

Received at London Office

Date of writing Report

19

When handed in at Local Office

- 2 DEC 1921

Port of

SUNDERLAND.

No. in Survey held at
Reg. Book.

SUNDERLAND.

Date, First Survey 29th Oct 1920 Last Survey 29th Nov 1921

Number of Visits 19

on the

Screw Steamer S. N. A. 6

Tons Gross 2668

Net 1389

When built 1921

Master

Built at

Sunderland

By whom built

Osbourne Graham & Co. Ltd. (N° 244)

Engines made at

Sunderland

By whom made

Richardsons, Westgarth & Co. Ltd. (N° 2162)

When made

1921

Boilers made at

do

By whom made

do

do

when made

1921

Registered Horse Power

Owners

Soc. Nationale d'Affrètement

Port belonging to

Hause

Nom. Horse Power as per Section 28

317

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

yes

ENGINES, &c.—Description of Engines Triple expansion

No. of Cylinders

3

No. of Cranks

3

Dia. of Cylinders

23 $\frac{1}{2}$, 38, 64

Length of Stroke

42"

Revs. per minute

70

Dia. of Screw shaft

as per rule 12.98

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

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

Length of stern bush

4-5 $\frac{1}{2}$

Dia. of Tunnel shaft

as per rule 11.6

Dia. of Crank shaft journals

as per rule 12.2

Dia. of Crank pin

13"

Size of Crank webs

24 $\frac{1}{2}$ x 7 $\frac{3}{4}$

Dia. of thrust shaft under

collars

12 $\frac{1}{2}$

Dia. of screw

15-9

Pitch of Screw

16-6

No. of Blades

4

State whether moveable

no

Total surface

78 $\frac{1}{2}$

No. of Feed pumps

2

Diameter of ditto

8 $\frac{1}{2}$ x 6"

Stroke

18"

Can one be overhauled while the other is at work

yes

No. of Bilge pumps

2

Diameter of ditto

3 $\frac{1}{2}$ "

Stroke

27"

Can one be overhauled while the other is at work

yes

No. of Donkey Engines

3

Sizes of Pumps

7 x 5 x 8, 10 x 12 x 21

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

In Engine Room

3 @ 3", 1 @ 2 $\frac{1}{2}$ "

In Holds, &c.

Foreward hold, - 2 @ 3"

After hold, - 3 @ 3" Tunnel well, - 1 @ 3"

No. of Bilge Injections

1 sizes

4"

Connected to condenser, or to circulating pump

C.P.

Is a separate Donkey Suction fitted in Engine room & size

yes, 3 $\frac{1}{2}$ "

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

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

yes

What pipes are carried through the bunkers

Foreward hold suction

How are they protected

under wood casing

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

S)

Manufacturers of Steel

John Spencer Sons, Ltd.

2SB.

Total Heating Surface of Boilers

5264

Is Forced Draft fitted

no

No. and Description of Boilers

Two S.E. Marine

Working Pressure

180

Tested by hydraulic pressure to

322

Date of test

24-5-21

No. of Certificate

3765

Can each boiler be worked separately

yes

Area of fire grate in each boiler

71.5 $\frac{1}{2}$

No. and Description of Safety Valves to

each boiler

Two spring loaded

Area of each valve

8.29 $\frac{1}{2}$

Pressure to which they are adjusted

185

Are they fitted with easing gear

yes

Smallest distance between boilers or uptakes and bunkers or woodwork

18"

Mean dia. of boilers

16-0

Length

11-9

Material of shell plates

S

Thickness

1 $\frac{1}{4}$

Range of tensile strength

283 to 323 tons

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

D.R. lap

long. seams

L.R. D.B.S.

Diameter of rivet holes in long. seams

1 $\frac{9}{32}$

Pitch of rivets

8 $\frac{5}{8}$

Lap of plates or width of butt straps

18"

Per centages of strength of longitudinal joint

rivets 89

plate 85.15

Working pressure of shell by rules

180.3

Size of manhole in

end 16 x 12

Size of compensating ring

flanged

No. and Description of Furnaces in each boiler

Four, Susp. bulb

Material

S

Outside diameter

39 $\frac{1}{16}$

Length of plain part

top

bottom

Thickness of plates

crown 17

bottom 32

Description of longitudinal joint

weld

No. of strengthening rings

yes

Working pressure of furnace by the rules

210

Combustion chamber plates: Material

S

Thickness: Sides

1 $\frac{1}{16}$

Back 23

centre

Top 11

Bottom 13

Working pressure by rules

Pitch of stays to ditto:

Sides 9 $\frac{3}{4}$ x 9 $\frac{1}{4}$ Back 11 $\frac{1}{8}$ x 8 $\frac{5}{8}$ Top 9 $\frac{3}{4}$ x 9 $\frac{1}{4}$

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

190

End plates in steam space:

Material of stays

S

Area at smallest part

2.03 $\frac{1}{2}$

Area supported by each stay

95.95

Working pressure by rules

182.5

Material of stays

S

Material

S

Thickness

1 $\frac{1}{4}$

Pitch of stays

21 $\frac{3}{4}$ x 16

How are stays secured

D.N. & W.

