

Rpt. 5a.

NEWCASTLE-ON-TYNE Rpt. No. 76833

## REPORT ON BOILERS

No. 11222

WFD. 1 MAR. 1922

Date of writing Report

19

When handed in at Local Office

27.2.28

Port of

MIDDLESBRO

No. in

Survey held at

Stockton-on-Tees

Date, First Survey

18.10.21

Last Survey

21.2.22

19

Reg. Book.

9951

on the STEEL

OILFIELD

(Number of Visits)

(5.5.224)

Tons

Gross

Net

Master

Built at

Newcastle

By whom built

Tynes Iron S.B. Co

When built

Engines made at

Newcastle

By whom made

Hallend Shipway &amp; Eng. Co. Ltd. No. 844

When made

Boilers made at

Stockton

By whom made

Thos. Tynes &amp; Sons Ltd (No. 4573)

When made 1922

Registered Horse Power

Owners Northern Petroleum Tank S.S. Co. Ltd.

Port belonging to Newcastle

MULTITUBULAR BOILERS MAIN, AUXILIARY OR DONKEY. — Manufacturers of Steel

John Mercer &amp; Sons Ltd

(Letter for record

(5)

Total Heating Surface of Boilers

1237

Is forced draft fitted

No. and Description of

Boilers

one single ended

Working Pressure

120

Tested by hydraulic pressure to

230

Date of test

21.2.22

No. of Certificate

6264

Can each boiler be worked separately

Area of fire grate in each boiler

36.6

No. and Description of

safety valves to each boiler

Area of each valve

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

External

Heavy dia. of boilers

12'-0"

Length

9'-6"

Material of shell plates

steel

Thickness

23/32

Range of tensile strength

29-33

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

2-R. lap

long. seams

2-R. Riv.

Diameter of rivet holes in long. seams

15/16"

Pitch of rivets

4 3/4"

Lap of plates or width of butt straps

9 1/2"

3 Rivets per pitch

Per centages of strength of longitudinal joint

rivets

90.2

plate

80.21

Working pressure of shell by

rules

125

boiler

2 plain

Material

steel

Outside diameter

45 1/4"

Length of plain part

top

70 3/4"

bottom

97 1/2"

Thickness of plates

corners

2 1/32"

Description of longitudinal joint

weld

No. of strengthening rings

none

Working pressure of furnace by the rules

125

Combustion chamber

plates: Material

steel

Thickness: Sides

1 1/2"

Back

9/16"

Top

9 1/2"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

125

Material of stays

steel

Area at

smallest part

1.45

Area supported by each stay

85.5

Working pressure by rules

147

End plates in steam space: Material

steel

Thickness

1 1/2"

Pitch of stays

15 1/2"

How are stays secured

nuts + washers

Working pressure by rules

122

Material of stays

steel

Area at smallest part

3.24

Area supported by each stay

252

Working pressure by rules

157

Material of Front plates at bottom

steel

Thickness

1 1/2"

Material of

Lower back plate

steel

Thickness

2 3/4"

Greatest pitch of stays

13 1/2" x 9 1/2"

Working pressure of plate by rules

149

Diameter of tubes

3"

Pitch of tubes

4 1/2" x 4 1/2"

Material of tube plates

steel

Thickness: Front

1 1/2"

Back

5/8"

Mean pitch of stays

10 1/2"

Pitch across wide

water spaces

13 1/2" x 8 1/2"

Working pressures by rules

121

Girders to Chamber tops: Material

steel

Depth and thickness of

girder at centre

6 1/2" x 1 1/4"

Length as per rule

28 3/4"

Distance apart

9"

Number and pitch of Stays in each

2085

Working pressure by rules

122

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 TYNES &amp; SONS LIMITED.

R. W. Johnston

Manufacturer.

Dates

During progress of

work in shops

1921. Oct. 18. 26. Nov. 1. 16. Dec. 7. 15. 22. Jan. 13. 26. 21

while

During erection on

board vessel

building

Is the approved plan of boiler forwarded herewith

yes

Total No. of visits

9

GENERAL REMARKS

(State quality of workmanship, opinions as to class, &amp;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

Survey Fee

...

...

£

8-5-0

When applied for

monthly

Travelling Expenses (if any)

£

When received

19

Wm Morrison

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI 29. MAR. 1923

Assigned

Lloyd's Register  
Foundation

011294-011303-0082

0083