESLIE & CO. LIMITED
 27/9/37

Dates of Survey 1937
 During progress of work in shops -- May 25.31. June 4. 10. 15. 30. July Are the approved plans of boiler and superheater forwarded to the Director No.
 while building 7. 12. 19. 23. Aug. 6. 18. 19. 25. Sep. 6. 10. 17. (If not state date of approval.) 25/1
 During erection on board vessel --- 1938 Mar 8. 9. Apr 4. 12. 25. May 17. 31 June 4 Total No. of visits 17 + 8

Is this Boiler a duplicate of a previous case Yes except material of tubes and heating surface If so, state Vessel's name and Report No. Ancylus No. Rpt. 9214
Solarium No. Rpt. 9283

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)
This boiler has been constructed under special survey in accordance with the Rules and approved plan, and the material and workmanship are good.
The mountings were tested to twice the working pressure.
The boiler is to be forwarded to Italy (Monfalcone) for fitting on board the vessel.

The boiler has been fitted on board and reurally forwarded.
The arrangement for burning O.F. has been fitted under special survey, tested as per Rules and found in order. The boiler has been examined at the inside and outside and found in order.
The safety valves were adjusted to blow at 185 lbs
 Priests 9638
 27 SEP 1937

Survey Fee £ 16 : 8 : - | When applied for, 19
 Travelling Expenses (if any) £ : : | When received, 29. 9. 19 37 6/10
 A Watt.
 Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute TUE 28 JUN 1938
 Assigned See Tri. Rpt. 12109
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