

REPORT ON MACHINERY.

No. 27738

Date of writing Report

19

When handed in at Local Office

25 FEB 1920

Port of

Received at London Office

SUNDERLAND.

No. in Survey held at

SUNDERLAND.

Date, First Survey

21 Feb. 19

Last Survey

7 Feb. 10^h

1920

Reg. Book.

on the

S/S "WAR SIRDAR"

(Number of Visits 35)

Gross 5518

Net 3413

When built 1920

Master

Y. Hadley

Built at Sunderland

By whom built

Messrs. S. J. & Co. Ltd.

when made 1920

Engines made at Sunderland

By whom made

Messrs. J. Clark & Co. (1091)

when made 1920

Boilers made at Sunderland

By whom made

Messrs. J. Clark & Co. (1091)

Registered Horse Power

Owners

Anglo Mexican Petroleum Co

Port belonging to

London

Nom. Horse Power as per Section 28

517

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

Yes

ENGINES, &c.—Description of Engines

Triple

No. of Cylinders

3

No. of Cranks

3

Dia. of Cylinders

27, 44, 73

Length of Stroke

48

Revs. per minute

78

Dia. of Screw shaft

as per rule 14.69

Material of

2 inch

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

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

No

Length of stern bush

5-0 1/2"

Dia. of Tunnel shaft

as per rule 13.32

Dia. of Crank shaft journals

as per rule 14

Dia. of Crank pin

14 1/2

Size of Crank webs

9 x 22 1/2

Dia. of thrust shaft under

collars

as fitted 13 1/2

Dia. of screw

17-6

Pitch of Screw

16-6

No. of Blades

4

State whether moveable

No

Total surface

98 1/2

No. of Feed pumps

2

Diameter of ditto

4"

Stroke

24"

Can one be overhauled while the other is at work

Yes

No. of Bilge pumps

2

Diameter of ditto

4"

Stroke

24"

Can one be overhauled while the other is at work

Yes

No. of Donkey Engines

3

Sizes of Pumps

10 1/2 x 14 x 24, 9 1/2 x 7 x 18, 9 1/2 x 7 x 18

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

In Engine Room

4 @ 3 1/2"

in forward hold to forward pump room, one 3" in tunnel with

No. of Bilge Injections

1

sizes

13"

Connected to circulating pump

Yes

Is a separate Donkey Suction fitted in Engine room & size

Yes

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

None

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

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

No

Access by trunk

OILERS, &c.—(Letter for record

5)

Manufacturers of Steel

Spenner & Sons

Total Heating Surface of Boilers

7656 1/2

Is Forced Draft fitted

Yes

No. and Description of Boilers

Three single ended

Working Pressure

180 lbs

Tested by hydraulic pressure to

360 lbs

Date of test

10.10.19

No. of Certificate

3615

Can each boiler be worked separately

Yes

Area of fire grate in each boiler

63 1/2

No. and Description of Safety Valves to

each boiler

Two single ended

Area of each valve

9-6"

Pressure to which they are adjusted

180 lbs

Are they fitted with easing gear

Yes

Smallest distance between boilers or uptakes and bunkers or woodwork

14 1/2"

Mean dia. of boilers

15-6"

Length

11-7"

Material of shell plates

S

Thickness

1 1/4"

Range of tensile strength

28-32

Are the shell plates welded or flanged

No

Descrip. of riveting: cir. seams

lap 1/4"

long. seams

d. 1 1/2" riv.

Diameter of rivet holes in long. seams

1 1/2"

Pitch of rivets

9/8"

Top of plates or width of butt straps

1 1/2"

Per centages of strength of longitudinal joint

rivets

85-1

Working pressure of shell by rules

182

Size of manhole in shell

12 x 16

Size of compensating ring

Hanged

No. and Description of Furnaces in each boiler

3 Doughton

Material

S

Outside diameter

4-2 3/8"

Length of plain part

top

bottom

Thickness of plates

crown

3 1/2"

Description of longitudinal joint

welded

No. of strengthening rings

-

Working pressure of furnace by the rules

187

Combustion chamber plates: Material

S

Thickness: Sides

25/32"

Back

1/8"

Top

25/32"

Bottom

Pitch of stays to ditto: Sides

9 1/8" x 11 1/8"

Back

10 1/4" x 8 1/4"

Top

9 1/8" x 11 1/8"

If stays are fitted with nuts or riveted heads

None

Working pressure by rules

180

Material of stays

S

Area at smallest part

2-36"

