

REPORT ON BOILERS.

No. 27950

Received at London Office

MAR 13 1939

Date of writing Report 3.3.1939 When handed in at Local Office

Port of **ROTTERDAM**

AUG 10 1939

No. in Survey held at

Flushing

Date, First Survey 16-6-38

Last Survey 27-2-1939

on the **BOILER No 1055**

(Number of Visits 17)

Gross 6341
Tons Net 3606

Master

Built at **Amsterdam** By whom built **Van Dok My**

Yard No. 71

When built 1939

Engines made at

Amsterdam

By whom made **H. T. Weerspoor**

Engine No. 747

When made 1939

Boilers made at

Flushing

By whom made **Hon Mr. De Schelde**

Boiler No. 1055

When made 1939

Nominal Horse Power

Owners **Petr Mr. La Corona**

Port belonging to **Gravenhage**

MULTITUBULAR BOILERS ~~MARINE~~ ~~AUTOMATIC~~, OR DONKEY.

Manufacturers of Steel **The Steel Co. of Scotland**

(Letter for Record **S.**)

Total Heating Surface of Boilers

2560 sq. ft.

Is forced draught fitted **Yes**

Coal or Oil fired **O.C.**

No. and Description of Boilers

One Multitubular Marine boiler

Working Pressure **180 LBS**

Tested by hydraulic pressure to

320 LBS

Date of test 12-11-38

No. of Certificate 1022

Can each boiler be worked separately **Yes**

Area of Firegrate in each Boiler

1

No. and Description of safety valves to each boiler

2 spring loaded

No. of each set of valves per boiler

per Rule

10,630

Pressure to which they are adjusted **100 lb.**

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 boilers or uptakes and bunkers or woodwork

Is oil fuel carried in the double bottom under boilers **Yes**

Smallest distance between shell of boiler and tank top plating

Is the bottom of the boiler insulated **Yes**

Largest internal dia. of boilers

4400 mm.

Length

3468 mm.

Shell plates: Material **S. M. Steel**

Tensile strength **46.8-52 kg/mm²**

Thickness

29 mm.

Are the shell plates welded or flanged **but straps**

Description of riveting: circ. seams

end Lap 2 x 240 mm

Long. seams **Double butt strap 3 x riv**

Diameter of rivet holes in

circ. seams **30 mm**

Pitch of rivets

87 mm

Percentage of strength of circ. end seams

plate **64%**

rivets **52%**

Percentage of strength of circ. intermediate seam

plate **64%**

rivets **52%**

Percentage of strength of longitudinal joint

plate **85%**

rivets **85%**

Working pressure of shell by Rules

12.8 kg/cm²

Thickness of butt straps

outer **25 mm**

inner **25 mm**

No. and Description of Furnaces in each Boiler

3 Morrison patent

Material

S. M. Steel

Tensile strength

41.47 kg/mm²

Smallest outside diameter

1130 mm.

Length of plain part

top **1**

bottom **1**

Thickness of plates

crown **15 mm**

bottom **15 mm**

Description of longitudinal joint

Welded

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

Working pressure of furnace by Rules

15.22 kg/cm²

End plates in steam space: Material

S. M. Steel

Tensile strength

41.47 kg/mm²

Thickness

29 mm.

Pitch of stays **440 x 450 mm.**

How are stays secured

Secured in plates with nuts inside & outside

Working pressure by Rules

12.65 kg/cm²

Tube plates: Material

front **S. M. Steel**

back **S. M. Steel**

Tensile strength

41.47 kg/mm²

Thickness

28 mm.

Working pressure

17.8 kg/cm²

Lean pitch of stay tubes in nests

200 x 294 mm.

Pitch across wide water spaces

360 mm.

Working pressure

17.8 kg/cm²

Girders to combustion chamber tops: Material

S. M. Steel

Tensile strength

44.50 kg/mm²

Depth and thickness of girder

220 x 2 x 19 mm

at centre

220 x 2 x 19 mm

Length as per Rule

776 mm.

Distance apart

220 mm.

No. and pitch of stays

in each

3 at 200 mm.

