

REPORT ON BOILERS.

No. 45580.

Received at London Office 18 MAR 1935

Date of writing Report

10

When handed in at Local Office

1 MAR 1935

Port of

HULL

No. in Survey held at
Reg. Book.

Hull

Date, First Survey

23rd Nov. 1934

Last Survey

13th March 1935

on the

Steel S. K. " Kingston Beylomite "

(Number of Visits

✓)

Gross 447.95
Tons Net 173.87.

Master

Built at

Beverley

By whom built

Cook, Welton & Gemmells Ltd.

ard No.

600

When built

1935.3

Engines made at

Hull

By whom made

Charles D. Holmes & Co. Ltd.

Engine No.

1473

When made

1935

Boilers made at

Hull

By whom made

Charles D. Holmes & Co. Ltd.

Boiler No.

1473

When made

1935

Nominal Horse Power

117

Owners

Kingston Steam Trawling Co. Ltd.

Port belonging to

Hull.

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

Appleby - Frodingham Steel Co. Ltd.

(Letter for Record

"S")

Total Heating Surface of Boilers

1940 sq ft

Is forced draught fitted

No.

Coal or Oil fired

coal

No. and Description of Boilers

One single ended Return Tube.

Working Pressure

215 #0"

Tested by hydraulic pressure to

373 #0"

Date of test

24-1-35

No. of Certificate

3909.

Can each boiler be worked separately

✓

Area of Firegrate in each Boiler

53.74 sq ft

No. and Description of safety valves to each boiler

2 Spring loaded.

Area of each set of valves per boiler

per Rule 10.55 sq ft.
as fitted 11.88 "

Pressure to which they are adjusted

215 #0"

Are they fitted with easing gear

yes.

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

9"

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

174"

Length

10' 8"

Shell plates: Material

Steel

Tensile strength

29-33 tons #0"

Thickness

1 3/8"

Are the shell plates welded or flanged

✓

Description of riveting: circ. seams

end

inter.

3 3/4"

long. seams

T.R.

S.B.S.

Diameter of rivet holes in

circ. seams
long. seams

1 3/8"

Pitch of rivets

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

Percentage of strength of longitudinal joint

plate

86.80

rivets

87.60

Working pressure of shell by Rules

217 #0"

Thickness of butt straps

outer 1 1/16"
inner 1 3/16"

No. and Description of Furnaces in each Boiler

Three plain

Material

Steel

Tensile strength

26-30 tons #0"

Smallest outside diameter

42.5"

Length of plain part

top 42"
bottom

Thickness of plates

crown 53/64"
bottom

Description of longitudinal joint

welded.

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

Working pressure of furnace by Rules

221 #0"

End plates in steam space: Material

Steel

Tensile strength

26-30 tons

Thickness

1 7/32"

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

How are stays secured

Double nuts and washers

Working pressure by Rules

221 #0"

Tube plates: Material

front Steel
back "

Tensile strength

26-30 tons #0"

Thickness

15/16"

Mean pitch of stay tubes in nests

10.7"

Pitch across wide water spaces

14"

Working pressure

front 228 #0"
back 222 #0"

Girders to combustion chamber tops: Material

Steel

Tensile strength

29-33 tons #0"

Depth and thickness of girder

at centre

10 x 1 3/4"

Length as per Rule

36 7/32"

Distance apart

9" x 9 1/2"

Centre

No. and pitch of stays

in each

3 @ 8"

Working pressure by Rules

215 #0"

Combustion chamber plates: Material

Steel

Tensile strength

26-30 tons #0"

Thickness: Sides

3/4"

Back

23/32"

Top

23/32"

Bottom

3/4"

Pitch 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

Working pressure by Rules (min)

232 #0"

Front plate at bottom: Material

Steel

Tensile strength

26-30 tons #0"

Thickness

15/16"

Lower back plate: Material

Steel

Tensile strength

26-30 tons #0"

Thickness

7/8"

Pitch of stays at wide water space

14.25"

Are stays fitted with nuts or riveted over

nuts

Working Pressure

230 #0"

Main stays: Material

Steel

Tensile strength

28-32 tons #0"

Diameter

At body of stay,
or
Over threads

3 1/4"

No. of threads per inch

8

Area supported by each stay

360 sq in

Working pressure by Rules

223 #0"

Screw stays: Material

Steel

Tensile strength

26-30 tons #0"

Diameter

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 # Are the stays drilled at the outer ends No Margin stays: Diameter { At turned off part, 2" + 1 7/8"
No. of threads per inch 10 Area supported by each stay 89 sq inches Working pressure by Rules 240 #
Tubes: Material Iron External diameter { Plain } 3 1/2" Thickness { 8 wg } No. of threads per inch 9
Pitch of tubes 4 3/4" Working pressure by Rules 215 # Manhole compensation: Size of opening in
shell plate 16" x 12" Section of compensating ring 57 1/2" dia x 1 3/8" No. of rivets and diameter of rivet holes 59 @ 1 3/8"
Outer row rivet pitch at ends 10-4 1/2" Depth of flange if manhole flanged ✓ Steam Dome: Material Steel
Tensile strength 26-30 tons 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
Internal diameter 33" Working pressure by Rules 229 # Thickness of crown 7/8" Rivets 43.80
stays 2 @ 2 1/4" Inner radius of crown ✓ Working pressure by Rules
How connected to shell Riveted Size of doubling plate under dome 57 1/2" x 1 3/8" Diameter of rivet holes and pitch
of rivets in outer row in dome connection to shell 1 3/8" @ 10-4"

Type of Superheater _____ Manufacturers of { Tubes _____
Number of elements _____ Material of tubes _____ Steel castings _____
Material of headers _____ Tensile strength _____ Internal diameter and thickness of tubes _____
Can the superheater be shut off and
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 per
Rules _____ Pressure to which the safety valves are adjusted _____ Hydraulic test pressure:
tubes _____ castings _____ and after assembly in place _____ Are drain cocks or valves fitted
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. HOLMES & CO., LTD. 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 No.
(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 Chrysolite" 45543.

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 boiler plan is retained for dealing with duplicate boilers 1474 and 5.

Charged on engine report Lewerich.

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

C. Knoffart.
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE. 19 MAR 1935

Assigned See Phil JE. 45380