

REPORT ON BOILERS.

No. 70861

Received at London Office

Date of writing Report

3.4.46

When handed in at Local Office

8.7.46

Port of

GLASSGOW

No. in
Reg. Book.

Survey held at

GLASSGOW

Date, First Survey

1.5.44

Last Survey

12.6.1946

on the

S.S. "MOUNT PARK"

(Number of Visits)

85

Tons

Gross

6722

Net

6700

3875

4700

Master

Built at

GLASSGOW

By whom built

CHAS. CONNELL & CO. LD.

Yard No.

450

When built

1946

Engines made at

GLASSGOW

By whom made

DAVID ROWAN & CO. LD.

Engine No.

1153

When made

1946

Boilers made at

- D° -

By whom made

- D° -

Boiler No.

1153

When made

1946

Nominal Horse Power

531

Owners

DENHOLM LINE STEAMERS LTD.

Port belonging to

GREENOCK

M.N.

666

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

Colvilles Ltd.

(Letter for Record

S)

Total Heating Surface of Boilers

77284 (SHEAT + 3000 ft)

Is forced draught fitted

Yes

Coal or Oil fired

Oil

No. and Description of Boilers

3 S.E. Multitubular

Working Pressure

220 lb

Tested by hydraulic pressure to

380 lb

Date of test

5.3.46

No. of Certificate

22142

Can each boiler be worked separately

Yes

Area of Firegrate in each Boiler

No. and Description of safety valves to each boiler

1-2 1/4 S.H.S. Double

Area of each set of valves per boiler

per Rule

6.854

as fitted

7.952

Pressure to which they are adjusted

220 lb

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

4'10"

Is oil fuel carried in the double bottom under boilers

Yes

Smallest distance between shell of boiler and tank top plating

2'2 3/8"

Is the bottom of the boiler insulated

Yes

Largest internal dia. of boilers

15'3"

Length

11'6"

Shell plates: Material

S

Tensile strength

29/33 ton

Thickness

1 7/16"

Are the shell plates welded or flanged

No

Description of riveting: circ. seams

end

Double

long. seams

D.B.S.L.R.Q.

Diameter of rivet holes in

circ. seams

B1 1/2 F 1 3/8

long. seams

1 1/2"

Pitch of rivets

B4.13 F 3.435

inter

10.25

Percentage of strength of circ. end seams

plate

B63.6 F60

rivets

B44.2 F44.8

Percentage of strength of circ. intermediate seam

plate

85.36

rivets

Percentage of strength of longitudinal joint

plate

89

rivets

88.6

Working pressure of shell by Rules

app.

Thickness of butt straps

outer

1 3/32"

No. and Description of Furnaces in each Boiler

3 Deighton

Material

Steel

Tensile strength

26/30 ton

Smallest outside diameter

3'9 3/8"

Length of plain part

top

bottom

Thickness of plates

crown

1 1/16"

bottom

Description of longitudinal joint

Welded

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

None

Working pressure of furnace by Rules

app.

End plates in steam space: Material

S

Tensile strength

26/30 ton

Thickness

1 3/8"

Pitch of stays

19 x 22"

How are stays secured

Double nuts

Working pressure by Rules

app.

Tube plates: Material

front

back

Steel

Tensile strength

26/30 ton

Thickness

15/16"

25/32"

Mean pitch of stay tubes in nests

9.66"

Pitch across wide water spaces

14"

Working pressure

front

app.

back

Girders to combustion chamber tops: Material

Steel

Tensile strength

28/32 ton

Depth and thickness of girder

at centre

2 @ 8 3/4" x 1/8"

Length as per Rule

33.5"

Distance apart

8"

No. and pitch of stays

in each

3 @ 8 1/4"

Working pressure by Rules

app.

