

## REPORT ON BOILERS.

No. 15435<sup>C</sup>

Date of writing Report 1 Nov 1938 When handed in at Local Office

Received at London Office NOV -7 1938

Port of Amsterdam

No. in Survey held at

Amsterdam

Date, First Survey

21 March

Last Survey

16 Oct

1938

Reg. Book.

on the Single Screw M.V. "ALBERTA"

(Number of Visits 13)

Tons

Gross 3357

Net 1786

Master

Built at

Amsterdam

By whom built

Neddoel CH

Yard No. 69

When built 1930

Engines made at

Amsterdam

By whom made

N.V. Werkspoor

Engine No. 712

When made 1930

Boilers made at

Amsterdam

By whom made

N.V. Werkspoor

Boiler No. 2804

When made 1930

Nominal Horse Power

223

Owners

Société Anonyme Française  
des Pétrol Shell

Port belonging to

Alger

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

Manufacturers of Steel

The Brownside boiler works Motherwell

(Letter for Record)

Total Heating Surface of Boilers

142 M<sup>2</sup> = 1530 ft<sup>2</sup>

Is forced draught fitted

Yes

Coal or Oil fired

oil

No. and Description of Boilers

One horizontal Marine Boiler

Working Pressure 12.65 kg

Tested by hydraulic pressure to

3204.85

Date of test 15-6-38

No. of Certificate

427

Can each boiler be worked separately

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 7600 mm<sup>2</sup>)as fitted 7700 mm<sup>2</sup>

Pressure to which they are adjusted 180 lbs

Are they fitted with easing gear

Yes

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

Yes

Smallest distance between boiler or uptakes and bunkers or woodwork

Deckhouse

26"

Is oil fuel carried in the double bottom under boilers

No

Smallest distance between shell of boiler and tank top plating

placed separate deck in

Motor room (right main deck)

Is the bottom of the boiler insulated

Yes

Largest internal dia. of boilers

3550 mm

Length

3200 mm

Shell plates: Material

SMS

Tensile strength 47.5 kg

Thickness

25 mm

Are the shell plates welded or flanged

no

Description of riveting: circ. seams

end dble welded

long. seams

dble butt straps

Diameter of rivet holes in

circ. seams 26 mm

long. seams 26 mm

Pitch of rivets

77.5 mm

176 mm

Percentage of strength of circ. end seams

plate 66%

rivets 43.5%

Percentage of strength of circ. intermediate seam

plate -

rivets -

Percentage of strength of longitudinal joint

plate 85%

rivets 87.5%

combined 80%

Working pressure of shell by Rules 13.7 kg

Thickness of butt straps

outer 22 mm

inner 22 mm

No. and Description of Furnaces in each Boiler

3 Morrison's

Material

SMS

Tensile strength

41-47 kg

Smallest outside diameter

832 mm

Length of plain part

top -

bottom -

Thickness of plates

crown 11 mm

bottom 11 mm

Description of longitudinal joint

welded

Dimensions of stiffening rings on furnace or c.c. bottom

Working pressure of furnace by Rules 13.4 kg

End plates in steam space: Material

SMS

Tensile strength

41-47 kg

Thickness

26 mm

Pitch of stays 400 x 420 mm

How are stays secured

dble nuts

Working pressure by Rules 13.4 kg

Tube plates: Material

front SMS

back SMS

Tensile strength

41-47 kg

Thickness

26 mm

21 mm

Mean pitch of stay tubes in nests

247 mm

Pitch across wide water spaces

360 mm

Working pressure

front 14 kg

back 17 kg

Girders to combustion chamber tops: Material

SMS

Tensile strength

44-50 kg

Depth and thickness of girder

at centre 200(2x10) mm

Length as per Rule

650 mm

Distance apart

220 mm

No. and pitch of stays

in each

2-210 mm

Working pressure by Rules

10.5 kg

Combustion chamber plates: Material

SMS

Tensile strength

41-47 kg

Thickness: Sides 10 mm

Back 14 mm

Top 10 mm

Bottom 25 mm

Pitch of stays to ditto: Sides

190 x 210 mm

Back 164 x 245 mm

Top 210 x 220 mm

Are stays fitted with nuts or riveted over riveted over

Working pressure by Rules

14.2 kg

Front plate at bottom: Material

SMS

Tensile strength

41-47 kg

Thickness

26 mm

Lower back plate: Material

SMS

Tensile strength

41-47 kg

Thickness

26 mm

Pitch of stays at wide water space

360 x 164 mm

Are stays fitted with nuts or riveted over

with nuts

Working Pressure

24.5 kg

Main stays: Material

SMS

Tensile strength

44-50 kg

Diameter

At body of stay,

or

Over threads

2 3/4"

No. of threads per inch

8

Area supported by each stay

1680 cm<sup>2</sup>

Working pressure by Rules

15 kg

Screw stays: Material

SMS

Tensile strength

41-47 kg

Diameter

At turned off part,

or

Over threads

1 1/2"

No. of threads per inch

9

Area supported by each stay

392 cm<sup>2</sup>



Working pressure by Rules 14.4 kg Are the stays drilled at the outer ends Yes Margin stays: Diameter { At turned off part, or Over threads 1 7/8" ✓  
 No. of threads per inch 9 Area supported by each stay 500 cm<sup>2</sup> Working pressure by Rules 13.0 kg ✓  
 Tubes: Material SN5 External diameter { Plain 2 3/4" ✓ Thickness { 3.65 mm ✓ No. of threads per inch 9 ✓  
 Pitch of tubes 100 x 90 Working pressure by Rules 15 kg Manhole compensation: Size of opening in shell plate 300 x 400 Section of compensating ring 640 x 740 x 20 mm No. of rivets and diameter of rivet holes 40-20 ✓  
 Outer row rivet pitch at ends 140 mm Depth of flange if manhole flanged 75 mm ✓ 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 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 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 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

WERKSPOOR N.V. The foregoing is a correct description, [Signature] Manufacturer.

Dates of Survey { During progress of work in shops - - March 21, 25, 28, April 7, May 9, 11, 19 Are the approved plans of boiler and superheater forwarded herewith E10-6-37  
 while building { During erection on board vessel - - - 29 Aug. - 21 Sept. 22-26 Oct (If not state date of approval.) Total No. of visits 13

Is this Boiler a duplicate of a previous case Yes If so, state Vessel's name and Report No. MV. ADINDA Amseep 154206

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

The Boilers have been made under special survey in accordance with the approved plan & Secretary's letter.  
 Material duly tested as per rules workmanship throughout good

Survey Fee ... 8/122 : When applied for, 5-11- 1938  
 Travelling Expenses (if any) £ --- : When received, 2/12 1938

[Signature] [Signature]  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI 11 NOV 1938  
 Assigned See F12 mach  
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