

Skull Rpt No 31874  
**REPORT ON MACHINERY.**

No. 39238

10E JUL 21 1919

Received at London Office

Report

19

When handed in at Local Office

18/10 1919 Port of Glasgow

Date, First Survey

Last Survey

(Number of Visits

Gross

Net

When built

when made 1919

when made 1919

rated Horse Power

Owners

Port belonging to

Horse Power as per Section 28

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

NES, &c.—Description of Engines

Triple Expansion

No. of Cylinders

No. of Cranks

Cylinders

Length of Stroke

Revs. per minute

Dia. of Screw shaft

Material of

screw shaft

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

Is the after end of the liner made water tight

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

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

Tunnel shaft

Dia. of Crank shaft journals

as per rule

Dia. of Crank pin

Size of Crank webs

Dia. of thrust shaft under

Dia. of screw

Pitch of Screw

No. of Blades

State whether moveable

Total surface

Feed pumps

Diameter of ditto

Stroke

Can one be overhauled while the other is at work

Bilge pumps

Diameter of ditto

Stroke

Can one be overhauled while the other is at work

Donkey Engines

Sizes of Pumps

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

In Room

In Holds, &c.

Bilge Injections

sizes

Connected to condenser, or to circulating pump

separate Donkey Suction fitted in Engine room & size

Are the roses in Engine room always accessible

Are the sluices on Engine room bulkheads always accessible

connections with the sea direct on the skin of the ship

Are they Valves or Cocks

fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates

Are the Discharge Pipes above or below the deep water line

each fitted with a Discharge Valve always accessible on the plating of the vessel

Are the Blow Off Cocks fitted with a spigot and brass covering plate

es are carried through the bunkers

How are they protected

Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges

examination of completion of fitting of Sea Connections

of Stern Tube

Screw shaft and Propeller

Screw Shaft Tunnel watertight

Is it fitted with a watertight door

worked from

&c.—(Letter for record

Manufacturers of Steel

ing Surface of Boilers

Is Forced Draft fitted

No. and Description of Boilers

See separate report.

Pressure

Tested by hydraulic pressure to

Date of test

No. of Certificate

boiler be worked separately

Area of fire grate in each boiler

No. and Description of Safety Valves

Area of each valve

Pressure to which they are adjusted

Are they fitted with easing gear

ance between boilers on uptakes and bunkers or woodwork

Mean dia. of boilers

Length

Material of shell plates

Range of tensile strength

Are the shell plates welded or flanged

Descrip. of riveting: cir. seams

Diameter of rivet holes in long. seams

Pitch of rivets

Lap of plates or width of butt straps

of strength of longitudinal joint

Working pressure of shell by rules

Size of manhole in shell

insulating ring

No. and Description of Furnaces in each boiler

Material

Outside diameter

in part

Thickness of plates

crown

Description of longitudinal joint

No. of strengthening rings

ure of furnace by the rules

Combustion chamber plates: Material

Thickness: Sides

Back

Top

Bottom

to ditto: Sides

Back

Top

If stays are fitted with nuts or riveted heads

Working pressure by rules

Diameter at smallest part

Area supported by each stay

Working pressure by rules

End plates in steam space

Thickness

Pitch of stays

How are stays secured

Working pressure by rules

Material of stays

smallest part

Area supported by each stay

Working pressure by rules

Material of Front plates at bottom

Material of

Lower back plate

Thickness

Greatest pitch of stays

Working pressure of plate by rules

ubes

Pitch of tubes

Material of tube plates

Thickness: Front

Back

Mean pitch of stays

wide water spaces

Working pressures by rules

Girders to Chamber tops: Material

Depth and

order at centre

Length as per rule

Distance apart

Number and pitch of stays in each

sure by rules

Superheater or Steam chest; how connected to boiler

Can the superheater be shut off and the boiler worked

Diameter

Length

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

if augmented 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

W1484-0019



# VERTICAL DONKEY BOILER—

Manufacturers of Steel

No.	Description	When made	Where fixed
Made at	By whom made	No. of Certificate	Fire grate area
Working pressure	tested by hydraulic pressure to	Date of test	Date of adjustment
Valves	No. of Safety Valves	Area of each	Pressure to which they are adjusted
If fitted with easing 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
Working pressure of shell by rules	Thickness of shell crown plates	Radius of do.	No. of stays to do.
Diameter of furnace Top	Bottom	Length of furnace	Thickness of furnace plates
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 connecting rod top end bolts and nuts, 2 connecting rod bottom end bolts & nuts, 2 main bearing bolts & nuts, 1 set of feed, bilge, air & circulating pump valves, 6 condenser tubes, a quantity of assorted bolts & nuts & iron of various sizes, 1 main & 1 donkey feed check valve, 1 safety valve spring etc. 1 set coupling bolts. see Hull etc 12.6.20.

The foregoing is a correct description,

WILLIAM BEARDMORE & CO., LIMITED

Manufacturer.

for R. Sneddon

Dates of Survey while building: During progress of work in shops -- 1918 Apr 17.30 May 15.23.30 1919 Apr 11 May 13 June 30 July 8.11.15 Aug 11.19  
During erection on board vessel -- Sept 8 Oct 4 Hull: 1919 May 13 Aug 13 Oct 15 1920 Feb 27 May 4.12.14 Jun 2  
Total No. of visits 17. + 9 = 26  
Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts—Cylinders 11.8.19. Slides 15.8.19. Covers 11.8.19. Pistons 11.8.19. Rods 11.8.19.  
Connecting rods 19.8.19. Crank shaft 15.4.19. Thrust shaft 15.8.19. Tunnel shafts none. Screw shaft 15.4.19. Propeller 15.4.19.  
Stern tube 15.4.19. Steam pipes tested 27/2/20 Engine and boiler seatings 4/6/19 Engines holding down bolts 4/6/19  
Completion of pumping arrangements 3/6/20 Boilers fixed 14/5/20 Engines tried under steam 3/6/20  
Main boiler safety valves adjusted 14/5/20 Thickness of adjusting washers 5 5/16" P 32  
Material of Crank shaft M.S. Identification Mark on Do. 15.4.19. Material of Thrust shaft M.S. Identification Mark on Do.  
Material of Tunnel shafts Identification Marks on Do. Material of Screw shafts M.S. Identification Marks on Do.  
Material of Steam Pipes Copper Test pressure 360 lb

General Remarks (State quality of workmanship, opinions as to class, &c. The machinery has been built under Special Survey in accordance with the Approved Admiralty Specification and the Rules of the Society. The materials & workmanship are good throughout. The machinery has been dispatched to the vessel to be fitted on board the vessel.

The machinery has been properly fitted and secured on board the vessel. On completion, the machinery was tried under full working conditions with satisfactory results. On my opinion the machinery is eligible for the record L.M.C. 6-20. in Red, in the Society's Register Book.

It is submitted that this vessel is eligible for the record.

RECORD. L.M.C. 6-20.

The amount of Entry Fee .. £

Special .. £ 9.0

Donkey Boiler Fee .. £

Travelling Expenses (if any) £ 4.10

Committee's Minute

Assigned Deferres.

When applied for.

21.10.19

When received.

5.12.19

20.12.19

21.12.19

21.12.19

21.12.19

21.12.19

21.12.19

21.12.19

21.12.19

21.12.19

21.12.19

21.12.19

John Barr. Herbert L. Su  
Engineer Surveyor to Lloyd's Register of British & Foreign

21 OCT 1919

21 OCT 1919

21 OCT 1919

21 OCT 1919