

Rpt. 4.

## REPORT ON MACHINERY.

No. 23340

Date of writing Report 30 Oct 1923

1923

When handed in at Local Office

30/10/23

Port of

New York

Received at London Office

MON. 19 NOV. 1923

No. in Survey held at  
Reg. Book.

Newark N.J.

Date, First Survey

27 Sept

Last Survey

26 Oct 1923

37027 on the S/S ATLANTIC EX WEST CATANACE

(Number of Visits 8)

Master

Built at

San Pedro, Cal.

By whom built

South Western Shipbuilding Co.

Gross 5524

Net 3455

When built 1919

Engines made at

Los Angeles Cal.

By whom made

Llewellyn Iron Works

when made 1919

Boilers made at

Portland, Ore.

By whom made

Williamette Iron Works

when made 1919

Registered Horse Power

✓

Owners

Edgerton Parsons

Port belonging to

New York

Nom. Horse Power as per Section 28

552

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

Yes

## ENGINES, &amp;c.—Description of Engines

Triple expansion

No. of Cylinders

3

No. of Cranks

3

Dia. of Cylinders

24½" - 4½" - 72"

Length of Stroke

48"

Revs. per minute

88

Dia. of Screw shaft

as per rule 14½"

Material of

steel

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

Soldered

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

4'-10"

Dia. of Tunnel shaft

as per rule 13.25"

as fitted 13½"

Dia. of Crank shaft journals

as per rule 13.9"

as fitted 14"

Dia. of Crank pin

14 3/8"

Size of Crank webs

27x9½"

Dia. of thrust shaft under

collars

14"

Dia. of screw

17'-0"

Pitch of Screw

14'-6"

No. of Blades

4

State whether moveable

yes

Total surface

92.4 sq

No. of Feed pumps

independent 2

Diameter of ditto

12x9x24"

Stroke

12x8x12"

Can one be overhauled while the other is at work

yes

No. of Bilge pumps

2

Diameter of ditto

5"

Stroke

21"

Can one be overhauled while the other is at work

yes

No. of Donkey Engines

2

Sizes of Pumps

12x10x12"

BALANCE

12x8x12"

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

In Engine Room

5-3½"

In Holds, &amp;c.

2-3½" in each hold

No. of Bilge Injections

1 sizes 10"

Connected to condenser or to circulating pump

yes

Is a separate Donkey Suction fitted in Engine room &amp; size

yes 3½"

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

valves &amp; cocks

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

yes

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

oil fuel

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

Is the Screw Shaft Tunnel watertight

yes

Is it fitted with a watertight door

yes

worked from

upper deck

## BOILERS, &amp;c.—(Letter for record S.)

Manufacturers of Steel

Illinois Steel Co.

Total Heating Surface of Boilers

8112

Is Forced Draft fitted

yes

No. and Description of Boilers

3

Scotch type

3SB

Working Pressure

210 lbs

Tested by hydraulic pressure to

315 lbs

Date of test

27/9/23

No. of Certificate

Can each boiler be worked separately

yes

Area of fire grate in each boiler

oil fuel

No. and Description of Safety Valves to

each boiler

2 spring loaded

Area of each valve

9.62 sq

Pressure to which they are adjusted

210 lbs

Are they fitted with easing gear

yes

Smallest distance between boilers or uptakes and bunkers or woodwork

about 24"

Mean dia. of boilers

14'-9"

Length

11'-0"

Material of shell plates

steel

Thickness

1 9/16"

Range of tensile strength

60/70000 lbs

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

Double

long. seams

Telle. D.B.S.

Diameter of rivet holes in long. seams

1 9/16"

Pitch of rivets

10"

Lap of plates or width of butt straps

22 1/4"

Per centages of strength of longitudinal joint

rivets 95

plate 84.4

Working pressure of shell by rules

240

Size of manhole in shell

Size of compensating ring

✓

No. and Description of Furnaces in each boiler

3 Morrison

Material

steel

Outside diameter

3'-9 1/16"

Length of plain part

top 32"

bottom

Thickness of plates

crown 21"

bottom 32"

Description of longitudinal joint

welded

No. of strengthening rings

✓

Working pressure of furnace by the rules

235

Combustion chamber plates: Material

steel

Thickness: Sides

11/16"

