

REPORT ON BOILERS.

No. 84062

Received at London Office

Date of writing Report 12-4-1929 When handed in at Local Office 16-4-1929 Port of

NEWCASTLE-ON-TYNE

No. in Survey held at

Jarrow

Date, First Survey

22 Nov. 128

Last Survey

8 April

1929

38 Sup on the

S.S. "STANASFALT"

(Number of Visits 29.)

Tons

Gross 2224.34

Net 1328.6

Master

Built at

Hebburn

By whom built

Palmer's Co. Ltd.

Yard No. 989

When built 1929

Engines made at

Jarrow

By whom made

Palmer's Co. Ltd.

Engine No. 989

When made 1929

Boilers made at

"

By whom made

"

Boiler No. 989

When made 1929

Nominal Horse Power

136

Owners

Balisch Amerikanische Petroleum Import Gesellschaft

Port belonging to

Danzig

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

The Steel Company of Scotland

(Letter for Record

S)

Total Heating Surface of Boilers

2218

Is forced draught fitted

YES

Coal or Oil fired

OIL

No. and Description of Boilers

1 S.E. MULTITUBULAR

Working Pressure 180 LBS.

Tested by hydraulic pressure to

320 LBS.

Date of test 12.2.29

No. of Certificate 328

Can each boiler be worked separately

-

Area of Firegrate in each Boiler

No. and Description of safety valves to each boiler ONE DOUBLE SPRING LOADED

Area of each set of valves per boiler

per Rule 17.0

as fitted 19.24

Pressure to which they are adjusted 180 LBS.

Are they fitted with easing gear

YES

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

-

Smallest distance between boilers or uptakes and bunkers or woodwork

2' 6"

Is oil fuel carried in the double bottom under boilers

NO

Smallest distance between shell of boiler and tank top plating

1' 0"

Is the bottom of the boiler insulated

YES

Largest internal dia. of boilers

14' 0 3/4"

Length

11' 9"

Shell plates: Material

STEEL

Tensile strength 29 - 33 TONS

Thickness

1 1/8"

Are the shell plates welded or flanged

NO

Description of riveting: circ. seams

end DRL

Long. seams

TRDBS

Diameter of rivet holes in

circ. seams 1 5/16"

long. seams 1 3/8"

Pitch of rivets

3.758"

8.25"

Percentage of strength of circ. end seams

plate 65.0%

rivets 50.8%

Percentage of strength of circ. intermediate seam

plate

rivets

Percentage of strength of longitudinal joint

plate 85.6%

rivets 88.7%

combined 88.9%

Working pressure of shell by Rules

181 LBS.

Thickness of butt straps

outer 7/8"

inner 1"

No. and Description of Furnaces in each Boiler

3 DEIGHTON SECTION

30.f.

Material

STEEL

Tensile strength

26 - 30 TONS

Smallest outside diameter

3' 2 1/2"

Length of plain part

top 10 1/2"

bottom 10 1/2"

Thickness of plates

crown 1/2"

bottom 1/2"

Description of longitudinal joint

WELD

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

Working pressure of furnace by Rules

187 LBS.

End plates in steam space: Material

STEEL

Tensile strength

26 - 30 TONS

Thickness

1 3/32"

Pitch of stays 21 1/2" x 20"

How are stays secured

DOUBLE NUTS & WASHERS

Working pressure by Rules

181 LBS.

End plates: Material

front STEEL

back "

Tensile strength

26 - 30 TONS

Thickness

15/16"

27/32"

Can pitch of stay tubes in nests

10 5/8"

Pitch across wide water spaces

1' 2 1/4"

Working pressure

front 191 LBS.

back 185 LBS.

