

REPORT ON BOILERS.

No. 63856

Received at London Office 29 MAY 1941

Date of writing Report

19

When handed in at Local Office

26: 5: 1941

Port of GLASGOW

No. in Survey held at

GLASGOW

Date, First Survey

1st Apr. 1940

Last Survey

15th May 1941

Reg. Book.

9084 on the 5/5

"MICHAEL E"

(Number of Visits

90

Gross

7628

Tons

Net 5508

Built at

P¹ GLASGOW

By whom built

W. HAMILTON & CO. LD.

Yard No

446 When built

1941

Engines made at

GLASGOW

By whom made

DAVID ROWAN & CO. LD.

Engine No

1064 When made

1941

Boilers made at

-DO-

By whom made

-DO-

Boiler No

1064 When made

1941

Nominal Horse Power

443

Owners

Bury Hill Shipb^g Co. Ltd.

Port belonging to

London

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

Gillies, Ltd.

Total Heating Surface of Boilers

5940 sq

Is forced draught fitted

Yes

(Letter for Record

S

No. and Description of Boilers

2 Single-ended

Coal or Oil fired

Oil

Working Pressure

225 lb

Tested by hydraulic pressure to

388 lb.

Date of test

25-11-40

No. of Certificate

20674

Can each boiler be worked separately

Yes

Area of Firegrate in each Boiler

No. and Description of safety valves to each boiler

1-2 1/2" I.H.L. double

Area of each set of valves per boiler

{ per Rule 7.730"

Pressure to which they are adjusted

225 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 boiler uptakes and bunkers or woodwork

22"

Is oil fuel carried in the double bottom under boilers

Yes

Smallest distance between shell of boiler and tank top plating

2'-6"

Is the bottom of the boiler insulated

Yes

Largest internal dia. of boilers

15'-9"

Length

12'-0"

Shell plates: Material

Steel

Tensile strength

30/34 tons

Thickness

1 3/16"

Are the shell plates welded or flanged

No

Description of riveting: circ. seams

end double

Long. seams

D.B.S. TR

Diameter of rivet holes in

{ circ. seams

B 1 9/16" F 1 3/8"

Pitch of rivets

B 4-332" F 3-425"

Percentage of strength of circ. end seams

{ plate 8639 F 60

{ rivets 45.7 45.2

Percentage of strength of circ. intermediate seam

{ plate

{ rivets

Percentage of strength of longitudinal joint

{ plate 84.94

{ rivets 88.7

Thickness of butt straps

{ outer 1 1/8"

{ inner 1 1/4"

No. and Description of Furnaces in each Boiler

3 Reighton

Material

Steel

Tensile strength

26/30 tons

Smallest outside diameter

46 7/16"

Length of plain part

{ top

{ bottom

Thickness of plates

{ crown 2 3/32"

{ bottom

Description of longitudinal joint

welded

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

End plates in steam space: Material

Steel

Tensile strength

26/30 tons

Thickness

1 3/8"

Pitch of stays

19" x 2 1/2"

How are stays secured

DN

End plates: Material

{ front

{ back

Steel

Tensile strength

26/30 tons

Thickness

1 5/16"

25/32"

Pitch of stay tubes in nests

9.67"

Pitch across wide water spaces

14"

Orders to combustion chamber tops: Material

Steel

Tensile strength

28/32 tons

Depth and thickness of girder

centre

20 9 1/4" x 7/8"

Length as per Rule

2'-10 1/8"

Distance apart

W 8 7/8" C 7 1/8"

No. and pitch of stays

each

30 8 1/4"

Combustion chamber plates: Material

Steel

Tensile strength

26/30 tons

Thickness: Sides

1 1/16"

Back

1 1/16"

Top

1 1/16"

Bottom

27/32"

Pitch of stays to ditto: Sides

8 1/4" x 8 7/8"

Back

8" x 8 1/2"

Top

8 1/4" x 8 7/8"

Are stays fitted with nuts or riveted over

nuts

End plate at bottom: Material

Steel

Tensile strength

26/30 tons

Thickness

15/16"

Lower back plate: Material

Steel

Tensile strength

26/30 tons

Thickness

53/64"

Pitch of stays at wide water space

13 1/2"

Are stays fitted with nuts or riveted over

nuts

Pitch of stays: Material

Steel

Tensile strength

28/32 tons

Pitch of stays: Material

Steel

Pitch of stays: Material

Steel

Pitch of stays: Material

Steel

Pitch of stays: Material

Steel

Pitch of stays: Material

Steel

Pitch of stays: Material

Steel

Pitch of stays: Material

Steel

Pitch of stays: Material

Steel

Pitch of stays: Material

Steel

Pitch of stays: Material

Steel

© 2019

Lloyd's Register

Foundation

22880
Are the stays drilled at the outer ends NO
Margin stays: Diameter { At turned off part, or Over threads 1 7/8"
No. of threads per inch 9
Tubes: Material Mm External diameter { Plain 3" Stay 3" Thickness { 8 WG 5/16, 3/8 & 7/16 No. of threads per inch 9
Pitch of tubes 4 1/8" x 4 3/16" Manhole compensation: Size of opening in
shell plate 15 1/2" x 19 1/2" Section of compensating ring 10 1/2" x 1 3/16" No. of rivets and diameter of rivet holes 34 @ 1 9/16"
Outer row rivet pitch at ends 10 3/8" Depth of flange if manhole flanged 3" Steam Dome: Material None
Tensile strength Thickness of shell Description of longitudinal joint
Diameter of rivet holes Pitch of rivets Percentage of strength of joint { Plate Rivets
Internal diameter Thickness of crown No. and diameter of
stays Inner radius of crown
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 Superheater G. Ld. Manufacturers of { Tubes See Manchester C.A. H.C. 681 & 2 Steel forgings Cipin Lunnith Steel castings
Number of elements Material of tubes Internal diameter and thickness of tubes
Material of headers Tensile strength Thickness Can the superheater be shut off and
the boiler be worked separately NO 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 1.76 sq" Are the safety valves fitted with easing gear Yes
Pressure to which the safety valves are adjusted 225 lb. Hydraulic test pressure
tubes forgings and castings and after assembly in place 450 lb. Are drain cocks
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.
Arch. N. Grierson

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 (If not state date of approval.)
SEE ACCOMPANYING MACHINERY REPORT.
Total No. of visits

Is this Boiler a duplicate of a previous case Yes If so, state Vessel's name and Report No. Kington Hill

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

Rob
26/5/41

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

Committee's Minute GLASGOW 27 MAY 1941

Assigned SEE ACCOMPANYING MACHINERY REPORT.

Engineer Secretary to Lloyd's Register of Shipping