Area supported by each stay

112"

Working pressure by rules

187

End plates in steam space:

Material

S

Thickness

1 1/2"

Pitch of stays

21 3/4" x 20 1/2"

How are stays secured

d. n. 1 1/2"

Working pressure by rules

181

Material of stays

S

Area at smallest part

8-29"

Area supported by each stay

432"

Working pressure by rules

186

Material of Front plates at bottom

S

Thickness

3/32"

Material of Lower back plate

S

Thickness

15/16"

Greatest pitch of stays

10 1/4"

Working pressure of plate by rules

219

Diameter of tubes

2 3/4"

Pitch of tubes

3 7/8" x 4"

Material of tube plates

S

Thickness: Front

3/32"

Back

3/4"

Mean pitch of stays

9 13/16"

Pitch across wide water spaces

13 1/2"

Working pressures by rules

181

Girders to Chamber tops: Material

S

Depth and

thickness of girder at centre

9 3/8" x 1 3/4"

Length as per rule

35"

Distance apart

9 15/16"

Number and pitch of stays in each

2, 11 1/2"

Working pressure by rules

182

Steam dome: description of joint to shell

-

% 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

IS A DONKEY BOILER FITTED?

NO

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied.

Two top end and two bottom end connecting rod bolts and nuts, two main bearing bolts on aft coupling bolts, on aft pin and ledge pump valves, assorted bolts and nuts, Iron of various sizes, one propeller

The foregoing is a correct description,
FOR GEORGE CLARK LIMITED.

1088 SPILL

Manufacturer.

Dates of Survey while building
During progress of work in shops - -
During erection on board vessel - - -
Total No. of visits

1919 Feb 21 Mar 10 17 Apr 27 May 9 26 Jun 3 4 12 18 Jul 2 15 16 22 30 Aug 6 14 21 25
26 Sep 1 11 29 Oct 2 9 23 Nov 28 Dec 10 12 19 22 Jan 5 28 Feb 10
(35)

Is the approved plan of main boiler forwarded herewith 410

" " " donkey " " "

Dates of Examination of principal parts—Cylinders 2.7.19 Slides 7.4.19 Covers 9.5.19 Pistons 18.6.19 Rods 26.8.19
Connecting rods 30.7.19 Crank shaft 16.7.19 Thrust shaft 22.7.19 Tunnel shafts 3.6.19 Screw shaft 22.12.19 Propeller 14.8.19
Stern tube 26.8.19 Steam pipes tested 23.10, 19.2.19 Engine and boiler seatings 28.11.19 Engines holding down bolts 19.12.19
Completion of pumping arrangements 19.12.19 Boilers fixed 19.12.19 Engines tried under steam 8.1.20
Completion of fitting sea connections 28.11.19 Stern tube 10.12.19 Screw shaft and propeller 8.1.20
Main boiler safety valves adjusted 8.1.20 Thickness of adjusting washers 15 1/2 17 3/8 5 3/8 1 1/2 5 3/8 5 3/8 1 1/2 5 3/8 5 3/8
Material of Crank shaft Steel Identification Mark on Do. 1091 GAH Material of Thrust shaft Steel Identification Mark on Do. 1091 GAH
Material of Tunnel shafts Steel Identification Marks on Do. 1091 GAH Material of Screw shafts Iron Identification Marks on Do. 1091 GAH
Material of Steam Pipes Iron Test pressure 520 lb sq

Is an installation fitted for burning oil fuel 410 Is the flash point of the oil to be used over 150°F. 410

Have the requirements of Section 49 of the Rules been complied with 410

Is this machinery duplicate of a previous case If so, state name of vessel

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

The machinery of this vessel has been built under special survey, the materials and workmanship are sound and good and under the vessel elipith in my opinion to have used of L.M.C.2.20, fitted for oil fuel 2.20 F.P. above 150°F.

It is submitted that
this vessel is eligible for
THE RECORD T.L.M.C.2.20 F.D.

FITTED FOR OIL FUEL 2.20 F.P. ABOVE 150°F.

27/2/20

W.D.

G.R.

The amount of Entry Fee ... £ : :
Special ... £ 146: 11 :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : :
When applied for, 17.2.19.20
When received, 25/3/20

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE MAR 2-19

Assigned - J. + L.M.C. 2.20 F.P. 150°F.
Fitted for Oil Fuel 2.20 F.P. above 150°F.

CERTIFICATE WRITTEN.



© 2021

Lloyd's Register
Foundation