

Rpt. 4.

REPORT ON MACHINERY.

No. 79060

Date of writing Report

19

When handed in at Local Office

Port of

Received at London Office

LIVERPOOL

SAT. 24 MAY. 1919

To. in Survey held at

Liverpool

Date, First Survey

Aug 14th / 18

Last Survey

May 9th / 19

Reg. Book.

on the

Steel S/S. "WAR. YARE."

(Number of Voids 82)

Master

Built at

Liverpool

By whom built

H. V. E. Sisson & Co

Tons

Gross 7136

Net

1508

When built

1919-10

Engines made at

Liverpool

By whom made

D. Rolfe & Sons

when made

1919-10

Boilers made at

Birkenhead

By whom made

Cammell Laird & Co. Ltd.

when made

do

Registered Horse Power

Owners

The Shipping Controller

Port belonging to

Nom. Horse Power as per Section 25

251

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

yes

ENGINES, &c.—Description of Engines

Triple Expansion, Inverted, Glider

No. of Cylinders

three

No. of Cranks

three

Dia. of Cylinders

21"-34"-56"

Length of Stroke

36"

Revs. per minute

94

Dia. of Screw shaft

11 1/2"

Material of

steel

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

no

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

yes

Length of stern bush

4' 3 1/4"

Dia. of Tunnel shaft

as per rule 10 1/2"

Dia. of Crank shaft journals

as per rule 10 1/2"

Dia. of Crank pin

11 1/2"

Size of Crank webs

7" x 1 1/2"

Dia. of thrust shaft under

collars

10 1/2"

Dia. of screw

14-9"

Pitch of Screw

15"-0"

No. of Blades

7

State whether moveable

no

Total surface

70 sq ft

No. of Feed pumps

2

Diameter of ditto

3"

Stroke

21"

Can one be overhauled while the other is at work

yes

No. of Bilge pumps

2

Diameter of ditto

3"

Stroke

21"

Can one be overhauled while the other is at work

yes

No. of Donkey Engines

2

Sizes of Pumps

6" x 4 1/2" x 6" x 8" x 8" x 8"

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

In Engine Room

Three at 2 1/2" line

In Holds, &c. Three at 2 1/2" & two at 2"

No. of Bilge Injections

one

size

8"

Connected to condenser, or to circulating pump

Pump

Is a separate Donkey Suction fitted in Engine room & size

1 at 2 1/2"

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

yes

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

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

yes

Is it fitted with a watertight door

yes

worked from

level of upper deck

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

Are they fitted with easing gear

Smallest distance between boilers or uptakes and bunkers or woodwork

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

bottom

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 center

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

W617-0008

If so, is a report now forwarded?

2. Connecting Rod top end bolts & nuts, 2 bottom end bolts & nuts.
2. Main Bearing Bolts. 1 Set of Coupling Bolts.
The set of Feed. Bilge and Air & Circulating pump valves
the Propeller. 1 set Safety Valve Springs, 6 gti cover studs and nuts
6 Steam chest cover studs & nuts, Unrooted bolts & nuts. Item of various
sizes & other minor articles as per specification.

Per

Manufacturer.

Dates of Survey while building	During progress of work in shops --	Aug 14. Oct 14. 15. 16. 17. 18. 22. 30. Nov 4. 5. 6. 11. 15. 16. 20. 22. 25. 26. 27. Dec 3. 4. 5. 6. 10. 11. 12. 16. 17. 18. 22. 24. 27. 30. Jan 6. 7. 9. 10.
	During erection on board vessel --	15. 16. 20. 24. 27. 29. 31. Feb 6. 4. 5. 8. 12. 13. 7. 18. 21. 24. 25. 26. 27. Mar 3. 4. 10. 12. 13. 18. 19. 20. 21. 24. 27. 28. Apr 1. 2. 7. 9.
	Total No. of visits	14. 25. May 1. 2. 3. 8. 9.

83

Is the approved plan of main boiler forwarded herewith

Is the approved plan of main boiler forwarded herewith

Is this machinery duplicate of a previous case? *Yes.* If so, state name of vessel *Star Mercy*

