

REPORT ON BOILERS.

No. 44562

-2 FEB 1937

Received at London Office

of writing Report

1.2 to 37

When handed in at Local Office

11 FEB 1937

Port of

HULL

Survey held at

Hull.

Date, First Survey

6th Nov. 1936

Last Survey

28th Jan. 1937

on the

Steam Trawler "REIGHTON WYKE"

(Number of Visits)

Gross 465.24
Net 172.73

ter

Built at

Selly.

By whom built

Bochrane & Sons Ltd

Yard No. 1174.

When built 1937-1

ines made at

Hull.

By whom made

C. D. Holmes & Co., Ltd

Engine No. 1517.

When made 1937

ers made at

Hull.

By whom made

C. D. Holmes & Co., Ltd

Boiler No. 1517.

When made 1937.

inal Horse Power

120

Owners

West Dock Steam Fishing Co., Ltd

Port belonging to

Hull.

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

The Steel Company of Scotland Ltd

(Letter for Record

"S"

Heating Surface of Boilers

2160 square feet.

Is forced draught fitted

No

Coal or Oil fired

Coal.

Description of Boilers

One single ended return Tube.

Working Pressure

215 Lbs/sq

ed by hydraulic pressure to

373 Lbs/sq

Date of test

6.1.37

No. of Certificate

3962.

Can each boiler be worked separately

a of Firegrate in each Boiler

59 sq ft.

No. and Description of safety valves to each boiler

Two spring loaded 3" diameter.

a of each set of valves per boiler

per Rule 11.8

as fitted 4.1372

Pressure to which they are adjusted

215 Lbs/sq

Are they fitted with easing gear

Yes.

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

llest distance between boilers or uptakes and bunkers or woodwork

9"

Is oil fuel carried in the double bottom under boilers

llest distance between shell of boiler and tank top plating

Is the bottom of the boiler insulated

Yes.

gest internal dia. of boilers

15'-0"

Length

11'-0"

Shell plates: Material

Steel

Tensile strength

30-34 Tons/sq

ickness

1 3/8"

Are the shell plates welded or flanged

No.

Description of riveting: circ. seams

end

Double riveted

seams

Double riveted D.B.S.

Diameter of rivet holes in

circ. seams 1 3/8"

long. seams 1 3/32"

Pitch of rivets

3 3/4"

centage of strength of circ. end seams

plate 63.3

rivets 44.2

Percentage of strength of circ. intermediate seam

plate

rivets

centage of strength of longitudinal joint

plate 85.2

rivets 84.89

combined 87.7.

Working pressure of shell by Rules

216 Lbs/sq

ickness of butt straps

outer 1 1/8"

inner 1 3/8"

No. and Description of Furnaces in each Boiler

Three "Deighton" Corrugated

30"

erial

Steel

Tensile strength

26-30 Tons/sq

Smallest outside diameter

3'-8 1/16"

th of plain part

top

bottom

Thickness of plates

crow 2 1/32"

bottom 2 1/32"

Description of longitudinal joint

Welded.

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

Working pressure of furnace by Rules

217 Lbs/sq

plates in steam space: Material

Steel

Tensile strength

26-30 Tons/sq

Thickness

1 3/32"

Pitch of stays

18 1/2" x 19 1/2"

are stays secured

Double nuts & washers.

Working pressure by Rules

218 Lbs/sq

e plates: Material

front Steel

back Steel

Tensile strength

26-30 Tons/sq

Thickness

2 1/32"

Working pressure

front 225 Lbs/sq

back 220 Lbs/sq

n pitch of stay tubes in nests

10.69"

Pitch across wide water spaces

14"

Working pressure

front 225 Lbs/sq

back 220 Lbs/sq

lers to combustion chamber tops: Material

Steel

Tensile strength

29-33 Tons/sq

Depth and thickness of girder

entre

9 3/4" Wings

9 1/4" Centre x 7/8" Double

Length as per Rule

3'-0 1/4"

Distance apart

8" Centre 9 1/8" Max wings

No. and pitch of stays

ach

3 x 8 1/4" pitch

Working pressure by Rules

221 Lbs/sq

Combustion chamber plates: Material

Steel

ile strength

26-30 Tons/sq

Thickness: Sides

25/32"

Back

11/16"

Top

11/16"

Bottom

25/32"

h of stays to ditto: Sides

10 1/4" x 8 1/2"

Back

9 1/2" x 7 3/4"

Top

8 1/4" x 9 1/8" max

Are stays fitted with nuts or riveted over

Nuts.

king pressure by Rules

218 Lbs/sq

Front plate at bottom: Material

Steel

Tensile strength

26-30 Tons/sq

ickness

15/16"

Lower back plate: Material

Steel

Tensile strength

26-30 Tons/sq

Thickness

27/32"

h of stays at wide water space

14" x 7 3/4"

Are stays fitted with nuts or riveted over

Nuts.

king Pressure

221 Lbs/sq

Main stays: Material

Steel

Tensile strength 28 Tons minimum

meter

At body of stay,

3 1/4"

No. of threads per inch

8.

Area supported by each stay

361 square inches

king pressure by Rules

215 Lbs/sq

Screw stays: Material

Steel

Tensile strength

26 Tons minimum

meter

At turned off part,

1 3/4"

No. of threads per inch

10.

Area supported by each stay

73.6 square inches

Working pressure by Rules 245 lbs/sq in Are the stays drilled at the outer ends No Margin stays: Diameter 1 7/8" & 2" dia
No. of threads per inch 8 Area supported by each stay 87 square inches Working pressure by Rules 234 lbs/sq in
Tubes: Material L. W. Iron External diameter 3 1/2" Thickness 3/4" No. of threads per inch 9
Pitch of tubes 4 3/4" x 4 3/4" Working pressure by Rules 215 lbs/sq in Manhole compensation: Size of open
shell plate 16" x 12" Section of compensating ring 4' 9 3/4" dia x 1 3/8" thick No. of rivets and diameter of rivet holes 16 - 1 1/32"
Outer row rivet pitch at ends 4' 5 3/8" p.c. Depth of flange if manhole flanged Steam Dome: Material Steel
Tensile strength 26-30 Tons/sq in Thickness of shell 3/4" Description of longitudinal joint Single riveted lap
Diameter of rivet holes 1 1/32" Pitch of rivets 2 1/4" Percentage of strength of joint Plate 54 Rivets 43.8
Internal diameter 2' 9" Working pressure by Rules 230 lbs/sq in Thickness of crown 1/8" No. and diam
stays 2 at 2 1/4" diameter Inner radius of crown Working pressure by Rules
How connected to shell Double riveted Size of doubling plate under dome 4' 9 3/4" dia: x 1 3/8" thick Diameter of rivet holes and
of rivets in outer row in dome connection to shell 1 3/8" dia x 3' 9" p.c.d.

Type of Superheater None Manufacturers of
Number of elements Material of tubes Internal diameter and thickness of tubes
Material of headers Tensile strength Thickness Can the superheater be shut off
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
Rules Pressure to which the safety valves are adjusted Hydraulic test pressure
tubes forgings and castings and after assembly in place Are drain cocks
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.
J. Cooper 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 No If so, state Vessel's name and Report No.

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, the materials and workmanship being sound and good. It has been satisfactorily fitted on board, tried under steam and its safety valves adjusted.

The approved plan is being retained for guidance in dealing with repeat boiler No 1518.

Charged on engine report herewith.

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

J. A. Orde
Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute FRI 5 FEB 1937
Assigned See other F.E. report