

REPORT ON BOILERS.

No. 45626

4 APR 1935

Received at London Office

5 APR 1935

of writing Report

19

When handed in at Local Office

10

Port of

HULL

in Survey held at

Hull

Date, First Survey

1st Dec 1934

Last Survey

1st April 1935

on the

Steel Sc K. "Kingston Cairnform"

(Number of Visits)

Gross 448.08

Net 173.79

ter

Built at

Beverley

By whom built

Book Nelson & Gemmell Ltd

Yard No.

601

When built 1935.4

nes made at

Hull

By whom made

Charles D. Holmes & Co. Ltd

Engine No.

1474

When made 1935

ers made at

Hull

By whom made

Charles D. Holmes & Co. Ltd

Boiler No.

1474

When made 1935

inal Horse Power

117

Owners

Kingston Steam Trawling Co. Ltd

Port belonging to

Hull

MULTITUBULAR BOILERS - MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

Parkgate Iron & Steel Co. Ltd.
The Steel Company of Scotland Ltd.

(Letter for Record "S" ✓)

Heating Surface of Boilers

1940 sq feet

Is forced draught fitted

ho.

Coal or Oil fired

coal.

Description of Boilers

One single ended return tube.

Working Pressure

215 #/sq"

ed by hydraulic pressure to

373 #/sq"

Date of test

15-2-35

No. of Certificate

3910.

Can each boiler be worked separately

✓

of Firegrate in each Boiler

53.7 sq ft

No. and Description of safety valves to each boiler

2 Spring loaded.

of each set of valves per boiler

per Rule

10.55 sq in

as fitted

11.88 sq in

Pressure to which they are adjusted

215 #/sq"

Are they fitted with easing gear

Yes.

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

✓

Least distance between boilers or uptakes and bunkers or woodwork

9"

Is oil fuel carried in the double bottom under boilers

✓

Least distance between shell of boiler and tank top plating

✓

Is the bottom of the boiler insulated

✓

Least internal dia. of boilers

174"

Length

10' 8"

Shell plates: Material

Steel

Tensile strength

29-33 tons/sq"

Thickness

1 3/8"

Are the shell plates welded or flanged

✓

Description of riveting: circ. seams

end

8.12

seams

T.R. 8135.

Diameter of rivet holes in

circ. seams

long. seams

1 3/8"

Pitch of rivets

3 3/4"

9 1/4"

Percentage of strength of circ. end seams

plate

63.20

rivets

72.40

Percentage of strength of circ. intermediate seam

plate

85.13

rivets

86.80

Percentage of strength of longitudinal joint

plate

85.13

rivets

86.80

Working pressure of shell by Rules

217 #/sq"

Thickness of butt straps

outer

1 1/6"

inner

1 3/16"

No. and Description of Furnaces in each Boiler

Three plain

Material

Steel

Tensile strength

26-30 tons/sq"

Smallest outside diameter

42.9"

Thickness of plain part

top

72"

bottom

✓

Thickness of plates

crown

53/64"

bottom

64"

Description of longitudinal joint

Welded.

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

✓

Working pressure of furnace by Rules

221 #/sq"

plates in steam space: Material

Steel

Tensile strength

26-30 tons/sq"

Thickness

1 7/32"

Pitch of stays 19 3/4" x 18 1/4"

are stays secured

Double nuts & washers

Working pressure by Rules

221 #/sq"

plates: Material

front

Steel

back

"

Tensile strength

26-30 tons/sq"

Thickness

15/16"

7/8"

pitch of stay tubes in nests

10.7"

Pitch across wide water spaces

14"

Working pressure

front

228 #/sq"

back

222 #/sq"

ers to combustion chamber tops: Material

Steel

Tensile strength

29-33 tons/sq"

Depth and thickness of girder

Centre

10" x 1 3/4"

Length as per Rule

36 7/32"

Distance apart

9" + 9 1/2"

No. and pitch of stays

ch

3 @ 8"

Working pressure by Rules

215 #/sq"