Working pressure by Rules

17.2 kg/cm²

Combustion chamber plates: Material

S. M. Steel

Tensile strength

41.47 kg/mm²

Thickness: Sides

18 mm.

Back

19 mm.

Top

18 mm.

Bottom

25 mm.

Pitch of stays to ditto: Sides

200 mm

Back

200 x 195 mm

Top

200 x 220 mm

Are stays fitted with nuts or riveted over **Riveted over**

Working pressure by Rules

12.8 kg/cm²

Front plate at bottom: Material

S. M. Steel

Tensile strength

41.47 kg/mm²

Thickness

23 mm.

Lower back plate: Material

S. M. Steel

Tensile strength

41.47 kg/mm²

Thickness

23 mm.

Pitch of stays at wide water space

366 mm.

Are stays fitted with nuts or riveted over **Fitted with nuts**

Working Pressure

17.7 kg/cm²

Main stays: Material

S. M. Steel

Tensile strength

44.50 kg/mm²

Diameter

At body of stay, **3"**

Over threads **3 1/4"**

No. of threads per inch

9

Area supported by each stay

190000 mm²

Working pressure by Rules

15.5 kg/cm²

Screw stays: Material

S. M. Steel

Tensile strength

41.47 kg/mm²

Diameter

At turned off part, **1 3/8"**

Over threads **1 1/2"**

No. of threads per inch

9

Area supported by each stay

401000 mm²

003631-003639-0160

Lloyd's Register
Foundation

Working pressure by Rules *14.1 kg/cm²* Are the stays drilled at the outer ends *Yes* Margin stays: Diameter { At turned off part, *1 7/16"* or Over threads *1 5/8"* ✓

No. of threads per inch *9* Area supported by each stay *5009.1 mm²* Working pressure by Rules *14.1 kg/cm²*

Tubes: Material *Iron* External diameter { Plain *2 3/4"* Stay *2 3/4"* Thickness *11/16" 9/16"* No. of threads per inch *9* ✓

Pitch of tubes *98 x 100 mm* Working pressure by Rules *215 lb.* Manhole compensation: Size of opening *370 x 470 mm* Section of compensating ring *780 x 880 x 32 mm* No. of rivets and diameter of rivet holes *54 @ 32 mm*

Outer row rivet pitch at ends *220 mm* Depth of flange if manhole flanged *100 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 of rivets in outer row in dome connection to shell *✓*

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 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 Rules *✓* Pressure to which the safety valves are adjusted *✓* Hydraulic test pressure tubes *✓* forgings and castings *✓* and after assembly in place *✓* Are drain cocks 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,
N.V. KON. M.I. "DE SCHELDE" Manufactured by *H.P. M. Schelle*

Dates of Survey { During progress of work in shops - - *10/6 5/7 13/7 4/24 5/9 17/12 21/12 27/12 30/12 31/12 1/1 2/1 3/1 4/1 5/1 6/1 7/1 8/1 9/1 10/1 11/1 12/1 13/1 14/1 15/1 16/1 17/1 18/1 19/1 20/1 21/1 22/1 23/1 24/1 25/1 26/1 27/1 28/1 29/1 30/1 31/1* Are the approved plans of boiler and superheater forwarded herewith *Retained* (If not state date of approval.) *as per Boiler 1049.20-1 8-4-3 each*

while building { During erection on board vessel - - *13/1 26/1 6/2 13/2 14/2 27/2* Total No. of visits *17*

Is this Boiler a duplicate of a previous case *Yes* If so, state Vessel's name and Report No. *Anglo-tanor tankers*

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *This boiler has been made in accordance with the approved plan, Society's Rules and Secretary's letters. Material tested as required and workmanship good.*

This boiler has been efficiently secured on a special made platform under main deck in motor room.

H. J. Schoon

Survey Fee ... *204.80* When applied for, *4. 3. 1939.*
Travelling Expenses (if any) *45.00* When received, *7-6-1939*

As per London Ltr. 7.6-1939
H. J. Schoon
Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute *106 15 AUG 1939*
Assigned *See KE. machy rpl.*