Working pressure by rules

182.5

Material of stays

S

Area at smallest part

6.1 $\frac{1}{2}$

Area supported by each stay

348

Working pressure by rules

182.3

Material of Front plates at bottom

S

Thickness

25

Material of Lower back plate

S

Thickness

1 $\frac{1}{8}$

Greatest pitch of stays

14 $\frac{1}{4}$

Working pressure of plate by rules

180.4

Diameter of tubes

3 $\frac{1}{4}$

Pitch of tubes

4 $\frac{1}{4}$ x 4 $\frac{1}{2}$

Material of tube plates

S

Thickness: Front

25

Back 25

Mean pitch of stays

11

Pitch across wide water spaces

14

Working pressures by rules

198

Girders to Chamber tops: Material

S

Depth and

thickness of girder at centre

9 x 12

Length as per rule

2-8 $\frac{1}{2}$

Working pressure by rules

189.4

Steam dome: description of joint to shell

yes

% of strength of joint

yes

Diameter

yes

Thickness of shell plates

yes

Material

yes

Description of longitudinal joint

yes

Diam. of rivet holes

yes

Pitch of rivets

yes

Working pressure of shell by rules

yes

Crown plates

yes

Thickness

yes

How stayed

yes

SUPERHEATER. Type

IS A DONKEY BOILER FITTED? *no*

If so, is a report now forwarded? *—*

SPARE GEAR. State the articles supplied:— *Two connecting rod top and bottom end bolts and nuts, one set of coupling bolts, two holding down bolts, one set of feed and bilge pump valves iron and bolts of various sizes, one propeller, one bottom end bearing two eccentric rods and one eccentric strap.*

The foregoing is a correct description,
FOR RICHARDSON, WESTGARTH & CO., LTD.

Richard St. Russell

Manufacturer.

Dates of Survey while building { During progress of work in shops -- } 1920. Oct. 29. Nov. 12. 19. 25. Dec. 7. 21. 22. 23. 1921. Jan. 11. 13. 14. 27. Feb. 5. 10. 15. 17. 22. 23. 25. Mar. 11. 17. 19. 23.
{ During erection on board vessel -- } 31. Apr. 12. 25. 28. 29. May. 5. 6. 10. 13. 24. June 13. 15. 17. 21. 27. 29. 30. July. 7. 12. 13. 29. 31. Aug. 7. 19. Nov. 29.
Total No. of visits *49*

Is the approved plan of main boiler forwarded herewith *yes*

" " " donkey " " "

Dates of Examination of principal parts—Cylinders *12-4-21* Slides *12-4-21* Covers *12-4-21* Pistons *12-4-21* Rods *12-4-21*

Connecting rods *31-3-21* Crank shaft *16-2-21* Thrust shaft *12-11-20* Tunnel shafts *23-2-21* Screw shaft *25-4-21* Propeller *12-4-21*

Stern tube *13-6-21* Steam pipes tested *29-6-21*; *7-7-21* Engine and boiler seatings *16-6-21* Engines holding down bolts *12-7-21*

Completion of pumping arrangements *29-11-21* Boilers fixed *30-6-21* Engines tried under steam *9-8-21*

Completion of fitting sea connections *22-2-21* Stern tube *15-6-21* Screw shaft and propeller *16-6-21*

Main boiler safety valves adjusted *9-8-21* Thickness of adjusting washers Port boiler:—bolts $\frac{7}{16}$ " Stalk bolts:— $P\frac{13}{32}$ " $S\frac{3}{8}$ "

Material of Crank shaft *Steel* Identification Mark on Do. *6202 A.B.M.* Material of Thrust shaft *Steel* Identification Mark on Do. *555 E.W.R.*

Material of Tunnel shafts *Iron* Identification Marks on Do. *2428 E.W.R.* Material of Screw shafts *Iron* Identification Marks on Do. *2428 E.W.R.*

Material of Steam Pipes *Solid drawn copper* Test pressure *400 lbs. □*

Is an installation fitted for burning oil fuel *No* Is the flash point of the oil to be used over 150°F. *—*

Have the requirements of Section 49 of the Rules been complied with *—*

Is this machinery duplicate of a previous case *No* If so, state name of vessel *—*

General Remarks (State quality of workmanship, opinions as to class, &c.)

The Materials and Workmanship are good.

The Machinery has been built under Special Survey and is eligible in our opinion for classification and the record + LMC 12, 21

11. On last date of inspection

It is submitted that
this vessel is eligible for
THE RECORD. + LMC 11. 21. CL.

Ed. W. Hutton & L. C. Davis
5/12/21

The amount of Entry Fee ... £ *5* : When applied for,

Special ... £ *72* : " *22nd Nov 21*

Donkey Boiler Fee ... £ : When received,

Travelling Expenses (if any) £ : *5. 12. 21*

Committee's Minute *TUE 6 DEC. 1921*

Assigned *+ L.M.C. 11. 21*

C. L.

CERTIFICATE WRITTEN



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Foundation