

## REPORT ON MACHINERY.

No. 3457.8

Received at London Office WED. NOV. 11. 1914

Writing Report

19

When handed in at Local Office

19

Port of Glasgow

Survey held at

Glasgow

Date, First Survey

5/3/13

Last Survey

2/11/

1914

Book.

on the

S.S. "Lampoc"

(Number of Visits

54)

Gross Tons

7270.

Net Tons

4513.

When built

1914

er A.H. John

Built at

Glasgow

By whom built

D.W. Henderson &amp; Co. (487)

when made

1914

es made at

Glasgow

By whom made

D.W. Henderson &amp; Co. (487)

when made

1914

rs made at

Glasgow

By whom made

D.W. Henderson &amp; Co. (487)

when made

1914

tered Horse Power

520

Owners

C.F. Bowring &amp; Co. (mgw)

Port belonging to

Liverpool

Horse Power as per Section 28

520

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

yes

INES, &amp;c.—Description of Engines

Triple expansion

No. of Cylinders

3

No. of Cranks

3

of Cylinders

27.49.76

Length of Stroke

48

Revs. per minute

74

Dia. of Screw shaft

as per rule 15.1  
as fitted 15.1

Material of

steel

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

propeller boss

yes

If the liner is in more than one length are the joints burned length If the liner does not fit tightly at the part

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

If two

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

Length of stern bush

6'-4 1/4"

of Tunnel shaft

as per rule 13.46  
as fitted 13.46

Dia. of Crank shaft journals

as per rule 14.13  
as fitted 14.13

Dia. of Crank pin

14 1/2"

Size of Crank webs

20.9 1/2"

Dia. of thrust shaft under

s 14 1/2"

Dia. of screw

18-3

Pitch of Screw

16-3

No. of Blades

4

State whether moveable

yes

Total surface

110.8 ft<sup>2</sup>

of Feed pumps

2

Diameter of ditto

7"

Stroke

24"

Can one be overhauled while the other is at work

yes

of Bilge pumps

2

Diameter of ditto

4 1/2"

Stroke

24"

Can one be overhauled while the other is at work

yes

of Donkey Engines

3

Sizes of Pumps

8 x 3 1/2 x 8, 7 x 5 x 8, 7 x 7 x 5

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

Engine Room (4)

3 1/2"

In Holds, &amp;c. No. 1 (2) 3 1/2" for pump (1) 3"

of Bilge Injections

2

sizes

9"

Connected to condenser, or to circulating pump

pump

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

yes 3 1/2"

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

no

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

yes

Are they Valves or Cocks

both

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

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

t pipes are carried through the bunkers

no

How are they protected

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

yes

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

yes

s of examination of completion of fitting of Sea Connections

9/7/14

of Stern Tube

30/9/14

Screw shaft and Propeller

30/9/14

e Screw Shaft Tunnel watertight

no

Is it fitted with a watertight door

no

worked from

ERS, &amp;c.—(Letter for record (7))

Manufacturers of Steel

D. Colvile &amp; Son, Stewarts &amp; Lloyds

Heating Surface of Boilers

7350.5

Is Forced Draft fitted

yes

No. and Description of Boilers

3 Single end

king Pressure

180

Tested by hydraulic pressure to

360

Date of test

27/2/14

No. of Certificate

12575

each boiler be worked separately

yes

Area of fire grate in each boiler

57 1/4

No. and Description of Safety Valves to

boiler

1 pair direct spring

Area of each valve

10.32

Pressure to which they are adjusted

185 lbs

Are they fitted with easing gear

yes

test distance between boilers or uptakes and bunkers or woodwork

4'-3"

Mean dia. of boilers

14.8

Length

12.0

Material of shell plates

steel

ness

1 1/2"

Range of tensile strength

25/32

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

lap double

seams

butt double

Diameter of rivet holes in long. seams

1-3/8

Pitch of rivets

9 1/2"

Lap of plates or width of butt straps

20 1/2"

percentages of strength of longitudinal joint

rivets 86.4  
plate 83.5

Working pressure of shell by rules

203

Size of manhole in shell

16 x 12"

of compensating ring

35 x 30 x 1 1/2"

No. and Description of Furnaces in each boiler

3 Deighton

Material

steel

Outside diameter

46 3/8"

th of plain part

top 7 1/2"  
bottom 7 1/2"

Thickness of plates

crown 9"  
bottom 7 1/2"

Description of longitudinal joint

welded

No. of strengthening rings

100

king pressure of furnace by the rules

190

Combustion chamber plates: Material

steel

Thickness: Sides

1 1/2"

Back

1 1/2"

Top

1 1/2"

Bottom

3/4"

of stays to ditto: Sides

9 x 9

Back

9 x 9

Top

9 x 9

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

202

rial of stays

iron

Diameter at smallest part

2 3/4"

Area supported by each stay

81

Working pressure by rules

214

End plates in steam space:

rial

steel

Thickness

1 3/4"

Pitch of stays

18 x 20"

How are stays secured

2 nuts

Working pressure by rules

183

Material of stays

steel

ater at smallest part

7.5

Area supported by each stay

860

Working pressure by rules

217

Material of Front plates at bottom

steel

Thickness

3/4"

Greatest pitch of stays

14"

ness

1 1/2"

Material of Lower back plate

steel

Thickness

3/4"

Working pressure of plate by rules

257

Pitch of tubes

3 3/8 x 3 3/4"

Material of tube plates

steel

eter of tubes

2 1/2"

Pitch of tubes

3 3/8 x 3 3/4"

