

REPORT ON MACHINERY.

No. 42943.

Received at London Office

WED. MAR 31 1920

Date of writing Report

19

When handed in at Local Office

30 MAR 1920

Port of

NEWCASTLE ON TYNE

No. in Survey held at

North Shields

Date, First Survey

21st September 1919

Last Survey

22nd March 1920

Reg. Book.

on the

S.S. "Lady Thomas" (Ex Hurlford)

(Number of Visits

35)

Gross

Net

Master

Built at

Adrossan

By whom built

Adrossan S.B. & Co. Ltd. (No. 274)

When built

Engines made at

North Shields

By whom made

Shields Eng. & Dry Dock Co. Ltd. (No. 327)

when made

1920

Boilers made at

Glasgow

By whom made

Forth Shipbuilding Co

when made

1926

Registered Horse Power

Owners

Port belonging to

Liverpool

Nom. Horse Power as per Section 28

64

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

No

ENGINES, &c.—Description of Engines

Compound

No. of Cylinders

Two

No. of Cranks

Two

Dia. of Cylinders

15½" - 33"

Length of Stroke

24"

Revs. per minute

120

Dia. of Screw shaft

as per rule 7.299"

Material of

Iron

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

Length of stern bush

2' 8"

Dia. of Tunnel shaft

as per rule 6.73"

Dia. of Crank shaft journals

as per rule 4.076"

Dia. of Crank pin

7/8"

Size of Crank webs

13½" x 4½"

Dia. of thrust shaft under

collars

7/8"

Dia. of screw

8' 6"

Pitch of Screw

10' 0"

No. of Blades

4

State whether moveable

Yes

Total surface

26 sq. ft.

No. of Feed pumps

One

Diameter of ditto

2½"

Stroke

12"

Can one be overhauled while the other is at work

No. of Bilge pumps

One

Diameter of ditto

2½"

Stroke

12"

Can one be overhauled while the other is at work

No. of Donkey Engines

2

Sizes of Pumps

6" x 4" x 6" 4" x 3" x 10"

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

In Engine Room

3 @ 2½"

In Holds, &c.

3 @ 2"

No. of Bilge Injections

1 size

3"

Connected to condenser, or to circulating pump

C.P.

Is a separate Donkey Suction fitted in Engine room & size

2½"

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

Hold & Fore Peak tank suction

How are they protected

Strong wood casing

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

Is the Screw Shaft Tunnel watertight

Not tunnel

Is it fitted with a watertight door

Yes

worked from

OILERS, &c.—(Letter for record

Manufacturers of Steel

Total Heating Surface of Boilers

12097

Is Forced Draft fitted

No

No. and Description of Boilers

Working Pressure

140

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

Two spring loaded

Area of each valve

2' 4"

Pressure to which they are adjusted

145 lbs

Are they fitted with easing gear

Yes

Smallest distance between boilers or uptakes and bunkers or woodwork

142"

Mean dia. of boilers

Length

Material of shell plates

Thickness

Range of tensile strength

Are the shell plates welded or flanged

Descrip. of riveting: cir. seams

long. seams

Diameter of rivet holes in long. seams

Pitch of rivets

Lap of plates or width of butt straps

Per centages of strength of longitudinal joint

rivets

Working pressure of shell by rules

Size of manhole in shell

Size of compensating ring

No. and Description of Furnaces in each boiler

Material

Outside diameter

Length of plain part

top

Thickness of plates

crown

Description of longitudinal joint

No. of strengthening rings

Working pressure of furnace by the rules

Combustion chamber plates: Material

Thickness: Sides

Back

Top

Bottom

Pitch of stays to ditto: Sides

Back

Top

If stays are fitted with nuts or riveted heads

Working pressure by rules

Material of stays

Area at smallest part

Area supported by each stay

Working pressure by rules

End plates in steam space:

