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REPORT ON BOILERS.

No. 16574

REMARKS.

Received at London Office

7 JUL 1927

of writing Report

11.6.1927

When handed in at Local Office

192

Port of

Rotterdam

in Survey held at

Rotterdam

Date, First Survey

20.5.25

Last Survey

4.2.1926

Book.

on the donkey boiler. MV, TROCAS

(Number of Visits 18)

Tons

Gross

Net

er

Built at

Rotterdam

By whom built

Rott Drög & My

Yard No. 99

When built

1917

nes made at

New Castle

By whom made

North Eastern Marine

Engine No. 298/99

When made

1916

ers made at

Rotterdam

By whom made

Rott Drög & My

Boiler No.

When made

1916

inal Horse Power

1200

Owners

Anglo Saxon Petroleum Co

Port belonging to

London

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

David Colville & Sons Ltd

(Letter for Record

S)

Heating Surface of Boilers

2452 sq

Is forced draught fitted

Yes

Coal or Oil fired

Oil

and Description of Boilers

Single ended Multitubular marine boilers

Working Pressure

12.65 kg

ed by hydraulic pressure to

320 lbs

Date of test

4.2.26

No. of Certificate

8334

Can each boiler be worked separately

Yes

of Firegrate in each Boiler

No. and Description of safety valves to each boiler

2 high lifting spring loaded

of each set of valves per boiler

per Rule

Pressure to which they are adjusted

100 lbs

Are they fitted with easing gear

Yes

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

Nearest distance between boilers or uptakes and bunkers or woodwork

Over 24"

Is oil fuel carried in the double bottom under boilers

Nearest distance between shell of boiler and tank top plating

In top of engine room

Is the bottom of the boiler insulated

Yes

Nearest internal dia. of boilers

350 mm

Length

320 mm

Shell plates: Material

J. M. Steel

Tensile strength

29.5-33 tons

Thickness

25 mm

Are the shell plates welded or flanged

No

Description of riveting: circ. seams

end lap 2 x riv

seams

Double butt 5 x riv

Diameter of rivet holes in

circ. seams

25 mm

Pitch of rivets

85.5 mm

Percentage of strength of circ. end seams

plate

70%

Percentage of strength of circ. intermediate seam

plate

-

Percentage of strength of longitudinal joint

plate

85.5%

Working pressure of shell by Rules

13.2 kg

Thickness of butt straps

outer 21 mm

inner 21 mm

No. and Description of Furnaces in each Boiler

3 Morrison patent

Material

J. M. Steel

Tensile strength

26.30 tons

Smallest outside diameter

874 mm

Thickness of plain part

top

bottom

Thickness of plates

crown

12 mm

Description of longitudinal joint

Welded

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

Working pressure of furnace by Rules

13.5 kg

plates in steam space: Material

J. M. Steel

Tensile strength

26.30 tons

Thickness

25 mm

Pitch of stays 400x400 mm

are stays secured

Working pressure by Rules

12.6 kg

plates: Material

front J. M. Steel

back J. M. Steel

Tensile strength

26.30 tons

Thickness

25 mm

pitch of stay tubes in nests

300x200 mm

Pitch across wide water spaces

860 mm

Working pressure

front 12.6 kg

back

ers to combustion chamber tops: Material

J. M. Steel

Tensile strength

20.32 tons

Depth and thickness of girder

160x2x19 mm

Length as per Rule

650 mm

Distance apart

200 mm

No. and pitch of stays

2 in 210 mm

Working pressure by Rules

17.7 kg

Combustion chamber plates: Material

J. M. Steel

ile strength

26.32 tons

Thickness: Sides

10 mm

Back

10 mm

Top

10 mm

Bottom

10 mm

Top solid heads

Fitted over

of stays to ditto: Sides

210x183 mm

Back

213x189 mm

Top

210x200 mm

Are stays fitted with nuts or riveted over

Fitted over

Working pressure by Rules

13.6 kg

Front plate at bottom: Material

J. M. Steel

Tensile strength

26.30 tons

Thickness

25 mm

Lower back plate: Material

J. M. Steel

Tensile strength

26.30 tons

Thickness

25 mm

of stays at wide water space

330 mm

Are stays fitted with nuts or riveted over

Fitted with nuts

Working Pressure

17.7 kg

Main stays: Material

J. M. Steel

Tensile strength

20.32 tons

At body of stay,

60 mm

or

Over threads

No. of threads per inch

9

Area supported by each stay

160000 mm²

Working pressure by Rules

16.6 kg

At turned off part,

24 mm

or

Over threads

1 1/4" 30 mm

No. of threads per inch

9

Area supported by each stay

40251 mm²

Screw stays: Material

J. M. Steel

Tensile strength

20.32 tons

No. of threads per inch

9

Area supported by each stay

39450 mm²

Lloyd's Register

Foundation

015338-015347-0308

Working pressure by Rules *15.4 kg* Are the stays drilled at the outer ends *No* Margin stays: Diameter { At turned off part, *34 mill* or Over threads *50 mill*

No. of threads per inch *9* Area supported by each stay *39000 mill* Working pressure by Rules *14.4 kg*

Tubes: Material *Iron* External diameter { Plain *2 3/4* Stay *2 3/4* Thickness { *21.9 4.59* No. of threads per inch *9*

Pitch of tubes *100 mill* Working pressure by Rules Manhole compensation: Size of opening in shell plate *410 x 512 mill* Section of compensating ring *105 x 10 mill* No. of rivets and diameter of rivet holes *41 x 27 mill*

Outer row rivet pitch at ends *105 mill* Depth of flange if manhole flanged *00 mill* Steam Dome: Material *C*

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

How connected to shell Inner radius of crown Working pressure by Rules

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, *ROTTERDAMSCH BROEDER MAATSCHAPPIJ* Manufacturer.

Dates of Survey { During progress of work in shops - - - *1925 12 19 13 16 26 31 18* Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.) *20-2-25*

while building { During erection on board vessel - - - *16 11 12 12 12 12 1926 1 1 1* Total No. of visits *10*

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *These boilers have been made under special survey in accordance with the approval plan Society's Rules and Secretary's letters, material tested as required and workmanship good*

Survey Fee ... *196.20* When applied for, *25/6* 1927

Travelling Expenses (if any) *1.50* When received, *4/7* 1927

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

Committee's Minute *See sub. yth attached*

Assigned

