

REPORT ON BOILERS.

No. 27930

25 MAY 1934

Received at London Office

Date of writing Report 17-5-1934 When handed in at Local Office

192

Port of

Rotterdam

No. in Reg. Book.

Survey held at

Rotterdam

Date, First Survey

Jan 11 1934

Last Survey

4th May 1934

on the

new main barter SS, SCHIELAND

(Number of Visits 20)

Gross

Tons

Net

Master

Built at

Schiedam

By whom built

A. F. Smulders

Yard No.

When built

Engines made at

Schiedam

By whom made

A. F. Smulders

Engine No.

When made

Boilers made at

Rotterdam

By whom made

Rott Drogen My

Boiler No. 519/20

When made

1934

Nominal Horse Power

Owners

Schepers & Henkolen My

Port belonging to

Rotterdam

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

Manufacturers of Steel

Mannesmann röhren Werk.

(Letter for Record

S)

Total Heating Surface of Boilers

3710 sq

Is forced draught fitted

No

Coal or Oil fired

Coal

No. and Description of Boilers

2 single ended multitubular marine

Working Pressure

180 lb

Tested by hydraulic pressure to

320 lb

Date of test

4-5-34

No. of Certificate

960

Can each boiler be worked separately

Yes

Area of Firegrate in each Boiler

51

No. and Description of safety valves to each boiler

2 spring loaded high lift

Area of each set of valves per boiler

per Rule

as fitted

600 sq in dia

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

Smallest distance between boilers or uptakes and bunkers or woodwork

Over 18"

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

13'6"

Length

11'0"

Shell plates: Material

S. M. Steel

Tensile strength

28-32 tons

Thickness

1 1/8"

Are the shell plates welded or flanged

No

Description of riveting: circ. seams

end lap 2 x riv

long. seams

Double butt straps 3 x riv

Diameter of rivet holes in

circ. seams 1 3/16"

long. seams 1 3/16"

Pitch of rivets

5/8"

8 1/4"

Percentage of strength of circ. end seams

plate 67.2%

rivets 44.6%

Percentage of strength of circ. intermediate seam

plate

rivets

Percentage of strength of longitudinal joint

plate 85.6%

rivets 92.8%

combined 89.7%

Working pressure of shell by Rules

183 lb

Thickness of butt straps

outer 7/8"

inner 1"

No. and Description of Furnaces in each Boiler

3 Morrison patent

Material

S. M. Steel

Tensile strength

26-30 tons

Smallest outside diameter

3' x 1 1/4"

Length of plain part

top

bottom

Thickness of plates

crown 1 1/4"

bottom 1 3/4"

Description of longitudinal joint

Welded

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

Working pressure of furnace by Rules

183 lb

End plates in steam space: Material

S. M. Steel

Tensile strength

26-30 tons

Thickness

1 3/4"

Pitch of stays

18 x 16"

How are stays secured

Secured in plates with nuts outside

Working pressure by Rules

192 lb

Tube plates: Material

front S. M. Steel

back S. M. Steel

Tensile strength

26-30 tons

Thickness

1 1/4"

3/4"

Mean pitch of stay tubes in nests

8 1/4" x 10 1/8"

Pitch across wide water spaces

1' 3 1/2"

Working pressure

front 193 lb

back

Girders to combustion chamber tops: Material

S. M. Steel

Tensile strength

28-32 tons

Depth and thickness of girder

at centre

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

Length as per Rule

2' 5"

Distance apart

8 1/2"

No. and pitch of stays

in each

2 x 9"

Working pressure by Rules

205 lb

Combustion chamber plates: Material

S. M. Steel

Tensile strength

26-30 tons

Thickness: Sides

1 1/4"

Back

1 1/4"

Top

1 1/4"

Bottom

7/8"

Pitch of stays to ditto: Sides

9 x 7 1/8"

Back

7 1/2 x 8 1/2"

Top

9 x 8 1/2"

Are stays fitted with nuts or riveted over

Nuts

Working pressure by Rules

217 lb

Front plate at bottom: Material

S. M. Steel

Tensile strength

26-30 tons

Thickness

1 3/16"

Lower back plate: Material

S. M. Steel

Tensile strength

26-30 tons

Thickness

3/4"

Pitch of stays at wide water space

14 1/8"

Are stays fitted with nuts or riveted over

Fitted with nuts

Working Pressure

254 lb

Main stays: Material

S. M. Steel

Tensile strength

28-30 tons

Diameter

At body of stay, 2 9/16"

Over threads 2 1/4"

No. of threads per inch

9

Area supported by each stay

188 sq

Working pressure by Rules

183 lb

Screw stays: Material

S. M. Steel

Tensile strength

26-30 tons

Diameter

At turned off part, 1 1/2"

Over threads 1 1/2"

No. of threads per inch

9

Area supported by each stay

63.15 sq

BILAGE
N° 872
BLIKMAN & SART AMST

W119-0189

Working pressure by Rules 196 lb Are the stays drilled at the outer ends No Margin stays: Diameter 1 3/4"
 No. of threads per inch 9 Area supported by each stay 930" Working pressure by Rules 195 lb
 Tubes: Material Steel External diameter 3 1/4" Thickness 5/16" No. of threads per inch 9
 Pitch of tubes 4 7/8" x 4 1/16" Working pressure by Rules 180 lb Manhole compensation: Size of opening in
 shell plate 1' 8 3/4" x 1' 4 1/4" Section of compensating ring 2 1/2" x 2 1/2" x 1 1/8" No. of rivets and diameter of rivet holes 4 x 2 1/16"
 Outer row rivet pitch at ends 6 3/4" Depth of flange if unflanged 3 1/2" 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 -
 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 -

ROTTERDAMSCHЕ DROOGDOEK MAATSCHAPPIJ
 Directeur

The foregoing is a correct description,
 J. J. Oetelaar Manufacturer.

Dates of Survey { During progress of work in shops - - - 1-10-14, 21-22-14, 2-5-17, 26-29-13
 while building { During erection on board vessel - - - 5-9-15, 19-23-16, 28-4-17
 Are the approved plans of boiler and superheater forwarded herewith Pitane
 (If not state date of approval.) 1-1-34.
 Total No. of visits 20

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have been made in accordance with the approved plan, Society's Rules and Secretary's letters, material tested as required and workmanship good, tested by hydraulic pressure as required and found sound and tight.

Survey Fee ... £ 297.60 When applied for, 24.5.1924
 Travelling Expenses (if any) 5.00 When received, 12.7.1924

Committee's Minute TUE. 3 JUL 1934
 Assigned see Rot. 22993

J. J. Oetelaar
 Engineer Surveyor to Lloyd's Register of Shipping.
 © 2020 Lloyd's Register Foundation