

REPORT ON BOILERS.

No. 13760

Received at London Office

21 SEP 1924

Date of writing Report 24.9.1924 When handed in at Local Office

192

Port of

Rotterdam

No. in Survey held at

Rotterdam

Date, First Survey

27.9.23

Last Survey

4-9-

1923

on the

Steel Screw Motor Vessel, SLIEDRECHT

(Number of Visits 15)

Gross

Tons

Net

Master

Built at

Rotterdam

By whom built

Roth Drogen Mij

Yard No.

91

When built

1914

Engines made at

Glasgow

By whom made

Harland & Wolff

Engine No.

NG 6164

When made

1914

Boilers made at

Rotterdam

By whom made

Roth Drogen Mij

Boiler No.

When made

1914

Nominal Horse Power

Owners

Hooma Mij, De Maas

Port belonging to

Rotterdam

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

Manufacturers of Steel

John Spencer & Sons

(Letter for Record S)

Total Heating Surface of Boilers

660 sq ft each boiler

Is forced draught fitted

No

Coal or Oil fired

oil

No. and Description of Boilers

2 single end multitubular donkey boiler

Working Pressure

120 lbs

Tested by hydraulic pressure to

250 lb

Date of test

20-3-24

No. of Certificate

788

Can each boiler be worked separately

Yes

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

Pressure to which they are adjusted

120 lbs

Are they fitted with easing gear

Yes

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

No main

Smallest distance between boilers or uptakes and bunkers or woodwork

On main deck

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

8' 3"

Length

10' 2"

Shell plates: Material

S.M. Steel

Tensile strength

28-32 tons

Thickness

9/16"

Are the shell plates welded or flanged

No

Description of riveting: circ. seams

end lap 2 x riv

Long. seams

Double butt 2 x riv

Diameter of rivet holes in

circ. seams

13/16"

long. seams

Pitch of rivets

3 1/4"

Percentage of strength of circ. end seams

plate

75%

rivets

94.6%

Percentage of strength of circ. intermediate seam

plate

75%

rivets

94.6%

Percentage of strength of longitudinal joint

plate

75%

rivets

80.3%

combined

94.6%

Working pressure of shell by Rules

120 lbs

Thickness of butt straps

outer 9/16"

inner 9/16"

No. and Description of Furnaces in each Boiler

2 Moulsons patent

Material

S.M. Steel

Tensile strength

26-30 tons

Smallest outside diameter

3' 6 1/8"

Length of plain part

top

bottom

Thickness of plates

crown 9/16"

bottom 9/16"

Description of longitudinal joint

Welded

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

Working pressure of furnace by Rules

192 lbs

End plates in steam space: Material

S.M. Steel

Tensile strength

26-30 tons

Thickness

5/16"

Pitch of stays

15"

Are stays secured

Screwed in plates with nuts in 2 outside

Working pressure by Rules

120 lbs

End plates: Material

front S.M. Steel

back S.M. Steel

Tensile strength

28-32 tons

Thickness

5/16"

Pitch of stay tubes in nests

8 1/16" x 12 3/16"

Pitch across wide water spaces

14"

Working pressure

front 140 lbs

back 120 lbs

Ends to combustion chamber tops: Material

S.M. Steel

Tensile strength

28-32 tons

Depth and thickness of girder

Centre

2 x 7 x 5/8"

Length as per Rule

2' 5"

Distance apart

7 1/2"

No. and pitch of stays

Each

2 x 8 3/4"

Working pressure by Rules

131 lbs

Combustion chamber plates: Material

S.M. Steel

Tensile strength

26-30 tons

Thickness: Sides

5/8"

Back

5/8"

Top

5/8"

Bottom

1 1/16"

Pitch of stays to ditto: Sides

8 3/4" x 7"

Back

8 1/2" x 7 1/4"

Top

7 1/2" x 8 3/4"

Are stays fitted with nuts or riveted over

Riveted over

Working pressure by Rules

135 lbs

Front plate at bottom: Material

S.M. Steel

Tensile strength

26-30 tons

Thickness

5/16"

Thickness

5/16"

Lower back plate: Material

S.M. Steel

Tensile strength

26-30 tons

Thickness

5/16"

Pitch of stays at wide water space

L

Are stays fitted with nuts or riveted over

L

Working Pressure

L

Main stays: Material

S.M. Steel

Tensile strength

28-32 tons

At body of stay, or

2"

No. of threads per inch

9

Area supported by each stay

225 sq"

Working pressure by Rules

151 lbs

Screw stays: Material

S.M. Steel

Tensile strength

26-30 tons

At turned off part, or

1 1/4"

No. of threads per inch

9

Area supported by each stay

81.25 sq"

Over threads

1 1/4"

No. of threads per inch

9

Area supported by each stay

61.6 sq"

65.6 sq"

W446-0211

Working pressure by Rules 129 lbs Are the stays drilled at the outer ends Yes Margin stays: Diameter { At turned off part, 1 1/16" or Over threads, 1 1/4" top 1 1/2"

No. of threads per inch 9 Area supported by each stay 0.6 sq" Working pressure by Rules 129 lbs

Tubes; Material Iron External diameter { Plain 3" Stay 3" Thickness 2 1/4" x 10 LSC No. of threads per inch 9

Pitch of tubes 4 1/2" x 4 1/2" Working pressure by Rules 140 lbs Manhole compensation: Size of opening in shell plate 12" x 16" Section of compensating ring 2 1/2" x 3/4" No. of rivets and diameter of rivet holes 56 @ 1 1/16"

Outer row rivet pitch at ends 3 1/2" Depth of flange if manhole flanged Not flanged Steam Dome: Material SM Steel

Tensile strength 20 - 32 tons Thickness of shell 1 1/2" Description of longitudinal joint Lap 2 x riveted

Diameter of rivet holes 1 1/16" Pitch of rivets 2 3/4" Percentage of strength of joint { Plate 70 1/2% Rivets 85.4%

Internal diameter 2' - 3 1/2" Working pressure by Rules 104 lbs Thickness of crown 9/16" No. and diameter of stays None Inner radius of crown ✓ Working pressure by Rules ✓

How connected to shell riveted Size of doubling plate under dome 2' - 3 1/2" x 3/4" Diameter of rivet holes and pitch of rivets in outer row in dome connection to shell 1 1/16" @ 3"

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 Yes

The foregoing is a correct description,
 ROTTERDAMSCH DROOGDOEK MAATSCHAPPIJ
 DIRECTOR
 J. E. Oudekerk
 Manufacturer.

Dates of Survey while building { During progress of work in shops - 1923 12 16, 22, 29, 9, 16, 23, 30, 10, 17, 24, 31, 11, 18, 25, 12, 1, 8, 15, 22, 29
 During erection on board vessel - 1924 1 18, 25, 1 25, 1 25

Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.) ✓
 Total No. of visits 15

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have been built in accordance with Deur letters and approved plan material tested as required and workmanship good, tested as required and found sound and tight!

Survey Fee ... 105.60 When applied for, 23/9 19224
 Travelling Expenses (if any) £ : : When received, 24/9 19224

J. E. Oudekerk
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRL 3 OCT 1924
 Assigned _____