

REPORT ON MACHINERY.

No. 81744.

SAT. JAN. 15 1921

Received at London Office

of writing Report

19

When handed in at Local Office

10 JAN 1921

Port of

Liverpool

in Survey held at

Colchester Port

Date, First Survey Dec 1st

Last Survey Dec 22nd 1920

g. Book.

6060 on the

S.S. "Delia"

(Number of Visits 6)

Gross 1225

Net 700

ster

Built at Lübeck

By whom built Schiffbau. V. Henry Koch.

When built 1914

ines made at

Hamburg

By whom made

Ottensener Maschinenfabrik.

when made

1914

ilers made at

Lübeck.

By whom made

Henry Koch

when made

1914

gistered Horse Power

Owners

J. Currie & Co

Port belonging to

London.

m. Horse Power as per Section 28

162. ✓

Is Refrigerating Machinery fitted for cargo purposes

no.

Is Electric Light fitted

yes.

GINES, &c.—Description of Engines

Triple Expansion.

No. of Cylinders

3

No. of Cranks

3

a. of Cylinders

18 $\frac{1}{2}$ 29 $\frac{1}{8}$ 46 $\frac{1}{16}$ ✓

Length of Stroke

32 $\frac{1}{2}$ ✓

Revs. per minute

Dia. of Screw shaft

as per rule 10 $\frac{1}{2}$ ✓

as fitted 10 $\frac{1}{2}$ ✓

Material of screw shaft

—

the screw shaft fitted with a continuous liner the whole length of the stern tube Continuous liner. Is the after end of the liner made water tight

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

been the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive

✓

If two

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

Length of stern bush

5'-7"

a. of Tunnel shaft

as per rule 9 $\frac{1}{8}$ ✓

as fitted 9 $\frac{1}{8}$ ✓

Dia. of Crank shaft journals

as per rule 9 $\frac{1}{8}$ ✓

as fitted 9 $\frac{1}{8}$ ✓

Dia. of Crank pin

9 $\frac{1}{16}$ ✓

Size of Crank webs

153 x 6

Dia. of thrust shaft under

ars

9 $\frac{1}{16}$

Dia. of screw

12'-8"

Pitch of Screw

12'-0"

No. of Blades

4

State whether moveable

no

Total surface

51.7 $\frac{1}{2}$

of Feed pumps

2

Diameter of ditto

2 $\frac{1}{2}$

Stroke

21 $\frac{1}{2}$

Can one be overhauled while the other is at work

yes.

of Bilge pumps

2

Diameter of ditto

2 $\frac{1}{2}$

Stroke

21 $\frac{1}{2}$

Can one be overhauled while the other is at work

yes.

o. of Donkey Engines

2.

Sizes of Pumps

6.8

133 $\frac{1}{2}$ 59

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

12.5

In Holds, &c. Nos. 2-3. Nos (after) 2-3.

Engine Room 4-2 $\frac{1}{4}$ tunnel 1-2 $\frac{1}{4}$.

of Bilge Injections

1

sizes 4 $\frac{3}{4}$

Connected to condenser, or to circulating pump

yes.

Is a separate Donkey Suction fitted in Engine room & size 1-3"

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.

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

yes.

Are they Valves or Cocks

both.

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

both.

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.

at pipes are carried through the bunkers

none.

How are they protected

—

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

yes.

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

yes.

the Screw Shaft Tunnel watertight

yes.

Is it fitted with a watertight door

yes.

worked from

Main deck.

MLERS, &c.—(Letter for record

S)

Manufacturers of Steel

al Heating Surface of Boilers

2715 $\frac{1}{2}$

Is Forced Draft fitted

no

No. and Description of Boilers

2. S.E. Multitubular.

orking Pressure

199 lbs.

Tested by hydraulic pressure to

300 lbs.

Date of test

20-12-20

No. of Certificate

—

each boiler be worked separately

yes.

