

Received at London Office

MON. FEB. 15. 1915

Date of writing Report 4<sup>th</sup> Feb 1915 When handed in at Local Office FEB 5 1915 Port of NEWCASTLE-ON-TYNE

No. in Survey held at S. Shields

Date, First Survey July 7. 1914 Last Survey Feb 2 1915

Reg. Book.

(Number of Vessels)

on the S. S. "Liscaine"

Gross 4196

Net 2678

Master Michel

Built at S. Shields

By whom built

John Readhead &amp; Sons When built 1915

Engines made at S. Shields

By whom made

John Readhead &amp; Sons 2091 when made 1915

Boilers made at S.

By whom made

when made 1915

Registered Horse Power

Owners

Main Steamship Co. Ltd.  
(Edward Ham & Sons)  
Managers

Port belonging to St. Kees

Nom. Horse Power as per Section 28

386

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

No

## ENGINES, &amp;c.—Description of Engines

Triple expansion

No. of Cylinders

3

No. of Cranks

3

Dia. of Cylinders 26-42-69

Length of Stroke 48

Revs. per minute 60

Dia. of Screw shaft

as per rule 14.44

Material of screw shaft

as fitted 14.5

Is the screw shaft fitted with a continuous liner the whole length of the stern tube

Yes

Is the after end of the liner made water tight

in the propeller boss

Yes

If the liner is in more than one length are the joints burned

Yes

If the liner does not fit tightly at the part

between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive

If two liners are fitted, is the shaft lapped or protected between the liners

Yes

Length of stern bush 4'-10"

Dia. of Tunnel shaft as per rule 12.93

as fitted 13

Dia. of Crank shaft journals

as per rule 13.57

as fitted 13.3/4

Dia. of Crank pin 13 3/4

Size of Crank webs 18"x9"

Dia. of thrust shaft under

collars 14 1/2

Dia. of screw 17-6

Pitch of Screw 17-6

No. of Blades 4

State whether moveable

No

Total surface 87 sq

No. of Feed pumps 2

Diameter of ditto 3 1/2

Stroke 24

Can one be overhauled while the other is at work

Yes

No. of Bilge pumps 2

Diameter of ditto 4 3/8

Stroke 24

Can one be overhauled while the other is at work

Yes

No. of Donkey Engines 2

Size of Pumps 13 1/2"x9"x13 + 7 1/2"x5"x6"

No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room

Three 3 1/2"

In Holds, &amp;c.

Two 3 1/2"

in each hold, one

2 1/2"

in tunnel well

No. of Bilge Injections 1

size 5 1/2

Connected to condenser, or to circulating pump

Yes

Is a separate Donkey Suction fitted in Engine room &amp; size

Are all the bilge suction pipes fitted with roses

Yes

Are the roses in Engine room always accessible

Yes

Are the sluices on Engine room bulkheads always accessible

None

Are all connections with the sea direct on the skin of the ship

Yes

Are they Valves or Cocks

Both

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates

Yes

Are the Discharge Pipes above or below the deep water line

Above

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel

Yes

Are the Blow Off Cocks fitted with a spigot and brass covering plate

Yes

What pipes are carried through the bunkers

None

How are they protected

Yes

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

Yes

Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges

Yes

Dates of examination of completion of fitting of Sea Connections

18-12-14

of Stern Tube

18-12-14

Screw shaft and Propeller

6-1-15

Is the Screw Shaft Tunnel watertight

Yes

Is it fitted with a watertight door

Yes

worked from

Left platform

## BOILERS, &amp;c.—(Letter for record R)

Manufacturers of Steel

J. Spence &amp; Sons

Total Heating Surface of Boilers 6329 sq

Is Forced Draft fitted

No

No. and Description of Boilers

Two, single-ended

Working Pressure 180 lbs

Tested by hydraulic pressure to

360 lbs

Date of test 25-11-14

No. of Certificate 8732

Can each boiler be worked separately

Yes

Area of fire grate in each boiler

66 sq

No. and Description of Safety Valves to

each boiler

Two, spring

Area of each valve 207 sq

Pressure to which they are adjusted

185 lbs

Are they fitted with easing gear

Yes

Smallest distance between boilers or uptakes and bunkers or woodwork

18"

Mean dia. of boilers

17'-0"

Length

11'-6"

Material of shell plates

Steel

Thickness 3/8"

Range of tensile strength

28-32

Are the shell plates welded or flanged

No

Descrip. of riveting: cir. seams

S. Lap

long. seams

ABS. T. Rivet

Diameter of rivet holes in long. seams

1 3/8"

Pitch of rivets

9 13/32"

Lap of plates or width of butt straps

1'-9 3/4"

Per centages of strength of longitudinal joint

rivets 85-3

plate 85-3

Working pressure of shell by rules

182 lbs

Size of manhole in shell

16" x 12"

Size of compensating ring

7" x 1 3/4"

No. and Description of Furnaces in each boiler

3 - Morrison

Material

Steel

Outside diameter

51"

Length of plain part

top

Thickness of plates

crown

19/32"

Description of longitudinal joint

Welded

No. of strengthening rings

1

Working pressure of furnace by the rules

185 lbs

Combustion chamber plates: Material

Steel

Thickness: Sides

23/32"

Back

23/32"

Top

23/32"

Bottom

1"

Pitch of stays to ditto: Sides

10" x 9 1/2"

Back

9 1/2" x 9 1/2"

Top

10" x 9"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

192 lbs

Material of stays

None

Diameter at smallest part

2 3/16"

Area supported by each stay

92.5 sq

Working pressure by rules

187 lbs

End plates in steam space:

Material

Steel

Material

Steel

Thickness

1 1/16"

Pitch of stays

25" x 21"

How are stays secured

Xn &amp; W.

