

REPORT ON BOILERS.

No. 48402

Received at London Office 19 SEP 1928

24 OCT 1928

Date of writing Report

192

When handed in at Local Office

17. 9. 1928

Port of

Glasgow

No. in
Ref. Book.

Survey held at

Glasgow

Date, First Survey

21. 6. 28

Last Survey

10-9-

1928

on the

S.S. THE COUNTESS

(Number of Visits

10

Gross

Tons

Net

Master

Built at

Troon

By whom built

Ailsa Sps Co

Yard No.

406

When built

1928

Engines made at

Troon

By whom made

Ailsa S. B. Co. Ltd

Engine No.

141

When made

1928

Boilers made at

Glasgow

By whom made

David Rowan & Co. Ltd

Boiler No.

361

When made

1928

Nominal Horse Power

115

Owners

J. Hay & Sons Ltd

Port belonging to

Glasgow

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

James Dunlop & Co. Ltd and David & Charles Rowan Ltd

(Letter for Record 5)

Total Heating Surface of Boilers

2021 sq ft

Is forced draught fitted

no

Coal or Oil fired

coal

No. and Description of Boilers

one single ended

15B

Working Pressure

200

Tested by hydraulic pressure to

350

Date of test

23-8-28

No. of Certificate

18020

Can each boiler be worked separately

Area of Firegrate in each Boiler

57 1/2 sq ft

No. and Description of safety valves to each boiler

Area of each set of valves per boiler

per Rule

11.44

as fitted

11.88

Pressure to which they are adjusted

200 lbs

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

7'-0"

Is oil fuel carried in the double bottom under boilers

Smallest distance between shell of boiler and tank top plating

Open flans

Is the bottom of the boiler insulated

Largest internal dia. of boilers

15'-0"

Length

10'-9"

Shell plates: Material

Steel

Tensile strength

29-33 tons

Thickness

1 1/2"

Are the shell plates welded or flanged

no

Description of riveting: circ. seams

end

WR

long. seams

WBS TR

Diameter of rivet holes in

circ. seams

F 1 3/8" B 1 3/8"

Pitch of rivets

F 3-09" B 3-746"

Percentage of strength of circ. end seams

plate

F 61.5 B 63.2

Percentage of strength of circ. intermediate seam

plate

rivets

Percentage of strength of longitudinal joint

plate

85.5

Working pressure of shell by Rules

200

Thickness of butt straps

outer

6 3/4"

No. and Description of Furnaces in each Boiler

Three Deighton 3 cf.

Material

steel

Tensile strength

26-30 tons

Smallest outside diameter

3-11 5/16"

Length of plain part

top

bottom

Thickness of plates

crown

3 1/2"

Description of longitudinal joint

welded

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

Working pressure of furnace by Rules

203

End plates in steam space: Material

steel

Tensile strength

26-30 tons

Thickness

1 9/32"

Pitch of stays

19 1/2" x 19 5/8"

How are stays secured

DN

Working pressure by Rules

200

Tube plates: Material

front

steel

back

steel

Tensile strength

26-30 tons

Thickness

3/4"

Mean pitch of stay tubes in nests

10 1/2"

Pitch across wide water spaces

14 1/4"

Working pressure

front

202

back

200

Girders to combustion chamber tops: Material

Steel

Tensile strength

28-32 tons

Depth and thickness of girder

at centre

2 @ 1 1/8" x 8 1/2"

Length as per Rule

33.58"

Distance apart

9 1/2"

No. and pitch of stays

in each

2 @ 10 3/8"

Working pressure by Rules

203

Combustion chamber plates: Material

Steel

Tensile strength

26-30 tons

Thickness: Sides

3/4"

Back

2 1/2"

Top

3/4"

Bottom

3/4"

Pitch of stays to ditto: Sides

10 3/8" x 9 1/4"

Back

9 1/4" x 8"

Top

10 3/8" x 9 1/2"

Are stays fitted with nuts or riveted over

nuts

Working pressure by Rules

201

Front plate at bottom: Material

Steel

Tensile strength

26-30 tons

Thickness

29/32"

Lower back plate: Material

Steel

Tensile strength

26-30

Thickness

25/32"

Pitch of stays at wide water space

13 1/2"

Are stays fitted with nuts or riveted over

nuts

Working Pressure

200

Main stays: Material

Steel

Tensile strength

28-32 tons

Diameter: At body of stay,

3"

No. of threads per inch

6

Area supported by each stay

388 sq in

Working pressure by Rules

202

Screw stays: Material

Steel

Tensile strength

26-30 tons

Diameter: At turned off part,

1 5/8"

No. of threads per inch

9

Area supported by each stay

74 sq in