Material of tube plates

steel

Thickness: Front

1 1/2"

Back

3/8"

Mean pitch of stays

8 3/8"

e across wide water spaces

13 1/4"

Working pressures by rules

183

Girders to Chamber tops: Material

steel

Depth and

Number and pitch of stays in each

(3)

9"

ness of girder at centre

7 1/2 x 1 1/2"

Length as per rule

33 1/2"

Distance apart

9"

Can the superheater be shut off and the boiler worked

no

king pressure by rules

195

Superheater or Steam chest; how connected to boiler

no

Diam. of rivet

1 1/2"

tely

Diameter

Length

Thickness



VERTICAL DONKEY BOILER—

Manufacturers of Steel

No.	Description				
Made at	By whom made	When made	Where fixed		
Working pressure	tested by hydraulic pressure to	Date of test	No. of Certificate	Fire grate area	Description of Safety
Valves	No. of Safety Valves	Area of each	Pressure to which they are adjusted	Date of adjustment	
If fitted with easing gear	If steam from main boilers can enter the donkey boiler	Dia. of donkey boiler	Length		
Material of shell plates	Thickness	Range of tensile strength	Descrip. of riveting long. seams		
Dia. of rivet holes	Whether punched or drilled	Pitch of rivets	Lap of plating	Per centage of strength of joint	Rivets Plates
Working pressure of shell by rules	Thickness of shell crown plates	Radius of do.	No. of stays to do.	Dia. of stays	
Diameter of furnace Top	Bottom	Length of furnace	Thickness of furnace plates	Description of joint	
Working pressure of furnace by rules	Thickness of furnace crown plates	Radius of do.	Stayed by		
Diameter of uptake	Thickness of uptake plates	Thickness of water tubes	Dates of survey		

SPARE GEAR. State the articles supplied:—(2) Top end bolts and nuts 2 bottom end bolts and nuts 2 main bearing bolts and nuts 1 set of cranking bolts and nuts, feed and bilge pump valves, iron, bolts and nuts assorted, 1 propeller shaft, 6 propeller blades, 1 set of piston rings for H.P. & L.P. cylinders, also spars for liquid fuel & gas engine. The foregoing is a correct description,

FOR DAVID & WILKINSON & CO., LTD.

Manufacturer:

DIRECTOR.

Dates of Survey while building	During progress of work in shops --	1913 Mar 5. Apr 24. May 1. 14. 27. June 11. 13. July 9. 15. 17. 29. Aug 11. 25. Sept 5. 15. 19. 26. Oct 8. 10. 24. Nov 13. 27.
	During erection on board vessel --	Dec 1. 22. 1914 Jan 19. 22. Feb 2. 17. 27. Mar 2. 7. Apr 6. 10. 18. June 1. July 9. 16. 18. Aug 5. Sept 2. 4. 15. Oct 1. 6. 7. 13.
	Total No. of visits	54

Is the approved plan of main boiler forwarded herewith

yes

Dates of Examination of principal parts—Cylinders	8/10/13	Slides	8/10/13	Covers	22/12/13	Pistons	29/7/13	Rods	24/10/13
Connecting rods	24/10/13	Crank shaft	19/9/13	Thrust shaft	19/9/13	Tunnel shafts	8/2/14	Screw shaft	3/2/14
Propeller	5/8/14	Stern tube	3/2/14	Steam pipes tested	6/4/14	Engine and boiler seatings	4/9/14	Engines holding down bolts	13/10/14
Completion of pumping arrangements	23/10/14	Boilers fixed	13/10/14	Engines tried under steam	30/10/14	Thickness of adjusting washers			
Main boiler safety valves adjusted	23/10/14	Pat. of 1/2" 5/8" SD of 1/2" 5/8" Fuel 1/2" 5/8"							
Material of Crank shaft	Steel	Identification Mark on Do.	487 H.C.	Material of Thrust shaft	Steel	Identification Mark on Do.	487 H.C.		
Material of Tunnel shafts	Steel	Identification Marks on Do.	487 H.C.	Material of Screw shafts	Steel	Identification Marks on Do.	487 H.C.		
Material of Steam Pipes	S.D. Steel	Test pressure	600 lbs						

General Remarks (State quality of workmanship, opinions as to class, &c. This engine and boiler have been built under special survey, the materials and workmanship are of good description, they have been well fitted on board and tried under steam. The boilers are fitted with the Wallsend Howden system for burning liquid fuel, in accordance with the approved plans. This machinery is now in our opinion eligible to have notification of L.M.C. 11. 14. and fitted for oil fuel 11. 14 F.P. above 150°F.

When proceeding up the River Clyde after the trial the vessel touched the mud bar at Pallas Pier, in consequence of which she was put in the dock at Elderslie. All sea cross connections, propeller & fastenings were then examined and found in good order. 2/11/14.

The amount of Entry Fee	£ 3 : 0 :	When applied for,	6/11/14
Special	£ 40 : 0 :	When received,	12/11/14
Donkey Boiler Fee	£ :		
Travelling Expenses (if any)	£ :		

Committee's Minute GLASGOW 10 NOV. 1914

Assigned + L.M.C. 11, 14 F.D.

Fitted for oil fuel 11, 14 F.P. above 150°F

It is submitted that this vessel is eligible for THE RECORD + L.M.C. 11. 14. F.D. Fitted for oil fuel 11. 14 F.P. above 150°F. A.M. McLean Harry Clarke. Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.



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GLASGOW

Certificate (if required) to be sent to

(The Surveyors are requested not to write on or below the space for Committee's Minute.)

LAN 6/11/14