End plates to combustion chamber tops: Material

STEEL

Tensile strength

29 - 33 TONS

Depth and thickness of girder

Centre

9" x 1 1/8"

Length as per Rule

2' 7 5/8"

Distance apart

9"

No. and pitch of stays

Each

2 @ 10"

Working pressure by Rules

182 LBS.

Combustion chamber plates: Material

STEEL

Tensile strength

26 - 30 TONS

Thickness: Sides

11/16"

Back

21/32"

Top

11/16"

Bottom

11/16"

Pitch of stays to ditto: Sides

10 1/2" x 8 1/2"

Back

9" x 9 1/4"

Top

9" x 10"

Are stays fitted with nuts or riveted over

NUTS

Working pressure by Rules

180 LBS.

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

7/8"

Pitch of stays at wide water space

D = 18.75"

Are stays fitted with nuts or riveted over

NUTS

Working Pressure

185 LBS.

Main stays: Material

STEEL

Tensile strength 28 - 32 TONS

Diameter

At body of stay, 3 1/4"

Over threads

No. of threads per inch

6

Area supported by each stay

4.30"

Working pressure by Rules

187 LBS.

Screw stays: Material

STEEL

Tensile strength 26 - 30 TONS

Diameter

At turned off part, 1 5/8"

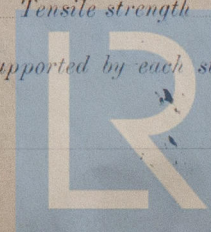
Over threads

No. of threads per inch

9

Area supported by each stay

83.25"



Working pressure by Rules **183 LBS** Are the stays drilled at the outer ends **No** Margin stays: Diameter { At turned off part, **2"** or Over threads **1 7/8"**, **2"**

No. of threads per inch **9** ✓ Area supported by each stay **107.53** **132.234** Working pressure by Rules **198 - 187 LBS**

Tubes: Material **STEEL** External diameter { Plain **3"** Stay **3"** Thickness { **8 LBS** **5/16"**, **3/8"** No. of threads per inch **9**

Pitch of tubes **4 1/4" x 4 1/4"** Working pressure by Rules **250 LBS** Manhole compensation: Size of opening shell plate **16" x 20"** Section of compensating ring **2' 11 1/2" x 2' 8 1/2" x 1 1/8"** No. of rivets and diameter of rivet holes **40 @ 1 1/4"**

Outer row rivet pitch at ends **8 3/4"** Depth of flange if manhole flanged **4 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 { 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 **SMOKE TUBE** Manufacturers of { Tubes **North Eastern Marine Eng. Co. Ltd.** Steel **Mild** **castings** **"** **"** **"**

Number of elements **46** Material of tubes **STEEL** Internal diameter and thickness of tubes **19 7/8"** **3 7/8"** thick.

Material of headers **STEEL** Tensile strength **-** Thickness **7/8"** Can the superheater be shut off and the boiler be worked separately **YES** Is a safety valve fitted to every part of the superheater which can be shut off from the boiler **YES**

Area of each safety valve **1.7671** Are the safety valves fitted with easing gear **YES** Working pressure as per Rules **180 LBS** Pressure to which the safety valves are adjusted **183 LBS** Hydraulic test pressure tubes **-** castings **-** and after assembly in place **540 LBS** Are drain cocks or valves fitted to free the superheater from water where necessary **YES**

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with **YES**

Palmer Shipbuilding & Iron Co., Ltd.
The foregoing is a correct description,

Dates of Survey { During progress of work in shops - - } while building { During erection on board vessel - - }

See Ind. Report

Are the approved plans of boiler and superheater forwarded herewith **Yes.**
(If not state date of approval.)

Total No. of visits

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) **This boiler has been built under Special Survey, the materials and workmanship are good.**

Survey Fee ... **See Ind. Report.** When applied for, **192**
Travelling Expenses (if any) £ : : When received, **192**

Thomas Napier

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **TUE. 28 APR 1929**

TUE. 28 MAY 1929

Assigned

See Ind. Report.
WED. 22 MAY 1929
See Ind. Report.



© 2020

Lloyd's Register Foundation