

REPORT ON MACHINERY.

No. 549

REC'D NEW YORK Jan. 23, 1918

Received at London Office

10 When handed in at Local Office

10 Port of NEW YORK N.Y.

held at SCHEMECTADY N.Y.

Date, First Survey

Last Survey Feb 26 1918

Steel Screw Steamer "WEST ARROW", Builders Jord No. 12

(Number of Visits)

Tons } Gross 5852
Net 4436

Building Built at Seattle

By whom built Kimber & Eddy Corporation

When built 1918

SCHEMECTADY N.Y.

By whom made GENERAL ELECTRIC CO.

when made 1918

Seattle

By whom made Commercial Boiler Works

when made

Power

Owners U.S. Shipping Board & Emergency Fleet Corp.

Port belonging to Seattle

at Full Power 2500

Is Refrigerating Machinery fitted for cargo purposes No

Is Electric Light fitted yes

GINES, &c. — Description of Engines GEARED TURBINE (TURBINE 12486)

GEAR 2585

No. of Turbines ONE

ft Journals, H.P. 8"

L.P. 4"

Diameter of Pinion Shaft 4"

H.S. PINION 7"

Distance between Centres of Bearings 14"

H.S. PINION 7.835"

" GEAR 57.666"

L.S. PINION 5 1/2"

Distance between Centres of Bearings 14"

L.S. PINION 5 1/2"

Diameter of Pitch Circle of Wheel 54 1/2"

L.S. PINION 10.75"

35" Diameter of Thrust Shaft under Collars

Diameter of Tunnel Shaft as per rule

Diameter of same as per rule

Diameter of Propeller

Pitch of Propeller

State whether Moveable

Total Surface

Diameter of Rotor Drum, H.P.

L.P. Astern

Revs. per Minute at Full Power, Turbine 2374 1/6

Propeller 90

OF BLADING.

ACTIVE H.P.			L.P.			ACTIVE ASTERN.		
HEIGHT OF BLADES.	PITCH. DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	PITCH. DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	PITCH. DIAMETER AT TIP.	NO. OF ROWS.
5-125	2'-11 1/2"	2				8 1/2	2'-2"	2
625	3'-9"	1				3 1/2	2'-3"	1
125	3'-10 1/2"	1						
25	4'-0"	1						
6	4'-2"	1						

In Holds, &c.

Connected to condenser, or to circulating pump Is a separate Donkey Suction fitted in Engine Room & size

Are the roses in Engine room always accessible

Are they Valves or Cocks

Are the Discharge Pipes above or below the deep water line

Are the Blow Off Cocks fitted with a spigot and brass covering plate

How are they protected

Are the Discharge Pipes accessible at all times

Are they arranged so as to prevent any communication between the sea and the bilges

Is it fitted with a watertight door worked from

Manufacturers of Steel

No. and Description of Boilers

Is Forced Draft fitted Date of test No. of Certificate

Tested by hydraulic pressure to Area of fire grate in each boiler No. and Description of Safety Valves to

Area of each valve Pressure to which they are adjusted Are they fitted with easing gear

Mean dia. of boilers Length Material of shell plates

Are the shell plates welded or flanged Descrip. of riveting: cir. seams

Diameter of rivet holes in long. seams Pitch of rivets Lap of plates or width of butt straps

Working pressure of shell by rules Size of manhole in shell

No. and Description of Furnaces in each Boiler Material Outside diameter

Description of longitudinal joint No. of strengthening rings

Combustion chamber plates: Material Thickness: Sides Back Top Bottom

If stays are fitted with nuts or riveted heads Working pressure by rules

Working pressure by rules End plates in steam space

Working pressure by rules Material of stays

Working pressure by rules Material of Front plates at bottom

Working pressure of plate by rules

Working pressures by rules Girders to Chamber tops: Material Depth and

Length as per rule Distance apart Number and pitch of stays in each

Steam dome: description of joint to shell % of strength of joint Diameter

Description of longitudinal joint Diameter of rivet holes Pitch of rivets

Crown plates: Thickness How stayed



Lloyd's Register Foundation

48-0216

SUPERHEATER. Type _____ Date of Approval of Plan _____ Tested by Hydraulic Pressure to _____
 Date of Test _____ Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler _____
 Diameter of Safety Valve _____ Pressure to which each is adjusted _____ Is Easing Gear fitted _____

IS A DONKEY BOILER FITTED? _____ If so, is a report now forwarded? _____

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,
General Electric Co. Manufacturer.
per S. A. Berg.