Working pressure by rules

183 lbs

Material of stays

Steel

Diameter at smallest part

9.82"

Area supported by each stay

52.5 sq

Working pressure by rules

194 lbs

Material of Front plates at bottom

Steel

Thickness

7/8"

Material of Lower back plate

Steel

Thickness

1"

Greatest pitch of stays

15"

Working pressure of plate by rules

216 lbs

Diameter of tubes

3 1/2"

Pitch of tubes

4 3/4"

Material of tube plates

Steel

Thickness: Front

7/8"

Back

7/8"

Mean pitch of stays

9 1/2"

Pitch across wide water spaces

14"

Working pressures by rules

194 lbs

Girders to Chamber tops: Material

Steel

Depth and

thickness of girder at centre

8 1/2" x 1 3/4"

Length as per rule

30 1/2"

Distance apart

10"

Number and pitch of stays in each

2-9"

Working pressure by rules

193 lbs

Superheater or Steam chest; how connected to boiler

None

Can the superheater be shut off and the boiler worked

separately

Diameter

Length

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet

holes

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

If stiffened with rings

Distance between rings

Working pressure by rules

End plates: Thickness

How stayed

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

Yes

Yes

Yes

Yes

Yes

Yes

Yes

Yes

Yes

Yes

W504-0130



IS A DONKEY BOILER FITTED?

yes

If so, is a report now forwarded?

yes

SPARE GEAR.

State the articles supplied:

2 top end, 2 bottom end & 2 main bearing bolts & nuts, a set of coupling bolts, a set of feed & bilge pump valves, a quantity of assorted bolts nuts & iron, a solid propeller, a screw shaft & one crank.

The foregoing is a correct description,

Wm Readhead

Manufacturer.

Dates of Survey while building

During progress of work in shops - -  
During erection on board vessel - -  
Total No. of visits

Jul. 7. 16. 21. 24 Aug 6. 10. 14 17. 25. 27. 31 Sept 3. 7. 17. 28 Oct 7. 9. 12. 19. 28 Nov 3. 9. 13.  
17. 25. 30 Dec 2. 7. 18. Jan 4. 6. 13. 18. 21. 22. 25 Feb 2.  
38.

Is the approved plan of main boiler forwarded herewith

yes

" " " donkey " " "

yes

Dates of Examination of principal parts—Cylinders 12-10-14 Slides 28-10-14 Covers 17-11-14 Pistons 28-10-14 Rods 12-10-14

Connecting rods 12-10-14 Crank shaft 28-10-14 Thrust shaft 23-9-14 Tunnel shafts 9-11-14 Screw shaft 9-11-14 Propeller 17-11-14

Stern tube 17-11-14 Steam pipes tested 13-1-15 Engine and boiler seatings 30-12-14 Engines holding down bolts 18-1-15

Completion of pumping arrangements 22-1-15 Boilers fixed 18-1-15 Engines tried under steam 25-1-15

Main boiler safety valves adjusted 25-1-15 Thickness of adjusting washers P.B.  $P\frac{7}{16}$   $S\frac{5}{16}$  S.B.  $P\frac{3}{4}$   $S\frac{3}{4}$  T.B.  $F\frac{3}{16}$   $A\frac{3}{4}$

Material of Crank shaft Steel Identification Mark on Do. 1857 D.F.C. Material of Thrust shaft Steel Identification Mark on Do. 1857 D.F.C.

Material of Tunnel shafts Steel Identification Marks on Do. T.F. 11-14 Material of Screw shafts Steel Identification Marks on Do. T.F. 14-14

Material of Steam Pipes Copper Test pressure 360 lbs

Is an installation fitted for burning oil fuel No Is the flash point of the oil to be used over 150°F.

Have the requirements of Section 49 of the Rules been complied with

Is this machinery duplicate of a previous case yes If so, state name of vessel S.S. "Generalack"

General Remarks

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

The engines & boilers of this vessel have been constructed under special survey & the material & workmanship are found to be good. The engines have been tried under steam and the safety valves of main & donkey boilers adjusted. The machinery is now in good & safe working condition and eligible in my opinion to have the notation of +LMC 2-15.

It is submitted that this vessel is eligible for THE RECORD + LMC 2-15.

The amount of Entry Fee ... £ 3 : 0 : 0

Special ... £ 39 : 6 : 0

Donkey Boiler Fee ... £ 2 : 2 : 0

Travelling Expenses (if any) £

When applied for.

FEB 13 1915

When received.

FEB 16 1915

Committee's Minute

Assigned

+ LMC 2-15

Thomas Field  
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.



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