

REPORT ON MACHINERY

No. 73377

Received at London Office

WED. AUG. 4 1920

of writing Report

19

When handed in at Local Office

3 AUG 1920

Port of Newcastle on Tyne

in Survey held at

South Shields

Date, First Survey 16 Sept. 19, Last Survey 16 July 1920

Book

(Number of Visits 22)

on the

S.S. "Homecliffe"

Tons

Gross

4914

Net

3011

ter

Built at

South Shields

By whom built

J. Readhead & Sons

When built

1920

ines made at

South Shields

By whom made

J. Readhead & Sons

when made

1920

ers made at

South Shields

By whom made

J. Readhead & Sons

when made

1920

istered Horse Power

Owners Cliffe S.S. Co. Ltd. (J. Readhead & Co. Eng.)

Port belonging to South Shields

Horse Power as per Section 28

433

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

Yes

GINES, &c.—Description of Engines

Triple Expansion

No. of Cylinders

3

No. of Cranks

3

of Cylinders

26 1/2, 44, 73

Length of Stroke

48

Revs. per minute

Dia. of Screw shaft

as per rule 14 1/2

Material of

scrap iron

he 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

he 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

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

Yes

If two

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

Yes

Length of stern bush

5'-0"

of Tunnel shaft

as per rule 13-21

as fitted 13-21

Dia. of Crank shaft journals

as per rule 13-27

as fitted 14-6

Dia. of Crank pin

14 1/2

Size of Crank webs

9 1/2 x 18

Dia. of thrust shaft under

rs

14 1/2

Dia. of screw

17'-9"

Pitch of Screw

17'-0"

No. of Blades

4

State whether moveable

No

Total surface

96 sq

of Feed pumps

2

Diameter of ditto

4 1/2

Stroke

30"

Can one be overhauled while the other is at work

Yes

of Bilge pumps

2

Diameter of ditto

4 1/2

Stroke

30"

Can one be overhauled while the other is at work

Yes

of Donkey Engines

3

Sizes of Pumps

Imperial Ballast 10 x 10 1/2 x 10"

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

Engine Room

Four 3 1/2 dia

In Holds, &c. Eight 3 1/2 dia, and one 2 1/2 dia in

tunnel well.

of Bilge Injections one sizes 6 3/4 dia

Connected to condenser, or to circulating pump

Yes

Is a separate Donkey Suction fitted in Engine room & size

Yes 3 1/2 dia

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

Yes

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

at pipes are carried through the bunkers

None

How are they protected

Yes

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

he Screw Shaft Tunnel watertight

Yes

Is it fitted with a watertight door

Yes

worked from

Top platform

ELERS, &c.—(Letter for record

Yes

Manufacturers of Steel

al Heating Surface of Boilers

57110 sq

Is Forced Draft fitted

No

No. and Description of Boilers

3 Single ended

orking Pressure

180 lbs

Tested by hydraulic pressure to

360 lbs

Date of test

31.3.20

No. of Certificate

9380

each boiler be worked separately

Yes

Area of fire grate in each boiler

60.15 sq

No. and Description of Safety Valves to

boiler

Two spring loaded

Area of each valve

7.06 sq

Pressure to which they are adjusted

185 lbs

Are they fitted with easing gear

Yes

allest distance between boilers or uptakes and bunkers or woodwork

4'-0"

Mean dia. of boilers

15'-7 1/2"

Length

11'-0"

Material of shell plates

Steel

ickness

1 1/4"

Range of tensile strength

28/32 lbs

Are the shell plates welded or flanged

No

Descrip. of riveting: cir. seams

DR Lap

seams

TR.D.B. 3/4"

Diameter of rivet holes in long. seams

1 1/8"

Pitch of rivets

9 3/8"

Lap of plates or width of butt straps

1'-8"

centages of strength of longitudinal joint

rivets 85.9%

plate 86.6%

Working pressure of shell by rules

181.3 lbs

Size of manhole in shell

16" x 12"

of compensating ring

7' x 1 1/2"

No. and Description of Furnaces in each boiler

3 Brighton

Material

Steel

Outside diameter

4'-0"

ngth of plain part

top 1'

bottom 1'

Thickness of plates

crown 9"

bottom 7 1/2"

