

# REPORT ON BOILERS.

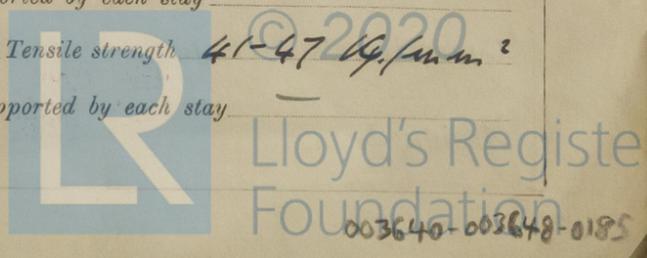
No. 4004

30 JUN 1941

Received at London Office  
 Date of writing Report 19 When handed in at Local Office 19 Port of Galveston  
 No. in Survey held at HAMBURG Date, First Survey Last Survey 55/11/1940 40  
 g. Book. GEN. EXAM. at Galveston  
 2306 on the "NUEVA ANDALUCIA"  
 (Number of Visits ) Gross 10044  
 Tons Net 5786  
 Master Built at Hamburg By whom built Deutsche Werft A.G. No. 232 When built 1940  
 Engines made at Augsburg By whom made M. A. U. Engine No. - When made 1939  
 Boilers made at Hamburg By whom made Deutsche Werft A.G. Boiler No. - When made 1939-41  
 Nominal Horse Power 1167 Owners The Texas Co. (Norway) S.P. Port belonging to Oslo

**MULTITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.**

Steel tested as required by Rules.  
 Manufacturers of Steel but particulars not available (Letter for Record S.)  
 Total Heating Surface of Boilers 400 m<sup>2</sup> Is forced draught fitted Yes Coal or Oil fired oil  
 No. and Description of Boilers 2 SB Working Pressure 12 kg./cm<sup>2</sup>  
 Tested by hydraulic pressure to 21.5 kg. Date of test 21-11-39 No. of Certificate 761 Can each boiler be worked separately Yes  
 Area of Firegrate in each Boiler - No. and Description of safety valves to each boiler 2 spring loaded  
 Area of each set of valves per boiler { per Rule 9345 mm<sup>2</sup> as fitted 11349 mm<sup>2</sup> Pressure to which they are adjusted 12 kg. 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 1120 mm Is oil fuel carried in the double bottom under boilers Boiler in  
 Smallest distance between shell of boiler and tank top plating 400 mm Is the bottom of the boiler insulated Yes  
 Largest internal dia. of boilers 4100 mm Length 2300 mm Shell plates: Material O.H. Steel Tensile strength 47-53 kg./mm<sup>2</sup>  
 Thickness 25.5 mm Are the shell plates welded or flanged No Description of riveting: circ. seams { end D.R. lap inter. -  
 Long. seams T.R.D.B.S. Diameter of rivet holes in { circ. seams 29 mm long. seams 29 mm Pitch of rivets { 92.7 mm 185 mm  
 Percentage of strength of circ. end seams { plate rivets Percentage of strength of circ. intermediate seam { plate rivets  
 Percentage of strength of longitudinal joint { plate rivets combined Working pressure of shell by Rules  
 Thickness of butt straps { outer 25.5 mm inner 25.5 mm No. and Description of Furnaces in each Boiler 3 corrugated (Morse type)  
 Material O.H. Steel Tensile strength 41-47 kg./cm<sup>2</sup> Smallest outside diameter 974 mm  
 Length of plain part { top - bottom - Thickness of plates { crown 12 mm bottom - Description of longitudinal joint Lap weld  
 Dimensions of stiffening rings on furnace or c.c. bottom none Working pressure of furnace by Rules -  
 End plates in steam space: Material O.H. Steel Tensile strength 41-47 kg./mm<sup>2</sup> Thickness 24 mm Pitch of stays 460 x 400 mm  
 How are stays secured Upper row D.N. or rusted washer Lower " D.N. " doubler Working pressure by Rules -  
 Tube plates: Material { front O.H. Steel back O.H. Steel Tensile strength { 41-47 kg./mm<sup>2</sup> Thickness { 24 mm 22 mm  
 Clean pitch of stay tubes in nests 208 mm Pitch across wide water spaces 360 mm Working pressure { front back  
 Girders to combustion chamber tops: Material O.H. Steel Tensile strength 47-53 kg./mm<sup>2</sup> Depth and thickness of girder  
 centre 200 x 12 double Length as per Rule 709 mm Distance apart 200 mm No. and pitch of stays  
 each 2 @ 210 mm Working pressure by Rules - Combustion chamber plates: Material O.H. Steel  
 Tensile strength 41-47 kg./mm<sup>2</sup> Thickness: Sides 16.5 mm Back 19 mm Top 16.5 mm Bottom 24 mm  
 Pitch of stays to ditto: Sides 200 x 210 mm Back 200 x 208 mm Top 210 x 200 Are stays fitted with nuts or riveted over riveted  
 Working pressure by Rules - Front plate at bottom: Material O.H. Steel Tensile strength 41-47 kg./mm<sup>2</sup>  
 Thickness 24 mm Lower back plate: Material O.H. Steel Tensile strength 41-47 kg./mm<sup>2</sup> Thickness 24 mm  
 Pitch of stays at wide water space 360 mm Are stays fitted with nuts or riveted over nuts  
 Working Pressure - Main stays: Material O.H. Steel Tensile strength 41-47 kg./mm<sup>2</sup>  
 Diameter { At body of stay, 72 mm or Over threads 72 mm No. of threads per inch 6 Area supported by each stay -  
 Working pressure by Rules - Screw stays: Material O.H. Steel Tensile strength 41-47 kg./mm<sup>2</sup>  
 Diameter { At turned off part, 35.38 mm or Over threads 39 mm No. of threads per inch 9 Area supported by each stay -



