

REPORT ON BOILERS.

No. 10927

Received at London Office

Date of writing Report

19

When handed in at Local Office

17.1.21

19

Port of

Middlesbrough

No. in
Reg. Book.

Survey held at

Stockton on Tees

Date, First Survey

28 Oct. 1920

Last Survey

12th Jan. 1921

1921

(Number of Visits)

11

Gross 2578

Tons Net 1400

Master

Built at

Aston

By whom built

Chant. Har. Amersois

When built

1904-2

Engines made at

Sunderland

By whom made

M. S. Marine Eng Co.

When made

1904

Boilers made at

Stockton

By whom made

Messrs. Thos. Hudon & Co. Ltd. (No. 1388)

When made

1921

Registered Horse Power

287

Owners

A. Embriess

Port belonging to

Andros

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY

Manufacturers of Steel

Messrs. J. Spencer & Sons Ltd.

(Letter for record)

(5)

Total Heating Surface of Boilers

672 sq ft

Is forced draft fitted

No

No. and Description of

Boilers

One single ended

Working Pressure

90

Tested by hydraulic pressure to

180

Date of test

12.1.21

No. of Certificate

6196

Can each boiler be worked separately

Area of fire grate in each boiler

27 sq ft

No. and Description of

safety valves to each boiler

1 Spring loaded

Area of each valve

15.5 sq in

Pressure to which they are adjusted

90 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

Under deck

Mean dia. of boilers

9'-0"

Length

9'-1 1/2"

Material of shell plates

steel

Thickness

3/32

Range of tensile strength

29-33

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

Single lap long. seams

3 Riv lap

Diameter of rivet holes in long. seams

3/8"

Pitch of rivets

3 7/8"

Lap of plates or width of butt straps

6 1/2"

Per centages of strength of longitudinal joint

rivets 93.0

plate 73.59

Working pressure of shell by

rules

95

Size of manhole in shell

16" x 12"

Size of compensating ring

5 1/2" x 3/4"

No. and Description of Furnaces in each

boiler

2 plain

Material

steel

Outside diameter

33"

Length of plain part

top 7 1/2"

bottom 9 1/2"

Thickness of plates

crown 1/2"

bottom 3/8"

Description of longitudinal joint

Weld

No. of strengthening rings

none

Working pressure of furnace by the rules

98

Combustion chamber

states: Material

steel

Thickness: Sides

3/32"

Back

1/2"

Top

3/32"

Bottom

5/8"

Pitch of stays to ditto: Sides

9 1/2"

Back

8 1/2" x 9 1/2"

Top 9 1/2"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

100

Material of stays

steel

Area at

smallest part

96

Area supported by each stay

84

Working pressure by rules

92

End plates in steam space: Material

steel

Thickness

3/4"

Pitch of stays

5 1/2" / 16 tubes

How are stays secured

nuts & washers

Working pressure by rules

99

Material of stays

steel

Area at smallest part

256

Area supported by each stay

284

Working pressure by rules

98

Material of Front plates at bottom

steel

Thickness

3/4"

Material of

Lower back plate

steel

Thickness

3/4"

Greatest pitch of stays

13 1/2" x 9"

Working pressure of plate by rules

148

Diameter of tubes

3"

Pitch of tubes

1 1/4" x 1 1/4"

Material of tube plates

steel

Thickness: Front

3/4"

Back

9/16"

Mean pitch of stays

10 5/8"

Pitch across wide

water spaces

13 1/2"

Working pressures by rules

100

Girders to Chamber tops: Material

steel

Depth and thickness of

order at centre

5 3/4" x 1 1/4"

Length as per rule

22 7/16"

Distance apart

9 1/2"

Number and pitch of Stays in each

Working pressure by rules

108

Steam dome: description of joint to shell

none

% 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

The foregoing is a correct description,

Thomas Hudon & Co. Ltd.

(Signed) R.W. Johnston

Manufacturer.

Dates

During progress of

work in shops - - -

Survey

while

During erection on

building

board vessel - - -

1920 - Oct. 8, 15, 27, Nov. 4, 16, Dec. 6, 18, 17, 30 Jan. 11, Is the approved plan of boiler forwarded herewith

Yes.

Total No. of visits

11

GENERAL REMARKS

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

This boiler has been built under

Special Survey: is of good material and workmanship and on completion was tested by hydraulic pressure with satisfactory results. It is stated that the boiler will be fitted on board at Cardiff.

Survey Fee

£

:

:

When applied for.

19

Travelling Expenses (if any) £

:

:

When received.

19

FRI. 26 JUN 1925

FRI. 30 JAN 1925

TUES. 24 JUN 1924

TUE. NOV. 6 1923

Committee's Minute

FRI. JUL. 8 1921

Assigned

TUE. NOV. 22 1921

TUE. MAR. 14 1922

FRI. 22 DEC. 1921

FRI. 10 OCT 1924

FRI. 19 SEP 1924

TUE. DEC. 19 1922

TUE. 30 OCT. 1923

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