

Rpt. 4.

REPORT ON MACHINERY

No. 14382

Received at London Office

MON. AUG. 19 1920

Date of writing Report

19

When handed in at Local Office

19

Port of

HAMBURG

No. in Survey held at
Reg. Book.

Date, First Survey

Last Survey

19

on the

S.S. "MARIE REPPEN"

No. 345

(Number of Visits)

Master

Built at

Rostock

By whom built

Friedrich Naumann

Tons

When built

Engines made at

Rostock

By whom made

Friedrich Naumann

when made

Boilers made at

Rostock

By whom made

Friedrich Naumann

when made

Registered Horse Power

Owners

Port belonging to

Nom. Horse Power as per Section 28

452

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

yes

ENGINES, &c.—Description of Engines

Triple Expansion

No. of Cylinders

3

No. of Cranks

3

Dia. of Cylinders

25" 4 1/4"

Length of Stroke

47 1/2"

Revs. per minute

70

Dia. of Screw shaft

as per rule 14 5/8"

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

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

42 1/2"

Dia. of Tunnel shaft

as per rule 13 7/32"

Dia. of Crank shaft journals

as per rule 13 7/32"

Dia. of Crank pin

10 5/8"

Size of Crank webs

8 1/2" x 2 1/4"

Dia. of thrust shaft under

collars

Dia. of screw

17 1/2"

Pitch of Screw

17 1/2"

No. of Blades

4

State whether moveable

yes

Total surface

82.6 sq ft

No. of Feed pumps

2

Diameter of ditto

4 3/4"

Stroke

23 1/2"

Can one be overhauled while the other is at work

yes

No. of Bilge pumps

2

Diameter of ditto

4 3/4"

Stroke

23 1/2"

Can one be overhauled while the other is at work

yes

No. of Donkey Engines

4

Sizes of Pumps

7 1/2 x 5 1/2"

7 1/2 x 7 1/2 x 8"

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

In Engine Room

6-3" Engine room smoke hold

In Holds, &c. 6-3" 4 IN FORWARD BILGES.

No. of Bilge Injections

1

sizes

7 1/2"

Connected to condenser, or to circulating pump

yes

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

no - never

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

yes

Are they Valves or Cocks

Valves and Cocks

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

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

-

of Stern Tube

-

Screw shaft and Propeller

-

Is the Screw Shaft Tunnel watertight

yes

Is it fitted with a watertight door

yes

worked from

Cylinder platform

-

OILERS, &c.—(Letter for record

S)

Manufacturers of Steel

Total Heating Surface of Boilers

6393 sq ft

Is Forced Draft fitted

yes

No. and Description of Boilers

3 Single end multibubblers

Working Pressure

200 lb.

Tested by hydraulic pressure to

400 lb.

Date of test

10.19/4.

No. of Certificate

2434.

Can each boiler be worked separately

yes

Area of fire grate in each boiler

150 sq ft

No. and Description of Safety Valves to

each boiler

2 Spring loaded

Area of each valve

9.84 sq in.

Pressure to which they are adjusted

250 lb.

Smallest distance between boilers or uptakes and bunkers or woodwork

16"

Mean dia. of boilers

105"

Length

144"

Material of shell plates

Steel

Thickness

1 1/2"

Range of tensile strength

28-32 tons

Are the shell plates welded or flanged

-

Descrip. of riveting: cir. seams

lap, double r.

ong. seams

all steps, girders, etc.

Diameter of rivet holes in long. seams

1 1/4"

Pitch of rivets

13.45"

Lap of plates or width of butt straps

27.5 x 1.22"

Per centages of strength of longitudinal joint

rivets 101.9%

plate 90.2%

Working pressure of shell by rules

202.75 lb.

Size of manhole in shell

11.8 x 15.7"

Size of compensating ring

27.6 x 31.5 x 1.22"

No. and Description of Furnaces in each boiler

3 horizontal

Material

Steel

Outside diameter

39.4"

length of plain part

top 5.1"

Thickness of plates

crown 1.55"

Description of longitudinal joint

welded

No. of strengthening rings

none

Working pressure of furnace by the rules

258 lb.

Combustion chamber plates: Material

Steel

Thickness: Sides

.63"

Back

.60"

Top

.65"

Bottom

.905"

Pitch of stays to ditto: Sides

7.5 x 7.5"

Back

7.5 x 7.5"

Top

7.5 x 7.5"

If stays are fitted with nuts or riveted heads

yes

Working pressure by rules

215 lb.

Material of stays

Steel

Diameter at smallest part

1.38"

Area supported by each stay

20.57 sq in.

Working pressure by rules

244 lb.

End plates in steam space:

-

Material

Steel

Thickness

1.02"

Pitch of stays

4.5 x 4.5"

How are stays secured

by nuts

Working pressure by rules

207 lb.

Material of stays

Steel

Diameter at smallest part

1.68"

Area supported by each stay

27.07 sq in.

Working pressure by rule

216 lb.

Material of Front plates at bottom

Steel

Thickness

1"

Material of Lower buck plate

Steel

Thickness

.605"

Greatest pitch of stays

2.15"

Working pressure of plate by rules

214 lb.

Diameter of tubes

3"

Pitch of tubes

4.25"

Material of tube plates

Steel

Thickness: Front

1"

Back

.845"

Mean pitch of stays

8.5"

Pitch across wide water spaces

14.1"

Working pressures by rules

202.25 lb.

Girders to Chamber tops: Material

Steel

Depth and

thickness of girder at centre

5.65 x 1.49"

Length as per rule

30.7"

Distance apart

7.5"

Working pressure by rules

222 lb.

Superheater or Steam chest; how connected to boiler

-

Can the superheater be shut off and the boiler worked

separately

-

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

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

-

-

-

-

-

-

-

-

-

-

006248-006257-0112

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR.

State the articles supplied:—

Two each top and bottom end connecting end bolts nuts, two main bearing bolts nuts, one set of Coupling bolts nuts, one set each feed and bilge pump valves, iron of various sizes, a quantity of assorted bolts, nuts etc, one set each piston ring, for each engine. also list enclosed.

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops - - }
{ During erection on board vessel - - - }
Total No. of visits

Is the approved plan of main boiler forwarded herewith

“ “ “ donkey “ “ “

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			
Main boiler safety valves adjusted	Thickness of adjusting washers				
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		Test pressure			

Is an installation fitted for burning oil fuel

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

If so, state name of vessel

General Remarks

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

The engines and boilers of this vessel have not been built under Special Survey, but they have now been opened out & examined and the results compared with plans and first entry report supplied, and approved by the Committee. The results were found to be as stated on the report & plans and in accordance with the Rules of the Society (see Secretary's letter of 21.8.20.M.)

The machinery of this vessel is now in good & efficient condition, eligible in my opinion to be classed with the notation of LMC 10.20 without the X, subject to the safety valves being adjusted, and the engines tried under full working conditions. It was stated that this will be done before the vessel proceeds to sea. The vessel is at present laid up.

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

Committee's Minute

Assigned

J. G. Mackintosh
Friedrich W. H.

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

FRI. OCT. 22 1920

Lb. 6 10.20

F.D.



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