Rept 504

Working pressure by Rules — Are the stays drilled at the outer ends *no* Margin stays: Diameter { At turned off part, 38-38 mm / Over threads, 42 mm

No. of threads per inch 9 Area supported by each stay — Working pressure by Rules —

Tubes: Material *O.H. Steel* External diameter { Plain 76 mm / Stay 76 mm Thickness { 7.75 mm / 8.11 mm No. of threads per inch 9

Pitch of tubes 104 x 104 mm Working pressure by Rules — Manhole compensation: Size of opening in shell plate 320 x 425 mm Section of compensating ring 265 x 25.5 mm No. of rivets and diameter of rivet holes 28 @ 29 mm

Outer row rivet pitch at ends 175 mm Depth of flange if manhole flanged — Steam Dome: Material *O.H. Steel*

Tensile strength 41-47 kg/mm<sup>2</sup> Thickness of shell 14 mm Description of longitudinal joint *welded with inside riveted*

Diameter of rivet holes 26 mm Pitch of rivets 84 mm Percentage of strength of joint { Plate / Rivets

Internal diameter 900 mm Working pressure by Rules — Thickness of crown 16 mm No. and diameter of stays *none* Inner radius of crown 720 mm Working pressure by Rules —

How connected to shell *riveted angle* Size of doubling plate under dome *only manhole double* Diameter of rivet holes and pitch of rivets in outer row in dome connection to shell 29 mm @ 200 mm

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

The foregoing is a correct description,

Manufacturer.

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

Are the approved plans of boiler and superheater forwarded herewith (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. *"Nueva Granada" Ham. 22304*

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

*Galveston, Nov. 1940. These boilers have been efficiently installed and fixed in the vessel, generally examined internally & externally, and under steam, particulars so far as seen found in accordance with this form, and in accordance with the rules. Workmanship and materials as seen are satisfactory*

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

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

Engineer Surveyor to Lloyd's Register of Shipping.

*Sam Rennie*

Committee's Minute

TUE. 29 JUL 1941

Assigned

*See Gal. J.C. 4004*



© 2020

Lloyd's Register Foundation