

REPORT ON BOILERS.

No. 12140

Received at London Office

20 MAR 1931

Date of writing Report 2nd Jan. 1931. When handed in at Local Office

Port of AMSTERDAM

No. in Survey held at AMSTERDAM

Date, First Survey 7th April

Last Survey 21st August 1930.

Reg. Book.

on the M.V. "ALDEGONDA"

(Number of Visits 7)

Gross Tons

Master - Built at Schiedam By whom built Werf "Gusto" Yard No. 652 When built 1931

Engines made at Amsterdam By whom made N.V. Werkspoor Engine No. - When made 1931

Boilers made at Amsterdam By whom made N.V. Werkspoor Boiler No. - When made 1931

Nominal Horse Power 2 x 143 Owners Anglo Saxon Petroleum Co. Port belonging to London

MULTITUBULAR BOILERS - MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

Kenschel

(Letter for Record S.)

Total Heating Surface of Boilers

925 sq. ft.

Is forced draught fitted

Yes

Coal or Oil fired

oil fired

No. and Description of Boilers

Horizontal marine boilers

Working Pressure

150 lbs.

Tested by hydraulic pressure to 275 lbs. Date of test 21-8-30 No. of Certificate 368

Can each boiler be worked separately

Area of Firegrate in each Boiler

No. and Description of safety valves to each boiler

Two spring loaded

Area of each set of valves per boiler

per Rule 8.4 sq. inch

Pressure to which they are adjusted

150 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

Smallest distance between shell of boiler and tank top plating

Is the bottom of the boiler insulated

Yes.

Largest internal dia. of boilers

9' - 10" Length 9' - 8"

Shell plates: Material

S. H. Steel

Tensile strength

29-33 tons

Thickness

25/32"

Are the shell plates welded or flanged

No.

Description of riveting: circ. seams

end

inter.

long. seams

Diameter of rivet holes in

circ. seams

1"

Pitch of rivets

3 1/4"

Percentage of strength of circ. end seams

plate 70%

rivets 44%

Percentage of strength of circ. intermediate seam

plate

rivets

Percentage of strength of longitudinal joint

plate 80.8%

rivets 80.5%

combined 82%

Working pressure of shell by Rules

165 lbs

Thickness of butt straps

outer 2 3/32"

inner 2 3/32"

No. and Description of Furnaces in each Boiler

2 Horizontal furnaces

Material

Steel

Tensile strength

26-30 tons

Smallest outside diameter

32 1/2"

Length of plain part

top

Thickness of plates

crown 3 1/16"

Description of longitudinal joint

Welded

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

Working pressure of furnace by Rules

190 lbs

End plates in steam space: Material

Steel

Tensile strength

26-30 tons

Thickness

15/16"

Pitch of stays

15 x 15"

How are stays secured

dbl. nuts

Working pressure by Rules

180 lbs

Tube plates: Material

front Steel

back

Tensile strength

26-30 tons

Thickness

3/4"

Mean pitch of stay tubes in nests

10 1/2"

Pitch across wide water spaces

14 7/8"

Working pressure

front 165 lbs

back 180 ..

Girders to combustion chamber tops: Material

Steel

Tensile strength

28-32 tons

Depth and thickness of girder

at centre

6" x 1 1/4"

Length as per Rule

23 1/2"

Distance apart

7 1/2"

No. and pitch of stays

in each

2 - 7 1/8"

Working pressure by Rules

190 lbs

Combustion chamber plates: Material

Steel

Tensile strength

26-30 tons

Thickness: Sides

21.5/32"

Back

21.5/32"

Top

21.5/32"

Bottom

Pitch of stays to ditto:

Sides

7 1/16" x 7 1/8"

Back

8 1/4" x 7 1/8"

Top

7 1/8" x 7 1/2"

Are stays fitted with nuts or riveted over

riveted over

Working pressure by Rules

158 lbs

Front plate at bottom: Material

Steel

Tensile strength

26-30 tons

Thickness

15/16"

Lower back plate: Material

Steel

Tensile strength

26-30 tons

Thickness

15/16"

Pitch of stays at wide water space

7 5/8" x 13"

Are stays fitted with nuts or riveted over

nuts

Working Pressure

300 lbs

Main stays: Material

Steel

Tensile strength

28-32 tons

Diameter

At body of stay,

2 3/8"

No. of threads per inch

8

Area supported by each stay

225 sq. inch

Working pressure by Rules

185 lbs

Screw stays: Material

Steel

Tensile strength

26-30 tons

Diameter

At turned-off part,

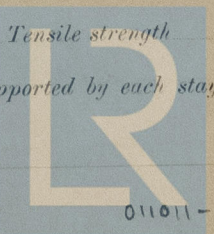
1 3/8"

No. of threads per inch

11

Area supported by each stay

63 sq. inch



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Working pressure by Rules 175 lbs Are the stays drilled at the outer ends *Yes* Margin stays: Diameter $1\frac{1}{2}''$
No. of threads per inch 11 Area supported by each stay 8.1 sq. inch Working pressure by Rules 165 lbs
Tubes: Material *iron/cap welded* External diameter $2\frac{1}{2}''$ Thickness $5/16''$ No. of threads per inch 11
Pitch of tubes $3\frac{1}{2} \times 3\frac{1}{2}$ Working pressure by Rules 215 lbs Manhole compensation: Size of opening in
shell plate $14\frac{1}{2} \times 18\frac{1}{2}$ Section of compensating ring 16 sq. inch No. of rivets and diameter of rivet holes $40 - 1\frac{1}{8}''$
Outer row rivet pitch at ends $7\frac{1}{2}''$ Depth of flange if manhole flanged $3''$ Steam Dome: Material *-*
Tensile strength *-* Thickness of shell *-* Description of longitudinal joint *-*
Diameter of rivet holes *-* Pitch of rivets *-* Percentage of strength of joint *-*
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

The foregoing is a correct description.

W. H. P. R. C.

Manufacturer.

Dates of Survey *-* During progress of work in shops *-* $1/4, 2/4, 20/5, 3/6, 16/7, 18/8, 2/9$ Are the approved plans of boiler and superheater forwarded herewith *Retained in B.I.R.*
while building *-* During erection on board vessel *-* (If not state date of approval.) *Sending F.S.S. 30.*
Total No. of visits 7

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

The boiler has been constructed under Special Survey, in accordance with the Rules, Secretary's letters and approved plans. Material tested as required and workmanship good.

The boiler has been fitted on board and safety valves adjusted to 150 lb.

M. Yewett

Survey Fee \pounds *100 on march* Report
Travelling Expenses (if any) \pounds : : When applied for. 192
When received. 192

F. N. Bernotti
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **TUE. 31 MAR '33**
Assigned *Sec F. E. R. P.*



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