

REPORT ON MACHINERY.

No. 33872.

Received at London Office

Date of writing Report

19

When handed in at Local Office

18. 4.

19

Port of

Glasgow

WED. APR. 22. 1914

No. in Survey held at
Reg. Book.

Glasgow

Date, First Survey

3. 4. 14

Last Survey

16. 4. 1914

116 In on the

J. I. "Saint Quentin"

(Number of Visits

38)

Master R. Luthelara

Built at

Port Glasgow

By whom built

W. Hamilton & Co.

Tons

Gross

5043

Net

3191

When built

1914

Engines made at

Glasgow

By whom made

David Rowan & Co.

when made

1914

Boilers made at

do

By whom made

do

when made

1914

Registered Horse Power

Owners Rankin Gilmore & Co.

2^d Port belonging to

Liverpool

Nom. Horse Power as per Section 28

458

Is Refrigerating Machinery fitted for cargo purposes

Yes

Is Electric Light fitted

Yes

ENGINES, &c.—Description of Engines

Triple Expansion

No. of Cylinders

3

No. of Cranks

3

Dia. of Cylinders

27. 44. 73

Length of Stroke

48

Revs. per minute

72

Dia. of Screw shaft

as per rule 1.4. 8.75

Material of

Iron

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

No

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

Yes

If two

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

Length of stern bush

5. 0

Dia. of Tunnel shaft

as per rule 1.3. 32.5

Dia. of Crank shaft journals

as per rule 1.3. 9.9

Dia. of Crank pin

14. 2

Size of Crank webs

9

Dia. of thrust shaft under

collars

14. 2

Dia. of screw

18. 0

Pitch of Screw

18. 6

No. of Blades

4

State whether moveable

No

Total surface

100

No. of Feed pumps

2

Diameter of ditto

4

Stroke

24

Can one be overhauled while the other is at work

Yes

No. of Bilge pumps

2

Diameter of ditto

4. 2

Stroke

24

Can one be overhauled while the other is at work

Yes

No. of Donkey Engines

3

Sizes of Pumps

9. 12 x 12, 8. 6 x 6, 6. 4 x 6

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

In Engine Room

4 — 3. 2

In Holds, &c.

2 — 3. 2

each hold

No. of Bilge Injections

1

sizes

6

Connected to condenser, or to circulating pump

Is a separate Donkey Suction fitted in Engine room & size

Yes 3. 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

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

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

For suction

How are they protected

Wood covering

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

7

of Stern Tube

7

Screw shaft and Propeller 19/2/14, 10/4/14

Is the Screw Shaft Tunnel watertight

Yes

Is it fitted with a watertight door

Yes

worked from Top grating

BOILERS, &c.—(Letter for record (21))

Manufacturers of Steel

William Beardmore & Co. Ltd

Total Heating Surface of Boilers

7860

Is Forced Draft fitted

No

No. and Description of Boilers

Three Single Ended

Working Pressure

180 lb

Tested by hydraulic pressure to

360 lb

Date of test

3/11/13

No. of Certificate

12392

Can each boiler be worked separately

Yes

Area of fire grate in each boiler

60.5

No. and Description of Safety Valves to

each boiler

Cockburn double

Area of each valve

3. 9

Pressure to which they are adjusted

185

Are they fitted with easing gear

Yes

Smallest distance between boilers or uptakes and bunkers or woodwork

abt. 2 ft

Mean dia. of boilers

15. 6

Length

11. 6

Material of shell plates

slut

Thickness

1/4

Range of tensile strength

28632

Are the shell plates welded or flanged

No

Descrip. of riveting: cir. seams

D. R. L.

long. seams

D. B. S.

Diameter of rivet holes in long. seams

1 5/16

Pitch of rivets

9

Lap of plates or width of butt straps

19 1/2

Per centages of strength of longitudinal joint

rivets 8. 2. 25

plate 8. 5. 41

Working pressure of shell by rules

180 lb

Size of manhole in shell

16 x 12

Size of compensating ring

Flanged

No. and Description of Furnaces in each boiler

3 Dighton

Material

slut

Outside diameter

4. 0 1/2

Length of plain part

top

bottom

Thickness of plates

crown 3/16

bottom 3/16

Description of longitudinal joint

weld

No. of strengthening rings

Working pressure of furnace by the rules

182

Combustion chamber plates: Material

slut

Thickness: Sides

2 1/32

Back

2 1/32

Top

2 1/32

Bottom

3/16

Pitch of stays to ditto: Sides

8 3/4 x 9

Back

8 7/16 x 9 1/16

Top

8 x 9 3/4

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

180

Material of stays

iron

Diameter at smallest part

2. 07

Area supported by each stay

8. 2

Working pressure by rules

192

End plates in steam space:

