

REPORT ON MACHINERY.

No. 27997
SAT. DEC. 19 1920

Date of writing Report

19

When handed in at Local Office

17 DEC 1920

Port of

Received at London Office

Sunderland

No. in Survey held at
Reg. Book.

Sunderland

Date, First Survey

13 May 20

Last Survey

17 Dec 17 1920

(Number of Visits)

36

on the new steel S/S "STONEWALL".

Tons

Gross 5074

Net 3150

Master

W. Zollic

Built at

Sunderland

By whom built

Barham & Sons Ltd (S/N 253)

When built

1920

Engines made at

Sunderland

By whom made

J. Dickinson & Sons Ltd (N 837)

when made

1920

Boilers made at

Sunderland

By whom made

J. Dickinson & Sons Ltd (N 837)

when made

1920

Registered Horse Power

Owners

Garland Steamship Corporation

Port belonging to

New York

Nom. Horse Power as per Section 28

476

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

27½ - 45 - 75

Length of Stroke

48

Revs. per minute

68

Dia. of Screw shaft

as per rule 14.87

Material of screw shaft

as fitted 15½

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

yes

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 5'-3"

Dia. of Tunnel shaft

as per rule 13.505

as fitted 13½

Dia. of Crank shaft journals

as per rule 14.18

as fitted 14½

Dia. of Crank pin

14½

Size of Crank web

9½ x 2.2

Dia. of thrust shaft under

collars 14½

Dia. of screw

17.9

Pitch of Screw

16.9

No. of Blades

4

State whether moveable

no

Total surface

990 ft

No. of Feed pumps

2

Diameter of ditto

7"

Stroke

24"

Can one be overhauled while the other is at work

yes

(Weirs) steam cylinder 9½"

No. of Bilge pumps

2

Diameter of ditto

5"

Stroke

24"

Can one be overhauled while the other is at work

yes

No. of Donkey Engines

2

Sizes of Pumps

7½ & 4½ x 10

9 & 10½ x 10

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

In Engine Room

4 @ 3½"

In Holds, &c.

N° 1 hold - 2 @ 3½"

N° 2 hold - 2 @ 3½"

N° 3 hold - 2 @ 3½"

N° 4 hold - 1 @ 3½"

No. of Bilge Injections

1

sizes

7"

Connected to condenser, or to circulating pump

b.p.

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

none

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

forward hold suction

How are they protected

under limber boards

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

stop platform

BOILERS, &c.—(Letter for record)

S

Manufacturers of Steel

John Spencer & Sons Ltd

Total Heating Surface of Boilers

8055 sq ft

Is Forced Draft fitted

no

No. and Description of Boilers

three single ended marine

P&S C

Working Pressure

180

Tested by hydraulic pressure to

320

Date of test

2.9.20. 10.20

No. of Certificate

3714 3724

Can each boiler be worked separately

yes

Area of fire grate in each boiler

68 sq ft

No. and Description of Safety Valves

each boiler

two direct spring

Area of each valve

8.29 sq"

Pressure to which they are adjusted

185

Are they fitted with easing gears

yes

Smallest distance between boilers or uptakes and bunkers or woodwork

8'-0"

Ext. dia. of boilers

16'-1½"

Length

11'-10½"

Material of shell plates

steel

Thickness

1 9/32"

Range of tensile strength

28-32 tons

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

DR

long. seams

DRS. TR

Diameter of rivet holes in long. seams

1 3/8"

Pitch of rivets

9 5/16"

Lap of plates or width of butt straps

1-8 1/8"

Per centages of strength of longitudinal joint

rivets 92.6

plate 85.2

Working pressure of shell by rules

181

Size of manhole in shell

16" x 12"

Size of compensating ring

flanged

No. and Description of Furnaces in each boiler

3 Deighton

Material

steel

Outside diameter

4'2"

Length of plain part

top

bottom

Thickness of plates

crown 1 1/8"

bottom 1 3/32"

Description of longitudinal joint

welded

No. of strengthening rings

yes

Working pressure of furnace by the rules

189

Combustion chamber plates: Material

steel

Thickness: Sides

2 3/32"

Back

1 1/8"

Top

2 3/32"

Bottom

2 3/32"

Pitch of stays to ditto: Sides

11 1/8" x 7 1/2"

Back

10 1/8" x 8 3/4"

