

REPORT ON MACHINERY.

No. 24531

Port of SunderlandReceived at London Office H.M.S. 2 AUG 1910No. in Survey held at SunderlandDate, first Survey March 19Last Survey July 14

1910

Reg. Book.

on the

1/2 "Oakmere"(Number of Visits 23)

Master

Built at S. land.

By whom built

S. land S.B. 6th Ltd.Tons } Gross 1251Net 744When built 1910

Engines made at

S. land.

By whom made

H. E. M. Eng Co. Ltd.when made 1910

Boilers made at

"

By whom made

"when made 1910

Registered Horse Power

Owners

Watson & Co. Ltd.

Port belonging to

Manchester

Nom. Horse Power as per Section 28

170

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

ENGINES, &c.—Description of Engines

Tri. C.P. 10No. of Cylinders 3No. of Cranks 3

Dia. of Cylinders

18 1/23151

Length of Stroke

36

Revs. per minute

40

Dia. of Screw shaft

as per rule

11 1/8

Material of

S

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

If two

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

Length of stern bush

3' 10"

Dia. of Tunnel shaft

as per rule

9 1/4

Dia. of Crank shaft journals

as per rule

9 1/4

Dia. of Crank pin

10 1/4

Size of Crank webs

15 1/2

Dia. of thrust shaft under

collars

10 1/4

No. of Feed pumps

2

Diameter of ditto

3"

Stroke

16 1/2

Can one be overhauled while the other is at work

yes

No. of Bilge pumps

2

Diameter of ditto

3 1/2

Stroke

16 1/2

Can one be overhauled while the other is at work

yes

No. of Donkey Engines

2

Sizes of Pumps

6 x 4 x 66 x 7 x 9

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

In Engine Room

three 2 1/2"

In Holds, &c.

two 2 1/2" in each.

No. of Bilge Injections

1

sizes

3 1/2

Connected to condenser, or to circulating pump

C.P.

Is a separate Donkey Suction fitted in Engine room & size

2 1/2"

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

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

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

none

How are they protected

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

21. 6. 10

of Stern Tube

21. 6. 10

Screw shaft and Propeller

21. 6. 10

Is the Screw Shaft Tunnel watertight

yes

Is it fitted with a watertight door

yes

worked from

top platform

OILERS, &c.—(Letter for record

S)

Manufacturers of Steel

J. Spencer & Sons Ltd.

Total Heating Surface of Boilers

2646

Is Forced Draft fitted

yes

No. and Description of Boilers

One S.E.

Working Pressure

180

Tested by hydraulic pressure to

360

Date of test

15. 6. 10

No. of Certificate

2838

Can each boiler be worked separately

yes

Area of fire grate in each boiler

50 1/4

No. and Description of Safety Valves to

each boiler

two Spring

Area of each valve

8 1/2

Pressure to which they are adjusted

185

Are they fitted with easing gear

yes

Smallest distance between boilers or uptakes and bunkers or woodwork

2 feet

Mean dia. of boilers

16 1/2

Length

10 9

Material of shell plates

S

Thickness

1 1/4

Range of tensile strength

28 1/2 - 32

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

d. & lap

long. seams

d. butts

Diameter of rivet holes in long. seams

1 3/4

Pitch of rivets

9 1/4

Lap of plates or width of butt straps

20 1/4

Per centages of strength of longitudinal joint

rivets

86.5

Working pressure of shell by rules

180

Size of manhole in shell

end. 16" x 12"

Size of compensating ring

flanged

No. and Description of Furnaces in each boiler

3High

Material

S

Outside diameter

3' 5 1/2"

Length of plain part

top

1 1/2

Thickness of plates

crown

1 1/2

Description of longitudinal joint

weld

No. of strengthening rings

yes

Working pressure of furnace by the rules

182

Combustion chamber plates: Material

S

Thickness: Sides

23

Back

25

Top

23

Bottom

8

Pitch of stays to ditto: Sides

11 3/8

Back

11 3/8

Top

9 x 8 1/4

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

180

Material of stays

S

Diameter at smallest part

2 1/4

Area supported by each stay

114 1/2

Working pressure by rules

191

End plates in steam space:

Material

S

Thickness

1 3/8

Pitch of stays

23 1/220 3/4

How are stays secured

at nuts

Working pressure by rules

182

Material of stays

S

Diameter

8 1/4

Area supported by each stay

487 1/2

Working pressure by rules

181

Material of Front plates at bottom

S

Thickness

13/16

Material of Lower back plate

S

Thickness

3/4

Greatest pitch of stays

14 1/2

Working pressure of plate by rules

187

Diameter of tubes

3 1/4

Pitch of tubes

4 1/24 5/8

Material of tube plates

S

Thickness: Front

3/4

Back

3/4

Mean pitch of stays

9 1/29 3/8

Pitch across wide water spaces

14 1/2

Working pressures by rules

192

Girders to Chamber tops: Material

S

Depth and

2 @ 8 1/4

thickness of girder at centre

7 1/41 5/8

Length as per rule

29.5

Distance apart

9"

Number and pitch of stays in each

2 @ 8 1/4

Working pressure by rules

184

Superheater or Steam chest; how connected to boiler

yes

Can the superheater be shut off and the boiler worked

separately

Diameter

10"

Length

10"

Thickness of shell plates

10"

Material

S

Description of longitudinal joint

2020

Diam. of rivet

10"

holes

Pitch of rivets

10"

Working pressure of shell by rules

