

REPORT ON BOILERS.

No. 3472/C

Received at London Office

113 MAY 1952

Writing Report... 2.5.3.1952 When handed in at Local Office... 19... Port of Rotterdam

Survey held at Rotterdam Date, First Survey 20.11.1950 Last Survey 16.1.1952

(Number of Visits... 12...) Tons { Gross... 116.74 Net... 65.26 }

On the M.V. Comodoro Rivadavia

Built at Rotterdam By whom built P. Smit Jr. N.V. Yard No. 599 When built 1952

made at Rotterdam By whom made P. Smit Jr. N.V. Engine No. 675-676 When made 1952

made at Rotterdam By whom made P. Smit Jr. N.V. Boiler No. 40/41 When made 1952

Horse Power... Owners Yacimientos Petroliferos Fiscales Port belonging to Buenos Aires

TUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Constructors of Steel Heutenwerk Hauckingen A.G. of Duisburg-Wanheim (Letter for Record S.)

Heating Surface of Boilers 206.5 m² each Is forced draught fitted Yes Coal or Oil fired Oil fired

Description of Boilers Two multitubular donkey boilers Working Pressure 12.65 kg/cm²

hydraulic pressure to 23 kg/cm² Date of test 26.6.51 No. of Certificate 1138-1139 Can each boiler be worked separately Yes

Firegrate in each Boiler Oil fired No. and Description of safety valves to each boiler 2 of high lifting type on each boiler

each set of valves per boiler { per Rule... as fitted 56.5 kg/cm² Pressure to which they are adjusted 12.65 kg Are they fitted with easing gear Yes

of donkey boilers, state whether steam from main boilers can enter the donkey boiler no main boilers

distance between boilers or uptakes and bunkers or woodwork no woodwork Is oil fuel carried in the double bottom under boilers no

distance between shell of boiler and tank top plating Fitted on tweendeck Is the bottom of the boiler insulated Yes

internal dia. of boilers 4200 m.m. Length 3400 m.m. Shell plates: Material S.M. steel Tensile strength 45/51 kg/mm²

ss 29 m.m. Are the shell plates welded or flanged no Description of riveting: circ. seams { end Double riveted inter... Pitch of rivets { 101 m.m. 113 m.m.

ams 3 x riveted double butt strap Diameter of rivet holes in { circ. seams 32 m.m. long. seams 32 m.m. Percentage of strength of circ. intermediate seam { plate... rivets... Working pressure of shell by Rules App'd

age of strength of circ. end seams { plate... rivets... Working pressure of shell by Rules App'd

age of strength of longitudinal joint { plate... rivets... combined App'd

ss of butt straps { outer 23 m.m. inner 26 m.m. No. and Description of Furnaces in each Boiler 3 corrugated furnaces in each

l S.M. steel Tensile strength 41/47 kg/mm² Smallest outside diameter 1030 m.m.

of plain part { top 200 m.m. bottom 200 m.m. Thickness of plates { crown 15 m.m. bottom 15 m.m. Description of longitudinal joint welded

ions of stiffening rings on furnace or c.c. bottom not fitted Working pressure of furnace by Rules App'd

ates in steam space: Material S.M. steel Tensile strength 41/47 kg/mm² Thickness 28.5 m.m. Pitch of stays 400 X 450 m.m.

stays secured Screwed through end plate with in outside nuts Working pressure by Rules App'd

plates: Material { front S.M. steel back S.M. steel Tensile strength { 41/47 kg/mm² 41/47 kg/mm² Thickness { 22 m.m. 22 m.m.

pitch of stay tubes in nests 204 m.m. Pitch across wide water spaces 360 m.m. Working pressure { front App'd back App'd

s to combustion chamber tops: Material S.M. steel Tensile strength 45/51 kg/mm² Depth and thickness of girder

re 290 X 20 m.m. Length as per Rule 790 m.m. Distance apart 200 m.m. No. and pitch of stays

welded girders Working pressure by Rules App'd Combustion chamber plates: Material S.M. steel

strength 41/47 kg/mm² Thickness: Sides 17 m.m. Back 19 m.m. Top 17 m.m. Bottom 20 m.m.