Top

10" x 9"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

182

Material of stays

steel

Area at smallest part

2.03 sq"

Area supported by each stay

900"

Working pressure by rules

203

End plates in steam space:

Material

steel

Thickness

1 3/16"

Pitch of stays

20 3/8" x 18"

How are stays secured

BN & W

Working pressure by rules

180

Material of stays

steel

Area at smallest part

6.49 sq"

Area supported by each stay

366

Working pressure by rules

184

Material of Front plates at bottom

steel

Thickness

1"

Material of Lower back plate

steel

Thickness

7/8"

Material of Lower back plate

steel

Thickness

2 3/32"

Greatest pitch of stays

13 x 10 1/8"

Working pressure of plate by rules

181

Mean pitch of stays

11 1/4"

Diameter of tubes

3 1/4"

Pitch of tubes

4 1/2" x 4 1/2"

Material of tube plates

steel

Thickness: Front

7/8"

Back

1"

Mean pitch of stays

11 1/4"

Girders to Chamber tops: Material

steel

Depth and

Pitch across wide water spaces

14 1/4" (5.5 ft)

Working pressures by rules

248

Girders to Chamber tops: Material

steel

Depth and

thickness of girder at centre

20 1/8" x 8 3/8"

Length as per rule

37 15/32"

Distance apart

9"

Number and pitch of stays in each

3 @ 10"

Working pressure by rules

181

Steam dome: description of joint to shell

none

% of strength of joint

Diameter

IS A DONKEY BOILER FITTED?

yes

If so, is a report now forwarded?

✓

SPARE GEAR.

State the articles supplied:—Two connecting rod top and bottom end bolts and two main bearing bolts, one set of coupling bolts, one set of feed and lift pump valves, iron and bolts of various sizes, one screw shaft and one propeller.

The foregoing is a correct description,

John Dickinson & Sons, Limited.

Director.

Manufacturer.

Dates of Survey while building
During progress of work in shops -- 1920. May 13 Jun 11, 14, 29, Jul 5, 7, 8, 14, 15, 26 Aug 3, 11, 18, 19, 26 Sep 2, 16, 17, 21, 22, Oct 5, 6, 15, 26
During erection on board vessel -- Nov. 29, 22, 24 Dec. 1, 2, 6, 8, 10, 14, 17
Total No. of visits 36.

Is the approved plan of main boiler forwarded herewith

yes

" " " donkey " " "

yes

Dates of Examination of principal parts—Cylinders 26-7-20 Slides 17-9-20 Covers 17-9-20 Pistons 26-8-20 Rods 26-8-20

Connecting rods 15-7-20 Crank shaft 16-9-20 Thrust shaft 16-9-20 Tunnel shafts 16-9-20 Screw shaft 16-9-20 Propeller 21-9-20

Stern tube 21-9-20 Steam pipes tested 14-7-20 Engine and boiler seatings 24-11-20 Engines holding down bolts 8-12-20

Completion of pumping arrangements 17-12-20 Boilers fixed 8-12-20 Engines tried under steam 14-12-20

Completion of fitting sea connections 24-11-20 Stern tube 24-11-20 Screw shaft and propeller 1-12-20

Main boiler safety valves adjusted 14-12-20 Thickness of adjusting washers 14-12-20

Material of Crank shaft J. Steel Identification Mark on Do. LLOYDS 19-12-20 L.C.D.

Material of Tunnel shafts J. Steel Identification Marks on Do. LLOYDS 19-12-20 L.C.D.

Material of Steam Pipes lapwelded with iron & solid brass copper Test pressure 540 lbs & 400 lbs respectively

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 yes If so, state name of vessel s/s "Suevian" (Sld Rpt. N° 279)

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

The materials and workmanship are good
The machinery has been constructed under special survey and is eligible in my opinion for classification and the record + LMC 12, 20

It is submitted that
this vessel is eligible for
THE RECORD. + LMC. 12, 20.

Roll

J.M.

20/12/20

Certificate (if required) to be sent to

The amount of Entry Fee ... £ 3 : - :
Special ... £ 43 : 16 :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : :
When applied for, 15.12.1920
When received, 17 DEC 1920

Committee's Minute

Assigned

TUE. 21 DEC 1920

+ L.M.C. 12, 20

S.D. Davis

Engineer Surveyor to Lloyd's Register of Shipping.

CERTIFICATE WRITTEN.



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