

REPORT ON MACHINERY.

No. 44066

Received at London Office

22 OCT 1924

Date of writing Report 11th Oct. 1924 When handed in at Local Office11th Oct. 1924 Port of

Glasgow

No. in Survey held at
Reg. Book.

Glasgow

Date, First Survey 5.2.23

Last Survey

9.10.1924

on the

S.S. "KONINI"

(Number of Visits 46)

Gross 1420
Net 833

Master

Built at

Grangemouth

By whom built

Grangemouth Dockyard Co. Ltd. (N^o 407)

When built 1924

Engines made at

Glasgow

By whom made

D. Rowan & Co. Ltd. (N^o 775)

when made 1924

Boilers made at

Glasgow

By whom made

D. Rowan & Co. Ltd. (N^o 775)

when made 1924

Registered Horse Power

Owners Union Steamship Company of New Zealand Ltd.

Port belonging to Dunedin N.Z.

Nom. Horse Power as per Section 28

173

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

yes

ENGINES, &c.—Description of Engines

Triple Expansion

No. of Cylinders

No. of Cranks

Dia. of Cylinders

18" 30" 49"

Length of Stroke

33"

Revs. per minute

80

Dia. of Screw shaft

10.46"

Material of

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

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

charged

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

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Length of stern bush

3'-6"

Dia. of Tunnel shaft

as per rule 9.02"

Dia. of Crank shaft journals

as per rule 9.47"

Dia. of Crank pin

9.34"

Size of Crank webs

21" x 6"

Dia. of thrust shaft under

collars

Dia. of screw

13'-4"

Pitch of Screw

14'-0"

No. of Blades

4

State whether movable

no

Total surface

60.8 sq

No. of Feed pumps

2

Diameter of ditto

2 3/4"

Stroke

18"

Can one be overhauled while the other is at work

yes

No. of Bilge pumps

2

Diameter of ditto

3"

Stroke

18"

Can one be overhauled while the other is at work

yes

No. of Donkey Engines

3

Sizes of Pumps

BALLAST GENERAL HARBOUR

6" x 8" 6" x 4" 5 1/2" x 3 1/2"

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

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In Engine Room

3 @ 2 1/4"

2 @ 2 1/4"

TO DRY TANK

In Holds, &c.

FORE HOLD 2 @ 2 3/4"

AFTER HOLD 2 @ 2 3/4"

1 @

2 3/4"

TO TUNNEL WELL

No. of Bilge Injections

One size 4"

Connected to condenser, or to circulating pump

Pump

Is a separate Donkey Suction fitted in Engine room & size

1 @ 3 1/2"

-

-

-

-

-

Are all the bilge suction pipes fitted with roses

yes

Are the pipes in Engine room always accessible

yes

Are the sluices on Engine room bulkheads always accessible

none

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Are all connections with the sea direct on the skin of the ship

yes

Are they Valves or Cocks

both

-

-

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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

both

-

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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

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What pipes are carried through the bunkers

none

How are they protected

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Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

yes

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Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges

yes

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Is the Screw Shaft Tunnel watertight

yes

Is it fitted with a watertight door

yes

worked from

Bridge Deck

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OILERS, &c.—(Letter for record

S)

Manufacturers of Steel

Port Talbot Steel Co. Ltd., Scottish Iron & Steel Co. Ltd.

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Total Heating Surface of Boilers

3000

Is Forced Draft fitted

no

No. and Description of Boilers

Two Single Ended

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Working Pressure

180 lbs./sq.

Tested by hydraulic pressure to

320 lbs./sq.

Date of test

20.4.23

No. of Certificate

16238

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Can each boiler be worked separately

yes

Area of fire grate in each boiler

48 sq

No. and Description of Safety Valves to

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Each boiler

Two Spring loaded

Area of each valve

4.9 sq

Pressure to which they are adjusted

185 lbs./sq.

Are they fitted with easing gear

yes

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Smallest distance between boilers

15"

Int. diam. of boilers

12'-9 3/8"

Length

10'-6"

Material of shell plates

Steel

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Thickness

1 1/8"

Range of tensile strength

28/32 tons/sq.

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

D.R.L.R.

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Long. seams

T.R.D.B.S.

Diameter of rivet holes in long. seams

1 1/8"

Pitch of rivets

7 7/8"

Top of plates or width of butt straps

16 3/4"

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Per centages of strength of longitudinal joint

rivets 90.8

plate 86.7

Working pressure of shell by rules

181 lbs./sq.

Size of manhole in shell

19 1/2" x 15 1/2"

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Size of compensating ring

33" x 29" x 1 1/2"

Description of Furnaces in each boiler

3 Corrugated

Material

Steel

Outside diameter

2'-11 29/32"

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Length of plain part

top 29"

Thickness of plates

bottom 29"

Description of longitudinal joint

weld

No. of strengthening rings

none

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Working pressure of furnace by the rules

180 lbs./sq.

Combustion chamber plates: Material

Steel

Thickness: Sides

1 1/8"

Back

2 1/8"

Top

1 1/8"

Bottom

Pitch of stays to ditto: Sides

10 1/4" x 5 1/4"

Back

11 1/8" x 7 5/8"

Top

11 1/8" x 7 5/8"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

180 lbs./sq.

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Material of stays

Steel

Area supported by each stay

84.8 sq

Working pressure by rules

180 lbs./sq.

End plates in steam space:

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