

REPORT ON MACHINERY.

3134
No. 15628

Received at London Office

4a.

of writing Report 1st March 1919 When handed in at Local Office 6th March 1919 Port of San Francisco
in Survey held at Schmiedt & Co. Date, First Survey 5th July 1918 Last Survey 4th March 1919
Book. on the STEEL SCREW STEAMER "SAPINERO" (Number of Visits 60)

Tons { Gross 5784
Net 3513

ster H. A. Thompson Built at Philadelphia, Pa. By whom built American International Corp. When built 1919
ines made at Schmiedt & Co. By whom made General Electric Company when made 1918
ilers made at Bayonne N.J. By whom made Babcock & Wilcox Co. MB 570 when made 1918
ual Horse Power 600 Owners United States Shipping Board Port belonging to Philadelphia, Pa.
aft Horse Power at Full Power 2500 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

RBINE ENGINES, &c.—Description of Engines Grand Turbine (Turbine 13508) No. of Turbines One
meter of Rotor Shaft Journals, H.P. 8" L.P. 7" Diameter of Pinion Shaft 7"
meter of Journals H.S. PINION 7" Distance between Centres of Bearings H.S. PINION 37" Diameter of Pitch Circle H.S. PINION 7.612"
meter of Wheel Shaft 14" Distance between Centres of Bearings L.S. PINION 63 1/4" Diameter of Pitch Circle of Wheel L.S.P. 11.442"
h of Face 20.44" Diameter of Thrust Shaft under Collars 13.23" Diameter of Tunnel Shaft as per rule 12.48"
of Screw Shafts Continuous Run Diameter of same as per rule 14" Diameter of Propeller 17'0" Pitch of Propeller 13'9"
of Blades 4 State whether Moveable No Total Surface 98.8 sq ft Diameter of Rotor Drum, H.P. L.P. Astern astern
rkness at Bottom of Groove, H.P. L.P. Astern Revs. per Minute at Full Power, Turbine 3234 Propeller 90

PARTICULARS OF BLADING.

	ACTIVE HEIGHT OF BLADES.	H.P. PITCH. DIAMETER AT TIP.	NO. OF ROWS.		L.P. HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.		ACTIVE HEIGHT OF BLADES.	ASTERN. PITCH. DIAMETER AT TIP.	NO. OF ROWS.
EXPANSION	75-125	2'-11 1/2"	2						8125-1.5	3'-3"	2
"	625	2'-9"	1						3.375	2'-3"	1
"	125	2'-10 1/2"	1								
"	2.5	4'-0"	1								
"	6.0	4'-2"	1								
"											
"											
"											

and size of Feed pumps Two 10" x 6" x 24"
and size of Bilge pumps Two 12" x 8 1/2" x 12" and 10" x 12" x 12"
and size of Bilge suction in Engine Room Two 3 1/2" dia. Thrust Recs. One 2 1/2" dia. L.R. Room Two 3 1/2" dia
In Holds, &c. No. 1. Two 3 1/2" dia. One 2 1/2" dia. No. 2. Two 3 1/2" dia
No. 3. Two 3 1/2" dia. No. 4. One 3 1/2" dia. No. 5. One 3 1/2" dia. Lunge Well One 3 1/2" dia
of 1 Bilge Injections One sizes 10" dia Connected to condenser, or to circulating pump pump Is a separate Donkey Suction fitted in Engine Room & size 3 1/2" dia
all the bilge suction pipes fitted with roses Yes Are the roses in Engine room always accessible Yes
all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Both
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 below
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
at pipes are carried through the bunkers None How are they protected Yes
all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes
the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges Yes
Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Upper Platform Eng. Room

ILERS, &c.—(Letter for record S) Manufacturers of Steel
al Heating Surface of Boilers 8706 Is Forced Draft fitted yes No. and Description of Boilers 3 Water Tube Boilers
orking Pressure 400 Tested by hydraulic pressure to 400 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
h boiler Area of each valve Pressure to which they are adjusted Are they fitted with easing gear
allest distance between boilers or uptakes and bunkers or woodwork Mean dia. of boilers Length Material of shell plates
ickness 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
Water Capac centages of strength of longitudinal joint Working pressure of shell by rules Size of manhole in shell
Tons. plates
of compensating ring No. and Description of Furnaces in each Boiler Material Outside diameter
length of plain part top Thickness of plates crown Description of longitudinal joint No. of strengthening rings
bottom bottom
orking pressure of furnace by the rules Combustion chamber plates: Material Thickness: Sides Back Top Bottom
ch of stays to ditto: Sides Back Top If stays are fitted with nuts or riveted heads Working pressure by rules
aterial of stays Diameter at smallest part Area supported by each stay Working pressure by rules End plates in steam space
aterial Thickness Pitch of stays How are stays secured Working pressure by rules Material of stays
ameter at smallest part Area supported by each stay Working pressure by rules Material of Front plates at bottom
ickness Material of Lower back plate Thickness Greatest vitch of stays Working pressure of plate by rules
ameter of tubes Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays
ch across wide water spaces Working pressures by rules Girders to Chamber tops: Material Depth and
ickness of girder at centre Length as per rule Distance apart Number and pitch of stays in each
orking pressure by rules Steam d.me: description of joint to shell % of strength of joint Diameter
ickness of shell plates Material Description of longitudinal joint Diameter of rivet holes Pitch of rivets
orking pressure of shell by rules Crown plates: Thickness How stayed

