

REPORT ON BOILERS.

No. 8228

Received at London Office

-5 DEC 1932

Date of writing Report 26th Nov. 1932 When handed in at Local Office 30th Nov. 1932 Port of Bilbao

No. in Survey held at Bilbao

Date, First Survey 10th Feb.Last Survey 25th Nov. 1932

on the Yard No. 27, Mms. Scherarieta y Larinaga, Cadiz.

(Number of Visits 24)

Gross Tons
Net

Master Built at Cadiz By whom built Mms. Scherarieta y Larinaga Yard No. 27 When built

Engines made at By whom made Engine No. When made

Boilers made at Bilbao By whom made La. Insaladora de Constr. Boiler No. 125 When made 1932

Nominal Horse Power Owners La. Arrendatarios del Monopolio de Petroleos. S.A. Port belonging to

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

Manufacturers of Steel Alcos Hornos de Vizcaya S.A.; Soc. Anon. de la Fab. de Hierro de Chelera (Letter for Record (S) ✓)

Total Heating Surface of Boilers 127.43 m² = 1372 sq. ft. Is forced draught fitted Coal or Oil firedNo. and Description of Boilers Two cylindrical multitubular marine type Working Pressure 10.5 kg/cm² 150 lb./sq. in.

Tested by hydraulic pressure to 275 lb. Date of test 8/11/32 No. of Certificate 125 Can each boiler be worked separately

Area of Firegrate in each Boiler No. and Description of safety valves to each boiler Two direct spring loaded, 3" dia.

Area of each set of valves per boiler (per Rule 12.45 sq. in. as fitted 14.12 " 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 3500 mm Length 3280 mm Shell plates: Material S.M. steel Tensile strength 44/55 kg/cm²

Thickness 27 mm Are the shell plates welded or flanged No Description of riveting: circ. seams and Double zig-zag

Pitch of rivets 185 mm { End 29.5 mm { End 90 mm { End 120 mm { End 120 mm { End 120 mm { End 120 mm

Percentage of strength of circ. end seams (plate 67.2 % rivets 46 % Percentage of strength of circ. intermediate seam (plate 72.1 % rivets 66.8 %

Percentage of strength of longitudinal joint (plate 84 % rivets 105 % combined 89.25 % Working pressure of shell by Rules 13.95 kg/cm² = 198 lb./sq. in.

Thickness of butt straps (outer 20 mm inner 20 mm No. and Description of Furnaces in each Boiler Two Morrison corrugated, Gossling mesh

Material S.M. steel Tensile strength 26/30 kg/cm² Smallest outside diameter 1020 mm

Length of plain part (top bottom) Thickness of plates (crown bottom) 15 mm Description of longitudinal joint Welded

Dimensions of stiffening rings on furnace or e.c. bottom Working pressure of furnace by Rules 15.05 kg/cm² = 214 lb./sq. in.End plates in steam space: Material S.M. steel Tensile strength 41/47 kg/cm² Thickness 25 mm Pitch of stays 360 x 380 mmHow are stays secured Nuts & washers, inside & outside Working pressure by Rules 14.75 kg/cm² = 210 lb./sq. in.Tube plates: Material (front S.M. steel back S.M. steel Tensile strength 41/47 kg/cm² Thickness 20 mmMean pitch of stay tubes in nests 190 mm Pitch across wide water spaces 360 mm Working pressure (front 10.7 kg/cm² = 152 lb./sq. in. back 21.3 " = 303 lb./sq. in.)Girders to combustion chamber tops: Material S.M. steel Tensile strength 44/55 kg/cm² Depth and thickness of girder

at centre 170 mm; 2 x 19 mm Length as per Rule 700 mm Distance apart 180 mm No. and pitch of stays

in each 3 @ 180 mm Working pressure by Rules 13.9 kg/cm² = 198 lb./sq. in. Combustion chamber plates: Material S.M. steelTensile strength 41/47 kg/cm² Thickness: Sides 15 mm Back 16 mm Top 15 mm Bottom 19 mm

Pitch of stays to ditto: Sides 200 x 180 mm Back 210 x 210 mm Top 180 x 180 mm Are stays fitted with nuts or riveted over Nuts

Working pressure by Rules (Sides 15 kg/cm² Back 14.2 " Front plate at bottom: Material S.M. steel Tensile strength 41/47 kg/cm²Thickness 20 mm Lower back plate: Material S.M. steel Tensile strength 41/47 kg/cm² Thickness 20 mm

Pitch of stays at wide water space 360 mm (Double 14 mm) Are stays fitted with nuts or riveted over Nuts

Working Pressure 19.8 kg/cm² = 282 lb./sq. in. Main stays: Material S.M. steel Tensile strength 44/55 kg/cm²

Diameter (At body of stay, 68 mm; 60 mm on end No. of threads per inch 6 Area supported by each stay 360 x 380 mm

Working pressure by Rules 15.8 kg/cm² = 225 lb./sq. in. Screw stays: Material S.M. steel Tensile strength 41/47 kg/cm²

Diameter (At turned off part, 35 mm; 31 mm No. of threads per inch 9 Area supported by each stay 210 x 210 mm

Over threads 39 mm; 35 mm

Lloyd's Register Foundation

013671-013677-015

Working pressure by Rules 12.8 Are the stays drilled at the outer ends No Margin stays: Diameter At turned off part, 397
 No. of threads per inch 9 Area supported by each stay (180 + 105) x 2101 Working pressure by Rules 10.5 kg/cm² = 150 lb/in²
 Tubes: Material S.M. steel External diameter Plain 637 Thickness 47 No. of threads per inch 9
 Pitch of tubes 957 Working pressure by Rules 12.3 kg/cm² = 203 lb/in² Manhole compensation: Size of opening in
 shell plate 450 x 5507 Section of compensating ring 27 x 1451 No. of rivets and diameter of rivet holes 48 rivets - 29.57 dia
 Outer row rivet pitch at ends 907 Depth of flange if manhole flanged 907 Steam Dome: 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 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
 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 easing gear Working pressure as per
 Rules Pressure to which the safety valves are adjusted Hydraulic test pressure:
 tubes 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,

Dates of Survey 1932: Feb. 10, 17; Mar. 1, 4, 30; Apr. 1, 6; May 9; Jun. 6, 13, 22, 28; July 14; Aug. 3, 12, 29, 31; Sept. 14, 26; Oct. 11, 13; Nov. 8, 11, 25. 24
 During progress of work in shops - - - Apr. 1, 6; May 9; Jun. 6, 13, 22, 28; July 14; Aug. 3, 12, 29, 31; Sept. 14, 26;
 while building During erection on board vessel - - - Oct. 11, 13; Nov. 8, 11, 25. Total No. of visits 24
 (If not state date of approval.) 4/6/32

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) When two Dandy Boilers have
been constructed under survey, of tested materials and in accordance with the
approved plan, London letters E 22/12/31, 12/8/32, 24/9/32, Rules & Regulations. The
workmanship is good and the boilers have been tested to 275 lb. hydraulic
pressure and found tight and sound. When two Dandy Boilers are signed
in my opinion to be classed, with notation in Register Book of 200-150 lb.
when satisfactorily fitted on board, examined under steam, safety valves
adjusted and accumulation tests carried out.

Survey Fee Rs. 1098-7 When applied for, 1/12 1932
 Travelling Expenses (if any) 7-7 When received, 2/12 1932

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRL 15 JUN 1934

Assigned See Log 1422



© 2021

Lloyd's Register
Foundation