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REPORT ON MACHINERY. No. 2778

Received at London Office

Date of writing Report July 10th 1918 When handed in at Local Office July 12th 1918 Port of Sau Francisco
 No. in Survey held at Los Angeles + Sau Francisco Date, First Survey Sept 21st 1917 Last Survey June 27th 1918
 Reg. Book. on the S.S. "Accomac" (Los Angeles S.B. Co. No. 1) (Number of Visits 13)

Master R.B. Seike Built at Sau Pedro Cal By whom built Los Angeles S.B. + D.D. Co. Tons Gross 5898
Net 4450
 Engines made at Pittsburg Pa By whom made Westinghouse Elec Mfg Co When built 1918
 Boilers made at Phoenixville Pa By whom made Heine Boiler Works when made 1918
 Registered Horse Power 670 Owners U.S. Shipping Board Port belonging to Los Angeles
 Shaft Horse Power at Full Power 3000 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

TURBINE ENGINES, &c.—Description of Engines Double Reduction Geared Turbines No. of Turbines Two (1-H.P. 1-L.P.)

Diameter of Rotor Shaft Journals, H.P. _____ L.P. _____ Diameter of Pinion Shaft _____
 Diameter of Journals _____ Distance between Centres of Bearings _____ Diameter of Pitch Circle _____
 Diameter of Wheel Shaft _____ Distance between Centres of Bearings _____ Diameter of Pitch Circle of Wheel _____
 Width of Face _____ Diameter of Thrust Shaft under Collars _____ Diameter of Tunnel Shaft as per rule 12.8"
 No. of Screw Shafts one 3 PIECES BURNED as per rule 14.08" 14.22 Diameter of Tunnel Shaft as fitted 13.25"
 Diameter of same as fitted 14.5" Diameter of Propeller 17-1/4" Pitch of Propeller 12-4"
 No. of Blades 4 State whether Moveable Yes Total Surface _____ Diameter of Rotor Drum, H.P. _____ L.P. _____ Astern _____
 Thickness at Bottom of Groove, H.P. _____ L.P. _____ Astern _____ Revs. per Minute at Full Power, Turbine 3655 Propeller 100

PARTICULARS OF BLADING.

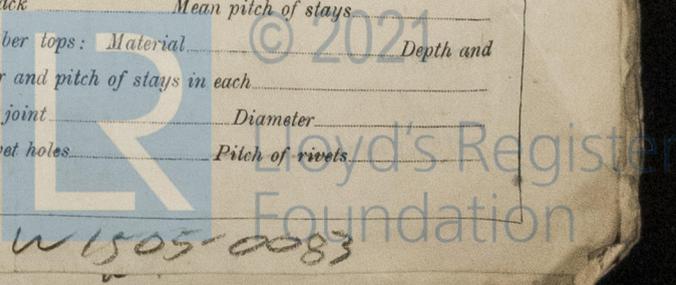
ST EXPANSION	H. P.			L. P.			ASTERN.		
	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.
1									
2									
3									
4									
5									
6									
7									
8									

No. and size of Feed pumps 2- 12" x 8" x 18"
 No. and size of Bilge pumps 3- 1- 12" x 10" x 12", 1- 12" x 8" x 12", 1- 6" x 6" x 6"
 No. and size of Bilge suction in Engine Room 4- 3 1/2" and 1- 3"

Forward coffer dam 1- 3" aft coffer dam 1- 3" No. 3 hold 4- 3 1/2" aft well 1- 3 1/2" aft peak 1- 3"
 In Holds, &c. For peak 1- 3" No. 1 hold 2- 3 1/2" No. 2 hold 2- 3 1/2"
 No. of Bilge Injections 1 sizes 12" Connected to condenser, or to circulating pump Car pumps Is a separate Donkey Suction fitted in Engine Room & size yes 3 1/2"
 Are all the bilge suction pipes fitted with roses yes Are the roses in Engine room always accessible yes
 Are all connections with the sea direct on the skin of the ship yes Are they Valves or Cocks valves
 Are they sized 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 both
 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 _____ 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 Top platform of E.R

BOILERS, &c.—(Letter for record S.) Manufacturers of Steel Illinois Steel Co.