Material

Thickness

Pitch of stays

How are stays secured

Working pressure by rules

Material of stays

Area at smallest part

Area supported by each stay

Working pressure by rules

Material of Front plates at bottom

Thickness

Material of Lower back plate

Thickness

Greatest pitch of stays

Working pressure of plate by rules

Diameter of tubes

Pitch of tubes

Material of tube plates

Thickness: Front

Back

Mean pitch of stays

Pitch across wide water spaces

Working pressures by rules

Girders to Chamber tops: Material

Depth and

thickness of girder at centre

Length as per rule

Distance apart

Number and pitch of stays in each

Working pressure by rules

Steam dome: description of joint to shell

% of strength of joint

Diameter

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet holes

Pitch of rivets

Working pressure of shell by rules

Crown plates

Thickness

How stayed

SUPERHEATER. Type

Date of Approval of Plan

Tested by Hydraulic Pressure to

Date of Test

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Diameter of Safety Valve

Pressure to which each is adjusted

Is Easing Gear fitted

004222-004229-0057

IS A DONKEY BOILER FITTED?

None

If so, is a report now forwarded?

SPARE GEAR.

State the articles supplied:—

2 Top end bolts & nuts, 2 Bottom end bolts & nuts for connecting rods
2 main bearing bolts and nuts, 1 set of coupling bolts and nuts, 1 set of feed and bilge pump valves, 1
main & 1 auxiliary feed check valve, a quantity of assorted bolts and nuts also iron of various
sizes.

The foregoing is a correct description,

THE SHIELDS ENGINEERING & DRY DOCK CO., LIMITED,
E. Bradshaw

Manufacturer.

March 29th 1920.

Dates of Survey while building
During progress of work in shops --
During erection on board vessel --
Total No. of visits

1918. July 3. 10. 18. 30 Aug 7. 13. 26. Sept 4. 16. Nov 21. Dec 17. 19. 24. 1919 July 14. Sept 24. 26
1920 Oct 13. 15. 21. 23. 30 Nov 4. 10. 13. 19. 21. 24. Dec 4. 11. Jan 9. 15. 30 Feb 4. 18. Mar 2

Is the approved plan of main boiler forwarded herewith

" " " donkey " " "

Dates of Examination of principal parts—Cylinders 30-1-20 Slides 30-1-20 Covers 30-1-20 Pistons 19-11-19. Rods 30/10/19
Connecting rods 30/10/19 Crank shaft 10/11/19 Thrust shaft 2/10/19 Tunnel shafts none Screw shaft 2/10/19 Propeller 12/1/20
Stern tube 2/10/19 Steam pipes tested 13/4/20 Engine and boiler seatings 26/1/20 Engines holding down bolts 13/4/20
Completion of pumping arrangements 2/4/20 Boilers fixed 2/3/20 Engines tried under steam 22/4/20
Completion of fitting sea connections 12/1/20 Stern tube 12/1/20 Screw shaft and propeller 12/1/20
Main boiler safety valves adjusted 2/1/4/20 Thickness of adjusting washers P. 5/16. S. 5/16
Material of Crank shaft Iron Identification Mark on Do. 3312. Material of Thrust shaft Iron Identification Mark on Do. 4722
Material of Tunnel shafts Identification Marks on Do. Material of Screw shafts Iron Identification Marks on Do. 4722
Material of Steam Pipes Seamless Copper Test pressure 300 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 If so, state name of vessel

General Remarks

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

The Engines for this vessel have been built under special survey. The material and workmanship are sound and good. They have been despatched to Adrossan to be fitted aboard the Adrossan S.B. Co's No 274 Ship. A propeller supplied previously is to be fitted and requires to be examined.

These Engines have been fitted on board in an efficient manner tried under working conditions and found satisfactory and are eligible in my opinion to be classed with record of + L.M.C. 4-20

It is submitted that this vessel is eligible for

THE RECORD. + L.M.C. 4-20

Certificate (if required) to be sent to

The Amount of Entry Fee ... £ 2 : 0 : 0 When applied for,

1/3 Special ... £ 3 : 4 : 0

Donkey Boiler Fee ... £ 2 : 17 : 0

Travelling Expenses (if any) £ 1 : 2 : 0

Committee's Minute

Assigned

+ L.M.C. 4,20

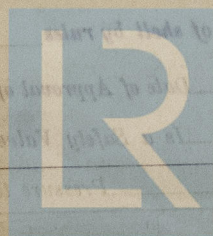
GLASGOW

4 MAY 1920

Mr. Laidlaw

J. S. Sellar

Engineer Surveyor to Lloyd's Register of Shipping.



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