

REPORT ON MACHINERY.

No. 84592

Date of writing Report 23 AUG 1921

When handed in at Local Office 23 AUG 1921

Port of *Spanish* LondonNo. in Survey held at
Reg. Book.*Great Yarmouth*
S. S. "Glen Mary"

Date, First Survey

Oct 8th 1920

Last Survey

Aug 18th

1921

(Number of Visits)

18

Tons

Gross

Net

Master

Built at

Great Yarmouth

By whom built

Messrs. G. & H. Ltd.

When built

1921

Engines made at

Great Yarmouth

By whom made

Messrs. G. & H. Ltd.

when made

1921

Boilers made at

Stockton

By whom made

Messrs. Riley Bros.

when made

1921

Registered Horse Power

Owners

Messrs. Wilson Bros. Bobbin & Co. Ltd.

Port belonging to

Liverpool

Nom. Horse Power as per Section 28

83

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

No

ENGINES, &c.—Description of Engines

Triple expansion

No. of Cylinders

No. of Cranks

Dia. of Cylinders

13", 21" and 35"

Length of Stroke

24"

Revs. per minute

110

Dia. of Screw shaft

7 1/2"

Material of screw shaft

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

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

Yes

Length of stern bush

2'-9 1/2"

Dia. of Tunnel shaft

as per rule 6.5

Dia. of Crank shaft journals

as fitted 6 3/8"

Dia. of Crank pin

6 3/8"

Size of Crank webs

5" x 13 1/2"

Dia. of thrust shaft under

collars

6 3/8"

Dia. of screw

9'-2"

Pitch of Screw

11 1/2"

No. of Blades

4

State whether moveable

No

Total surface

13 1/2 sq ft

No. of Feed pumps

one

Diameter of ditto

2 1/2"

Stroke

12"

Can one be overhauled while the other is at work

Yes

No. of Bilge pumps

one

Diameter of ditto

2 1/2"

Stroke

12"

Can one be overhauled while the other is at work

Yes

No. of Donkey Engines

one

Sizes of Pumps

6 1/2" x 4" x 6"

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

In Engine Room

Two 2" dia.

In Holds, &c.

Hold. Three 2" dia. & one 1 1/2"

No. of Bilge Injections

one

sizes

4"

Connected to condenser, or to circulating pump

cu. ft.

Is a separate Donkey Suction fitted in Engine room & size

Yes 2" dia.

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

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

Bilge suction.

How are they protected

Steel plates.

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

BOILERS, &c.—(Letter for record

B.

Manufacturers of Steel

Total Heating Surface of Boilers

1540 sq ft

Is Forced Draft fitted

No

No. and Description of Boilers

One. Single ended.

Working Pressure

180 lb.

Tested by hydraulic pressure to

390 lb.

Date of test

29. 4. 21

No. of Certificate

6224

Can each boiler be worked separately

Yes

Area of fire grate in each boiler

46 1/2 sq ft

No. and Description of Safety Valves to

each boiler

2. Spring loaded

Area of each valve

7.06 sq in

Pressure to which they are adjusted

180 lb.

Are they fitted with easing gear

Yes

Smallest distance between boilers or uptakes and bunkers or woodwork

About 5 ft

Mean dia. of boilers

11 1/2"

Length

11 1/2'

Material of shell plates

Thickness

3/16"

Range of tensile strength

45,000 lb.

Are the shell plates welded or flanged

Welded

Descrip. of riveting: cir. seams

long. seams

Yes

Diameter of rivet holes in long. seams

1 1/8"

Pitch of rivets

2 1/2"

Lap of plates or width of butt straps

Per centages of strength of longitudinal joint

85%

Working pressure of shell by rules

1120 lb.

Size of manhole in shell

Size of compensating ring

12"

No. and Description of Furnaces in each boiler

1

Material

Steel

Outside diameter

Length of plain part

11 1/2'

Thickness of plates

3/16"

Description of longitudinal joint

Butt

No. of strengthening rings

Working pressure of furnace by the rules

180 lb.

Combustion chamber plates: Material

Steel

Thickness: Sides

3/16"

Back

3/16"

Top

3/16"

Bottom

Pitch of stays to ditto: Sides

12"

Back

12"

If stays are fitted with nuts or riveted heads

Yes

Working pressure by rules

Material of stays

Steel

Area at smallest part

1.5 sq in

Area supported by each stay

1.5 sq in

Working pressure by rules

180 lb.