W132-0248

SUPERHEATER. Type *Lester* Date of Approval of Plan *In New York Office* Tested by Hydraulic Pressure to *400 PSI*
Date of Test *7/11/19* Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler *Yes*
Diameter of Safety Valve *1"* Pressure to which each is adjusted *200 PSI* Is Easing Gear fitted *Yes*

IS A DONKEY BOILER FITTED? *No* If so, is a report now forwarded? *Yes*

SPARE GEAR. State the articles supplied:—*Large Bolts Nuts or Studs for each Rotor bearing, Gear Bearings, the set of coupling bolts of each size used, 120 of total number of bolts Nuts for the Coupling joints & Turbine casing joints. Two Thermometers for oil circulating system. One complete set of bearing bushes for Rotor, Pinion & Gear Shafts. Complete set of packing stems for Turbine head & diaphragm. Two main thrust shoes. One set of boiler thrust rings for turbine. One set of field pump valves. One set of Bilge Pump valves. One set of valves for Lubricating Air Pumps. One Bucket & Rod for Bilge Oil Pump. One emergency Governor. One complete quantity of assorted bolts Studs Nuts. Bars plates of mild steel. One high speed Pinion Shaft. One Propeller. 14 Boiler Tubes 16 nipples. 16 Hand Hole Doors. 37 Condenser Tubes. One set Boiler Check Valves.*

The foregoing is a correct description,

General Electric Co. Manufacturer.
per S. A. Berg.

1918.
Dates of Survey while building { During progress of work in shops -- *Aug. 5, 18, 22, 25, 31, Sept. 9, 14, 15, 20, 1918.*
During erection on board vessel --- *Aug. 13, 20, Sept. 5, 12, 13, 24, 30, Oct. 3, 4, 5, 10, 17, 25, 29, Nov. 6, 7, 12, 14, 15, 21, 22, 26, 27, Dec. 4, 12, 15, 1918.*
Total No. of visits *1919. Jan. 2, 7, 8, 10, 13, 14, 21, 23, 29, 30. Feb. 3, 5, 7, 11, 14, 19, 20, 21, 24, 25, 26. MAR. 3, 4.*
Is the approved plan of main boiler forwarded herewith *No*

Dates of Examination of principal parts—Casings *✓* Rotors *✓* Blading *✓* Gearing *✓*
Rotor shaft *✓* Thrust shaft *8/1/19* Tunnel shafts *8/1/19* Screw shaft *2/10/18* Propeller *2/10/18*
Stern tube *12/11/15* Steam pipes tested *29/1/19* Engine and boiler seatings *2/9/18* Engines holding down bolts *20/2/19*
Completion of pumping arrangements *30/1/19* Boilers fired *7/11/18* Engines tried under steam *26/2/19*
Main boiler safety valves adjusted *4/3/19* Thickness of adjusting washers *Lock Nuts*
Material and tensile strength of Rotor shaft *STEEL 80,000 LBS 7" MINIMUM.* Identification Mark on Do. *T.G.D.*
Material and tensile strength of Pinion shaft *" 85,000 "* Identification Mark on Do. *T.G.D.*
Material of Wheel shaft *STEEL* Identification Mark on Do. *T.G.D.* Material of Thrust shaft *STEEL* Identification Mark on Do. *T.H.*
Material of Tunnel shafts *STEEL* Identification Marks on Do. *T.H.* Material of Screw shafts *STEEL* Identification Marks on Do. *T.H.*
Material of Steam Pipes *STEEL* Test pressure *600 PSI*
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 *Yes* If so, state name of vessel *"PRUSA" previous 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 and good. The engines have been forwarded to Philadelphia Pa. to be fitted on board.*

The Boiler Machinery of the vessel have been securely fitted on board and satisfactorily tried under steam. It is submitted that the vessel be eligible for a record of + LMC 3-19, Extra for oil fuel 3 Flash Point above 150°F in the Register Book

The amount of Entry Fee ... £ : :
Special *1/3 Philadelphia* } *\$250.00*
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : :
When applied for, 19
When received, *10/4/19*

Committee's Minute *New York MAR 11 1919*

Assigned *+ L. M. C. 3 19*
Fitted for oil fuel 3 19 F.P. above 150°F.

J. H. Bond
Engineer Surveyor to Lloyd's Register of Shipping.
It is submitted that this vessel is eligible for THE RECORD + LMC 3.19. F.P. above 150°F. Subject to the Water-tube boilers being surveyed

Lloyd's Register
TUE JUN 24 1919
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