

REPORT ON BOILERS.

No. 17809

Date of writing Report 11-3-38

Received at London Office MAR 19 1938

No. in
Reg. Book.

Survey held at

Hartlepool

When handed in at Local Office 18-3-38

Port of West Hartlepool

Date, First Survey

8th February,

Last Survey

9th March, 1938

on the

s.s. "Italian Prince"

(Number of Visits 18)

Gross 3478
Net 1782

Master

Built at

Haverton Hill-on-Sea

By whom built

Furness L. B. & Co. Ltd.

Yard No.

When built 1921-5

Engines made at

Sunderland

By whom made

Richardsons Westgarth & Co. Ltd.

Engine No.

When made 1921

Boilers made at

By whom made

Boiler No.

When made

Nominal Horse Power 538

Owners

Prince Line Ltd.

Port belonging to London

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

Total Heating Surface of Boilers

(Letter for Record)

No. and Description of Boilers

Is forced draught fitted

Coal or Oil fired

Tested by hydraulic pressure to

Date of test

No. of Certificate

Working Pressure

Area of Firegrate in each Boiler

No. and Description of safety valves to each boiler

Can each boiler be worked separately

Area of each set of valves per boiler { per Rule
as fitted

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

Is oil fuel carried in the double bottom under boilers

Smallest distance between shell of boiler and tank top plating

Is the bottom of the boiler insulated

Largest internal dia. of boilers

Length

Shell plates: Material

Tensile strength

Thickness

Are the shell plates welded or flanged

Description of riveting: circ. seams { end
inter.

long. seams

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

Pitch of rivets {

Percentage of strength of circ. end seams { plate
rivetsPercentage of strength of circ. intermediate seam { plate
rivetsPercentage of strength of longitudinal joint { plate
rivets
combined

Working pressure of shell by Rules

Thickness of butt straps { outer
inner

No. and Description of Furnaces in each Boiler

Material

Tensile strength

Smallest outside diameter

Length of plain part { top
bottomThickness of plates { crown
bottom

Description of longitudinal joint

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

Working pressure of furnace by Rules

End plates in steam space: Material

Tensile strength

Thickness

Pitch of stays

How are stays secured

Working pressure by Rules

Tube plates: Material { front
back

Tensile strength {

Thickness {

Mean pitch of stay tubes in nests

Pitch across wide water spaces

Working pressure { front
back

Girders to combustion chamber tops: Material

Tensile strength

Depth and thickness of girder

at centre

Length as per Rule

Distance apart

No. and pitch of stays

in each

Working pressure by Rules

Combustion chamber plates: Material

Tensile strength

Thickness: Sides

Back

Top

Bottom

Pitch of stays to ditto: Sides

Back

Top

Are stays fitted with nuts or riveted over

Working pressure by Rules

Front plate at bottom: Material

Tensile strength

Thickness

Lower back plate: Material

Tensile strength

Thickness

Pitch of stays at wide water space

Are stays fitted with nuts or riveted over

Working Pressure

Main stays: Material

Tensile strength

Diameter { At body of stay,
or
Over threads

No. of threads per inch

Area supported by each stay

Working pressure by Rules

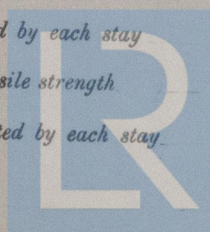
Screw stays: Material

Tensile strength

Diameter { At turned off part,
or
Over threads

No. of threads per inch

Area supported by each stay



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Working pressure by Rules
 No. of threads per inch
Tubes: Material
 Pitch of tubes
 shell plate
 Outer row rivet pitch at ends
 Tensile strength
 Diameter of rivet holes
 Internal diameter
 stays
 How connected to shell
 of rivets in outer row in dome connection to shell

Arc the stays drilled at the outer ends
 Area supported by each stay
 External diameter ^{Plain} Stay
 Working pressure by Rules
 Section of compensating ring
 Depth of flange if manhole flanged
 Thickness of shell
 Pitch of rivets
 Working pressure by Rules
 Inner radius of crown
 Size of doubling plate under dome

Margin stays: Diameter ^{At turned off part, or Over threads}
 Working pressure by Rules
 Thickness
 No. of threads per inch
 Manhole compensation: Size of opening in
 No. of rivets and diameter of rivet holes
 Steam Dome: Material
 Description of longitudinal joint
 Percentage of strength of joint ^{Plate Rivets}
 Thickness of crown
 No. and diameter of
 Working pressure by Rules
 Diameter of rivet holes and pitch

Type of Superheater *Smoke tube* Manufacturers of *Superheater Co Ltd.*
 Number of elements *67 each boiler* Material of tubes *solid drawn steel* Internal diameter and thickness of tubes *15 in. 2 1/2 in.*
 Material of headers *steel* Tensile strength Can the superheater be shut off and the boiler be worked separately *yes.* 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 *1.76 sq. in.* Are the safety valves fitted with easing gear *yes.* Working pressure as per Rules *180 lbs.* Pressure to which the safety valves are adjusted *190 lbs.* Hydraulic test pressure: tubes *1,000 lbs. sq. in.* forgings and castings *540 lbs. sq. in.* and after assembly in place *540 lbs. sq. in.* Are drain cocks or valves fitted to free the superheater from water where necessary *yes.*
 Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with ☒

The foregoing is a correct description,

Manufacturer.

Dates of Survey ^{During progress of work in shops - -}
 while building ^{During erection on board vessel - - -}

Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.)

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.)

Smoke tube superheaters fitted to port and starboard main boilers. Tested by hydraulic pressure 540 lbs per sq. inch after assembly in place and finally examined under working conditions and found satisfactory.

Survey Fee ... £ : : } When applied for, 19
 Travelling Expenses (if any) £ : : } When received, 19

S. Brooke Smith

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned



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