Total Heating Surface of Boilers _____ Is Forced Draft fitted No No. and Description of Boilers See Phila Rpt No 2763
 Working Pressure 200 lbs Tested by hydraulic pressure to 400 lbs Date of test _____ No. of Certificate _____
 Can each boiler be worked separately yes Area of fire grate in each boiler _____ No. and Description of Safety Valves to _____
 Each boiler 2- Spring loaded Area of each valve 9.620 Pressure to which they are adjusted 200 lbs Are they fitted with easing gear yes
 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 _____
 Long. seams _____ Diameter of rivet holes in long. seams _____ Pitch of rivets _____ Lap of plates or width of butt straps _____
 Per centages of strength of longitudinal joint _____ Working pressure of shell by rules _____ Size of manhole in shell _____
 Size 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 _____
 Pitch 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 _____



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? **NO** If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— 1- tail shaft complete, 4 propeller blades - 40 condenser tubes
 24 boiler tubes - 1 complete set of check valves, 3 sets of bilge pump valves - 1 set of feed pump valves -
 2 sets of gear shaft bearings - 2 sets of turbine bearings - 6 sets of pinion bearings - 6 propeller thrust
 shoes - 12 turbine thrust bearing shoes - 1/2 set of studs & nuts for turbine bearings - 12 coupling
 10 studs for pedestal cover - 1/2 set of studs & nuts for turbine cover - 1/2 set of bolts for gear housing
 7 studs for pinion frame joint - 1 set of oil pump drive gears for main oil pumps - one set of valves
 for auxiliary oil pumps - 1 relief valve spring - 27 open tubes for lubricating oil cooler.

The foregoing is a correct description,
 Los Angeles SHIPBUILDING & DRY DOCK CO
 By *[Signature]* Manufacturer.

Dates of Survey while building { During progress of work in shops -- } Dec 14. Mar 28 Apr 12
 { During erection on board vessel --- } ~~Mar 28~~ Mar 28. Apr 12. May 1. 22 June 5. 6. 7. 10. 14. 27
 Total No. of visits 13

Is the approved plan of main boiler forwarded herewith No
 " " " donkey " " "

Dates of Examination of principal parts—Casings Rotors Blading Gearing
 Rotor shaft Thrust shaft Tunnel shafts **Mar 28th** Screw shaft **Apr 12th** Propeller **May 1st**
 Stern tube **Mar 28th** Steam pipes tested **Mar 28th** Engine and boiler seatings **Mar 28th** Engines holding down bolts **June 5th**
 Completion of pumping arrangements **May 22nd** Boilers sized **April 12th** Engines tried under steam **June 14th**
 Main boiler safety valves adjusted **June 14th** 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 **Steel** Identification Marks on Do. **see below** Material of Screw shafts **Steel** Identification Marks on Do.
 Material of Steam Pipes **Steel** Test pressure **600 lbs.**

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 a duplicate of a previous case **no** If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, etc.) *The machinery and boilers of this vessel have been built under special survey, of materials tested in accordance with the rules and the workmanship was found good throughout - On completion the machinery was tested under working conditions & found satisfactory.*
In the opinion of the undersigned this machinery is eligible to be classed in the Register with notations of L.M.C 6-18. Fitted for oil fuel 6-18 - Electric Light -

Lloyd's No 17 2-7-18 T.H.	Lloyd's No 18 2-14-18 T.H.	Lloyd's No 27 2-27-18 T.H.	Lloyd's No 20 2-27-18 T.H.	Lloyd's No 34 2-27-18 T.H.	Lloyd's No 11A 2-19-18 T.H.	Lloyd's No 30 2-27-18 T.H.
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The amount of Entry Fee ... \$15-00
 Special ... \$250-00
 Donkey Boiler Fee ... £
 Travelling Expenses (if any) £ 103-19

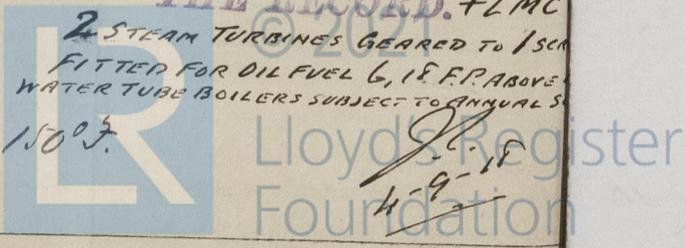
When applied for, **25 July 1918**
 When received, **28 July 1918**

[Signature]
 Engineer Surveyor to Lloyd's Register of Shipping
 It is submitted that this vessel is eligible for THE RECORD. + L.M.C
 2 STEAM TURBINES GEARED TO 1 SCREW
 FITTED FOR OIL FUEL 6, 12 F.P. ABOVE WATER TUBE BOILERS SUBJECT TO ANNUAL SURVEY

Committee's Minute New York AUG 16 1918

Assigned **+ L.M.C. 6-18. Fitted for oil fuel 6-18 F. above 150°F. Elec. Lt.**

MACHINERY CERTIFICATE
 WRITTEN 31.8.18



San Francisco

Certificate (if required) to be sent to

(The Surveyors are requested not to write on or below the space for Committee's Minute.)