Area of fire grate in each boiler

36.1

No. and Description of Safety Valves to

boiler 2 Direct spring

allest distance between boilers

or uptakes and bunkers or woodwork

12"

Mean dia. of boilers

14.0"

Length

141"

Material of shell plates

steel

ickness

1.02

Range of tensile strength

28.5-32

Are the shell plates welded or flanged

flanged

Descrip. of riveting: cir. seams

ends

DR. 11.8

11.8

15.74

Material of shell plates

steel

seams

Q.R.

Diameter of rivet holes in long. seams

1.15

Pitch of rivets

13-33

Lap of plates or width of butt straps

24.4

24.4

centages of strength of longitudinal joint

97.2

Working pressure of shell by rules

210 lbs.

Size of manhole in shell

11.8 x 15.74

Material of shell plates

steel

11.8

15.74

of compensating ring

30 x 33 x 1.02

No. and Description of Furnaces in each boiler

2

Corrugated

Material

steel

Outside diameter

38.5

38.5

th of plain part

top

bottom

Thickness of plates

5.55

Description of longitudinal joint

welded.

No. of strengthening rings

none

Working pressure of furnace by the rules

229 lbs.

Combustion chamber plates: Material

steel

Thickness: Sides

1.29

Back

1.29

Top

1.29

Bottom

1.866

h of stays to ditto: Sides

4.28 x 7.28

Back

7.28 x 7.28

Top

7.28 x 7

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

255 lbs.

255 lbs.

aterial of stays

steel

Area at smallest part

1.4

Area supported by each stay

7.28 x 7.28

Working pressure by rules

208 lbs.

End plates in steam space:

Material

steel

Thickness

1.885

Pitch of stays

14.17 x 15.74

How are stays secured

DR. 11.8

11.8

15.74

at smallest part

5.4

Area supported by each stay

2.22

IS A DONKEY BOILER FITTED? *No.*

If so is a report now forwarded? *-*

SPARE GEAR. State the articles supplied:— *Two top & 2 bottom end bolts & nuts. 2 main bearing bolts & nuts. set of coupling bolts. set of bilge & feed pump valves. check valves. & sets of piston rings. bolts. nuts & various sizes of iron. & other details of spares.*

The foregoing is a correct description,

Manufacturer.

Dates of Survey *Dec 1. 6. 10. 15. 20. 22.*
During progress of work in shops --
During erection on board vessel --
Total No. of visits *6*

Is the approved plan of main boiler forwarded herewith *No.*

Dates of Examination of principal parts—Cylinders Slides Covers Pistons Rods
Connecting rods Crank shaft Thrust shaft Tunnel shafts Screw shaft Propeller
Stern tube Steam pipes tested Engine and boiler seatings Engines holding down bolts
Completion of pumping arrangements Boilers fixed Engines tried under steam
Completion of fitting sea connections *22. 12. 20.* Stern tube — — — Screw shaft and propeller — — —
Main boiler safety valves adjusted *22. 12. 20.* Thickness of adjusting washers *PB - $P\frac{19}{64}$ S - $\frac{11}{16}$. SB - $P\frac{5}{16}$ S. $\frac{5}{16}$.*
Material of Crank shaft Identification Mark on Do. Material of Thrust shaft Identification Mark on Do.
Material of Tunnel shafts Identification Marks on Do. Material of Screw shafts Identification Marks on Do.
Material of Steam Pipes *Steel.* Test pressure *600 lbs.*
Is an installation fitted for burning oil fuel *No.* Is the flash point of the oil to be used over 150°F. *✓*
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.)

In accordance with London letter of 10. 12. 1920, this machinery has been opened up throughout, the scantlings of the boilers found to be in accordance with the submitted plan, and all found to be in good order and safe working condition — See Liverpool Report herewith.

In my opinion this vessel's machinery is eligible for classification & to have records Club 12. 20. 12. 20.

Certificate (if required) to be sent to

The amount of Entry Fee ... £ : : When applied for
Special ... £ : :
Donkey Boiler Fee ... £ : : When received.
Travelling Expenses (if any) £ : : 19

Committee's Minute

Assigned

See report attached

A. J. Barnett.
Engineer Surveyor to Lloyd's Register of Shipping.

FRI. 30 JUN. 1922
TUES. 15 DEC 1925

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Lloyd's Register
Foundation