

REPORT ON MACHINERY.

No. 25560

Received at London Office

Date of writing Report

19

When handed in at Local Office

15. / 19 13 Port of

No. in Survey held at
Reg. Book.

on the

Date, First Survey

Last Survey

17 June 1913

(Number of Visits)

35

Gross

2743

Net

1714

Master

Built at

By whom built

Engines made at

By whom made

Boilers made at

By whom made

Registered Horse Power

Owners

Port belonging to

Nom. Horse Power as per Section 28

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

ENGINES, &c.—Description of Engines

No. of Cylinders

No. of Cranks

Dia. of Cylinders

Length of Stroke

Revs. per minute

Dia. of Screw shaft

Material of

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

Is the after end of the liner made water tight

in the propeller boss

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

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

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

Length of stern bush

Dia. of Tunnel shaft

Dia. of Crank shaft journals

Dia. of Crank pin

Size of Crank webs

Dia. of thrust shaft under

collars

Dia. of screw

Pitch of Screw

No. of Blades

State whether moveable

Total surface

No. of Feed pumps

Diameter of ditto

Stroke

Can one be overhauled while the other is at work

No. of Bilge pumps

Diameter of ditto

Stroke

Can one be overhauled while the other is at work

No. of Donkey Engines

SIZES OF PUMPS

Ballast

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

In Engine Room

Three @ 3" dia & 1 @ 3" dia in hold

In Holds, &c.

2 @ 3" dia in each hold

No. of Bilge Injections

sizes

Connected to condenser, or to circulating pump

Is a separate Donkey Suction fitted in Engine room & size

Are all the bilge suction pipes fitted with roses

Are the roses in Engine room always accessible

Are the sluices on Engine room bulkheads always accessible

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

Are they Valves or Cocks

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

Are the Discharge Pipes above or below the deep water line

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

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

What pipes are carried through the bunkers

Holds bilge suction

How are they protected

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

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

Dates of examination of completion of fitting of Sea Connections

24-11-12

of Stern Tube

Screw shaft and Propeller

Is the Screw Shaft Tunnel watertight

Is it fitted with a watertight door

worked from

BOILERS, &c.—(Letter for record)

Manufacturers of Steel

Total Heating Surface of Boilers

Is Forced Draft fitted

No. and Description of Boilers

Working Pressure

Tested by hydraulic pressure to

Date of test

No. of Certificate

Can each boiler be worked separately

Area of fire grate in each boiler

No. and Description of Safety Valves to

each boiler

Area of each valve

Pressure to which they are adjusted

Smallest distance between boilers or uptakes and bunkers or woodwork

18"

Mean dia. of boilers

Length

Material of shell plates

Thickness

Range of tensile strength

28 3/4 & 32 1/2

Are the shell plates welded or flanged

long. seams

Diameter of rivet holes in long. seams

1 1/4"

Pitch of rivets

9 3/16"

Lap of plates or width of butt straps

18 3/4"

Per centages of strength of longitudinal joint

rivets

Working pressure of shell by rules

180 lbs

Size of manhole in shell

16" x 12"

Size of compensating ring

dished

No. and Description of Furnaces in each boiler

Three Cor.

Material

Outside diameter

Length of plain part

top

Thickness of plates

crown

Description of longitudinal joint

weld

No. of strengthening rings

Working pressure of furnace by the rules

180 lbs

Combustion chamber plates: Material

Steel

Thickness: Sides

3/4"

Back

Top

Bottom

Pitch of stays to ditto: Sides

8 3/8" x 12"

Back

10 3/4" x 10 3/8"

Top

12" x 8 3/8"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

180 lbs

Material of stays

Steel

Diameter at smallest part

2 1/4"

Area supported by each stay

100 3/4"

Working pressure by rules

188 lbs

End plates in steam space:

Material of stays

Steel

Thickness

1 1/4"

Pitch of stays

21 3/8" x 19"

How are stays secured

D.N. Wash

Working pressure by rules

181 lbs

Material of Front plates at bottom

Steel

Diameter at smallest part

1 1/4"

Area supported by each stay

406"

Working pressure by rules

181 lbs

Material of stays

Steel

Thickness

Material of Lower back plate

Steel

Thickness

1 1/4"

