

Rpt. 5a.

REPORT ON BOILERS

No. 49991

-1 JAN 1930

Received at London Office

Date of writing Report

19

When handed in at Local Office

31. 12. 10

Port of

Glasgow

No. in Reg. Book.

Survey held at

Glasgow

Date, First Survey

10. 9. 29

Last Survey

24. 12. 29

1929

on the

new steel S/S "SKELDERGATE"

(Number of Visits)

31

Tons

Gross

Net

Master

Built at

Burntisland

By whom built

Burntisland SBCo

Yard No. 159

When built 1930

Engines made at

Glasgow

By whom made

David Rowan & Co Ltd

Engine No. 927

When made 930

Boilers made at

Glasgow

By whom made

David Rowan & Co Ltd

Boiler No. 927

When made 930

Nominal Horse Power

349

Owners

Port belonging to

MULTITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

Wilkowitz Benhau und Eisenhütten-Gesellschaft in Wilkowitz

(Letter for Record S -)

Heating Surface of Boilers

1165 sq ft

Is forced draught fitted

no

Coal or Oil fired

coal

Description of Boilers

one single ended

Working Pressure

200

Area of Firegrate in each Boiler

36 sq ft

Date of test

13. 12. 29

No. of Certificate

18551

Can each boiler be worked separately

yes

Area of each set of valves per boiler

per Rule 6. 470"

as fitted 7. 950"

No. and Description of safety valves to each boiler

two, direct spring

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

yes

Smallest distance between boilers or uptakes and bunkers or woodwork

6'-0"

Is oil fuel carried in the double bottom under boilers

no

Smallest distance between shell of boiler and tank top plating

2'-6"

Is the bottom of the boiler insulated

no

Largest internal dia. of boilers

11'-6"

Length

10'-6"

Shell plates: Material

steel

Tensile strength

29-33 tons

Thickness

1"

Are the shell plates welded or flanged

no

Description of riveting: circ. seams

and

NR

g. seams

NR S TR

Diameter of rivet holes in

circ. seams 1 1/16"

long. seams 1 1/16"

Pitch of rivets

2. 85"

Percentage of strength of circ. end seams

plate 62.7

rivets 44.1

Percentage of strength of circ. intermediate seam

plate 85.95

rivets 86.5

Percentage of strength of longitudinal joint

plate 85.95

rivets 86.5

combined 89.2

Working pressure of shell by Rules

200

Thickness of butt straps

outer 3/4" inner 7/8"

No. and Description of Furnaces in each Boiler

Two Water-tube

Material

steel

Tensile strength

26-30 tons

Smallest outside diameter

3'-4. 58"

Length of plain part

top

bottom

Thickness of plates

crown 9/16"

bottom 7/16"

Description of longitudinal joint

welded

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

Working pressure of furnace by Rules

201

Stays in steam space: Material

steel

Tensile strength

26-30 tons

Thickness

1 1/2"

Pitch of stays 22 7/8" x 14"

How are stays secured

DN

Working pressure by Rules

203

Stays in steam space: Material

front steel

back "

Tensile strength

26-30 tons

Thickness

29/32"

25/32"

Pitch of stay tubes in nests

10. 2"

Pitch across wide water spaces

14"

Working pressure

front 206

back 210

Stays to combustion chamber tops: Material

steel

Tensile strength

28-32 tons

Depth and thickness of girder

Centre

2 @ 6 3/4" x 7/8"

Length as per Rule

2'-4. 03"

Distance apart

8 3/8"

No. and pitch of stays

Each

2 @ 8 7/8"

Working pressure by Rules

206

Combustion chamber plates: Material

steel

Tensile strength

26-30 tons

Thickness: Sides

11/16"

Back

11/16"

Top

11/16"

Bottom

11/16"

Thickness of stays to ditto: Sides

8 7/8" x 8 3/8"

Back

9 1/2" x 8"

Top

8 7/8" x 8 3/8"

Are stays fitted with nuts or riveted over

nuts

Working pressure by Rules

214

Front plate at bottom: Material

steel

Tensile strength

26-30 tons

Thickness

29/32"

Lower back plate: Material

steel

Tensile strength

26-30 tons

Thickness

13/16"

Thickness of stays at wide water space

13 1/4"

Are stays fitted with nuts or riveted over

nuts

Working Pressure

207

Main stays: Material

steel

Tensile strength

28-32 tons

At body of stay,

or

Over threads

No. of threads per inch

6

Area supported by each stay

3520"

Working pressure by Rules

222

Screw stays: Material

steel

Tensile strength

26-30 tons

At turned off part,

or

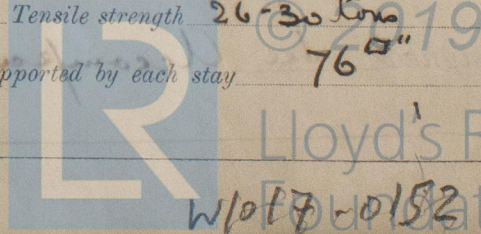
Over threads

No. of threads per inch

9

Area supported by each stay

760"



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Working pressure by Rules 200 Are the stays drilled at the outer ends no Margin stays: Diameter { At turned off part, 13/4 & 17/8 Over threads }
No. of threads per inch 9 Area supported by each stay 91" & 102" Working pressure by Rules 200 & 209
Tubes: Material Iron External diameter { Plain 3 1/4 Stay 3 1/4 Thickness { 8 w.g. 1/4 7/16 3/8 No. of threads per inch 9
Pitch of tubes 4 1/2" x 4 3/8" Working pressure by Rules 230 Manhole compensation: Size of opening in
shell plate 15 1/2" x 19 1/4" Section of compensating ring 8" x 1" No. of rivets and diameter of rivet holes 36 @ 1 1/8"
Outer row rivet pitch at ends 7 5/8" 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 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 None Manufacturers of { Tubes 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 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 as per
Rules Pressure to which the safety valves are adjusted Hydraulic test pressure:
tubes, castings and after assembly in place Are drain cocks or 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

The foregoing is a correct description,
For David Rowan & Co. Ltd. Manufacturer.
Arch. W. Grierson

Dates of Survey { During progress of work in shops - - - See Accompanying
while building { During erection on board vessel - - - Machinery Report
Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.)
Total No. of visits 31

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

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

The materials and workmanship are good.
The boiler has been constructed under special survey in accordance with the Rules. It has been forwarded to Buntingford to be fitted in the vessel.

This Boiler has been efficiently fitted on board, & its safety valves have been adjusted under steam.

John Houston
Leith 18/7/30.

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

S. C. Davis.
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 31 DEC 1929

Assigned See Accompanying Machy Report W.M.

FPI. 28 FEB 1930

See Lth J.E. 2019
17757
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