

# REPORT ON BOILERS.

No. 40742.

12 APR 1930

Received at London Office

HULL.

Date of writing Report

10:40 1930

When handed in at Local Office

10 April 1930

Port of

No. in Survey held at

Hull

Date, First Survey

17 Dec 1929

Last Survey

5 April 1930

Book

(Number of Visits)

18

Gross

362.53

Net

144.62

1509 on the

Steam Trawler "KINGSTON OLIVINE"

Master

Built at

Beverley

By whom built

W. H. M. & Co. Ltd

Yard No.

539

When built

1930

Engines made at

Hull

By whom made

Charles Boulton & Co. Ltd

Engine No.

1389

When made

1930

Boilers made at

Hull

By whom made

do

Boiler No.

1389

When made

1930

Nominal Horse Power

96

Owners

Kingston Steam Trawling Co. Ltd

Port belonging to

Hull

## MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

Witkovitzer Began Reinvention & Co.

(Letter for Record

(S)

Total Heating Surface of Boilers

1698 sq. ft.

Is forced draught fitted

Yes

Coal or Oil fired

Coal

No. and Description of Boilers

One single ended return tube

Working Pressure

200 lbs.

Tested by hydraulic pressure to

350 lbs.

Date of test

5.3.30

No. of Certificate

3764

Can each boiler be worked separately

Yes

Area of Firegrate in each Boiler

49.2 sq. ft.

No. and Description of safety valves to each boiler

2 Spring loaded

Area of each set of valves per boiler

per Rule

9.8 sq. ft.

Pressure to which they are adjusted

200 lbs.

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

4"

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

14'-0"

Length

10'-8"

Shell plates: Material

Steel

Tensile strength

38/32 Tons

Thickness

1/2"

Are the shell plates welded or flanged

Description of riveting: circ. seams

inter.

Angle of seams

T.R. 58.5

Diameter of rivet holes in

circ. seams

1/2"

Pitch of rivets

8 1/2"

Percentage of strength of circ. end seams

plate

65.8

rivets

51.2

Percentage of strength of circ. intermediate seam

plate

85.0

rivets

90.8

Percentage of strength of longitudinal joint

plate

85.0

rivets

90.8

Working pressure of shell by Rules

201 lbs.

Thickness of butt straps

outer

1"

inner

1/2"

No. and Description of Furnaces in each Boiler

Shen plain

Material

Steel

Tensile strength

38/30 Tons

Smallest outside diameter

41"

Length of plain part

top

76"

bottom

69"

Thickness of plates

crowd

1 1/2"

bottom

1 1/2"

Description of longitudinal joint

Welded

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

End plates in steam space: Material

Steel

Tensile strength

38/30 Tons

Thickness

1 1/2"

Pitch of stays

18"

How are stays secured

Double nuts & washers

Working pressure by Rules

220 lbs.

Tube plates: Material

front

Steel

back

Steel

Tensile strength

38/30 Tons

Thickness

1 1/2"

Pitch of stays

18"

Lean pitch of stay tubes in nests

10.97"

Pitch across wide water spaces

13 1/4"

Working pressure

front

211 lbs.

back

230

Girders to combustion chamber tops: Material

Steel

Tensile strength

38/32 Tons

Distance apart

9"

No. and pitch of stays

3 @ 8 1/4"

Length as per Rule

36 3/16"

Working pressure by Rules

210 lbs.

Combustion chamber plates: Material

Steel

Each

3 @ 8 1/4"

Working pressure by Rules

210 lbs.

Thickness: Sides

3/4"

Back

2 1/2"

Top

3/4" + 2 1/2"

Bottom

3/4"

Tensile strength

38/30 Tons

Pitch of stays to ditto: Sides

9 x 8 1/4"

Back

9 x 8 1/2"

Top

9 x 8 1/4"

Are stays fitted with nuts or riveted over

Yes

Working pressure by Rules

230 lbs.

Front plate at bottom: Material

Steel

Tensile strength

38/30 Tons

Thickness

2 1/2"

Pitch of stays at wide water space

14 x 8 1/4"

Are stays fitted with nuts or riveted over

Yes

Working Pressure

228 lbs.

Main stays: Material

Steel

Tensile strength

38/32 Tons

Area supported by each stay

324 sq. ft.

