

REPORT ON MACHINERY.

No. 36579.

Received at London Office

FRI. JAN 5 - 1917

Date of writing Report

19

When handed in at Local Office

19

Port of Glasgow

No. in Survey held at
Reg. Book.

Glasgow

Date, First Survey

10-12-13

Last Survey

22-12-1916

on the

S.S. Limeleaf

(Number of Vents 153)

Gross

Tons

Net

Master

Built at

Glasgow

By whom built

Barclay Curle & Co. (538)

When built

1916

Engines made at

Glasgow

By whom made

Barclay Curle & Co. (538)

when made

1916

Boilers made at

Glasgow

By whom made

Barclay Curle & Co. (538)

when made

1916

Registered Horse Power

Owners

Port belonging to

Nom. Horse Power as per Section 28

900

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

yes

ENGINES, &c.—Description of Engines

Twin screw triple expansion

No. of Cylinders

6

No. of Cranks

6

Dia. of Cylinders

21" 35 1/2" 61"

Length of Stroke

45"

Revs. per minute

85

Dia. of Screw shaft

as per rule 13.29

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 length

yes

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' 8"

Dia. of Tunnel shaft

as per rule 11.27

as fitted 12.5"

Dia. of Crank shaft journals

as per rule 12.46

as fitted 12.46"

Dia. of Crank pin

12 3/8"

Size of Crank webs

8 1/2" x 18"

Dia. of thrust shaft under

collars

12 5/8"

Dia. of screw

16" 3"

Pitch of Screw

18" 9"

No. of Feed pumps

4

Diameter of ditto

4 1/4"

Stroke

22 1/2"

Can one be overhauled while the other is at work

yes

No. of Bilge pumps

4

Diameter of ditto

4 1/4"

Stroke

22 1/2"

Can one be overhauled while the other is at work

yes

No. of Donkey Engines

4

Sizes of Pumps

9" x 11" 12"

9" x 6 1/2" 10"

7" x 8" 12"

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

6" x 6" 10"

In Engine Room (2) 3 1/2" in boiler room (2) 3 1/2"

In Holds, &c. for peak (1) 4" for deep tanks (1) 4" aft dup

Tanks (1) 4" for copper dunnage (1) 4" for (1) 1 1/2" Cargo space (2) 3 1/2" chain locker (1) 2 1/2" in each tunnel (1) 2 1/2" in tunnel

No. of Bilge Injections

2

Connected to condenser, or to circulating pump

pump

Is a separate Donkey Suction fitted in Engine room & size

yes

4"

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

below

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

Dates of examination of completion of fitting of Sea Connections

10/6/16

of Stern Tube

10/5/16

Screw shaft and Propeller

10/5/16

Is the Screw Shaft Tunnel watertight

yes

Is it fitted with a watertight door

yes

worked from

—

OILERS, &c.—(Letter for record

S)

Manufacturers of Steel

Tern Beadmore & Co. & D. Colville & Sons

Total 14,156

cwt.

Total Heating Surface of Boilers

12,628

Is Forced Draft fitted

yes

No. and Description of Boilers

4

Single ended

Working Pressure

215

Tested by hydraulic pressure to

430

Date of test

18/10/16

2/12/16

No. of Certificate

13267

13288

Can each boiler be worked separately

yes

Area of fire grate in each boiler

75-16 1/2"

No. and Description of Safety Valves to

each boiler

1 pair dual spring

Area of each valve

9-6 1/2"

Pressure to which they are adjusted

220

Are they fitted with easing gear

yes

Smallest distance between boilers or uptakes and bunkers or woodwork

0-15"

Mean dia. of boilers

16-6"

Length

12-0"

Material of shell plates

steel

Thickness

1 1/4"

Range of tensile strength

31 to 35

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

table

Cap

long. seams

table

both

Diameter of rivet holes in long. seams

1 21/32"

Pitch of rivets

10 1/2"

Lap of plates or width of butt straps

23 1/16"

Per centages of strength of longitudinal joint

rivets 92.8

plate 94.3

Working pressure of shell by rules

257

Size of manhole in shell

16" x 12"

Size of compensating ring

10 1/2" x 1 1/2"

No. and Description of Furnaces in each boiler

4

Morrison's

Material

steel

Outside diameter

8' 9 1/4"

Length of plain part

top

bottom

Thickness of plates

21"

Description of longitudinal joint

weld

No. of strengthening rings

—

Working pressure of furnace by the rules

234

Combustion chamber plates: Material

steel

Thickness: Sides

11/16"

Back

21/32"

Top

11/16"

Bottom

1"

Pitch of stays to ditto: Sides

7 3/4" x 8 1/4"

Back

9" x 7 3/4"

Top

8" x 9"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

225

Material of stays

steel

Diameter at smallest part

2-03"

Area supported by stay

75"

Working pressure by rules

253

End plates in steam space

—

Material

steel

Thickness

1 1/4"

Pitch of stays

20" x 16"

How are stays secured

2 nuts

Working pressure by rules

219

Material of stays

steel

Diameter at smallest part

7-56"

Area supported by each stay

320"

Working pressure by rules

256

Material of Front plates at bottom

steel

Thickness

27/32"

Material of Lower back plate

steel

Thickness

29/32"

Greatest pitch of stays

14 1/4"

Working pressure of plate by rules

216

Diameter of tubes

2 1/2"

Pitch of tubes

3 3/4" x 3 3/4"

Material of tube plates

steel

Thickness: Front

31/32"

Back

13/16"

Mean pitch of stays

7 1/2"

Pitch across wide water spaces

13 1/2"

Working pressures by rules

224

Girders to Chamber tops: Material

steel

Depth and

thickness of girder at centre

10" x 25"

Length as per rule

2' 10"

Distance apart

9"

Number and pitch of stays in each

(3) 8"

Working pressure by rules

215

Superheater or Steam chest; how connected to boiler

none

Can the superheater be shut off and the boiler worked

separately

Diameter

Length

Manufacturers of Steel

SPARE GEAR. State the articles supplied:—2 top end bolts & nuts 2 bottom end bolts & nuts 1 set of coupling bolts & nuts 2 main bearing bolts & nuts feed & bridge pump rod iron bolts & nuts of various sizes and in addition all other articles specified.

The foregoing is a correct description

FOR BARCLAY, CURLE & CO., LTD.

FOR BARCLAY, CURLE & CO., LTD.

Manufacturer.

Director.

Is the approved plan of main boiler forwarded herewith

Test pressure 64.5 lbs.

These engines and boilers have been built under special survey, the materials and workmanship are of good description. They have been well fitted on board & tried under steam.

This machinery is now in my opinion eligible to have notification of \pm U.M.C 12. 16 (in pd) in the Register Book

The Regenerating plant referred to in Administrative letter L.P. 128034, dated Sep-20th 1916 has not been fitted.

It is submitted that
this vessel is eligible for

TEX 38208D + LMC 12.16 FD

Engineer Surveyor to Lloyd's Register of British & Foreign Shipping

3 - JAN 1917

NOV 25 1921

MACHINERY CERTIFICATE
 57/

TUE FEB 27 1923

FRI. 22 MAR 1918

Lloyd's Register
Foundation