

REPORT ON BOILERS.

No. 27299^c

Received at London Office SEP 19 1938

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

193

Port of

Rotterdam

No. in Survey held at

Rotterdam

Date, First Survey 15-11-38 Last Survey 5-5-1938

Reg. Book.

on the

MV "CORYDA"

(Number of Visits 11)

Gross 8028

Net 4721

Master

Built at

Rotterdam

By whom built

Roth Drogd. Hg.

Yard No. 202

When built 1930

Engines made at

Amsterdam

By whom made

NV Westinghouse

Engine No. 419

When made 1938

Boilers made at

Rotterdam

By whom made

Roth Drogd. Hg.

Boiler No. 548

When made 1930

Nominal Horse Power

502

Owners

Pels My. La Corona

Port belonging to

Gravenhage

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

Manufacturers of Steel

The Steel Co. of Scotland.

(Letter for Record S)

Total Heating Surface of Boilers

1560 sq. ft.

Is forced draught fitted

Yes

Coal or Oil fired

oil

No. and Description of Boilers

One multitubular Marine boiler

Working Pressure

100 lbs

Tested by hydraulic pressure to

320 lb

Date of test

5.5.-30

No. of Certificate

1008

Can each boiler be worked separately

Area of Firegrate in each Boiler

No. and Description of safety valves to each boiler

2 spring loaded.

Diam.

of each set of valves per boiler

per Rule

as fitted

90 m.H.

Pressure to which they are adjusted

180 lb

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 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

4400 m.H.

Length

3460 m.H.

Shell plates: Material

S.H. steel

Tensile strength

46-52 kg/m.H.

Thickness

19 m.H.

Are the shell plates welded or flanged

Welded at outer ends in way

Description of riveting: circ. seams

end laps 2 x riv.

long. seams

Double butt straps 3 x riv.

Diameter of rivet holes in

circ. seams

30 m.H.

Pitch of rivets

87 m.H.

Percentage of strength of circ. end seams

plate 65%

rivets 50%

Percentage of strength of circ. intermediate seam

plate

rivets

Percentage of strength of longitudinal joint

plate 85%

rivets 85%

combined 87%

Working pressure of shell by Rules

12.0 kg/m.H.

Thickness of butt straps

outer 25 m.H.

inner 15 m.H.

No. and Description of Furnaces in each Boiler

3 Morrisons Patent.

Material

S.H. steel

Tensile strength

41-47 kg/m.H.

Smallest outside diameter

1130 m.H.

Length of plain part

top

bottom

Thickness of plates

crown

bottom

15 m.H.

Description of longitudinal joint

Welded.

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

Working pressure of furnace by Rules

13.22 kg/m.H.

End plates in steam space: Material

S.H. steel

Tensile strength

41-47 kg/m.H.

Thickness

19.5 m.H.

Pitch of stays

440-450 m.H.

How are stays secured

Screwed in plates with nuts outside

Working pressure by Rules

12.65 kg/m.H.

Tube plates: Material

front S.H. steel

Tensile strength

41-47 kg/m.H.

Thickness

23 m.H.

Mean pitch of stay tubes in nests

100 x 194 m.H.

Pitch across wide water spaces

360 m.H.

Working pressure

front 17.0 kg/m.H.

Girders to combustion chamber tops: Material

S.H. steel

Tensile strength

44-50 kg/m.H.

Depth and thickness of girder

at centre

220 x 2 x 19 m.H.

Length as per Rule

776 m.H.

Distance apart

220 m.H.

No. and pitch of stays

in each

3 x 200 m.H.

Working pressure by Rules

17.2 kg/m.H.

Combustion chamber plates: Material

S.H. steel

Tensile strength

41-47 kg/m.H.

Thickness: Sides

10 m.H.

Back

19 m.H.

Top

10 m.H.

Bottom

25 m.H.

Pitch of stays to ditto: Sides

250 m.H.

Back

200 x 195 m.H.

Top

200 x 220 m.H.

Are stays fitted with nuts or riveted over

Riveted over

Working pressure by Rules

15.3 kg/m.H.