Combustion chamber plates: Material

Steel

Tensile strength

26/30 ton

Thickness: Sides

21/32"

Back

21/32"

Top

21/32"

Bottom

13/16"

Pitch of stays to ditto: Sides

8 1/4 x 8"

Back

10 x 8"

Top

8 1/4 x 8"

Are stays fitted with nuts or riveted over

Nuts

Working pressure by Rules

app.

Front plate at bottom: Material

Steel

Tensile strength

26/30 ton

Thickness

15/16"

Lower back plate: Material

Steel

Tensile strength

26/30 ton

Thickness

13/16"

Pitch of stays at wide water space

13 7/16"

Are stays fitted with nuts or riveted over

Nuts

Working pressure

app.

Main stays: Material

Steel

Tensile strength

28/32 ton

Diameter

At body of stay

3" x 3 1/4"

or

Over threads

No. of threads per inch

6

Area supported by each stay

app.

Working pressure by Rules

app.

Screw stays: Material

Steel

Tensile strength

26/30 ton

Diameter

At turned off part

1 3/8" x 1 3/4"

or

Over threads

No. of threads per inch

9

Area supported by each stay

app.

Working pressure by Rules *app* Are the stays drilled at the outer ends *No* Margin stays: Diameter { At turned off part *1 7/8* or Over threads *1 7/8* }

No. of threads per inch *9* Area supported by each stay *app* Working pressure by Rules *app*

Tubes: Material *Steel* External diameter { Plain *3* Stay *3* } Thickness { *1 1/4* *5/16* *3/8* } No. of threads per inch *9*

Pitch of tubes *4 1/8 x 4 3/16* Working pressure by Rules *app* Manhole compensation: Size of opening in shell plate

Section of compensating ring

No. of rivets and diameter of rivet holes

Outer row rivet pitch at ends

Depth of flange if manhole flanged

Steam Dome: Material

Tensile strength

Thickness of shell

Description of longitudinal joint

Diameter of rivet holes

Pitch of rivets

Percentage of strength of joint { Plate Rivets }

Interst diameter

Working pressure by Rules

Thickness of crown

No. and diameter of stays

Inner radius of crown

Working pressure by Rules

How connected to shell

Size of doubling plate under dome

Diameter of rivet holes and pitch of rivets in outer row in dome connection to shell

Type of Superheater *Smoke tube* Manufacturers of *The Superheater Co. Ltd. Trafford Park*

Number of elements *141* Material of tubes *S. D. S.* Internal diameter and thickness of tubes *22 1/4"*

Material of headers

Tensile strength

Thickness

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 7/6 sq"* Are the safety valves fitted with easing gear *Yes* Working pressure as per Rules *app* Pressure to which the safety valves are adjusted *220 lbs* Hydraulic test pressure: tubes *500 lbs* forgings and castings *660 lbs* and after assembly in place *500 lbs* 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 David Rowan & Co. Ltd. Manufacturer.
Arch. H. Thomson

Dates of Survey while building { During progress of work in shops - - } *See accompanying* Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.)

{ During erection on board vessel - - } *machinery report* Total No. of visits *1*

Is this Boiler a duplicate of a previous case *Yes* If so, state Vessel's name and Report No. *Emp. swordman fls. Rpt. No 68656*

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *These boilers have been built under special survey in accordance with the rules and approved plans. The materials and workmanship are good. The boilers have been satisfactorily installed in the vessel, and the safety valves adjusted under steam to the working pressure*

Survey Fee ... £ *See Mach. Rpt.* When applied for, ... 19...

Travelling Expenses (if any) £ *See Mach. Rpt.* When received, ... 19...

No. Russell

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned *SEE ACCOMPANYING MACHINERY REPORT*



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Lloyd's Register Foundation

Rpt. 13.

Date of writing

No. in Reg. B
38822

Built at

Owners

Electrical

Is vessel

Have plan

Heating

has the go

trip switch

if not con

arranged

nega

test for n

of the ge

near unp

injury an

contact

are they

and oil

material

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Is the c

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Switc

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protec

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Cable

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