Material

slut

Thickness

17/16

Pitch of stays

22 x 23

How are stays secured

D. nuts

Working pressure by rules

180

Material of stays

slut

Diameter at smallest part

9. 62

Area supported by each stay

4. 33

Working pressure by rules

190

Material of Front plates at bottom

slut

Thickness

7/8

Greatest pitch of stays

13

Working pressure of plate by rules

189

Diameter of tubes

3 1/4

Pitch of tubes

4 1/2 x 4 3/8

Material of tube plates

slut

Thickness: Front

7/8

Back

13/16

Mean pitch of stays

11 1/8

Pitch across wide water spaces

13 1/2

Working pressures by rules

180

Girders to Chamber tops: Material

slut

Depth and

thickness of girder at centre

8 3/4 x 7 x 2

Length as per rule

32 1/2

Distance apart

9 3/4

Number and pitch of stays in each

3 at 8

Working pressure by rules

180

Superheater or Steam chest; how connected to boiler

none

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

holes

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

If stiffened with rings

VERTICAL DONKEY BOILER—

Manufacturers of Steel

No.	Description	None	
Made at	By whom made	When made	Where fixed
Working pressure	tested by hydraulic pressure to	Date of test	No. of Certificate
Valves	No. of Safety Valves	Area of each	Pressure to which they are adjusted
If fitted with easing 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
Working pressure of shell by rules	Thickness of shell crown plates	Radius of do.	No. of stays to do.
Diameter of furnace Top	Bottom	Length of furnace	Thickness of furnace plates
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:— Two top end bolts, 2 bottom end bolts, 2 main bearing bolts, set of coupling bolts— all with nuts, assorted bolts, iron etc; also tail shaft, propeller, pair crank pin bushes, set air & circulating pump valves, etc.

The foregoing is a correct description,

for David Rowan & Co. Manufacturers.

Dates of Survey while building: During progress of work in shops: 1913. Apr 5 June 2 Aug 1.5.23. Sept 11.23. Oct 1.8.17.22.28. Nov 2.6.12.14.24.28. Dec 8.10.15.29. During erection on board vessel: 1914. Jan 15.22.30. Feb 5.12.19.23. Mar 2.5.18.27. Apr 2.10.13.15.16. Total No. of visits: 38.

Is the approved plan of main boiler forwarded herewith Yes ☒ " " " donkey " " None ☒

Dates of Examination of principal parts—Cylinders 12/11/13 Slides 22/11/14 Covers 22/11/14 Pistons 22/11/14 Rods 3/11/13 Connecting rods 3/11/13 Crank shaft 3/11/13 Thrust shaft 3/11/13 Tunnel shafts 10/12/13 Screw shaft 13/12/13 Propeller 15/12/13 Stern tube 15/12/13 Steam pipes tested 29/12/13 etc Engine and boiler seatings 23/2/14 Engines holding down bolts 2/4/14 Completion of pumping arrangements 10/4/14 Boilers fixed 2/4/14 Engines tried under steam 16.4.14 Main boiler safety valves adjusted 15.4.14 Thickness of adjusting washers P 11/32 S 11/32 Material of Crank shaft steel Identification Mark on Do. H.G.S. Material of Thrust shaft steel Identification Mark on Do. H.G.S. Material of Tunnel shafts steel Identification Marks on Do. H.G.S. Material of Screw shafts Iron Identification Marks on Do. H.G.S. Material of Steam Pipes steel Test pressure 540 lb

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

The engines & boilers of this vessel have been constructed under Special Survey & are of good materials & workmanship. They have been securely fitted on board & satisfactorily tried under steam.

This vessel is in our opinion eligible to have notation $\mathcal{L} \cdot \mathcal{M} \cdot \mathcal{C} \cdot \mathcal{H} \cdot 14$ (in red) in the Register Book.

It is submitted that this vessel is eligible for THE RECORD. + LMC 4.14.

JWD. 23/4/14

The amount of Entry Fee .. £ 3 : 0 : When applied for, Special .. £ 42 : 18 : 17-4-14. Donkey Boiler Fee .. £ : : When received, Travelling Expenses (if any) £ : : 21.4.14

H Gardner-Smith & W Muelken Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute GLASGOW 21 APR. 1914

Assigned + L.M.C. 4.14.



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