Greatest pitch of stays

14 1/2" x 10 3/8"

Working pressure of plate by rules

185 lbs

Diameter of tubes

3 1/4"

Pitch of tubes

4 9/16"

Material of tube plates

Steel

Thickness: Front

3/4"

Back

Mean pitch of stays

Pitch across wide water spaces

14 1/2"

Working pressures by rules

192 lbs

Girders to Chamber tops: Material

Steel

Depth and

thickness of girder at centre

2 @ 8 3/4" x 1 1/2"

Length as per rule

2'-1"

Working pressure by rules

181 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

Lloyd's Register

Foundation

W755-0227

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:— Two each bolts & nuts for top & bottom ends of main bearings. One set coupling bolts. Values for all pumps. One Propeller, one Tail shaft, 1 set of pistons, rings & springs, 2 safety valve springs, 2 check valves, 2 air pump valves 3 circulating pump valves. Assorted bolts nuts & iron.

NORTH EASTERN MARINE ENGINEERING CO LTD

The foregoing is a correct description,

Manufacturer.

S. J. Harrison Secy
per HC

Dates of Survey while building	During progress of work in shops - -	1912 Jan 17, Jul 23, 30, Sep 6, 12, 23, Oct 3, 4, 7, 8, 15, 16, 22, 23, 29, Nov 1, 8, 9, 12, 13, 14, 18
	During erection on board vessel - - -	19, 20, 26, 27, Dec 2, 4, 6, 10, 12, 13, Jan 7, 13
	Total No. of visits	(35)

Is the approved plan of main boiler forwarded herewith Yes No
" " " donkey " " "

Dates of Examination of principal parts—Cylinders	15-10-12	Slides	26-11-12	Covers	26-11-12	Pistons	29-10-12	Rods	11-10-12
Connecting rods	11-10-12	Crank shaft	15-10-12	Thrust shaft	8-11-12	Tunnel shafts	8-11-12	Screw shaft	2-12-12
Propeller	2-12-12	Stern tube	2-12-12	Steam pipes tested	6-12-12	Engine and boiler seatings	2-11-12	Engines holding down bolts	12-12-12
Completion of pumping arrangements	13-1-13	Boilers fixed	12-12-12	Engines tried under steam	13-12-12	Main boiler safety valves adjusted	13-12-12	Thickness of adjusting washers	800 lb F 1/2 3/16 A 5/16
Material of Crank shaft	Steel	Identification Mark on Do.	3995-6 H.K.	Material of Thrust shaft	Steel	Identification Mark on Do.	6 J.C.D.		
Material of Tunnel shafts	4 off Steel	Identification Marks on Do.	8038-9 K.H.	Material of Screw shafts	Steel	Identification Marks on Do.	5 J.C.D. working 5094 P.A. shaft		
Material of Steam Pipes	Solid drawn copper 4 1/2" bore x 6 wall	Test pressure	1400 lbs						

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

The Machinery of this vessel has been built under special survey, the materials and workmanship are of good quality and the hydraulic tests of the Boilers proved satisfactory. The whole of the machinery has been securely fixed on board & tried under steam & is in good & safe working condition & eligible in my opinion to be classed & have record **LMC 1-13** in the Register Book.

It is submitted that
this vessel is eligible for
THE RECORD + LMC 1.13.

The amount of Entry Fee	£ 2 : 0 : 0	When applied for,	14.1.1913
Special	£ 33 : 5 : 0	When received,	16.1.1913
Donkey Boiler Fee	£ :		
Travelling Expenses (if any)	£ :		

Committee's Minute

Assigned

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



© 2020

Lloyd's Register
Foundation

SUNDERLAND.

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

Rpt. 5a

Date of writ

No. in
Reg. Book.

Master

Engines m

Boilers m

Registered

MULTI

(Letter for

Boilers

No. of Ce

safety val

Are they f

Smallest o

Material o

Descrip. o

Lap of pl

rules

boiler

Description

plates: M

Top 9"

smallest p

Pitch of

Area sup

Lower ba

Pitch of

water sp

girder at

Working

separatel

holes

If stiffen

Working

Dates
of Surve
while
building

GENE

Spec

test

St h

adv

Sur

Tr

Comm

Assig

Comm

Assig