

REPORT ON BOILERS.

No. 15562

Received at London Office

13 SEP 1926

Date of writing Report 2.9.1926 When handed in at Local Office

192

Port of

Rotterdam

No. in Survey held at Reg. Book.

Flushing

Date, First Survey

16.1.26.

Last Survey

22.6.1926

1926

on the Steel Screw Steamer "WESTLAND"

(Number of Visits 12)

Tons

Gross

Net

Master

Built at

Alblasserdam

By whom built

J. Smit. Cn

Yard No.

When built

1926

Engines made at

Flushing

By whom made

Hon. Mr. De Schelde

Engine No.

303

When made

1926

Boilers made at

Flushing

By whom made

Hon. Mr. De Schelde

Boiler No.

964.65

When made

1926

Nominal Horse Power

Owners

Scheepw. Rembolen Mr

Port belonging to

Rotterdam

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

Société Anonyme des Forges et Chaudières de Dilling

Letter for Record

S

Total Heating Surface of Boilers

4228 sq ft

Is forced draught fitted

Yes

Coal or Oil fired

Coal

No. and Description of Boilers

2 Multitubular single ended boilers

Working Pressure

180 lb

Tested by hydraulic pressure to

270 lb

Date of test

22.6.26

No. of Certificate

039

Can each boiler be worked separately

Yes

Area of Firegrate in each Boiler

51 sq ft

No. and Description of safety valves to each boiler

2 Spring loaded

Area of each set of valves per boiler

(per Rule as fitted)

19 sq ft

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

No donkey boiler

Smallest distance between boilers or uptakes and bunkers or woodwork

24 in

Is oil fuel carried in the double bottom under boilers

No

Smallest distance between shell of boiler and tank top plating

Is the bottom of the boiler insulated

Yes

Largest internal dia. of boilers

13' 4 7/8"

Length

10' 6"

Shell plates: Material

S. M. Steel

Tensile strength

20-32 tons

Thickness

1 1/16"

Are the shell plates welded or flanged

No

Description of riveting: circ. seams

end

top 2 x riv

long. seams

Double butt 3 x riv

Diameter of rivet holes in

circ. seams

1 1/8"

Pitch of rivets

3 1/2"

inter.

8 1/16"

Percentage of strength of circ. end seams

plate

65%

rivets

53.4%

Percentage of strength of circ. intermediate seam

plate

L

rivets

L

Percentage of strength of longitudinal joint

plate

85%

rivets

81%

combined

88.4%

Working pressure of shell by Rules

190 lbs

Thickness of butt straps

outer

1 1/16"

inner

1 1/16"

No. and Description of Furnaces in each Boiler

3 Monitors patent

Material

S. M. Steel

Tensile strength

26-30 tons

Smallest outside diameter

3' 4 1/2"

3' 4 1/2"

Length of plain part

top

bottom

Thickness of plates

crown

1 1/2"

Description of longitudinal joint

Welded

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

Working pressure of furnace by Rules

204 lbs

End plates in steam space: Material

S. M. Steel

Tensile strength

26-30 tons

Thickness

7/8" + 1/4" doubling

ch of stays

18 x 16"

How are stays secured

Secured in plates with nuts outside

Working pressure by Rules

219 lbs

Tube plates: Material

front

S. M. Steel

back

S. M. Steel

Tensile strength

26-30 tons

Thickness

3/4"

Working pressure

front

187 lbs

back

L

Mean pitch of stay tubes in nests

11 1/2" x 7 1/8"

Pitch across wide water spaces

13 1/4"

Working pressure

front

187 lbs

back

L

Girders to combustion chamber tops: Material

S. M. Steel

Tensile strength

20-32 tons

Depth and thickness of girder

at centre

8 1/2" x 2 x 3/4"

Length as per Rule

2' 6"

in each

3 x 2 x 1 1/2"

Working pressure by Rules

250 lbs

Combustion chamber plates: Material

S. M. Steel

Tensile strength

26-30 tons

Thickness: Sides

5/8"

Back

5/8"

Pitch of stays to ditto: Sides

7 1/2"

Back

7" x 1 1/2"

Top

7 1/2" x 8"

Are stays fitted with nuts or riveted over

Nuts inside

Nuts outside

Nuts outside

Working pressure by Rules

240 lbs

Front plate at bottom: Material

S. M. Steel

Tensile strength

26-30 tons

Thickness

1 5/16"

Lower back plate: Material

S. M. Steel

Pitch of stays at wide water space

13 1/2"

Are stays fitted with nuts or riveted over

Fitted with nuts

Working Pressure

212 lbs

Main stays: Material

S. M. Steel

Tensile strength

20-32 tons

Diameter: At body of stay,

2 7/8"

or

Over threads

2 7/8 - 3"

No. of threads per inch

9

Area supported by each stay

20.8 sq inch

Working pressure by Rules

206 lbs

Diameter: At turned off part,

1 1/2"

or

Over threads

1 1/2"

No. of threads per inch

10

Area supported by each stay

56"

60"

60"

Working pressure by Rules 213 lbs Are the stays drilled at the outer ends No Margin stays: Diameter { At turned off part, or Over threads 1 1/4" ✓

No. of threads per inch 10 ✓ Area supported by each stay 76.0" Working pressure by Rules 257 lbs ✓

Tubes: Material Iron ✓ External diameter { Plain 2 1/4" ✓ Thickness 4.9 IWG ✓ No. of threads per inch 10 ✓

Pitch of tubes 3 13/16" ✓ Working pressure by Rules 215 lbs ✓ Manhole compensation: Size of opening in shell plate 14" x 18" ✓ Section of compensating ring 9 x 1" flange 3" ✓ No. of rivets and diameter of rivet holes 40 @ 1 1/8" ✓

Outer row rivet pitch at ends 5 5/8" ✓ Depth of flange if manhole flanged ring 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 23 inclusive for boilers been complied with Yes ✓

The foregoing is a correct description,

KON.MY. "DE SCHEDE"

J.M. Smith & Co.

Manufacturer.

Dates of Survey { During progress of work in shops - - - 16/9/13 19/9/13 16/10/13 19/10/13 13/11/13 16/11/13 ✓
while building { During erection on board vessel - - - On Machinery report ✓
the approved plans of boiler and superheater forwarded herewith 14-10-13 (If not state date of approval.)

Total No. of visits 12

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have been built under special survey, material tested as required and workmanship good. Boilers tested by hydraulic pressure and found sound and tight.

Survey Fee £ ... On Machinery report When applied for. 192
Travelling Expenses (if any) £ ... When received. 192

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

Committee's Minute TUE. 14 SEP 1928

Assigned See Report attached