Front plate at bottom: Material

S.H. steel

Tensile strength

41-47 kg/m.H.

Thickness

23 m.H.

Lower back plate: Material

S.H. steel

Tensile strength

41-47 kg/m.H.

Thickness

23 m.H.

Pitch of stays at wide water space

366 m.H.

Are stays fitted with nuts or riveted over

Fitted with nuts.

Working Pressure

17.7 kg/m.H.

Main stays: Material

S.H. steel

Tensile strength

41-47 kg/m.H.

Diameter

At body of stay,

No. of threads per inch

9

Area supported by each stay

190000 m.H.

Diameter

Over threads

3 1/4"

Working pressure by Rules

15.5 kg/m.H.

Screw stays: Material

S.H. steel

Tensile strength

41-47 kg/m.H.

Diameter

At turned off part,

No. of threads per inch

9

Area supported by each stay

40000 m.H.

Diameter

Over threads

1 1/8"

Working pressure by Rules

15.5 kg/m.H.

Tensile strength

41-47 kg/m.H.

Diameter

Over threads

1 1/2"

Working pressure by Rules

15.5 kg/m.H.

Tensile strength

41-47 kg/m.H.

Diameter

Over threads

1 1/2"

Working pressure by Rules

15.5 kg/m.H.

Tensile strength

41-47 kg/m.H.

Diameter

Over threads

1 1/2"

Working pressure by Rules

15.5 kg/m.H.

Tensile strength

41-47 kg/m.H.

Diameter

Over threads

1 1/2"

Working pressure by Rules

15.5 kg/m.H.

Tensile strength

41-47 kg/m.H.

Diameter

Over threads

1 1/2"

Working pressure by Rules

15.5 kg/m.H.

Tensile strength

41-47 kg/m.H.

Diameter

Over threads

1 1/2"

Working pressure by Rules

15.5 kg/m.H.

Tensile strength

41-47 kg/m.H.

Diameter

Over threads

1 1/2"

Working pressure by Rules

15.5 kg/m.H.

Tensile strength

41-47 kg/m.H.

Diameter

Over threads

1 1/2"

Working pressure by Rules

15.5 kg/m.H.

Tensile strength

41-47 kg/m.H.

Diameter

Over threads

1 1/2"

Working pressure by Rules

15.5 kg/m.H.

Tensile strength

41-47 kg/m.H.

Rpt. 4c
Date of wr
No. in
Reg. Book
Built at
Owner
Oil Eng
Generat
No. of S
OIL E
Maximun
Span of t
Revolutio
Crank S
Couple
Flywhe
Is a gove
Are the
Cooling
Lubrica
Air Co
Scaven
AIR P
Can the
Is there
High P
Seamless
Startin
Seamless
ELEC
Pressu
If alter
Gener
shunt fu
are they
If the g
If the g
PLAN
SPAR

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 *50091 mm²* Working pressure by Rules *14.1 kg/cm²*

Tubes: Material *Iron* External diameter { Plain *2 3/4"* Stay *2 3/4"* Thickness { *1 1/8" L.S.G.* *5/16" - 3/16"* No. of threads per inch *9*

Pitch of tubes *90 x 100 mm* Working pressure by Rules *215 lbs* Manhole compensation: Size of opening in shell plate *370 x 470 mm* Section of compensating ring *700 x 800 x 32 mm* No. of rivets and diameter of rivet holes *54 x 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 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 23 inclusive for boilers been complied with

DE ROTTERDAMSCH E DROOGDOCK M.I.J.
The foregoing is a correct description,
Director

A. Nape Manufacturer

Dates of Survey { During progress of work in shops - - *15/11/12 21/12 24/4 12/12 18/10 1/12 13/4 16/5 19/8* Approved plans of boiler and superheater forwarded herewith *Returned* (If not state date of approval.)

while building { During erection on board vessel - - *on machinery report* Total No. of visits *11*

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

Survey Fee ... *104.80* When applied for, *17th Sept. 1938*

Travelling Expenses (if any) £ *-* When received, *4/10 1938*

J. J. Ochoa
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute *23 SEP 1938*

Assigned *See Ann. 15355*