

REPORT ON BOILERS.

No. 85156

Received at London Office

of writing Report

192

When handed in at Local Office

8/11

1930

Port of

Newcastle-on-Tyne

in Survey held at

Wallsend-on-Tyne

Date, First Survey

26 Feb 1929

Last Survey

6 Jan 1930

on the

New Steel S.S. Wearwood

(Number of Visits)

Gross 4578

Net 2795

er

Built at Willington Quay

By whom built

Northumberland S.S. Co. Ltd

Yard No.

When built

1930

es made at

Wallsend

By whom made

North Eastern Harb. & Co. Ltd

Engine No.

When made

1930

ers made at

Wallsend

By whom made

North Eastern Harb. & Co. Ltd

Boiler No.

When made

1930

nal Horse Power

H32

Owners

Port belonging to

WELDED TUBULAR BOILERS - MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

The Steel Company of Scotland Ltd & Wilmonts Bergham and Co. Ltd

Eisenhüttenwerk G.m.b.H. (Letter for Record)

al Heating Surface of Boilers

1325 sq ft

Is forced draught fitted

no

Coal or Oil fired

coal

and Description of Boilers

One single ended

Working Pressure

200 lbs

tested by hydraulic pressure to

350 lbs

Date of test

22-8-29

No. of Certificate

378

Can each boiler be worked separately

yes

of Firegrate in each Boiler

35 sq ft

No. and Description of safety valves to each boiler

Two spring loaded

of each set of valves per boiler

4.6

Pressure to which they are adjusted

205 lbs

Are they fitted with easing gear

yes

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

yes

allest distance between boilers or uptakes and bunkers or woodwork

2'-6"

Is oil fuel carried in the double bottom under boilers

no

allest distance between shell of boiler and tank top plating

2'-3"

Is the bottom of the boiler insulated

yes

gest internal dia. of boilers

11'-9 1/8"

Length

10'-6"

Shell plates: Material

Steel

Tensile strength

29 to 33 tons

ckness

1 1/16"

Are the shell plates welded or flanged

no

Description of riveting: circ. seams

end

inter

D.R.

seams

T.R.D. B.S.

Diameter of rivet holes in

circ. seams

1 1/8"

Pitch of rivets

3 1/4"

8"

centage of strength of circ. end seams

plate

65.5

rivets

45.6

Percentage of strength of circ. intermediate seam

plate

86

centage of strength of longitudinal joint

plate

86

rivets

84

Working pressure of shell by Rules

204.5 lbs

ckness of butt straps

outer

1 1/16"

inner

1 1/16"

No. and Description of Furnaces in each Boiler

Two corrugated (Deighton)

erial

Steel

Tensile strength

26 to 30 tons

Smallest outside diameter

3'-5 1/4"

gth of plain part

top

19 3/8"

bottom

19 3/8"

Description of longitudinal joint

weld

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

none

Working pressure of furnace by Rules

209.5 lbs

l plates in steam space

Material

Steel

Tensile strength

26 to 30 tons

Thickness

1 1/4"

Pitch of stays

22 x 15

are stays secured

Double nuts

Working pressure by Rules

206 lbs

pitch of stay tubes in nests

front

Steel

8 1/8"

Tensile strength

26 to 30 tons

Thickness

3/4"

ers to combustion chamber tops

Material

Steel

Tensile strength

29 to 33 tons

Depth and thickness of girder

entre

2 @ 1 1/8" x 3 1/4"

Length as per Rule

2'-3"

Distance apart

10"

No. and pitch of stays

ach

2 @ 8"

Working pressure by Rules

202 lbs

Combustion chamber plates: Material

Steel

ile strength

26 to 30 tons

Thickness: Sides

1/16"

Back

3/32"

Top

1/16"

Bottom

1/8"

h of stays to ditto

Sides

8 x 10"

Back

9 3/4 x 9 1/4"

Top

8 x 10"

Are stays fitted with nuts or riveted over

nuts

king pressure by Rules

201 lbs

Front plate at bottom: Material

Steel

Tensile strength

26 to 30 tons

ckness

1"

Lower back plate: Material

Steel

Tensile strength

26 to 30 tons

Thickness

1/8"

h of stays at wide water space

14 1/8" x 9 3/4"

Are stays fitted with nuts or riveted over

nuts

king Pressure

206 lbs

Main stays: Material

Steel

Tensile strength

29 to 33 tons

eter

At body of stay,

2 3/4"

or

Over threads

No. of threads per inch

6

Area supported by each stay

330 sq in

king pressure by Rules

205 lbs

Screw stays: Material

Steel

Tensile strength

26 to 30 tons

eter

At turned off part,

1 3/4"

or

Over threads

No. of threads per inch

9

Area supported by each stay

90 sq in



Lloyd's Register Foundation

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Working pressure by Rules 201 lbs Are the stays drilled at the outer ends no Margin stays: Diameter 2 1/2" ^{At turned off part.} _{or} ^{Over threads} 2 1/4"

No. of threads per inch 9 Area supported by each stay 116 sq" Working pressure by Rules 214

Tubes: Material S. D. Steel External diameter ^{Plain} 3 1/4" Thickness 8 L.S.G. No. of threads per inch 9
_(Stay)

Pitch of tubes 4 1/2" x 4 3/8" Working pressure by Rules W.W.S 208.5 lbs Manhole compensation: Size of opening 16" x 20"
 Section of compensating ring 11 3/8" x 1 1/8" No. of rivets and diameter of rivet holes 32 @ 1 3/8"

shell plate 16" x 20" Outer row rivet pitch at ends 10" Depth of flange if manhole flanged 3 3/4" Steam Dome: Material Wool.

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 diam. stays _____

Inner radius of crown _____ Working pressure by Rules _____

How connected to shell _____ Size of doubling plate under dome _____ Diameter of rivet holes and of rivets in outer row in dome connection to shell _____

Type of Superheater Wool Manufacturers of ^{Tubes} _____ _{Steel castings} _____

Number of elements _____ Material of tubes _____ Internal diameter and thickness of tubes _____

Material of headers _____ Tensile strength _____ Thickness _____ Can the superheater be shut off from the boiler? Yes

the boiler be worked separately _____ 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 _____ Are the safety valves fitted with easing gear? _____ Working pressure _____

Rules _____ Pressure to which the safety valves are adjusted _____ Hydraulic test pressure _____

tubes _____, castings _____ and after assembly in place _____ Are drain cocks or valves to free the superheater from water where necessary? _____

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with? Yes

THE NORTH EASTERN MARINE ENGINEERING CO. LTD.
 The foregoing is a correct description,
W. A. P. Allen Secretary

Dates of Survey ^{During progress of work in shops - - -} See Machinery Report Are the approved plans of boiler and superheater forwarded herewith Yes
_{while building} ^{During erection on board vessel - - -} (If not state date of approval.)

Total No. of visits _____

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

See machinery report.

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

William P. Allen
 Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute FRI, 17 JAN 1930

Assigned See other J.E. Rpt.

