

## REPORT ON MACHINERY.

No. 39816

Received at London Office

Writing Report

19

When handed in at Local Office

12.4

in 20 Port of

Glasgow. WED. APR. 14 1920

in Survey held at  
Book.

Paisley

Date, First Survey 10.10.17

Last Survey Mar 18<sup>th</sup> 1920

on the Racia Type Lug

"JAUNTY"

(Number of Vents 4)

Gross 606

Net 57

ter

Built at

Whiteinch

By whom built

Ritchie Graham &amp; Co. Ltd.

When built

1919

ines made at

Paisley

By whom made

Campbell &amp; Haldenwood (953)

when made

1919

ers made at

Renfrew

By whom made

H. M. Simons &amp; Co. Ltd. (624)

when made

1918

istered Horse Power

Owners

H. M. Government.

Port belonging to

n. Horse Power as per Section 28

217

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

Yes

GINES, &amp;c.—Description of Engines

Triple Expansion

No. of Cylinders

3

No. of Cranks

3

of Cylinders

18<sup>1</sup>/<sub>4</sub>" - 28<sup>1</sup>/<sub>2</sub>" - 48<sup>1</sup>/<sub>4</sub>"

Length of Stroke

28"

Revs. per minute

Dia. of Screw shaft

as per rule 9.55"

as fitted 10<sup>1</sup>/<sub>2</sub>"

Material of screw shaft

M.S.

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

No liner

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

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

Length of stern bush

3'-6"

of Tunnel shaft

as per rule 8.5-8.21

as fitted 8<sup>3</sup>/<sub>4</sub>"

Dia. of Crank shaft journals

as per rule 8.92-8.65

as fitted 9"

Dia. of Crank pin

9"

Size of Crank webs

16<sup>3</sup>/<sub>4</sub>" x 6<sup>3</sup>/<sub>4</sub>"

Diameter of screw

10'-7"

Pitch of Screw

12'-0"

No. of Blades

4

State whether moveable

No

Total surface

34 sq

of Feed pumps

One

Diameter of ditto

3<sup>1</sup>/<sub>2</sub>"

Stroke

13<sup>1</sup>/<sub>2</sub>"

Can one be overhauled while the other is at work

of Bilge pumps

One

Diameter of ditto

3<sup>1</sup>/<sub>2</sub>"

Stroke

13<sup>1</sup>/<sub>2</sub>"

Can one be overhauled while the other is at work

of Donkey Engines

Five

Sizes of Pumps

1 General 5<sup>1</sup>/<sub>4</sub>" x 12"

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

2 Feed

Engine Room 1 @ 2 1/2

In Holds, &amp;c.

2 @ 2 1/2

Stokehold

of Bilge Injections

1

sizes

6"

Connected to condenser, or to circulating pump

C.P.

Is a separate Donkey Suction fitted in Engine room &amp; size

Yes 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

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

That pipes are carried through the bunkers

Steam to windlass

Bilge range to F.R.

How are they protected

Asbestos

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

Dates of examination of completion of fitting of Sea Connections

23.9.19

of Stern Tube

23.9.19

Screw shaft and Propeller

23.9.19

Is the Screw Shaft Tunnel watertight

No tunnel

Is it fitted with a watertight door

Yes

worked from

MILERS, &amp;c.—(Letter for record

S)

Manufacturers of Steel

The Steel Company of Scotland.

Total Heating Surface of Boilers

3600 sq

Is Forced Draft fitted

Yes

No. and Description of Boilers

Two Single Ended

Working Pressure

180

Tested by hydraulic pressure to

360

Date of test

31.4.18

No. of Certificate

14384

Can each boiler be worked separately

Yes

Area of fire grate in each boiler

66 sq

No. and Description of Safety Valves to

each boiler

2 Spring loaded

Area of each valve

4 sq

Pressure to which they are adjusted

185

Are they fitted with easing gear

Yes

Smallest distance between boilers or uptakes and bunkers or woodwork

12"

Mean dia. of boilers

14'-1<sup>3</sup>/<sub>4</sub>"

Length

10'-6"

Material of shell plates

Steel

Thickness

1<sup>5</sup>/<sub>32</sub>"

