

REPORT ON BOILERS.

No. 92498

Received at London Office

Writing Report

29/4/1935

When handed in at Local Office

29/4/1935

Port of

NEWCASTLE-ON-TYNE

MAY 1935

Survey held at

Wallsend-on-Tyne

Date, First Survey

21st March

Last Survey

18/4/1935

On the

Steel Sc. "HOPETON"

(Number of Visits)

Tons

Gross 4980

Net 3099

Built at

By whom built

Yard No.

When built

Made at

By whom made

Engine No.

When made

Made at

By whom made

Boiler No.

When made

Horse Power

Owners

Port belonging to

TUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Makers of Steel

(Letter for Record)

Painting Surface of Boilers

Is forced draught fitted

Coal or Oil fired

Description of Boilers

Working Pressure

hydraulic pressure to

Date of test

No. of Certificate

Can each boiler be worked separately

Firegrate in each Boiler

No. and Description of safety valves to each boiler

Each set of valves per boiler

{per Rule
as fitted

Pressure to which they are adjusted

Are they fitted with easing gear

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

Distance between boilers or uptakes and bunkers or woodwork

Is oil fuel carried in the double bottom under boilers

Distance between shell of boiler and tank top plating

Is the bottom of the boiler insulated

Internal dia. of boilers

Length

Shell plates: Material

Tensile strength

Are the shell plates welded or flanged

Description of riveting: circ. seams {end
inter.

Is

Diameter of rivet holes in {circ. seams
long. seams

Pitch of rivets {

e of strength of circ. end seams {plate
rivetsPercentage of strength of circ. intermediate seam {plate
rivetse of strength of longitudinal joint {plate
rivets

{combined

Working pressure of shell by Rules

of butt straps {outer
inner

No. and Description of Furnaces in each Boiler

Tensile strength

Smallest outside diameter

plain part {top
bottomThickness of plates {crown
bottom

Description of longitudinal joint

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

Working pressure of furnace by Rules

es in steam space: Material

Tensile strength

Thickness

Pitch of stays

stays secured

Working pressure by Rules

tes: Material {front
back

Tensile strength {

Thickness {

h of stay tubes in nests

Pitch across wide water spaces

Working pressure {front
back

o combustion chamber tops: Material

Tensile strength

Depth and thickness of girder

Length as per Rule

Distance apart

No. and pitch of stays

Working pressure by Rules

Combustion chamber plates: Material

Strength

Thickness: Sides

Back

Top

Bottom

stays to ditto: Sides

Back

Top

Are stays fitted with nuts or riveted over

pressure by Rules

Front plate at bottom: Material

Tensile strength

Lower back plate: Material

Tensile strength

Thickness

stays at wide water space

Are stays fitted with nuts or riveted over

Pressure

Main stays: Material

Tensile strength

At body of stay,
or
Over threads

No. of threads per inch

Area supported by each stay

pressure by Rules

Screw stays: Material

Tensile strength

At turned off part,
or
Over threads

No. of threads per inch

Area supported by each stay

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1817-0050

Working pressure by Rules _____ Are the stays drilled at the outer ends _____ Margin stays: Diameter { At turned off part, or Over threads _____

No. of threads per inch _____ Area supported by each stay _____ Working pressure by Rules _____

Tubes: Material _____ External diameter { Plain _____ Stay _____ Thickness { _____ No. of threads per inch _____

Pitch of tubes _____ Working pressure by Rules _____ Manhole compensation: Size of shell plate _____ Section of compensating ring _____ No. of rivets and diameter of rivet holes _____

Outer row rivet pitch at ends _____ Depth of flange if manhole flanged _____ Steam Dome: Material _____

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 d stays _____ Inner radius of crown _____ Working pressure by Rules _____

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

Type of Superheater *The Superheater Co. Ltd.* Manufacturers of { Tubes *See certificates for tests etc* Steel castings _____

Number of elements *72 in each boiler* Material of tubes *S.D. Steel* Internal diameter and thickness of tubes *14 1/4 in x 1/2 in*

Material of headers *Forged Steel* Tensile strength *✓* Thickness *✓* Can the superheater be the boiler be worked separately *No* 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 *3.94 sq in* Are the safety valves fitted with easing gear *yes* Working pressure Rules *277 lb/in²* Pressure to which the safety valves are adjusted *205 lb/in²* Hydraulic test tubes *1000 lb/in²*, castings *600 lb/in²* and after assembly in place *400 lb/in²* Are drain cocks or to free the superheater from water where necessary *yes.*

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with *yes.*

The foregoing is a correct description, _____

Dates of Survey { During progress of work in shops - - } Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.) _____

while building { During erection on board vessel - - } Total No. of visits _____

Is this Boiler a duplicate of a previous case _____ If so, state Vessel's name and Report No. _____

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

Superheaters fitted to all three main boilers.

New headers and other steam pipes fitted for new arrangement made solid drawn steel and tested to 600 lb/in².

All valves and connections made of cast steel and tested to 400 lb/in².

Cylinders and valve liners etc made of suitable material for superheated steam.

Superheater safety valves adjusted under steam as above.

Main steam pipes tested by hydraulic pressure to 600 lb/in².

H.P. cylinder and valve liners renewed. H.P. piston rod skimmed.

new piston rings fitted. M.P. piston rod skimmed up and piston adjusted.

H.P. piston valve and liner renewed and valve rod skimmed.

New neck and gland bushes fitted to H.P. piston & valve rods and M.P. piston rod.

Survey Fee ... £ : : When applied for, 19 _____

Travelling Expenses (if any) £ : : When received, 19 _____

A. R. Hiddle.

Engineer Surveyor to Lloyd's Register of

Committee's Minute *FRI. 10 MAY 1935*

Assigned

*See other rpt.
Nwc. 93498*



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