Dates of Survey while building { During progress of work in shops -- } *Nov. 7. 23. 27. DEC. 6. 18. 21. 31. JAN. 1918. 2. 4.*
 { During erection on board vessel --- }
 Total No. of visits _____

Is the approved plan of main boiler forwarded herewith _____

Is the approved plan of donkey boiler forwarded herewith _____

Dates of Examination of principal parts—Casings _____ Rotors _____ Blading _____ Gearing _____

Rotor shaft _____ Thrust shaft _____ Tunnel shafts _____ Screw shaft _____ Propeller _____

Stern tube _____ Steam pipes tested _____ Engine and boiler seatings _____ Engines holding down bolts _____

Completion of pumping arrangements _____ Boilers fixed _____ Engines tried under steam _____

Main boiler safety valves adjusted _____ Thickness of adjusting washers _____

Material and tensile strength of Rotor shaft *STEEL 80,000 LBS MINIMUM* Identification Mark on Do. *T.G.D.*

Material and tensile strength of Pinion shaft *" 100,000 "* Identification Mark on Do. *T.G.D.*

Material of Wheel shaft *STEEL* Identification Mark on Do. *T.G.D.* Material of Thrust shaft _____ Identification Mark on Do. _____

Material of Tunnel shafts _____ Identification Marks on Do. _____ Material of Screw shafts _____ Identification Marks on Do. _____

Material of Steam Pipes _____ Test pressure _____

Is an installation fitted for burning oil fuel _____ 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 a duplicate of a previous case _____ If so, state name of vessel _____

General Remarks (State quality of workmanship, opinions as to class, &c.) *These engines have been constructed under Special Survey in accordance with the applicable plans. The materials and workmanship are sound and good. The engines have been forwarded to Seattle Wash. to be fitted on board.*

Certificate (if registered) to be sent to _____
 (The Surveyors are requested not to write on below the space for Committee's Minute.)

The amount of Entry Fee	£	:	:	When applied for,
Special	...	£	:	19
Donkey Boiler Fee	...	£	:	When received,
Travelling Expenses (if any)	£	:	:	19

H. A. D. D.
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute *New York APR 16 1918*

Assigned *See other report*

REPORT OF

of *Seattle Wash*

on the *Steel* *Se*
 Built at *Seat*
 U.S. Shipping Board
 No. *12* Electric Light

DESCRIPTION OF DYNAMO, ENGINE

15 KW - 125 Volts.
Single cylinder
 Capacity of Dynamo *125*

is Dynamo fixed *Engin*
 on of Main Switch Board *En*

ons of auxiliary switch boards

page of forward deck

in Passage way of
passage way in fore part
 es are fitted on main switch bo

circuits *yes* and at each

sel is wired on the double wire s

he fuses of non-oxidizable metal

ll fuses fitted in easily accessible

re permanent instructions fitted o

ll switches and fuses constructed o

number of lights provided for

37 lights ea

33 lights ea

65 lights ea

27 lights ea

19 lights ea

Must head light with *1* la

Side light with *1* la

8 Cargo lights of

lights, what protection is provided

are the switches controlling the n

DESCRIPTION OF CABLES.

ble carrying *176* Amperes,

cables carrying *50* Amperes,

cables carrying *30* Amperes,

lamps carrying *2.56* Amperes, c

ght cables carrying *4.11* Amperes, c

DESCRIPTION OF INSULATION, PRO

National & E

n cables, how made, insulated, and pr

inted with *P & B*

the joints of cables thoroughly solder

itions, none being made in bunkers,

re any joints in or branches from th

re the cables led through the ship, an