of stays to ditto: Sides 175 X 200 m.m. Back 210 X 210 m.m. Top 175 X 200 m.m. Are stays fitted with nuts or riveted over Riveted over

g pressure by Rules App'd Front plate at bottom: Material S.M. steel Tensile strength 41/47 kg/mm²

ss 22 m.m. Lower back plate: Material S.M. steel Tensile strength 41/47 kg/mm² Thickness 22 m.m.

f stays at wide water space 380 m.m. Are stays fitted with nuts or riveted over fitted with nuts

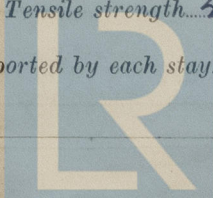
g pressure App'd Main stays: Material S.M. steel Tensile strength 45/51 kg/mm²

At body of stay 7.5 m.m. 6 of 5.7 m.m. No. of threads per inch 6 Area supported by each stay 400 X 450 m.m.

er { Over threads 22.5 m.m.

g pressure by Rules App'd Screw stays: Material S.M. steel Tensile strength 41/47 kg/mm²

er { At turned off part 1 3/8" - 1 1/2" - 1 3/4" No. of threads per inch 11 Area supported by each stay 175 X 200 - 210 X 210 m.m.



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Working pressure by Rules *App'd* Are the stays drilled at the outer ends *no* ✓ Margin stays: Diameter { At turned off part, *1 3/4"*
No. of threads per inch *11* ✓ Area supported by each stay *295 x 210 mm* ✓ Working pressure by Rules *App'd*
Tubes: Material *SM steel* External diameter { Plain *76 mm* ✓ Thickness { *3.46 mm* ✓ No. of threads per inch *9* ✓
Pitch of tubes *102 mm* ✓ Working pressure by Rules *App'd* ✓ Manhole compensation: Size of
shell plate *400 x 500 mm* ✓ Section of compensating ring *760 x 260 x 29%* No. of rivets and diameter of rivet holes *36 of 32 mm* ✓
Outer row rivet pitch at ends *230 mm* ✓ Depth of flange if manhole flanged *100 mm* ✓ Steam Dome: Material *not fitted*
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 of
stays *✓* Inner radius of crown *✓* Working pressure by Rules *✓*
How connected to shell *✓* Size of doubling plate under dome *✓* Diameter of rivet holes
of rivets in outer row in dome connection to shell *✓*
Type of Superheater *Not fitted* ✓ 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 sh
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 pres
Rules *✓* Pressure to which the safety valves are adjusted *✓* Hydraulic test
tubes *✓* forgings and castings *✓* and after assembly in place *✓* Are dra
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* ✓

The foregoing is a correct description.
P. S. M. T. V. N. V.

Dates of Survey while building { During progress of work in shops - - *1950: Nov. 20 - Dec 12.*
During erection on board vessel - - *1951: Jan. 4 - Feb. 1-26. April 19.*
Total No. of visits *13* ✓
May 4-22 - June 13-26.
1951: Nov. 15
1952: Jan 4-14-15-16.

Is this Boiler a duplicate of a previous case *yes* ✓ If so, state Vessel's name and Report No. *M.V. Director Madaniaga* ✓

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *These boilers have been consi*
under Special Survey in accordance with the approved plans, Society's P
and Secretary's letters of materials tested by the Society's Surveyors. Workma
is throughout good. The boilers have been tested by hydraulic pressure as
required and satisfactorily fitted on board the vessel. Safety valves have
adjusted under steam to the working pressure, the oil fuel burning arrange
and steam smothering system tried under working condition.
Thickness of safety valve washers: Port blr. *Starb'd blr.*
P 18.0 - S 19.1 mm P 18.7 - S 17.9 mm.

Survey Fee ... *fl 0.60.-* } When applied for *10/1 1952.*
Travelling Expenses (if any) *fl 10.50* } When received *28/1 1952*

E. M. Dudoek
Engineer Surveyor to Lloyd's Register of S

FRI. 13 JUN 1952

Committee's Minute

Assigned *See F.E. meby rph*