

REPORT ON BOILERS.

No. 86364

Received at London Office 25 OCT 1930

Date of Writing Report

19

When handed in at Local Office

23/10/1930

Port of Newcastle-on-Tyne.

No. in Survey held at
Reg. Book.

Walker

Date, First Survey

24 Oct 1929

Last Survey

15 Oct

1930

(Number of Visits)

Gross 7095

Net 4288

on the oil fired, waste heat boiler for the M.V. "MORGENEN."

Master

Built at

Walker

By whom built Swan Hunter & Wigham, Ltd.

Yard No. 1384

When built 1930

Engines made at

Walker

By whom made Swan Hunter & Wigham, Ltd.

Engine No. 1384

When made

Boilers made at

- do -

By whom made

- do -

Boiler No.

When made

Nominal Horse Power

425

Owners A. H. Gaussonsport

Port belonging to Gaussonsport

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

D. Colville & Son

(Letter for Record 8.)

Total Heating Surface of Boilers

2260 sq ft

Is forced draught fitted No

Coal or Oil fired Oil

No. and Description of Boilers

1 oil fired, waste heat donkey boiler (cyl) Working Pressure 150 lbs

Tested by hydraulic pressure to

245 lb

Date of test 28.5.30

No. of Certificate 464

Can each boiler be worked separately Yes

Area of Firegrate in each Boiler

Oil fired

No. and Description of safety valves to each boiler 2 Spring loaded I.H.L. type.

Area of each set of valves per boiler

per Rule 4.66 sq ft

as fitted 4.94 sq ft

Pressure to which they are adjusted 150 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

BUNKER

Is oil fuel carried in the ~~bottom~~ under boilers

TANK Yes

Smallest distance between shell of boiler and ~~bottom~~ plating

15"

Is the bottom of the boiler insulated

Yes

Largest internal dia. of boilers

18'-4 1/4"

Length 11'-0"

Shell plates: Material Steel

Tensile strength 30/34 tons

Thickness

1/8"

Are the shell plates welded or flanged

No

Description of riveting: circ. seams

end D. R. type

long. seams

T. R. D. B. S.

Diameter of rivet holes in

circ. seams 1 1/8"

long. seams 1 1/8"

Pitch of rivets

3.24"

Percentage of strength of circ. end seams

plate 69.14%

rivets 42.41%

Percentage of strength of circ. intermediate seam

plate -

rivets -

Percentage of strength of longitudinal joint

plate 85.84%

rivets 85.55%

Working pressure of shell by Rules

151 lbs

Thickness of butt straps

outer 2 1/32"

inner 2 1/32"

No. and Description of Furnaces in each Boiler

2 Deighton

Material

Steel

Tensile strength

26/30 tons

Smallest outside diameter

34 5/8"

Length of plain part

top -

bottom -

Thickness of plates

crown 13/32"

bottom 13/32"

Description of longitudinal joint

Weld

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

None

Working pressure of furnace by Rules

153 lbs

End plates in steam space: Material

Steel

Tensile strength

26/30 tons

Thickness

1 1/32"

Pitch of stays 18" x 18"

How are stays secured

Double nuts

Working pressure by Rules

151 lbs

Tube plates: Material

front Steel

back Steel

Tensile strength

26/30 tons

Thickness

5/8" x 1 1/8"

Mean pitch of stay tubes in nests

10 1/2" x 9 3/8" c.

Pitch across wide water spaces

13 3/4"

Working pressure

front 151 lbs

back 151 lbs

Girders to combustion chamber tops: Material

Steel

Tensile strength

28/32 tons

Depth and thickness of girder

at centre

4 5/8" x 1 1/4"

Length as per Rule

30 1/32"

Distance apart

8 1/2"

No. and pitch of stays

in each

2 @ 9 3/8"

Working pressure by Rules

155 lbs

Combustion chamber plates: Material

Steel

Tensile strength

26/30 tons

Thickness: Sides

5/8"

Back

23/32"

Top

5/8"

Bottom

5/8"

Pitch of stays to ditto: Sides

9 3/8" x 9 1/2"

Back

9" x 8 1/4"

Top

9 3/8" x 8 1/2"

Are stays fitted with nuts or riveted over

Nuts, Rivets

Working pressure by Rules

151 lbs

Front plate at bottom: Material

Steel

Tensile strength

26/30 tons

Thickness

4/8"

Lower back plate: Material

Steel

Tensile strength

26/30 tons

Thickness

25/32"

Pitch of stays at wide water space

13 3/4" x 9"

Are stays fitted with nuts or riveted over

Nuts

Working Pressure

146 lbs

Main stays: Material

Steel

Tensile strength

28/32 tons

Diameter

At body of stay, 2 5/8"

or Over threads

No. of threads per inch

6

Area supported by each stay

328.5 sq in

Working pressure by Rules

151 lbs

Screw stays: Material

Steel

Tensile strength

26/30 tons

Diameter

At turned off part, 1 1/2" back, 1 1/2" ends

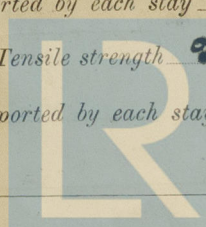
or Over threads

No. of threads per inch

9

Area supported by each stay

480 sq in



Lloyd's Register Foundation

003131-003137-0099

