

REPORT ON BOILERS.

No. 78460

NHC.F.E. Rpt. No. 78647

Received at London Office 29 OCT 1924

Date of writing Report

10

When handed in at Local Office

28/10/24 Port of Newcastle-on-Tyne

No. in Survey held at

Hebburn-on-Tyne

Date, First Survey

26th August

Last Survey

24th Oct.

1924

Reg. Book.

on the

Main Boiler MMS Palmers contract 104/Amble SS 2038.

(Number of Visits 13)

Gross

Tons

Net

Master

Built at

Amble

By whom built

Amble & Co Ltd

When built

1924

Engines made at

Great Farnworth

By whom made

Fraser & Neave Ltd.

When made

1924

Boilers made at

Hebburn-on-Tyne

By whom made

Palmers & Co Ltd. 1041

When made

1924.

Registered Horse Power

Owners

Swansea Pilot Boat Co Ltd.

Port belonging to

Swansea.

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Smith & White & Sons.

(Letter for record

S.)

Total Heating Surface of Boilers

1200 sq

Is forced draft fitted

No. and Description of

Boilers

One cyl. m.t.h.

Working Pressure

180 lbs.

Tested by hydraulic pressure to

320

Date of test

29/10/24.

No. of Certificate

9872

Can each boiler be worked separately

Area of fire grate in each boiler

0. Fuel

No. and Description of

safety valves to each boiler

One cyl. m.t.h.

Area of each valve

2 1/2"

Pressure to which they are adjusted

185.

Are they fitted with easing gear

Yes

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

Yes

Smallest distance between boilers or uptakes and bunkers or woodwork

8'-0"

Mean dia. of boilers

11'-6"

Length

10'-6"

Material of shell plates

Steel

Thickness

1 1/2"

Range of tensile strength

28-32

Are the shell plates welded or flanged

No

Descrip. of riveting: cir. seams

D.R.L.

long. seams

T.R.D.B.S.

Diameter of rivet holes in long. seams

1"

Pitch of rivets

7"

Lap of plates or width of butt straps

1'-2 1/2"

Per centages of strength of longitudinal joint

rivets 92.16%

plate 85.71%

Working pressure of shell by

rules

183 lbs

Size of manhole in shell

16" x 12"

Size of compensating ring

26" x 30" x 1/2"

No. and Description of Furnaces in each

boiler

2 2-segment

Material

Steel

Outside diameter

3'-4"

Length of plain part

top

Thickness of plates

crown 3 1/2"

bottom 3 1/2"

Description of longitudinal joint

Welded

No. of strengthening rings

Working pressure of furnace by the rules

182 lbs.

Combustion chamber

plates: Material

Steel

Thickness: Sides

5/8"

Back

2 1/2"

Top

5/8"

Bottom

5/8"

Pitch of stays to ditto: Sides

9" x 8 1/2"

Back

9" x 8 1/2"

Top 9 1/2" x 8"

If stays are fitted with nuts or riveted heads

Yes

Working pressure by rules

181 lbs.

Material of stays

Steel

Area at

smallest part

2 1/2"

smallest part 1 1/2"

Area supported by each stay

78.75

Working pressure by rules

187 lbs.

End plates in steam space: Material

Steel

Thickness

5/8"

Pitch of stays 15 1/2" x 16"

How are stays secured

D.R.W.

Working pressure by rules

189 lbs.

Material of stays

Steel

Area at

smallest part

2 1/2"

Area supported by each stay

254"

Working pressure by rules

190 lbs.

Material of Front plates at bottom

Steel

Thickness

5/8"

Material of

Lower back plate

Steel

Thickness

5/8"

Lower back plate

Steel

Thickness

5/8"

Greatest pitch of stays

15"

Working pressure of plate by rules

185 lbs.

Diameter of tubes

3 1/2"

Pitch of tubes 4 1/2" x 4 1/2"

Material of tube plates

Steel

Thickness: Front

5/8"

Back

3/4"

Mean pitch of stays

10 1/2"

Pitch across wide

water spaces

14 1/2" x 4 1/2"

Working pressures by rules

196 lbs.

Girders to Chamber tops: Material

Steel

Depth and thickness of

girder at centre

7 1/2" x 1 1/2"

Length as per rule

30"

Distance apart

8"

Number and pitch of Stays in each

2 @ 9 1/2"

Working pressure by rules

200 lbs.

Steam dome: description of joint to shell

-

% of strength of joint

-

Diameter

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet holes

Pitch of rivets

Working pressure of shell by rules

Crown plates

Thickness

How stayed

-

-

-

-

-

SUPERHEATER.

Type

Date of Approval of Plan

Tested by Hydraulic Pressure to

Date of Test

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Diameter of Safety Valve

Pressure to which each is adjusted

Is Easing Gear fitted

For Palmers Shipbuilding & Iron Co. Ltd. The foregoing is a correct description, J. Cameron

Manufacturer.

Dates

During progress of

1924

Aug. 26, Sept. 12, 15, 19, 23, Oct. 3, 8, 13, 15, 21, 22, 23, 24.

Is the approved plan of boiler forwarded herewith

of Survey

work in shops - -

while

During erection on

building

board vessel - - -

Total No. of visits

13.

GENERAL REMARKS

(State quality of workmanship, opinions as to class, &c.)

This boiler has been built under special order & the material & workmanship are good on completion it was tested by hydraulic pressure to 320 lbs. & found sound & tight. The boiler is intended for Amble SS 2038. This boiler has been satisfactorily fitted on board the vessel for Intimation see Machinery Rpt.

Survey Fee

£ 8-0-0

When applied for

24 OCT 1924

Travelling Expenses (if any) £

When received

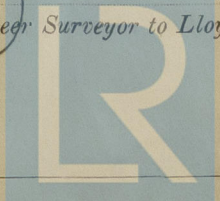
24 Nov 1924

Committee's Minute

TUES. 30 DEC 1924

Engineer Surveyor to Lloyd's Register of Shipping.

Assigned



Lloyd's Register Foundation