

REPORT ON BOILERS.

No. 16775

Date of writing Report

192

When handed in at Local Office

11.6.1929

Port of

Received at London Office JUN 1929

WEST HARTLEPOOL

No. in Survey held at

West Hartlepool

Date, First Survey

26th June/28

Last Survey

6th June 1929

Reg. Book.

89602 on the

S S "CITY OF DIEPPE"

(Number of Visits

7445

Tons

Net 4690

Master

Built at West Hartlepool

By whom built Wm Gray & Co. Ltd

Yard No. 1000

When built 1929.

Engines made at

West Hartlepool

By whom made

Central Inaume

Engine No. 1000

When made 1929

Boilers made at

ditto.

By whom made

Engine Works

Boiler No. 1000

When made 1929

Nominal Horse Power

Owners

Ellerman Lines Ltd

Port belonging to

Glasgow.

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

D. Cobille & Sons Ltd.

(Letter for Record

S ✓)

Total Heating Surface of Boilers

12792 sq. ft.

Is forced draught fitted

yes

Coal or Oil fired

either

No. and Description of Boilers

Four, single ended.

Working Pressure

255 lbs

Tested by hydraulic pressure to

433 lbs.

Date of test

7.12.28

No. of Certificate

3747

Can each boiler be worked separately

yes

Area of Firegrate in each Boiler

7275 sq. ft.

No. and Description of safety valves to each boiler

2 Cockburn's improved high lift.

Area of each set of valves per boiler

per Rule

8.88 sq. ft.

as fitted

11.88 sq. ft.

Pressure to which they are adjusted

260 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

16"

Is oil fuel carried in the double bottom under boilers

no

Smallest distance between shell of boiler and tank top plating

Is the bottom of the boiler insulated

yes

Largest internal dia. of boilers

16'-6"

Length

12'-6"

Shell plates: Material

Steel

Tensile strength

36/40

Thickness

1 1/2"

Are the shell plates welded or flanged

no

Description of riveting: circ. seams

end

DR Lap

long. seams

J.R. D.B.S.

Diameter of rivet holes in

circ. seams

1 1/16"

Pitch of rivets

4 1/2"

inter.

10 1/2"

Percentage of strength of circ. end seams

plate

65

rivets

42.2.

Percentage of strength of circ. intermediate seam

plate

✓

Percentage of strength of longitudinal joint

plate

84

rivets

85

Working pressure of shell by Rules

255 lbs

Thickness of butt straps

outer

1 3/16"

inner

1 5/16"

No. and Description of Furnaces in each Boiler

4 Deightons

4 C.F.

Material

Steel

Tensile strength

26/30

Smallest outside diameter

41 15/16"

Length of plain part

top

✓

bottom

Thickness of plates

crown

25"

bottom

32

Description of longitudinal joint

welded

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

Working pressure of furnace by Rules

274 lbs.

End plates in steam space: Material

Steel

Tensile strength

26/30

Thickness

1 5/16"

Pitch of stays

16" x 21"

How are stays secured

Double nuts & washers

Working pressure by Rules

262 lbs

Tube plates: Material

front

Steel

back

Steel

Tensile strength

26/30

Thickness

1"

29/32"

Mean pitch of stay tubes in nests

12 3/4" x 8 1/4"

Pitch across wide water spaces

14"

Working pressure

front

272 lbs

back

270 lbs

Girders to combustion chamber tops: Material

Steel

Tensile strength

28/32

Depth and thickness of girder

at centre

9 1/2" x 1 3/4"

Length as per Rule

35 3/8"

Distance apart

7 3/4"

No. and pitch of stays

in each

3 9"

Working pressure by Rules

259 lbs

Combustion chamber plates: Material

Steel

Tensile strength

26/30

Thickness: Sides

23/32"

Back

23/32"

Top

23/32"

Bottom

15/16"

Pitch of stays to ditto: Sides

7 3/4" x 9"

Back

7 1/2" x 8"

Top

7 3/4" x 9"

Are stays fitted with nuts or riveted over

Japer necks & riveted, or nuts.

Working pressure by Rules

257 lbs

Front plate at bottom: Material

Steel

Tensile strength

26/30

Thickness

1"

Lower back plate: Material

Steel

Tensile strength

26/30

Thickness

15/16"

Pitch of stays at wide water space

14" x 8"

Are stays fitted with nuts or riveted over

nuts

Working Pressure

273 lbs

Main stays: Material

Steel

Tensile strength

28/32

Diameter

At body of stay, or over threads

3 3/8"

No. of threads per inch

6

Area supported by each stay

16" x 21"

Working pressure by Rules

260 lbs

Screw stays: Material

Steel

Tensile strength

26/30

Diameter

At turned off part, or over threads

1 5/8" & 1 3/4"

No. of threads per inch

9

Area supported by each stay

7 1/2" x 8" & 7 3/4" x 9"

Working pressure by Rules **262-260** Are the stays drilled at the outer ends **no** Margin stays: Diameter { At turned off part, **2"** Over threads }
No. of threads per inch **9** Area supported by each stay **10 5/8" x 8"** Working pressure by Rules **302 lbs**
Tubes: Material **Iron** External diameter { Plain **3"** Stay **3"** Thickness { **8 w. 6"** **5/16"** **3/8"** No. of threads per inch **9**
Pitch of tubes **4 1/4" x 4 5/8"** Working pressure by Rules **258 lbs** Manhole compensation: Size of opening in shell plate **16" x 20"** Section of compensating ring **23" x 1 1/2"** No. of rivets and diameter of rivet holes **28 1 3/4"**
Outer row rivet pitch at ends **10 3/8"** Depth of flange if manhole flanged **✓** Steam Dome: Material **None**
Tensile strength **0001** Thickness of shell **0001** Description of longitudinal joint **0001**
Diameter of rivet holes **0001** Pitch of rivets **0001** Percentage of strength of joint **0001**
Internal diameter **0001** Working pressure by Rules **0001** Thickness of crown **0001** No. and diameter of stays **0001**
Inner radius of crown **0001** Working pressure by Rules **0001**
How connected to shell **0001** Size of doubling plate under dome **0001** Diameter of rivet holes and pitch of rivets in outer row in dome connection to shell **0001**

Type of Superheater **Smoke tube** Manufacturers of Tubes **North Eastern Marine Eng. Co. Ltd.**
Number of elements **1** Material of tubes **S.D. Steel** Internal diameter and thickness of tubes **✓**
Material of headers **Forged Steel** 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 **1.77 Cochburns improved 2. lift** Are the safety valves fitted with easing gear **yes** Working pressure as per Rules **255 lbs** Pressure to which the safety valves are adjusted **265 lbs.** Hydraulic test pressure **550 lbs.**
tubes **765 lbs** castings **765 lbs** and after assembly in place **550 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 THE CENTRAL MARINE ENGINE WORKS,
(W. Gray & Co. Ltd.) Manufacturer

Dates of Survey { During progress of work in shops - - } Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.) **✓**
while building { During erection on board vessel - - } Total No. of visits **2. 2. 2. 2. 2.**

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

See accompanying machinery report

Survey Fee ... £ : When applied for, 192
Travelling Expenses (if any) £ : When received, 192

R.D. Shilston
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

JUN 25 1920

See other report



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Foundation