Diameter

At body of stay,

3 1/2"

No. of threads per inch

8

Area supported by each stay

324 sq. ft.

Over threads

2 1/2"

Working pressure by Rules

245 lbs.

Screw stays: Material

Steel

Tensile strength

38/30 Tons

Diameter

At turned off part,

17/8" + 1 1/4"

No. of threads per inch

10

Area supported by each stay

79.8 sq. ft.

Over threads

1 1/4"

Working Pressure

228 lbs.

Main stays: Material

Steel

Tensile strength

38/32 Tons

Area supported by each stay

324 sq. ft.

Diameter

At body of stay,

3 1/2"

No. of threads per inch

8

Area supported by each stay

324 sq. ft.

Over threads

2 1/2"

Working pressure by Rules

245 lbs.

Screw stays: Material

Steel

Tensile strength

38/30 Tons

Area supported by each stay

79.8 sq. ft.

Diameter

At turned off part,

17/8" + 1 1/4"

No. of threads per inch



Working pressure by Rules 130 Lbs Are the stays drilled at the outer ends ho Margin stays: Diameter { At turned off part, 17/8 ✓  
or Over threads  
No. of threads per inch 10 Area supported by each stay 97.75 sq Working pressure by Rules 212 Lbs  
Tubes: Material Iron External diameter { Plain 3 1/2 Thickness { 8/16 No. of threads per inch 9  
Pitch of tubes 47/8 Working pressure by Rules 215 Lbs Manhole compensation: Size of opening in  
shell plate 16 x 12 Section of compensating ring 54 dia x 1 1/2 No. of rivets and diameter of rivet holes 16 @ 1 1/4  
Outer row rivet pitch at ends 10.3 Depth of flange if manhole flanged 10.3 Steam Dome: Material Steel  
Tensile strength 36/30 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 54.0  
Rivets 43.8  
Internal diameter 33 Working pressure by Rules 229 Lbs Thickness of crown 7/8 No. and diameter of  
stays 2 @ 2 1/4 Inner radius of crown ✓ Working pressure by Rules ✓  
How connected to shell Riveted Size of doubling plate under dome 54 dia x 1 1/2 Diameter of rivet holes and pitch  
of rivets in outer row in dome connection to shell 1 1/32 x 10.3

#### Type of Superheater

Number of elements \_\_\_\_\_ Material of tubes \_\_\_\_\_ Manufacturers of { Tubes \_\_\_\_\_  
Steel castings \_\_\_\_\_  
Internal diameter and thickness of tubes \_\_\_\_\_  
Material of headers \_\_\_\_\_ Tensile strength \_\_\_\_\_ Thickness \_\_\_\_\_ 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 23 inclusive for boilers been complied with \_\_\_\_\_

The foregoing is a correct description,  
For CHARLES D. HOLMES & CO., LTD.

Manufacturer

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

See attached report  
on Machinery.

Are the approved plans of boiler and superheater forwarded herewith  
(If not state date of approval.)  
Total No. of visits ✓

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

This boiler has been built under special survey & in accordance with  
the approved plan. It has been satisfactorily fitted on board, tried  
under steam, and its safety valves adjusted as above  
under steam.

Charge on engine report  
Survey Fee £  
Travelling Expenses (if any) £

When applied for, ✓ 192  
When received, ✓ 192

Shubhachandry

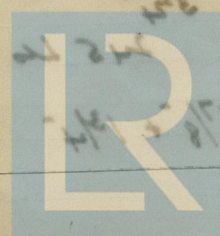
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

See A. E. 4th attached

TUE. 15 APR 1930



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Lloyd's Register  
Foundation

Rpt. 13.

REP

Date of writing Rep

No. in Survey  
Reg. Book.

11509 on the

Built at B...

Owners ...

Electric Light

Is the Vessel fit

System of Dis

Pressure of sup

Direct or Alter

If alternating cu

Has the Autom

Generators, do

are they over com

Where more than

series with each s

Are all terminals

short circuited, o

Position of G

is the ventilation

if situated nea

are their axes o

Earthing, are

their respective

Main Switch

a fuse on each

Switchboard

are they protec

woodwork or o

are they const

permanently h

with mica or n

and is the fra

bars

Main Switc

Switch

Instrumen

Earth Test

Switches,

Joint Box