

Rpt. 4.

REPORT ON MACHINERY

No. 8926

Received at London Office FRI. APR. 30. 1915

Date of writing Report 22.4.15

When handed in at Local Office Apr. 29 10 S. Port of Middlesbrough

No. in Survey held at Stockton-on-Tees

Date, First Survey November 18. 1913 Last Survey April 17. 1915

Reg. Book.

on the Steel screw steamer Ellawood

(Number of Violets 39)

S.S. N° 500

Tons Gross Net When built 1915

Master

Built at Stockton

By whom built Messrs Rofner & Sons

Engines made at Stockton

By whom made Messrs Blair & Co Ltd (N° 1815)

when made 1915

Boilers made at Stockton

By whom made Messrs Blair & Co Ltd

when made 1915

Registered Horse Power

Owners

Port belonging to

Nom. Horse Power as per Section 28

301

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

no

ENGINES, &c.—Description of Engines

Tri-compound

No. of Cylinders 3

No. of Cranks 3

Dia. of Cylinders 24-40-65

Length of Stroke 42

Revs. per minute 62

Dia. of Screw shaft as per rule 13.58

Material of 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

in the propeller boss

yes

If the liner is in more than one length are the joints burned in on

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

light fil

If two

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

yes

Length of stern bush 5'-1"

Dia. of Tunnel shaft as per rule 11.84

as fitted 12.5

Dia. of Crank shaft journals as per rule 12.48

as fitted 13

Dia. of Crank pin 13.5

Size of Crank webs 24x8.5

Dia. of thrust shaft under

collars 13.5

Dia. of screw 17'-0"

Pitch of Screw 16'-0"

No. of Blades 4

State whether moveable

no

Total surface 82 sq

ft

No. of Feed pumps 2

Diameter of ditto 3"

Stroke 30"

Can one be overhauled while the other is at work

yes

No. of Bilge pumps 2

Diameter of ditto 4.5"

Stroke 30"

Can one be overhauled while the other is at work

yes

No. of Donkey Engines 2

Sizes of Pumps

9x10"

Ballast

4x8"

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

In Engine Room

3 @ 3" + one @ 3.5" under boilers

In Holds, &c.

2 @ 3" in each hold; Tunnel well

one @ 2.5"

No. of Bilge Injections 1

size 7"

Connected to condenser or to circulating pump

yes

Is a separate Donkey Suction fitted in Engine room & size

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

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

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

What pipes are carried through the bunkers

suctions to forward holds

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

Dates of examination of completion of fitting of Sea Connections

28.2.15

of Stern Tube

23.2.15

Screw shaft and Propeller

4.3.15

Is the Screw Shaft Tunnel watertight

see hull repl

Is it fitted with a watertight door

yes

worked from top platform

BOILERS, &c.—(Letter for record (S))

Manufacturers of Steel

Messrs John Spencer & Sons

Total Heating Surface of Boilers

4690

Is Forced Draft fitted

no

No. and Description of Boilers

2 single ended

Working Pressure

180

Tested by hydraulic pressure to

360

Date of test

11.2.15

No. of Certificate

5464

Can each boiler be worked separately

yes

Area of fire grate in each boiler

61.3 sq

No. and Description of Safety Valves to

each boiler

2 direct spring

Area of each valve

7.07

Pressure to which they are adjusted

185 lb

Are they fitted with easing gear

Smallest distance between boilers or uptakes and bunkers or woodwork

2'-0"

External

Mean dia. of boilers

15'-9"

Length

10'-6"

Material of shell plates

Thickness

1.75"

Range of tensile strength

29.7-33

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams 2 R. lap

long. seams

2 B-3 Riv

Diameter of rivet holes in long. seams

1.5"

Pitch of rivets

8.5"

Lap of plates or width of butt straps

5 Rivets per pitch

rivets

93.0

Working pressure of shell by rules

187

Size of manhole in shell

16"x12"

Size of compensating ring

7.5"x1.5"

No. and Description of Furnaces in each boiler

3 Morrison

Material

steel

Outside diameter

46.75"

Length of plain part

top

bottom

Thickness of plates

crown

3.5"

Description of longitudinal joint

Welded

No. of strengthening rings

yes

Working pressure of furnace by the rules

188

Combustion chamber plates: Material

steel

Thickness: Sides

1.5"

Back

1.5"

Top

1.5"

Bottom

Pitch of stays to ditto: Sides

8.5"x10"

Back

9.5"x8.5"

Top

10.5"x8.5"

If stays are fitted with nuts or riveted heads

Material of stays

steel

Diameter at smallest part

1.99

Area supported by each stay

86.2

Working pressure by rules

208

End plates in steam space

Material

steel

Thickness

1.5"

Pitch of stays

21"x1.8"

How are stays secured

nuts + washers

Working pressure by rules

Material of Front plates at bottom

steel

Thickness

1.5"

Greatest pitch of stays

14.5"x8.5"

Working pressure of plate by rules

Diameter of tubes

3.5"

Pitch of tubes

4.5"x4.5"

Material of tube plates

steel

Thickness: Front

1.5"

Back

Pitch across wide water spaces

14.5"

Working pressures by rules

192

Girders to Chamber tops: Material

steel

Depth and

thickness of girder at centre

7.5"x1.5"

Length as per rule

26.5"

Distance apart

10.5"

Number and pitch of stays in each

2 @ 8.5"

Working pressure by rules

Superheater or Steam chest; how connected to boiler

none

Can the superheater be shut off and the boiler worked

separately

Diameter

Length

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

If stiffened with rings

Distance between rings

Working pressure by rules

End plates: Thickness

How stayed

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

yes

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

yes

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

yes

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

yes

Lloyd's Register
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