

REPORT ON MACHINERY.

No. 9122

Received at London Office

FRI. 30 MAY 1924

Date of writing Report

19

When handed in at Local Office

29

5

Port of

Belfast

No. in Survey held at
Re. Book.

Belfast

Date, First Survey 1923. Nov. 20.

Last Survey May 27th 1924

(Number of Visits 63)

on the **New Steel S.S. Atlantida**

Master

Built at

Belfast

By whom built

Workman Clark & Co Ltd

Gross 4190.94

Net 2446.49

When built 1924

Engines made at

Belfast

By whom made

Workman Clark & Co Ltd

55412

when made

1924

Boilers made at

Belfast

By whom made

Workman Clark & Co Ltd

when made

1924

Registered Horse Power

Owners

Standard Fruit & Steamship Coy

Port belonging to

Belfast

Nom. Horse Power as per Section 28

669

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

yes

ENGINES, &c.—Description of Engines

Four Cylinders Triple Expansion

No. of Cylinders

No. of Cranks

Dia. of Cylinders 24" x 44" x 54" x 54"

Length of Stroke 45"

Revs. per minute 103

Dia. of Screw shaft

as per rule 15.32

Material of screw shaft

Is the screw shaft fitted with a continuous liner the whole length of the stern tube

no lines (oil gland)

Is the after end of the liner made water tight

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'-6"

Dia. of Tunnel shaft

as per rule 13.4

as fitted 13.4

Dia. of Crank shaft journals

as per rule 14.07

as fitted 14.07

Dia. of Crank pin 14.7"

Size of Crank webs 2-4 x 9.7"

Dia. of thrust shaft under

collar 14.7"

Dia. of screw 16'-0"

Pitch of Screw 16'-3"

No. of Blades 4

State whether moveable

no

Total surface

90 sq ft

No. of Feed pumps 2

Diameter of ditto 9"

Stroke 24"

Can one be overhauled while the other is at work

yes

No. of Bilge pumps 2

Diameter of ditto 4.75"

Stroke 24"

Can one be overhauled while the other is at work

yes

No. of Donkey Engines

See list

Sizes of Pumps

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

In Engine Room 2 @ 3.75"

4 @ 2.75"

1 @ 4.75" Special

In Holds, &c. 2 @ 3.75"

2 @ 2.75"

No. of Bilge Injections 1

sizes 11"

Connected to condenser, or to circulating pump

yes

Is a separate Donkey Suction fitted in Engine room & size

yes 4.75"

Are all the bilge suction pipes fitted with roses

yes

Are the roses in Engine room 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

below

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

none

How are they protected

yes

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

Top Platform

BOILERS, &c.—(Letter for record

5)

Manufacturers of Steel W Beardmore & Co Ltd

Total Heating Surface of Boilers 10548 sq ft

Is Forced Draft fitted

yes

No. and Description of Boilers

4 Single Ended

Working Pressure 200 lbs

Tested by hydraulic pressure to

350 lbs

Date of test

8-4-24

No. of Certificate

834

Can each boiler be worked separately

yes

Area of fire grate in each boiler

oil fired

No. and Description of Safety Valves to

each boiler

Two high lift

Area of each valve

Smallest distance between boiler or uptakes and bunkers or woodwork

1'-4"

INSIDE

Mean dia. of boilers

16'-0"

Length

11'-9"

Material of shell plates

Steel

Thickness 1 1/16"

Range of tensile strength

28 to 32 tons

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

D.R.

long. seams

T.R.D.B.S.

Diameter of rivet holes in long. seams

1 1/16"

Pitch of rivets

10 1/8"

Lap of plates or width of butt straps

1'-9 1/2"

Per centages of strength of longitudinal joint

85.4

Working pressure of shell by rules

Size of compensating ring

2-10 3/4" x 2-11 3/8"

No. and Description of Furnaces in each boiler

4

Corrugated Material

Steel

Outside diameter

3'-8 1/4"

Length of plain part

Working pressure of furnace by the rules

209 lbs

Combustion chamber plates: Material

Steel

Thickness: Sides

2 1/2"

Back

4 1/2"

Top

Pitch of stays to ditto: Sides

8" x 9"

Back

9 1/2" x 4"

Top

1" x 9"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

Material of stays

Steel

Area at smallest part

14 1/2 x 2.36

Area supported by each stay

45 sq ft

Working pressure by rules

203 lbs

End plates in steam space:

Material

Steel

Thickness

1 1/2"

Pitch of stays

20 x 16 1/2"

How are stays secured

D.N. Wash

Working pressure by rules

Area at smallest part

6.096 sq ft

Area supported by each stay

330 sq ft

Working pressure by rules

203.6 lbs

Material of Front plates at bottom

Steel

Thickness

Material of Lower back plate

Steel

Thickness

1/8"

Greatest pitch of stays

13" x 9 1/2"

Working pressure of plate by rules

241 lbs

Diameter of tubes

Pitch of tubes

3 1/4" x 3 1/4"

Material of tube plates

Steel

Thickness: Front

1"

Back

1 1/16"

Mean pitch of stays

Pitch across wide water spaces

13 1/2" x 1 1/4"

Working pressures by rules

254 lbs

Girders to Chamber tops: Material

Steel

Depth and

thickness of girder at centre

2 @ 9 1/2" x 3 1/4"

Length as per rule

2'-10 1/16"

Distance apart

9"

Number and pitch of stays in each

3 @ 8"

Working pressure by rules

206 lbs

Steam dome: description of joint to shell

none

% of strength of joint

Diameter

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet holes

Pitch of rivets

Working pressure of shell by rules

Crown plates

Thickness

How stayed

SUPERHEATER. Type

none

Date of Approval of Plan

Tested by Hydraulic Pressure to

Date of Test

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

Diameter of Safety Valve

Pressure to which each is adjusted

Is Easing Gear fitted

