

(Boiler No 2048)

REPORT ON BOILERS.

No. 81921.

Date of writing Report

24 FEB 1921

When handed in at Local Office

24 FEB 1921

Received at London Office

SAT. 26 FEB. 1921

No. in Survey held at

Reg. Book.

on the *Messrs Abdala & Mitchell's Vessel No 414.*

Date, First Survey

Port of

Decr 9th/19.

Last Survey

*Feb 21st**March 1920.*

(Number of Visits

16)

Gross

Tons

Net

Master

Built at

By whom built

J. Abdala & Mitchell

Engines made at

By whom made

When built

Boilers made at

Birkenhead.

By whom made

Cammell Laird & Co. Ltd

When made

Registered Horse Power

Owners

When made

1921

Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.*J. Spenser & Sons Ltd*Manufacturers of Steel *The Earl of Dudley Foundry Works.*

(Letter for record

S)

Total Heating Surface of Boilers

1226

Is forced draft fitted

No. and Description of

Boilers *One, Cylindrical, Multitubular (S.B.)*

Working Pressure

140 lbs

Tested by hydraulic pressure to

280 lbs

Date of test

No. of Certificate

2118

Can each boiler be worked separately

Area of fire grate in each boiler

38.6

No. and Description of

safety valves to each boiler *Two, Spring loaded.*

Area of each valve

4.91

Pressure to which they are adjusted

Are they fitted with easing gear

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

Inside

Mean dia. of boilers

12'-0"

Length

Material of shell plates

Steel

Thickness

13/16"

Range of tensile strength

28-32 tons

Are the shell plates welded or flanged

No

Descrip. of riveting: cir. seams

D.R. Lap.

long. seams

T.R. Double Strap

Diameter of rivet holes in long. seams

15/16"

Pitch of rivets

6 1/4"

Lap of plates or width of butt straps

13 3/4"

Per centages of strength of longitudinal joint

rivets

101%

Working pressure of shell by

rules

143 lbs

Size of manhole in shell

16" x 12"

Size of compensating ring

Mc Neil

No. and Description of Furnaces in each

boiler *2, Monson's, with main*

Material

Steel

Outside diameter

3'-10"

Length of plain part

top

bottom

Thickness of plates

crown

15/32"

Description of longitudinal joint

Weld

No. of strengthening rings

1

Working pressure of furnace by the rules

150 lbs

Combustion chamber

plates: Material

Steel

Thickness: Sides

9/16"

Back

9/16"

Top

9/16"

Bottom

3/4"

Pitch of stays to ditto: Sides

9" x 8"

Back

*8 1/4" x 8 1/2"*Top *9" x 8"* If stays are fitted with nuts or riveted heads*Yes*

Working pressure by rules

151 lbs

Material of stays

Steel

Area at

smallest part

1.45

Area supported by each stay

72

Working pressure by rules

161 lbs

End plates in steam space: Material

Steel

Thickness

15/16"

Pitch of stays

17" x 17"

How are stays secured

*Double Nut**Washers*

Working pressure by rules

144 lbs

Material of stays

Steel

Area at smallest part

4.11

Area supported by each stay

289

Working pressure by rules

148 lbs

Material of Front plates at bottom

Steel

Thickness

29/32"

Material of

Steel

Thickness

29/32"

Lower back plate

Steel

Thickness

25/32"

Greatest pitch of stays

14 1/2" x 8 1/2"

Working pressure of plate by rules

149 lbs

Diameter of tubes

3 1/4" x 1"

Pitch of tubes

4 7/16" x 4 7/16"

Material of tube plates

Steel

Thickness: Front

29/32"

Back

3/4"

Mean pitch of stays

11 3/32"

Pitch across wide

water spaces

14 1/4"

Working pressures by rules

145 lbs

Girders to Chamber tops: Material

Steel

Depth and thickness of

6 1/8" x 1 3/16"

Length as per rule

25

Distance apart

8"

Number and pitch of Stays in each

*2 rows**9"*

Working pressure by rules

148 lbs

Steam dome: description of joint to shell

✓

Diameter

✓

Thickness of shell plates

✓

Material

✓

Description of longitudinal joint

✓

Pitch of rivets

✓

Working pressure of shell by rules

✓

Crown plates

✓

Thickness

✓

How stayed

✓

Is Easing Gear fitted

SUPERHEATER. Type

✓

Date of Approval of Plan

✓

Tested by Hydraulic Pressure to

✓

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

✓

Pressure to which each is adjusted

✓

Is Easing Gear fitted

✓

The foregoing is a correct description,

✓

Cammell Laird and Company Limited.

Manufacturer.

Dates of Survey
During progress of work in shops - *Dec 9, 17, 30, Feb 21, 1920.*
During erection on board vessel - *Jan 21, 27, Feb 2, 11, 24, 25, Mar 4, 10, 17, 18, 24, 1921.*

1919.

1920.

Is the approved plan of boiler forwarded herewith

Yes

Total No. of visits

*16.***GENERAL REMARKS**

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

This Boiler has now been built under Special Survey, and in accordance with the approved plan, & Secretary's letter (E) dated 3rd Decr 1919. The workmanship & materials are of good quality, and when tested to twice working pressure was found satisfactory in every respect.

Survey Fee £ 8 : 4 : :

Travelling Expenses (if any) £ : : :

When applied for,

When received,

Committee's Minute

Assigned

Transmit to London.

Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register Foundation

W1653-0050