Description of longitudinal joint

Welded

No. of strengthening rings

1

orking pressure of furnace by the rules

183.6 lbs

Combustion chamber plates: Material

Steel

Thickness: Sides

23/32"

Back

11"

ch of stays to ditto: Sides

10" x 9 1/4"

Back

10" x 9"

Top

10 1/2" x 9 1/2"

If stays are fitted with nuts or riveted heads

None

Working pressure by rules

192.7 lbs

aterial of stays

Steel

Area at smallest part

2.31"

Area supported by each stay

90"

Working pressure by rules

205.4 lbs

End plates in steam space:

aterial

Steel

Thickness

1 1/8"

Pitch of stays

2 1/2" x 20 1/2"

How are stays secured

DN & W

Working pressure by rules

197.7

Material of stays

Steel

a at smallest part

8.48"

Area supported by each stay

445.8"

Working pressure by rules

197.7

Material of Front plates at bottom

Steel

ickness

7/8"

Material of Lower back plate

Steel

Thickness

IS A DONKEY BOILER FITTED? *No*

If so, is a report now forwarded? *✓*

SPARE GEAR. State the articles supplied:—

*Propeller, Propeller shaft, 7 boiler tubes,
6 Condenser tubes, 100 Condenser ferrules, one set of feed pump Valves,
one set of Air pump Valves, one set of feed check Valves.
2 Safety Valves springs, 6 shaft Coupling bolts, 2 top end connecting
rod bolts, 2 bottom end connecting rod bolts, 2 main bearing bolts
6 junk ring bolts, one set of firebars for one boiler
6 Winch Condenser tubes, 50 Winch Condenser ferrules, 2 balls of Condenser packing
3 Hough's springs for check Valves.*

The foregoing is a correct description,

FOR JOHN READHEAD & SONS, LIMITED.

W. P. Newry Engineer

Manufacturer.

Dates of Survey while building { During progress of work in shops -- } *1919*
{ During erection on board vessel -- } *1920*
Total No. of visits *22*

Is the approved plan of main boiler forwarded herewith *No*
forwarded for 3/5 "Ronda".
" " " donkey " " "

Dates of Examination of principal parts—Cylinders *20/4/20* Slides *26/3/20* Covers *8/3/20* Pistons *26/3/20* Rods *20/2/20*
Connecting rods *20/2/20* Crank shaft *6/4/19* Thrust shaft *26/3/20* Tunnel shafts *26/3/20* Screw shaft *26/5/20* Propeller *12/4/20*
Stern tube *26/3/20* Steam pipes tested *2/7/20* Engine and boiler seatings *7/4/20* Engines holding down bolts *8/7/20*
Completion of pumping arrangements *8/7/20* Boilers fixed *27/5/20* Engines tried under steam *8/7/20*
Completion of fitting sea connections *19/4/20* Stern tube *26/3/20* Screw shaft and propeller *27/5/20*
Main boiler safety valves adjusted *8/7/20* Thickness of adjusting washers *1/2" 5/16" 5/16" 7/16" 5/16" 7/16"*
Material of Crank shaft *Steel* Identification Mark on Do. *LLOYD'S No. 3111 D MR.* Material of Thrust shaft *Steel* Identification Mark on Do. *LLOYD'S No. 3111 D 26.3.20 W.L.H.*
Material of Tunnel shafts *Iron* Identification Marks on Do. *LLOYD'S No. 1957 26.3.20 W.L.H.* Material of Screw shafts *Iron* Identification Marks on Do. *LLOYD'S No. 1957 26.5.20 W.L.H.*
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 *SS "Ronda."*

General Remarks (State quality of workmanship, opinions as to class, &c. *The machinery of this vessel has been constructed under special survey, the material and workmanship are of good quality, it has been securely fitted on board and satisfactorily tried under steam at moorings for 2½ hours.*

The machinery of this vessel is now in my opinion eligible for record of + L.M.C. 7.20. (in red) in the Register Book.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 7.20

Recd 4/8/20

The amount of Entry Fee ... £ *2* : : : When applied for, *3 AUG 1920*
Special ... £ *41* : *13* : :
Donkey Boiler Fee ... £ : : : When received, *11/8/20*
Travelling Expenses (if any) £ : : : *12*

Committee's Minute

Assigned

W. L. Hall
Engineer Surveyor to Lloyd's Register of Shipping.



© 2019

Lloyd's Register Foundation