

st. 5c.

RECEIVED

15 FEB 1945

IN D.O.

REPORT ON WATER TUBE BOILERS.

No. 69307

15 FEB 1945

Received at London Office

Writing Report

19

When handed in at Local Office

10.2.1945

Port of

GLASGOW.

21 JUN 1945

No. in Survey held at R E N F R E W.

Date, First Survey

16.6.43

Last Survey

1st Feb., 1945

g. Bk. on the TW. SC. TRANSPORT FERRY J. 11723.

ho 3037

(Number of Visits 20)

Gross 4157

ilt at GLASGOW.

By whom built

MESSRS. FAIRFIELD SHIPBUILDING & ENGINEERING CO. LTD.

When built

1945

ines made at

By whom made

When made

ilers made at R E N F R E W.

By whom made

BABCOCK & WILCOX, Ltd. 10/1630 No. 12

When made

1945

iminal Horse Power 658.25

Owners

THE ADMIRALTY.

Port belonging to

ATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel

Colvilles Ltd.,

te of Approval of plan 24.2.43.

Number and Description or Type

Boilers 1-Three Drum Small Tube Type

Working Pressure 225 lb.

Tested by Hydraulic Pressure to 387 lb.

Date of Test 16.2.44.

of Certificate 21665

Can each boiler be worked separately

Yes

Total Heating Surface of Boilers

5325 sq.ft.

forced draught fitted

Area of fire grate (coal) in each Boiler

and type of burners (oil) in each boiler

4 Admiralty Type

No. and description of safety valves on

h boiler 1-4" High Lift Double

Area of each set of valve

25.12 sq.in.

Pressure to which they are adjusted

225 lb.

e they fitted with easing gear

Yes

In case of donkey boilers state whether steam from main boilers can enter the donkey boiler

allest distance between boilers or uptakes and bunkers or woodwork

Height of boiler

10'11"

Width and Length

11'10" Width

eam Drums:—Number in each boiler

One

Inside diameter

4'2"

Thickness of plates

5" & 1 1/2"

11'9 1/16" Length

ange of Tensile Strength

28/32 tons

Are drum shell plates welded or flanged

No

Description of riveting:—

r. seams double

long. seams DBS DR

Diameter of rivet holes in long. seams

29/32"

Pitch of rivets

3.4516"

p of plate or width of butt straps

9 7/16"

Thickness of straps

1 1/2"

Percentage strength of long. joint:—Plate 73.74 Rivet 88.06

iameter of tube holes in drum

1 1/8"

1 1/8"

1 1/8"

1 1/8"

1 1/8"

1 1/8"

Pitch of tube holes

1 1/8"

1 1/8"

1 1/8"

1 1/8"

1 1/8"

1 1/8"

1 1/8"

1 1/8"

1 1/8"

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1 1/8"

1 1/8"

1 1/8"

1 1/8"

1 1/8"

1 1/8"

1 1/8"

orking pressure by rules

app. 225 lb.

Steam Drum Heads or Ends:—Range of tensile strength

26/30 tons

Thickness of plates

1 3/16"

F 1"

A

adius or how stayed

4'2"

Size of manhole or handhole

16" x 12"

Working pressure by rules

app. 225 lb.

Water Drums:—Number

2

Inside Diameter

22 3/4"

Thickness of plates

1 1/2"

Range of tensile strength

28/32 tons

Are drum shell plates

welded or flanged

Seamless

Forged

Description of riveting:—Cir. seams

Single

long. seam

—

Diameter of rivet holes in

g. seams

—

Pitch of rivets

—

Lap of plates or width of butt straps

—

Thickness of straps

—

Percentage strength of long. joint:—Plate

—

Rivet

Percentage strength of drum shell in way of tubes

32.3

Working pressure by rules

app. 225 lb.

Water Drum Heads or Ends:—Range of

tensile strength

—

Thickness of plates

—

Radius or how stayed

23"

ze of manhole or handhole

16" x 12"

Working pressure by rules

app. 225 lb.

Headers or Sections:—Number

—

aterial

—

Thickness

—

Tested by Hydraulic Pressure to

—

Tubes:—Diameter

1", 1 1/8", 1 1/2"

ickness

.104", .116", .116"

Number

364 @ 1 1/8"

186 @ 1 1/2"

Steam Dome or Collector:—Description of Joint to Shell

—

Range of tensile strength

—

side diameter

Thickness of shell plates

—

Description of longitudinal joint

—

Diameter of rivet holes

—

Pitch of rivets

—

Lap of plate or width of

tt straps

Thickness of straps

—

Percentage strength of long. Joint

—

Plate

—

Rivet

—

orking Pressure of shell by rules

—

Crown or End Plates:—Range of tensile strength

—

Working pressure by rules

—

ickness

Radius or how stayed

—

Working pressure by rules

—

UPERHEATER. Drums or Headers:—Number in each boiler

—

Inside Diameter

—

ickness

Material

—

Range of tensile strength

—

Are drum shell plates welded

or flanged

Description of riveting:—Cir. seams

—

long. seams

—

Diameter of rivet holes in

g. seams

—

Pitch of rivets

—

Lap of plates or width of butt straps

—

Thickness of straps

—

Percentage strength of long. joint:—Plate

—

Rivet

—

Diameter of tube holes in drum

—

Pitch of tube holes

—

Percentage strength of drum shell in way of tubes

—

Working pressure by rules

—

Drum Heads or Ends:—

—

ickness

Range of tensile strength

—

Radius or how stayed

—

Size of manhole or handhole

—

orking pressure by rules

Number, diameter, and thickness of tubes

—

Tested by Hydraulic Pressure to

—

ate of Test

Is a safety valve fitted to each section of the superheater which can be shut off from the boiler

—

Area of each set of valves

—

and description of Safety Valves

—

Pressure to which they are adjusted

—

Is easing gear fitted

—

pare Gear. Has the spare gear required by the rules been supplied

—

The foregoing is a correct description,

[Signature]

Manufacturer.

Dates

During progress of

1943 Jun 16 Jul 27 Aug 6 30 Sep 3 21 29 Oct 5 Nov 1 10 Dec 2

Survey

work in shops

16 1944 Jan 5 Feb 12 16 Mar 3 16 1945 Feb

while

During erection on

board vessel

ilding

Is the approved plan of boiler forwarded herewith

No.

Total No. of visits

20

this boiler a duplicate of a previous case

Yes.

If so, state vessel's name and report No.

Glasgow Report No. 68702.

GENERAL REMARKS

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

This boiler has been built under Special

vey in accordance with the Rules and approved plans, and also in accordance with Admiralty Statement

requirements and as otherwise modified and approved by the Admiralty, and the materials and workman-

p are good. It has been sent to the Shipbuilders for installation in the vessel,

Survey Fee ... £ 22 : 10 :

When applied for, 13 FEB 1945

Travelling Expenses (if any) £

When received, 19

Specification 22 10

GLASGOW