Back

11/16"

Top

11/16"

Bottom

15/16"

Pitch of stays to ditto: Sides

7x8"

Back

7 1/4 x 7 3/4"

Top

7x8 3/16"

If stays are fitted with nuts or riveted heads

Other

Rivets

Working pressure by rules

215

Material of stays

Steel

Area at smallest part

1.75 sq

Area supported by each stay

56 sq

Working pressure by rules

245

End plates in steam space:

Material

steel

Thickness

1 1/4"

Pitch of stays

16 3/8 x 17 1/2"

How are stays secured

Double nuts

Working pressure by rules

245

Material of stays

steel

Area at smallest part

8.29 sq

Area supported by each stay

287 sq

Working pressure by rules

300

Material of Front plates at bottom

steel

Thickness

13/16"

Material of Lower back plate

steel

Thickness

13/16"

Greatest pitch of stays

13"x7"

Working pressure of plate by rules

310

Diameter of tubes

3"

Pitch of tubes

4 1/8 x 4"

Material of tube plates

steel

Thickness: Front

13/16"

Back

13/16"

Mean pitch of stays

12 3/8 x 8"

Pitch across wide water spaces

13"

Working pressures by rules

230

Girders to Chamber tops: Material

steel

Depth and

thickness of girder at centre

11"x1 1/2"

Length as per rule

2'-10"

Distance apart

8 3/16"

Number and pitch of stays in each

4-7"

Working pressure by rules

285

Steam dome: description of joint to shell

no dome

% 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



IS A DONKEY BOILER FITTED?

No.

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— One bottom end brass complete with bolts, one crosshead brass complete with bolts, 2 main bearing bolts + nuts, 2 sets shaft coupling bolts, spare valves for all pumps, assorted nuts bolts + iron. 2 propeller blades.

The foregoing is a correct description,

Manufacturer.

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

1913. April 22 Oct 13 9 11 25 26

Is the approved plan of main boiler forwarded herewith yes

" " " donkey " " "

Dates of Examination of principal parts—Cylinders 1 Oct 1913 Slides 1/10/23 Covers 1/10/23 Pistons 1/10/23 Rods 1/10/23

Connecting rods 1/10/23 Crank shaft 1/10/23 Thrust shaft 1/10/23 Tunnel shafts 1/10/23 Screw shaft 28/9/23 Propeller 28/9/23

Stern tube 28/9/23 Steam pipes tested ✓ Engine and boiler seatings 17/10/23 Engines holding down bolts 17/10/23

Completion of pumping arrangements ✓ Boilers fixed ✓ Engines tried under steam 25/10/23

Completion of fitting sea connections ✓ Stern tube ✓ Screw shaft and propeller ✓

Main boiler safety valves adjusted 25/10/23 Thickness of adjusting washers Lock nuts fitted

Material of Crank shaft Steel Identification Mark on Do. ✓ Material of Thrust shaft Steel Identification Mark on Do. ✓

Material of Tunnel shafts Steel Identification Marks on Do. ✓ Material of Screw shafts Steel Identification Marks on Do. ✓

Material of Steam Pipes Steel Test pressure ✓

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

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

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 machinery of this vessel was not built under Special Survey, but it has been thoroughly examined & found to be in accordance with the Rules, & the workmanship & material are good.

The machinery & boilers have been satisfactorily tried under steam & the safety valves adjusted, & they are now in good & safe working condition & eligible, in our opinion, to receive the notations L.M.C 10.23 (in red) FD + 'FITTED FOR OIL FUEL 10.23 F.P. ABOVE 150°F' subject to tail shaft being specially examined at joint of liners in two years time (i.e. 10.25)

The amount of Entry Fee ... £ Inclusive: } When applied for,  
Special ... £ fee : }  
Donkey Boiler Fee ... £ charged : }  
Travelling Expenses (if any) £ on hull report : } When received,  
19.

Committee's Minute New York NOV 7 1923

Assigned

L.M.C - 10.23  
T.S - 10.23. subject  
(dated 19/11/23)

John S. Heck. A.R.S. 1127  
Engineer Surveyor to Lloyd's Register of Shipping.



© 2021

Lloyd's Register  
Foundation