

REPORT ON MACHINERY.

No. 16113

REC'D NEW YORK FEB 4 - 1919

Received at London Office

Port of New York N.Y. MDN 31 MAR 1919
 Date, First Survey _____ Last Survey _____ 19____
 Survey held at Schenectady N.Y. Date, First Survey _____ Last Survey _____ 19____
 on the West Wamma (NWS 19) (Number of Vistas _____) Tons { Gross _____ Net _____
 Built at _____ By whom built _____ When built _____
 Made at Schenectady N.Y. By whom made General Electric Company when made 1918
 Owners _____ Port belonging to _____
 Horse Power _____ Is Refrigerating Machinery fitted for cargo purposes _____ Is Electric Light fitted _____

TURBINE ENGINES, &c.—Description of Engines Grand Turbine Turbine 13457 No. of Turbines One
 Diameter of Rotor Shaft Journals, H.P. 8" L.P. Diameter of Pinion Shaft 7"
 Diameter of Journals 6.10" Distance between Centres of Bearings 6.275" Diameter of Pitch Circle 6.57.666
 Diameter of Wheel Shaft 14" Distance between Centres of Bearings 6.52" Diameter of Pitch Circle of Wheel 6.54.75"
 Diameter of Face 14.35" Diameter of Thrust Shaft under Collars _____ Diameter of Tunnel Shaft _____
 Diameter of Screw Shafts _____ Diameter of same _____ 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 3374.5 Propeller 90

DETAILS OF BLADING.

	H.P.			L.P.			ASTERN.		
	ACTIVE HEIGHT OF BLADES.	PITCH DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.	ACTIVE HEIGHT OF BLADES.	PITCH DIAMETER AT TIP.	NO. OF ROWS.
EXPANSION	7.5-1.25	2'-11 1/2"	2				8.125-1.5	3'-3"	2
"	6.25	3'-9"	1				2.275	3'-3"	1
"	1.25	3'-10 1/2"	1						
"	2.5	4'-0 1/2"	1						
"	6	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 _____
 How are they protected _____
 all pipes are carried through the bunkers _____
 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 _____
 Total 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 casing gear _____
 smallest 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 _____
 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 _____ Working pressure of shell by rules _____ Size of manhole in shell _____
 of compensating ring _____ No. and Description of Furnaces in each Boiler _____ Material _____ Outside diameter _____
 length of plain part _____ Thickness of plates _____ Description of longitudinal joint _____ No. of strengthening rings _____
 working pressure of furnace by the rules _____ Combustion chamber plates: Material _____ Thickness: Sides _____ Back _____ Top _____ Bottom _____
 thickness 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 _____
 thickness 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 _____

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

W 427-0106

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 Mr. Berg.

Dates of Survey while building { During progress of work in shops -- } *1919. Aug. 26. 30. Sept. 6. 9. 17. 20. 24.*
 { During erection on board vessel --- }
 Total No. of visits _____ Is the approved plan of main 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 fired _____ Engines tried under steam _____

Main boiler safety valves adjusted _____ Thickness of adjusting washers _____

Material and tensile strength of Rotor shaft _____ Identification Mark on Do. _____

Material and tensile strength of Pinion shaft _____ Identification Mark on Do. _____

Material of Wheel shaft _____ Identification Mark on Do. _____ 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 material and workmanship are sound and good. The engines have been forwarded to Portland, O. to be fitted on board.*)

Certificate (if required) to be sent to _____
 (The Surveyors 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

J. G. Ward
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute *To be attached to Portland Report No. 546.*

Assigned _____

