

Copy

# REPORT ON MACHINERY.

No. 17847

4a. Received at London Office  
 Port of New York, N.Y.  
 Date, First Survey Schenectady, N.Y. Last Survey 1919  
 in Survey held at "Robin Adair" (Number of Visits) 1  
 on the Schenectady, N.Y. Tons { Gross 11,028 Net 6,544.47  
 By whom built Skinner & Eddy When built 1919  
 By whom made General Electric Company when made 1919  
 Owners Schenectady, N.Y. Port belonging to Seattle  
 Is Refrigerating Machinery fitted for cargo purposes Yes Is Electric Light fitted Yes

**TURBINE ENGINES, &c.**—Description of Engines Geared Turbine Turbine 13687 No. of Turbines One  
 Diameter of Rotor Shaft Journals, H.P. 8" L.P. ✓ Diameter of Pinion Shaft Flexible 3 7/8"  
 Diameter of Journals H.S.P. 7" Distance between Centres of Bearings H.S.P. 2'-4 3/4" Diameter of Pitch Circle G 57.888"  
 Diameter of Wheel Shaft 14" Distance between Centres of Bearings G-2-11 3/4" Diameter of Pitch Circle of Wheel L.S.P. 11.028"  
 Diameter of Thrust Shaft under Collars 25.08" Diameter of Pitch Circle of Wheel 6.54.472"  
 Diameter of Tunnel Shaft as per rule as fitted as fitted  
 Diameter of Propeller as per rule Pitch of Propeller as fitted  
 Revs. per Minute at Full Power, Turbine 3380 Propeller 90

### PARTICULARS OF BLADING.

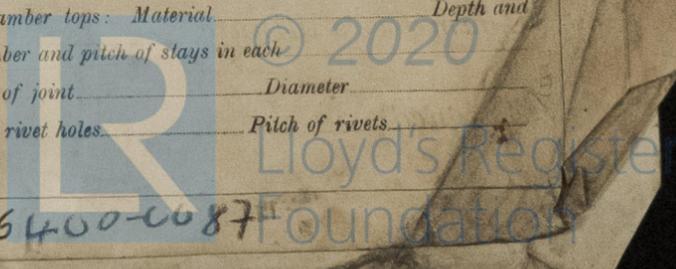
	L.P.			ASTERN.		
	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.
EXPANSION	75"-1.25"	2.11 1/2"	2	81.25"-1.5"	3'-3"	2
"	62.5"	3.9"	1	3.375"	3'-3"	1
"	1.25"	3'-10 1/2"	1			
"	3.5"	4'-0"	1			
"	6.0"	4'-2"	1			

and size of Feed pumps  
 and size of Bilge pumps  
 and size of Bilge suction in Engine Room  
 In Holds, &c.  
 of Bilge Injections sizes Connected to condenser, or to circulating pump Is a separate Donkey Suction fitted in Engine Room & size  
 all the bilge suction pipes fitted with roses Are the roses in Engine room always accessible  
 all connections with the sea direct on the skin of the ship Are they Valves or Cocks  
 they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the Discharge Pipes above or below the deep water line  
 they each fitted with a Discharge Valve always accessible on the plating of the vessel Are the Blow Off Cocks fitted with a spigot and brass covering plate  
 at pipes are carried through the bunkers How are they protected  
 all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times  
 the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges  
 the Screw Shaft Tunnel watertight Is it fitted with a watertight door worked from

### BOILERS, &c.—(Letter for record)

Manufacturers of Steel  
 Heating Surface of Boilers Is Forced Draft fitted No. and Description of Boilers  
 Working Pressure Tested by hydraulic pressure to Date of test No. of Certificate  
 each boiler be worked separately Area of fire grate in each boiler No. and Description of Safety Valves to  
 boiler Area of each valve Pressure to which they are adjusted Are they fitted with easing gear  
 distance between boilers or uptakes and bunkers or woodwork Mean dia. of boilers Length Material of shell plates  
 thickness Range of tensile strength Are the shell plates welded or flanged Descrip. of riveting: cir. seams  
 g. seams Diameter of rivet holes in long. seams Pitch of rivets Lap of plates or width of butt straps  
 percentages of strength of longitudinal joint rivets Working pressure of shell by rules Size of manhole in shell  
 plates  
 e of compensating ring No. and Description of Furnaces in each Boiler Material Outside diameter  
 length of plain part top crown Description of longitudinal joint No. of strengthening rings  
 bottom bottom  
 working pressure of furnace by the rules Combustion chamber plates: Material Thickness: Sides Back Top Bottom  
 length of stays to ditto: Sides Back Top If stays are fitted with nuts or riveted heads Working pressure by rules  
 material of stays Diameter at smallest part Area supported by each stay Working pressure by rules End plates in steam space  
 material Thickness Pitch of stays How are stays secured Working pressure by rules Material of stays  
 diameter at smallest part Area supported by each stay Working pressure by rules Material of Front plates at bottom  
 thickness Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules  
 diameter of tubes Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays  
 pitch across wide water spaces Working pressures by rules Girders to Chamber tops: Material Depth and  
 thickness of girder at centre Length as per rule Distance apart Number and pitch of stays in each  
 Working pressure by rules Steam dome: description of joint to shell % of strength of joint Diameter  
 Thickness of shell plates Material Description of longitudinal joint Diameter of rivet holes Pitch of rivets  
 Working pressure of shell by rules Crown plates: Thickness How stayed

006387-006400-0087



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 Company Manufacturer.  
per.

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

4-10-19 : 11-10-19 : 24-10-19 : 28-10-19 : 3-11-19 : 5-11-19 : 6-11-19

Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts—Casings 11-10-19 Rotors 3-11-19 Blading 24-10-19 Gearing 5-11-19  
" " " donkey " " "

Rotor shaft 24-10-19 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: 80000 lbs per sq in min. Identification Mark on Do. N.S.

Material and tensile strength of Pinion shaft " 85000 " " " " Identification Mark on Do. N.S.

Material of Wheel shaft Steel Identification Mark on Do. N.S. 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 approved plans. The materials and workmanship are sound & good. The engines have been forwarded to the Skinner & Eddy Shipbuilding Corp., Seattle, Wash. to be fitted on board.

Certificate (if required) to be sent to... (The Surveys are requested not to write on or 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

(Signed) Wm. Stewart  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. MAY. 20 1921

Assigned