End plates in steam space:

Material

Steel

Thickness

3/16"

Pitch of stays

12"

How are stays secured

Welded

Working pressure by rules

180 lb.

Material of stays

Area at smallest part

1.5 sq in

Area supported by each stay

1.5 sq in

Working pressure by rules

180 lb.

Material of Front plates at bottom

Thickness

3/16"

Material of lower back plate

Steel

Thickness

3/16"

Greatest pitch of stays

12"

Working pressure of plate by rules

Diameter of tubes

2"

Pitch of tubes

12"

Material of tube plates

Steel

Thickness: Front

3/16"

Back

3/16"

Mean pitch of stays

Pitch across wide water spaces

12"

Working pressures by rules

180 lb.

Girders to Chamber tops: Material

Steel

Depth and

thickness of girder at centre

1/2"

Length as per rule

12"

Distance apart

12"

Number and pitch of stays in each

Working pressure by rules

180 lb.

Steam dome: description of joint to shell

Welded

% of strength of joint

Diameter

1 1/2"

Thickness of shell plates

3/16"

Material

Steel

Description of longitudinal joint

Butt

Diam. of rivet holes

Pitch of rivets

2 1/2"

Working pressure of shell by rules

1120 lb.

Crown plates

3/16"

Thickness

3/16"

How stayed

SUPERHEATER. Type

Water tube

Date of Approval of Plan

1921

Tested by Hydraulic Pressure to

Date of Test

IS A DONKEY BOILER FITTED? *No.*

If so, is a report now forwarded? ☒

SPARE GEAR. State the articles supplied:—

2. connecting rod top end bolts & nuts

2 " " " " " "

2 Main bearing bolts

1 set coupling bolts

1 set gun + hinge for valves.

A quantity of assorted bolts & nuts from various sizes.

The foregoing is a correct description,

DRABTREE & CO. LTD

J. A. Chamberlain

Manufacturer.

Dates of Survey while building { During progress of work in shops - - } 1920: Oct 8.26 Nov 4.18.29 Dec 7.16 1921: Jan 5 Feb 10 Apl 14.28
{ During erection on board vessel - - } May 11.25 June 7.24.29 Aug 17.18
Total No. of visits 18

Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts—Cylinders *8-10-20* Slides *4-11-20* Covers *8-10-20* Pistons *16-12-20* Rods *26-10-20*
Connecting rods *6-1-21* Crank shaft Thrust shaft *18-11-20* Tunnel shafts *7-12-20* Screw shaft *18-11-20* Propeller *14-4-21*
Stern tube *5-1-21* Steam pipes tested *At Hull* Engine and boiler seatings *25-5-21* Engines holding down bolts *7-6-21*
Completion of pumping arrangements *18-8-21* Boilers fired *25-5-21* Engines tried under steam *18-8-21*
Completion of fitting sea connections *28-4-21* Stern tube *28-4-21* Screw shaft and propeller *28-4-21*
Main boiler safety valves adjusted *18-8-21* Thickness of adjusting washers *Put 4 1/2" Steel 4 1/2"*
Material of Crank shaft *Steel* Identification Mark on Do. *5787 E.E.B.* Material of Thrust shaft *Steel* Identification Mark on Do. *164 A.E.F.*
Material of Tunnel shafts *✓* Identification Marks on Do. *✓* Material of Screw shaft *Steel* Identification Marks on Do. *166 A.E.F.*
Material of Steam Pipes *Copper* 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.

Constructed under Survey. The materials tested, workmanship good, and together with boiler examined whilst being installed in vessel, the boiler safety valves adjusted to 183 lbs. & with Engines tried under working conditions & found satisfactory. & is now eligible in our opinion for the record of + L.M.C. 8-21. in Register Book.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 8.21. CL.

Recd 24/8/21

APR

The amount of Entry Fee £ : : When applied for, 23 AUG 1921
Donkey Boiler Fee £ : : When received, 16.8 1921
Travelling Expenses (if any) £ 7 : 7 : 31/8/21

Committee's Minute

Assigned

+ L.M.C. 8.21

MACHINERY CERTIFICATE
WRITTEN

A.E. Farmer & P. Pa
Engineer Surveyor to Lloyd's Register of Shipping.



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Lloyd's Register
Foundation