

REPORT ON BOILERS.

No. 45237

Received at London Office

12 NOV 1934

Date of writing Report

19

When handed in at Local Office

1 NOV 1934

Port of

HULL

No. in Reg. Book.

Survey held at

Hull.

Date, First Survey 5th July 1934

Last Survey 25th Oct,

1934

on the

Steel Sc K. "bape Barfleur"

(Number of Visits

v.)

Gross

456.92

Tons

Net 185.10.

Master

Built at

Selby

By whom built

Cochrane & Sons Ltd.

Yard No.

1127

When built

1934, 10

Engines made at

Hull

By whom made

Charles D. Holmes & Co. Ltd.

Engine No.

1465

When made

1934

Boilers made at

Hull

By whom made

Charles D. Holmes & Co. Ltd.

Boiler No.

1465

When made

1934.

Nominal Horse Power

122

Owners

Hudson Steam Fishing Co. Ltd.

Port belonging to

Hull.

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

Appleby Iron Co. Ltd.

(Letter for Record

"S")

Total Heating Surface of Boilers

2160 sq. ft.

Is forced draught fitted

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

18/9/34

No. of Certificate

3897

Can each boiler be worked separately

Area of Firegrate in each Boiler

61.75 sq. ft.

No. and Description of safety valves to each boiler

Two spring loaded.

Area of each set of valves per boiler

per Rule

14.335 sq. ft.

as fitted

18.36 sq. ft.

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

12"

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

180"

Length

11'

Shell plates: Material

Steel

Tensile strength

30/34 tons

Thickness

1 3/8"

Are the shell plates welded or flanged

Description of riveting: circ. seams

long. seams

J.R. D.B.S.

Diameter of rivet holes in

circ. seams

1 3/8"

long. seams

1 13/32"

Pitch of rivets

3 3/4"

9 9/16"

Percentage of strength of circ. end seams

plate

63.4

rivets

58.5

Percentage of strength of circ. intermediate seam

plate

-

rivets

Percentage of strength of longitudinal joint

plate

85.2

rivets

84.89

combined

87.7

Working pressure of shell by Rules

216 #0"

Thickness of butt straps

outer

1 1/16"

inner

1 3/16"

No. and Description of Furnaces in each Boiler

Three corrugated (Seighton)

Material

Steel

Tensile strength

26/30 tons

Smallest outside diameter

44.0625"

Length of plain part

top

-

bottom

Thickness of plates

crown

2 1/32"

bottom

Description of longitudinal joint

Welded.

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

Working pressure of furnace by Rules

218 #0"

End plates in steam space: Material

Steel

Tensile strength

26/30 tons

Thickness

1 7/32"

Pitch of stays

19 1/2 x 16 1/2"

How are stays secured

Double nuts and washers

Working pressure by Rules

217 #0"

Tube plates: Material

front

Steel

back

Tensile strength

26/30 tons

Thickness

15/16"

29/32"

Mean pitch of stay tubes in nests

10.94"

Pitch across wide water spaces

14"

Working pressure

front

219 #0"

back

215 #0"

Girders to combustion chamber tops: Material

Steel

Tensile strength

29/33 tons

Depth and thickness of girder

at centre

9 1/4 by 1 3/4"

Length as per Rule

36.25"

Distance apart

centre 8"

Wings 9 1/8"

No. and pitch of stays

in each

3 @ 8 1/4"

Working pressure by Rules

215 #0"

Combustion chamber plates: Material

Steel

Tensile strength

26/30 tons

Thickness: Sides

25/32"

Back

1 1/16"

Top

2 1/32"

Bottom

25/32"

Pitch of stays to ditto: Sides

10 1/4 x 8 1/2"

Back

9 1/2 x 7 3/4"

Top

9 1/8 x 8 1/4"

Are stays fitted with nuts or riveted over

nuts.

Working pressure by Rules

218 #0"

Front plate at bottom: Material

Steel

Tensile strength

26/30 tons

Thickness

15/16"

Lower back plate: Material

Steel

Tensile strength

26/30 tons

Thickness

27/32"

Pitch of stays at wide water space

14" x 7 3/4"

Are stays fitted with nuts or riveted over

nuts

Working Pressure

224 #0"

Main stays: Material

Steel

Tensile strength

28/32 tons

Diameter

At body of stay,

or

Over threads

3 1/4"

No. of threads per inch

8

Area supported by each stay

361 sq. inches

Working pressure by Rules

223 #0"

Screw stays: Material

Steel

Tensile strength

26/30 tons

Diameter

At turned off part,

or

Over threads

1 3/4"

No. of threads per inch

10

Area supported by each stay

73.65 sq. inches

002241-002248-0092

Lloyd's Register
Foundation

PILLA
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of Str
BILGE P
Strak
SIDE P
Strak
UPPER
strak
UPPER
strak
STRAKE
strak
STRAKE
strak
POOP St
BRIDGE
FOREC'T
Total
MIDS
COLLI
AFTEI
STEE

Working pressure by Rules 246 #0 Are the stays drilled at the outer ends ho Margin stays: Diameter { At turned off part, 1 7/8" x 2"
No. of threads per inch 10 Area supported by each stay 91 sq inches Working pressure by Rules 234 #0
Tubes: Material Iron External diameter { Plain 3 1/2" Thickness { 5/16" + 3/8" No. of threads per inch 9
Pitch of tubes 4 3/4" x 4 3/4" Working pressure by Rules 215 #0 Manhole compensation: Size of opening in
shell plate 16" x 12" Section of compensating ring 4'9 3/4" dia x 1 3/8" No. of rivets and diameter of rivet holes { 102 @ 1 3/8"
Outer row rivet pitch at ends 4'5 3/8" p.c. Depth of flange if manhole flanged 16 @ 1 13/32"
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 54.0
Internal diameter 33" Working pressure by Rules 230 #0 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 4'9 3/4" dia by 1 3/8" Diameter of rivet holes and pitch
of rivets in outer row in dome connection to shell 1 3/8" 3'9" p.c. (36 rivets)
Type of Superheater Smoke tube type by Superheater Co. Ltd. Manufacturers of { Tubes ✓ Please see Manchester certificates.
Number of elements 43 Material of tubes S.D. Steel Internal diameter and thickness of tubes 19 M.M. 14 WG.
Material of headers Steel forgings Tensile strength ✓ Thickness 5/8" 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 @ 1 1/2" dia 1.77 sq in. Are the safety valves fitted with easing gear Yes Working pressure as per
Rules Approved for 215 #0 Pressure to which the safety valves are adjusted 217 #0 Hydraulic test pressure
tubes 645 #0 castings 645 #0 + 1000 #0 and after assembly in place 430 #0 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 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 Yes.
(If not state date of approval.)
Total No. of visits ✓

Is this Boiler a duplicate of a previous case ho 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.
It has been satisfactorily fitted on board, tried under steam and its safety valves adjusted as above.

Charged on engine report herewith.

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

B. Knoffatt.
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 9 NOV 1934
Assigned See other Incl 76
Mch Rpt