

REPORT ON MACHINERY.

No. 39852.

WED. APR 21 1920

Received at London Office

Date of writing Report

19

When handed in at Local Office

16.4.

1920. Port of

Glasgow.

in Survey held at

TRON.

Date, First Survey

4.2.19.

Last Survey

12 April

1920

Book.

on the

S.S. HERON

(Number of Visits

79

Master G. G. Prantner built at

TRON.

By whom built

Aulsebrook Co. (No. 367)

Tons

Gross

Net

When built

1920.

Lines made at

TRON

By whom made

Aulsebrook Co. (No. 102)

when made

1920.

Boilers made at

GLASGOW

By whom made

Dunsmuir & Jackson (No. 119)

when made

1920.

Registered Horse Power

292

Owners General Steam Navigation Co. Ltd.

Port belonging to

London.

Horse Power as per Section 28

291.7

Is Refrigerating Machinery fitted for cargo purposes

Yes

Is Electric Light fitted

Yes

DETAILS, &c.—Description of Engines

Triple Expansion Surf. Cond.

No. of Cylinders

3.

No. of Cranks

3.

No. of Cylinders

23" 3 1/2" 60"

Length of Stroke

39"

Revs. per minute

95

Dia. of Screw shaft

as per rule 12.15

Material of screw shaft

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

Is 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

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

Length of stern bush

5'-8 1/8"

Dia. of Tunnel shaft

as per rule 11.15

Dia. of Crank shaft journals

as per rule 11.7

Dia. of Crank pin

11 1/4"

Size of Crank webs

2 1/4 x 7 1/2"

Dia. of thrust shaft under

as fitted 12 1/4"

Dia. of screw

14'-8"

Pitch of Screw

15'-9"

No. of Blades

4

State whether moveable

No

Total surface

63.5 sq. ft.

No. of Feed pumps

2

Diameter of ditto

4"

Stroke

20"

Can one be overhauled while the other is at work

Yes

No. of Bilge pumps

2

Diameter of ditto

4"

Stroke

20"

Can one be overhauled while the other is at work

Yes

No. of Donkey Engines

9

Sizes of Pumps

8x6x8 1/2"

1-6x8x8 1/2"

1-4x6x8

1-4x6x8

1-4x6x8

1-4x6x8

connected to both Bilge and Donkey pumps

Engine Room

4-2 1/2"

1-2 1/2"

1-2 1/2"

1-4x4x5

1-6x8 1/2"

Centrif. Circ.

1-4x4x5

1-4x4x5

1-4x4x5

1-4x4x5

1-4x4x5

1-4x4x5

1-4x4x5

1-4x4x5

Bilge Injections

1. sizes

7"

Connected to condenser, or to circulating pump

Yes

Is a separate Donkey Suction fitted in Engine room & size

Yes

6x10 1/2"

1-3"

Are 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

How are the pipes carried through the bunkers

Hold Bilge Suctions

How are they protected

Wood ceiling

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

E.R. Upper deck level

MANUFACTURERS, &c.—(Letter for record

S.)

Manufacturers of Steel

D. Colville & Sons, J. Spencer & Sons.

Heating Surface of Boilers

5154 sq. ft.

Is Forced Draft fitted

No

No. and Description of Boiler

Two single ended marine

Working Pressure

180 lbs.

Tested by hydraulic pressure to

360 lbs.

Date of test

30.1.20

30.1.20

No. of Certificate

15063

15064

Can each boiler be worked separately

Yes

Area of fire grate in each boiler

83 1/2 sq. ft.

No. and Description of Safety Valves to

boiler

Two

Pressure to which they are adjusted

185 lbs.

Are they fitted with easing gear

Yes

Least distance between

uptakes and bunkers

6'-6"

Mean dia. of boilers

14'-0 1/2"

Length

11'-6"

Material of shell plates

Steel

Range of tensile strength

Are the shell plates welded or flanged

Descrip. of riveting: cir. seams

Are the shell plates

welded or flanged

Descrip. of riveting: cir. seams

Diameter of rivet holes in long. seams

Pitch of rivets

Lap of plates or width of butt straps

Stages of strength of longitudinal joint

Working pressure of shell by rules

Size of manhole in shell

Material

Outside diameter

No. and Description of Furnaces in each boiler

Material

Outside diameter

No. of strengthening rings

Thickness of plates

Description of longitudinal joint

No. of strengthening rings

Working pressure of furnace by the rules

Combustion chamber plates: Material

Thickness: Sides

Back

Top

Bottom

If stays are fitted with nuts or riveted heads

Working pressure by rules

Working pressure by rules

End plates in steam space:

Material of stays

Area at smallest part

Area supported by each stay

Working pressure by rules

End plates in steam space:

Thickness

Pitch of stays

How are stays secured

Working pressure by rules

Material of stays

Area supported by each stay

Working pressure by rules

Material of Front plates at bottom

Working pressure of plate by rules

Material of Lower back plate

Thickness

Greatest pitch of stays

Working pressure of plate by rules

Pitch of tubes

Material of tube plates

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet holes

Working pressure of shell by rules

Crown plates

Thickness

How stayed

Type

Date of Approval of Plan

Tested by Hydraulic Pressure to

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

Is Easing Gear fitted

Superheater

3 1/4" Dia.

Pressure to which each is adjusted

Is Easing Gear fitted

Working pressure of shell by rules

Crown plates

Thickness

How stayed

Type

Date of Approval of Plan

Tested by Hydraulic Pressure to

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

Is Easing Gear fitted

Working pressure of furnace by the rules

Combustion chamber plates: Material

Thickness: Sides

Back

Top

Bottom

If stays are fitted with nuts or riveted heads

Working pressure by rules

Working pressure by rules

End plates in steam space:

Material of stays

Area at smallest part

Area supported by each stay

Working pressure by rules

