

REPORT ON MACHINERY.

No. 27446

TUE. 11 MAR. 1919

Form of writing Report

10

When handed in at Local Office

10 MAR 1919

Received at London Office

Port of Sunderland

in Survey held at

Sunderland

Date, First Survey

31 July 1918

Last Survey 25 April

1919

eg. Book.

on the 1/2 THISBE

Master

Built at S. Shields

By whom built C. Rimmelman & Co

Tons Gross 1710

Net 1043

When built 1919

Engines made at Sunderland

By whom made Macdon & P. Mack Ltd.

when made 1919

Machinery made at Newcastle

By whom made Palmers Shipbuilding & Iron Co Ltd

when made 1919

Registered Horse Power

Owners Thos. Bewley & Co.

Port belonging to Newcastle

Horse Power as per Section 28

216

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

Yes

GINES, &c.—Description of Engines

Triple

No. of Cylinders 3

No. of Cranks 3

No. of Cylinders 20, 33, 54

Length of Stroke 36

Revs. per minute 70

Dia. of Screw shaft

as per rule 11.58

Material of

screw shaft

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

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

If two

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

Length of stern bush 45 1/2"

Dia. of Tunnel shaft

as per rule 10.11

as fitted 10 1/8

Dia. of Crank shaft journals

as per rule 10.61

as fitted 10 5/8

Dia. of Crank pin

10 5/8

Size of Crank webs 6 5/8 x 1 1/2

Dia. of thrust shaft under

bars 10 5/8

Dia. of screw 14-6

Pitch of Screw 14-0

No. of Blades 4

State whether moveable

No

Total surface 659

No. of Feed pumps 2

Diameter of ditto 3"

Stroke 20"

Can one be overhauled while the other is at work

Yes

No. of Bilge pumps 2

Diameter of ditto 3"

Stroke 20"

Can one be overhauled while the other is at work

Yes

No. of Donkey Engines 2

SIZES OF PUMPS

7 1/2 x 5 x 8, 9 1/2 x 1 1/2 x 11

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

Engine Room 5, 2 1/4"

2 1/4" tunnel well

In Holds, &c.

Hold off well 2 1/2"

Foreholds 2 each

2 1/4" suction

No. of Bilge Injections 1

size 8 1/2"

Connected to condenser, or to circulating pump

Yes

Is a separate Donkey Suction fitted in Engine room & size

4 1/2 3"

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

No

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

Are all pipes carried through the bunkers

No

How are they protected

By

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 (Ch. 24)

Is it fitted with a watertight door

Yes

worked from

top platform

MILLERS, &c.—(Letter for record

(S)

Manufacturers of Steel

Bilms made

Newcastle

In separate report

Total Heating Surface of Boilers

3620

Is Forced Draft fitted

No

No. and Description of Boilers

25B

Working Pressure

190

Tested by hydraulic pressure to

380

Date of test

No. of Certificate

Is each boiler worked separately

Area of fire grate in each boiler

52 1/2

No. and Description of Safety Valves to

No. and Description of Safety Valves to

Are they fitted with easing gear

Yes

Is the boiler 2 Spring Valves

Area of each valve

5.94 1/4"

Pressure to which they are adjusted

195 lbs

Are they fitted with easing gear

Yes

Smallest distance between boilers or uptakes and bunkers or woodwork

Way between

Mean dia. of boilers

Length

Material of shell plates

Thickness

Range of tensile strength

Are the shell plates welded or flanged

Descrip. of riveting: air. seams

Diameter of rivet holes in long. seams

Pitch of rivets

Lap of plates or width of butt straps

Percentage of strength of longitudinal joint

rivets

Working pressure of shell by rules

Size of manhole in shell

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

bottom

Working pressure of furnace by the rules

Combustion chamber plates: Material

Thickness: Sides

Back

Top

Bottom

Length 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

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

Diameter

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet holes

How stayed

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

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

Pressure to which each is adjusted

Is Easing Gear fitted

Date of Test

Diameter of Safety Valve

Pressure to which each is adjusted

Is Easing Gear fitted

Date of Test

Diameter of Safety Valve

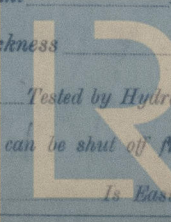
Pressure to which each is adjusted

Is Easing Gear fitted

Date of Test

Diameter of Safety Valve

W633-0180



Lloyd's Register Foundation

No

If so, is a report now forwarded?

The foregoing is a correct description.

MAC COLL & FOLLOWS LTD.

Manufacturer.

Director.

Dates of Survey while building	During progress of work in shops -- } 1918. Jul. 31. Aug. 8. 12. 29. Sep. 9. 17. 24. 30. Oct. 2. 22. Nov. 5. 26. 28. Dec. 5. 11. 21. Jan. 5. 13. 22. Feb. 1919 During erection on board vessel -- } at Muz. Dec. 19. 23. 24. Feb. 3. Mar. 10. 23. Apr. 7. 28. Total No. of visits 27. (20 + 7)
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Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts—Cylinders 5.11.18 Slides 26.11.18 Covers 9.9.18 Pistons 9.9.18 Rods 26.11.18
Connecting rods 5.12.18 Crank shaft 26.11.18 Thrust shaft 5.12.18 Tunnel shafts 13.1.19 Screw shaft 5.12.18 Propeller 26.11.18
Stern tube 5.12.18 Steam pipes tested 18.11.18 Engine and boiler seatings 19.2.19 Engines holding down bolts 19.2.19
Completion of pumping arrangements 28.2.19 Boilers fixed 28.2.19 Engines tried under steam 28.2.19
Completion of fitting sea connections 23 Dec 1918 Stern tube 24 Dec 1918 Screw shaft and propeller 10 March 1919
Main boiler safety valves adjusted 28.2.19 Thickness of adjusting washers Port 18 1/2 13 3/8 5 1/2 Starboard 13 1/2 15 5/8 5
Material of Crank shaft Steel Identification Mark on Do. 279 GAH Material of Thrust shaft Steel Identification Mark on Do. 279 9 1/2 8 1/2
Material of Tunnel shafts Steel Identification Marks on Do. 279 GAH Material of Screw shafts Steel Identification Marks on Do. 279 9 1/2 8 1/2
Material of Steam Pipes Iron ✓ Test pressure 570 lbs ✓

Is an installation fitted for burning oil fuel NO ✓

Have the requirements of Section 49 of the Rules been complied with ☒

Is this machinery duplicate of a previous case No If so, state name of vessel

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 sound and good and on completion under the vessel elicits in my opinion to have need of T.L.C. with care when is completed. The engines and boilers have been fitted and fixed in vessel in a satisfactory manner and the vessel has returned to the builders yard.

To complete survey the Hold and work sections remain to be filled and the electric light installed.

The Hold and tunnel well Suctions pipes fitted.

In my opinion this vessel is now eligible for the notification of + Lm C - 5-19
made in the Register Book.

It is submitted that
this vessel is eligible for 4 cc
THE RECORD. + LMC 5. 19

The amount of Entry Fee ... £ 2: - :
Special £ 30. 16. 0 }
Signature £ 10. 12. 8 } £ 20: 24

When applied for,
10 MAR 1919

Travelling Expenses (if any) £

Committee's Minute TUE. 20 MAY. 1919

Assigned

TUE. 20 MAY. 1919

+ d' in 4

Lloyd's Registered
Foundation

Id. 4-3-1919