

## REPORT ON MACHINERY

No. 39835

WED. APR 14 1920

Received at London Office

Date of writing Report

12<sup>th</sup> April 1920

When handed in at Local Office

12<sup>th</sup> April

1920 Port of

Glasgow

No. in Survey held at  
Reg. Book.

Glasgow

Date, First Survey 20. 8. 19.

Last Survey 9<sup>th</sup> April 1920

on the

S.S. "Dalmatier"

Master Selme

Built at

Hickmich

By whom built

Lloyd Royal Belge no 14

When built

1920.

Engines made at

Glasgow

By whom made

McKie &amp; Bayler no 943

when made 1920

Boilers made at

Paisley

By whom made

A. F. Craig no. 658/9

when made 1920

Registered Horse Power

Owners The Lloyd Royal Belge Anonymous.

Port belonging to Antwerp

Nom. Horse Power as per Section 28

99

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

No

ENGINES, &amp;c.—Description of Engines

Triple Expansion

No. of Cylinders

3

No. of Cranks

3

Dia. of Cylinders

15-25-40

Length of Stroke

27

Revs. per minute

95

Dia. of Screw shaft

as per rule

9.87

Material of screw shaft

Steel

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

No liner

Is the after end of the liner made water tight

in the 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

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

7.52

Dia. of Crank shaft journals

as per rule

7.59

Dia. of Crank pin

8"

Size of Crank webs

15 x 5 1/2

Dia. of thrust shaft under

collars

8"

Dia. of screw

12-6"

Pitch of Screw

9-5"

No. of Blades

4

State whether moveable

No

Total surface

50 sq ft.

No. of Feed pumps

2

Diameter of ditto

2 3/8

Stroke

13 1/2

Can one be overhauled while the other is at work

Yes

No. of Bilge pumps

2

Diameter of ditto

2 3/8

Stroke

13 1/2

Can one be overhauled while the other is at work

Yes

No. of Donkey Engines

1

Sizes of Pumps

6 1/2 x 6"

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

In Engine Room

3-2 1/2"

In Holds, &amp;c.

Fore Hold. 2-2 1/2"

After Hold 2-2 1/2"

Tunnel well

1-2 1/2"

No. of Bilge Injections

1

sizes

4 1/2"

Connected to condenser, or to circulating pump

Yes

Is a separate Donkey Suction fitted in Engine room &amp; size

Yes 2 1/2"

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

Yes

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

Is the Screw Shaft Tunnel watertight

Yes

Is it fitted with a watertight door

Yes

worked from

Top platform

BOILERS, &amp;c.—(Letter for record

Manufacturers of Steel

Total Heating Surface of Boilers

1630 sq ft.

Is Forced Draft fitted

No

No. and Description of Boilers

Two single ended multitubular.

Working Pressure

185

Tested by hydraulic pressure to

Date of test

No. of Certificate

15085

Can each boiler be worked separately

Yes

Area of fire grate in each boiler

24 sq ft.

No. and Description of Safety Valves to

each boiler

Two double spring

Area of each valve

34.5 sq in

Pressure to which they are adjusted

190

Are they fitted with easing gear

Yes

Smallest distance between boilers or uptakes and bunkers or woodwork

18"

Mean dia. of boilers

Length

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

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

Are they fitted with nuts or riveted heads

Working pressure by rules

Material of stays

Area 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

Area at smallest part

Area supported by each stay

Working pressure by rules

Material of Front plates at bottom

Thickness

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

Steam dome: description of joint to shell

% of strength of joint

Diameter

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet holes

Pitch of rivets

Working pressure of shell by rules

Crown plates

Thickness

How stayed

SUPERHEATER. Type

Schmidt

Date of Approval of Plan

5<sup>th</sup> July 1920.

Tested by Hydraulic Pressure to

555 lbs

Date of Test.

19/3/20

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Yes

Diameter of Safety Valve

1"

Pressure to which each is adjusted

190

Is Easing Gear fitted

No

W655 - 0173



✓

*Manufacturer.*

*Is the approved plan of main boiler forwarded herewith*

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 Yes If so, state name of vessel

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

The machinery has been built under special survey. The workmanship and materials are sound & good.

The condenser (an independent part of the engine) was damaged during fitting on board & has now been replaced. A new condenser has been put in hand and will be fitted on board either at Glasgow or on way at the first convenient opportunity. These engines & boilers have been fitted on board in a satisfactory manner, tried under working conditions & are eligible, in our opinion, to be classed with record  $\frac{1}{2}$  L.M.C. 4, subject to new main condenser being fitted at first convenient opportunity.

THE RECORD + L.M.C. 4.20

Subject to a new Condenser being WGL fitted at the first convenient opportunity. 21/4/20

The amount of Entry Fee	...	£	1	:	0	:	When applied for, <u>13/4</u> 19 <u>20</u> .  When received, <u>23/4</u> 19 <u>20</u> .
Special	...	£	14	:	17	:	
Donkey Boiler Fee	...	£		:		:	
Travelling Expenses (if any)	£			:		:	

Committee's Minute GLASGOW 13 APR 1920

Assigned + LMC 420  
subject to 14.4.20

*Edw M Negro, Jr, Sillie, J. D. Boyle*  
Engineer Surveyors to Lloyd's Register of Shipping.

Lloyd's Register  
Foundation