Combustion chamber plates: Material

Steel

le strength

26-30 tons/sq"

Thickness: Sides

3/4"

Back

23/32"

Top

23/32"

Bottom

3/4"

of stays to ditto: Sides

9 1/2" x 8 1/2"

Back

9 3/8" x 8 1/4"

Top

9 1/2" x 8"

Are stays fitted with nuts or riveted over

nuts.

ing pressure by Rules

232 #/sq"

Front plate at bottom: Material

Steel

Tensile strength

26-30 tons/sq"

ness

15/16"

Lower back plate: Material

Steel

Tensile strength

26-30 tons/sq"

Thickness

7/8"

of stays at wide water space

14 1/4" x 8 1/4"

Are stays fitted with nuts or riveted over

nuts.

ing Pressure

230 #/sq"

Main stays: Material

Steel

Tensile strength

28-32 tons/sq"

ter

At body of stay,

or

Over threads

3 1/4"

No. of threads per inch

8

Area supported by each stay

360 sq in

ing pressure by Rules

223 #/sq"

Screw stays: Material

Steel

Tensile strength

26-30 tons/sq"

ter

At turned off part,

or

Over threads

1 3/4" + 1 7/8"

No. of threads per inch

10

Area supported by each stay

77.2 sq in

Working pressure by Rules 232 #0 Are the stays drilled at the outer ends no Margin stays: Diameter { At turned off part, or Over threads 1 7/8" + 2" + 2 1/2"
No. of threads per inch 10 Area supported by each stay 89 sq inches Working pressure by Rules 240 #0
Tubes: Material Iron External diameter { Plain } 3 1/2" Thickness { 5/16" 3/8" 7/16" No. of threads per inch 9
Pitch of tubes 4 3/4" Working pressure by Rules 215 #0 Manhole compensation: Size of opening
shell plate 16" x 12" Section of compensating ring 5 7/2" dia x 1 3/8" No. of rivets and diameter of rivet holes 59 @ 1 3/8"
Outer row rivet pitch at ends 10.41" Depth of flange if manhole flanged ✓ Steam Dome: Material Steel
Tensile strength 26.30 tons sq" Thickness of shell 3/4" Description of longitudinal joint S.R. lap.
Diameter of rivet holes 1 1/32" Pitch of rivets 2 1/4" Percentage of strength of joint { Plate 54.00
Rivets 43.80
Internal diameter 33" Working pressure by Rules 229 #0 Thickness of crown 7/8" No. and diameter
stays 2 @ 2 1/4" Inner radius of crown ✓ Working pressure by Rules
How connected to shell Riveted Size of doubling plate under dome 5 7/2" dia x 1 3/8" Diameter of rivet holes and pit
of rivets in outer row in dome connection to shell 1 3/8" @ 10.4"

Type of Superheater _____ 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 a
the boiler be worked separately _____ Is a safety valve fitted to every part of the superheater which can be shut off from the boiler
Area of each safety valve _____ Are the safety valves fitted with easing gear _____ Working pressure as p
Rules _____ Pressure to which the safety valves are adjusted _____ Hydraulic test pressur
tubes _____, castings _____ and after assembly in place _____ Are drain cocks or valves fit
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 foregoing is a correct description,
For CHARLES D. HOBBS & CO., LTD. Manufacture

Dates of Survey { During progress of work in shops - - } ✓ Are the approved plans of boiler and superheater forwarded herewith no
while building { During erection on board vessel - - } See Incl. Report (If not state date of approval.)
Total No. of visits ✓

Is this Boiler a duplicate of a previous case Yes. If so, state Vessel's name and Report No. "Kingston Beylonite" 4558

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under special survey and in accordance with the approved plan. It has been satisfactorily fitted on board, tried under steam and its safety valves adjusted as stated.

The approved plan is retained for dealing with duplicate boiler 147

charged on engine report herewith

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

C. Moffatt.

Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute TUE. 9 APR 1935

Assigned

See Machy 38



© 2019

Lloyd's Register
Foundation