

REPORT ON BOILERS.

No. 12140

Received at London Office

10 JAN 1931

Date of writing Report 24 Jan 1931 When handed in at Local Office

102

Port of

AMSTERDAM

No. in Survey held at AMSTERDAM

Date, First Survey April 4

Last Survey August 1930

Reg. Book.

(Number of Visits 4)

Tons

Gross

Net

M.V. "ALDEGONDA"

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 Henschel

(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 main boiler

Working Pressure 150 lb

Tested by hydraulic pressure to 245 lb

Date of test 21-8-30

No. of Certificate 368

Can each boiler be worked separately Yes

Area of Firegrate in each Boiler 4

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)

as fitted 9.4

Pressure to which they are adjusted 4

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 4

Is oil fuel carried in the double bottom under boilers Yes

Smallest distance between shell of boiler and tank top plating 4

Is the bottom of the boiler insulated Yes

Largest internal dia. of boilers 9' 10"

Length 9' 8"

Shell plates: Material S.M. Steel

Tensile strength 29-33 tons

Thickness 25/32"

Are the shell plates welded or flanged No

Description of riveting: circ. seams

end All rivets

long. seams

All butt straps, all intermediate diameter of rivet holes in

circ. seams

1"

Pitch of rivets

5 1/8"

Percentage of strength of circ. end seams

plate 40%

rivets 44%

Percentage of strength of circ. intermediate seam

plate 4

rivets 4

Percentage of strength of longitudinal joint

plate 80.8%

rivets 80.5%

combined 82%

Working pressure of shell by Rules

165 lb

Thickness of butt straps

outer 25/32"

inner 25/32"

No. and Description of Furnaces in each Boiler 2 main furnaces

Material Steel

Tensile strength 24-30 tons

Smallest outside diameter 32 1/2"

Length of plain part

top 4

bottom 4

Thickness of plates

crown 3 1/4"

bottom 3 1/4"

Description of longitudinal joint

Welded

Dimensions of stiffening rings on furnace or c.c. bottom 4

Working pressure of furnace by Rules 190 lb

End plates in steam space: Material Steel

Tensile strength 24-30 tons

Thickness 15/16"

Pitch of stays 15" x 15"

How are stays secured All nuts

Working pressure by Rules 180 lb

Tube plates: Material

front Steel

back Steel

Tensile strength

24-30 tons

Thickness

15/16"

3/4"

Mean pitch of stay tubes in nests 10 1/2"

Pitch across wide water spaces 14 1/4"

Working pressure

front 165 lb

back 180 lb

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 - 4 7/8"

Working pressure by Rules

190 lb

Combustion chamber plates: Material Steel

Tensile strength

21.5"

Tensile strength

24-30 tons

Thickness: Sides

21.5/32"

Back

21.5/32"

Top

21.5/32"

Bottom

.32"

Pitch of stays to ditto: Sides

7 1/8" x 7 1/8"

Back

8 1/4" x 7 1/8"

Top

7 1/8" x 7 1/8"

Are stays fitted with nuts or riveted over rivets over

Working pressure by Rules

158 lb

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 1/8" x 13"

Are stays fitted with nuts or riveted over rivets

Working Pressure

300 lb

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 lb

Screw stays: Material Steel

Tensile strength 26-30 tons

Diameter

At turned off part

1 1/2"

No. of threads per inch

16

Area supported by each stay 63 sq. inch



Lloyd's Register Foundation

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Working pressure by Rules 145 lb. Are the stays drilled at the outer ends Yes Margin stays: Diameter ^{At turned off part.} 1 1/2" ^{or} Over threads

No. of threads per inch 11 Area supported by each stay 81 sq. inch. Working pressure by Rules 165 lb.

Tubes: Material iron (superheated) External diameter ^{Plain} 2 1/4" ^{Stay} 2 1/4" Thickness ^{Stay} 5/16" No. of threads per inch 11

Pitch of tubes 3 15/16" x 3 15/16" Working pressure by Rules 215 lb. Manhole compensation: Size of opening in shell plate 14 1/2" x 18 1/2" Section of compensating ring 16 sq. inch. No. of rivets and diameter of rivet holes 40 - 1 1/8"

Outer row rivet pitch at ends 4 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 ^{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 <

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

Dates of Survey ^{During progress of work in shops - -} 7/4, 2 1/4, 2 9/5, 3/6, 14/7, 16/8, 24/8. Are the approved plans of boiler and superheater forwarded herewith < (If not state date of approval.) September 1, 1910.

^{while building} ^{During erection on board vessel - - -} < Total No. of visits 4

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.

Survey Fee	£	:	When applied for.	192
Travelling Expenses (if any)	£	:	:	:	When received.	192

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

Committee's Minute TUE. 21 MAR '10

Assigned See F. C. Rpt.