Range of tensile strength

28/32

Are the shell plates welded or flanged

Descrip. of riveting: cir. seams

even 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

bottom

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

Back

Top

Bottom

Pitch of stays to ditto: Sides

Back

Top

If stays are fitted with nuts or riveted heads

Working pressure by rules

End plates in steam space

Material of stays

Diameter at smallest part

Area supported by each stay

How are stays secured

Working pressure by rules

Material of stays

Material

Thickness

Pitch of stays

Area supported by each stay

Working pressure by rules

Material of Front plates at bottom

Diameter at smallest part

Area supported by each stay

Working pressure by rules

Material of Front plates at bottom

Working pressure of plate by rules

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

Superheater or Steam chest; how connected to boiler

Can the superheater be shut off and the boiler worked

Diam. of rivet

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

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

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

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

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

Working pressure by rules

End plates: Thickness

How stayed



# VERTICAL DONKEY BOILER—

Manufacturers of Steel

None.

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  
 Valves No. of Safety Valves Area of each Pressure to which they are adjusted Date of adjustment  
 If fitted with casing 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  
 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 top end bolts 2 bottom end bolts 2 main bearing bolts  
 1 set of coupling bolts 1 set of feed and bilge pump valves Iron of various sizes and a quantity of  
 assorted bolts & nuts. Others as per Admiralty Specification.

The foregoing is a correct description,

Manufacturer.

1917 Oct 10. 23. Nov 1. 8. 22. 29. Dec 13. 21. 1918 Jan 14. 28 Feb 13. 21. Mar 14. 21. Apr 14. 6. 8. 16. 29.  
 Dates of Survey During progress of work in shops -- May 10. 21. June 4. 13. 24. July 2. 10. 29. Sept 2. 20. 23. Oct 1. 10. 20. Nov 4. 25. 29. Dec 1.  
 while building During erection on board vessel -- 1919 Jan 10. 15. 20. 23. 29. Feb 4. 21. Mar 13. 18. 21. May 12. 16. June 5. 20. July 1. Sept 23. Oct.  
 Total No. of visits May. Is the approved plan of main boiler forwarded herewith Yes

Dates of Examination of principal parts—Cylinders 16.12.18. Slides 30.10.18 Covers 16.12.18 Pistons 30.10.18 Rods 30.10.18  
 Connecting rods 30.10.18 Crank shaft 4.4.18 Thrust shaft 4.4.18 Tunnel shafts 4.4.18 Screw shaft 29.11.18 Propeller 16.5.19  
 Stern tube 16.5.19. Steam pipes tested 29/12/19. Engine and boiler seatings 1.10.19. Engines holding down bolts 5.11.19.  
 Completion of pumping arrangements 24/12/19 Boilers fixed 24/12/19 Engines tried under steam 11/3/20  
 Main boiler safety valves adjusted 4/2/20. Thickness of adjusting washers AFT PV 5/16 SY 9/32. FOR PV 2 1/4 SY 9/32  
 Material of Crank shaft Steel Identification Mark on Do. LLOYDS No 953 WGM 4.4.18. Material of Thrust shaft Steel Identification Mark on Do. LLOYDS No 953 WGM 4.4.18.  
 Material of Tunnel shafts Steel Identification Marks on Do. LLOYDS No 953 WGM 4.4.18. Material of Screw shafts Steel Identification Marks on Do. LLOYDS No 953 WGM 4.4.18.  
 Material of Steam Pipes SD Steel & SD Copper Test pressure Steel 540 lbs Copper 360 lbs

General Remarks (State quality of workmanship, opinions as to class, &c. These engines have been built under Special Survey in accordance with the approved plans and the Rules of the Society.

The workmanship and material are of good quality throughout. The Spare Crank Shaft and spare propeller shaft Identification Mark:—

The engines and boilers have been securely fitted on board the vessel and tried under steam with satisfactory results. The machinery is eligible in our opinion to have notification LMC 4-20 in the Register Book.

It is submitted that this vessel is eligible for THE RECORD + L.M.C. 3. 20. F.D.

The amount of Entry Fee .. £ : : When applied for, 1.4.20.  
 Special .. £ 65. 14. : :  
 Donkey Boiler Fee .. £ : : When received, 17/4/20  
 Travelling Expenses (if any) £ : : 20

Committee's Minute GLASGOW 13 APR 1920  
 Assigned + LMC 4 20  
 720.  
 MACHINERY CERT. 14.4.20  
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

