

Rpt. 4.

REPORT ON MACHINERY.

No. 39441

Received at London Office

Date of writing Report

19

When handed in at Local Office

9/12/19

Port of

GLASGOW

No. in Survey held at
Reg. Book.

Alloa

on the

S/S "Goodig"

Date, First Survey

10/1/19

Last Survey

3/12/19

1919

(Number of Visits 27)

Tons
Gross 449
Net 338

Master

Built at

Alloa

By whom built

T. & S. B. E. C. (Jeffrey & Co.) 201

When built

1919

Engines made at

Alloa

By whom made

T. & S. B. E. C. (Jeffrey & Co.) 201

when made

1919

Boilers made at

Glasgow

By whom made

D. Rowan & Co. (9: 3288)

when made

1919

Registered Horse Power

Owners

Stone & Rolfe

Port belonging to

Nom. Horse Power as per Section 28

127

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

No

ENGINES, &c.—Description of Engines

Triple Expansion

No. of Cylinders

3

No. of Cranks

3

Dia. of Cylinders

16" 26 1/2" - 44"

Length of Stroke

30"

Revs. per minute

90

Dia. of Screw shaft

as per rule 9 1/2"

Material of screw shaft

S

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

—

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

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

—

Length of stern bush

39"

Dia. of Tunnel shaft

as per rule 8 1/2"

Dia. of Crank shaft journals

as per rule 8 3/4"

Dia. of Crank pin

8 3/4"

Size of Crank webs

6" 14"

Dia. of thrust shaft under

collars

8 1/2"

Dia. of screw

11" 6"

Pitch of Screw

13" 0"

No. of Blades

4

State whether moveable

No

Total surface

45 1/2"

No. of Feed pumps

2

Diameter of ditto

3"

Stroke

15"

Can one be overhauled while the other is at work

Yes

No. of Bilge pumps

2

Diameter of ditto

3 1/4"

Stroke

15"

Can one be overhauled while the other is at work

Yes

No. of Donkey Engines

2

SIZES OF PUMPS

6" x 4" 1/4" 6"

7" x 7" 8"

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

In Engine Room

2. 2 1/2"

In Holds, &c.

2. 2 1/2"

No. of Bilge Injections

1

sises

5"

Connected to

circulating pump

pump

Is a separate Donkey Suction fitted in Engine room & size

Yes 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

Are all connections with the sea direct on the skin of the ship

on Stole.

Are they

Valves or Cocks

Valves

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

Bilge Suction

How are they protected

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

18-9-19

of Stern Tube

18-9-19

Screw shaft and Propeller

18-9-19

Is the Screw Shaft Tunnel watertight

None

Is it fitted with a watertight door

—

worked from

—

OILERS, &c.—(Letter for record

S)

Manufacturers of Steel

Total Heating Surface of Boilers

2128 1/2

Is Forced Draft fitted

No

No. and Description of Boilers

2 Single Ended

Working Pressure

180

Tested by hydraulic pressure to

360

Date of test

18-6-19

No. of Certificate

14787

Can each boiler be worked separately

Yes

Area of fire grate in each boiler

33 1/2

No. and Description of Safety Valves to

each boiler

Double Spring

Area of each valve

397"

Pressure to which they are adjusted

185

Are they fitted with easing gear

Yes

Smallest distance between boilers or uptakes and bunkers or woodwork

4' 6"

Mean dia. of boilers

11 1/2"

Length of

10 1/2"

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

Description of longitudinal joint

bottom

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

Diameter 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

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

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

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

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

How stayed

Lloyd's Register

Foundation

002241-002248-0124

VERTICAL DONKEY BOILER—

Manufacturers of Steel

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 Safety _____

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 _____ Plates _____

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:— 2 Connecting Rod bolts, nuts for top end. ditto for bottom end
2 Main Bearing bolts. 1 Set of Coupling bolts. 1 Set of Feed Bridge Pump valves. 1
Set of Piston Rings a quantity of assorted bolts, nuts. Iron of various sizes

The Forth Shipbuilding & Engineering Co., Ltd.
(JEFFREY'S YARD).

The foregoing is a correct description,

Manufacturer.

Robert Jeffrey & Sons.

Dates of Survey while building { During progress of work in shops --- 1919 Jan 10-16-29 Feb 5-11-18 Mar 4-14-26 June 10-25 July 14-29 Aug 6-25 Sept 18- Oct 4-14-21-23.
During erection on board vessel --- Nov 4-13-20-21-22 Dec 1-3.
Total No. of visits 27.

Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts—Cylinders 7. 10. 19 Slides 18. 9. 19 Covers 29 7 19 Pistons 10- 6- 19 Rods 10- 6- 19
Connecting rods 10- 6- 19 Crank shaft 6- 8- 19 Thrust shaft 6- 8- 19 Tunnel shafts ✓ Screw shaft 6- 8- 19 Propeller 6- 8- 19
Stern tube 6- 8- 19 Steam pipes tested 25- 8 19 Engine and boiler seatings 18 9 19 Engines holding down bolts 20- 11- 19
Completion of pumping arrangements 3- 12- 19 Boilers fixed 23 10- 19 Engines tried under steam 3- 12- 19
Main boiler safety valves adjusted 20- 11- 19 Thickness of adjusting washers PV 1/8 SR 3/16 PY 3/16 - SR 3/16
Material of Crank shaft S Identification Mark on Do. LLOYDS 4835 Material of Thrust shaft S Identification Mark on Do. LLOYDS 4835
Material of Tunnel shafts ✓ Identification Marks on Do. JRW Material of Screw shafts 9 Identification Marks on Do. JRW
Material of Steam Pipes Steel Test pressure 540 lb

General Remarks (State quality of workmanship, opinions as to class, &c.)

These Engines, Boilers have been built under Special Survey & the workmanship, material are of good quality.
The Machinery is eligible in my opinion for the record of LMC 12-19.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C 12-19.

The amount of Entry Fee .. £ 2 : - : When applied for, 11-12-1919.
Special .. £ 19 : 1 :
Donkey Boiler Fee .. £ : :
Travelling Expenses (if any) £ 2 : 18 : 6 When received, 20/12/1919

Wm Gordon-Mitchell
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute GLASGOW 16 DEC 1919

Assigned + LMC 12-19

MACHINERY CERTIFICATE
WRITTEN.
17.12.19



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