

REPORT ON MACHINERY.

No. *15627*
3195
MAY 1919

Received at London Office

Date of writing Report *Oct. 15-1918* When handed in at Local Office *19th April 1919* Port of *New York N.Y. Philadelphia*
No. in Survey held at *Philadelphia* Date, First Survey *22nd July 1918* Last Survey *17th April 1919*
Reg. Book. *"SALUDA"* (Number of Visits *20*)
on the *STEEL SCREW STEAMER*

Gross *5784*
Tons
Net *3513*

Master *A. E. Ellis* Built at *Philadelphia* By whom built *American International Corp.* When built *1919*
Engines made at *Philadelphia* By whom made *General Electric Company* when made *1918*
Boilers made at *Bayonne N.J.* By whom made *Babcock and Wilcox Co. M.B. 54* when made *1918*
Registered Horse Power *600* Owners *United States Shipping Board* Port belonging to *Philadelphia*
Shaft Horse Power at Full Power *2500* Is Refrigerating Machinery fitted for cargo purposes *no* Is Electric Light fitted *yes*

URBINE ENGINES, &c.—Description of Engines *Grand Turbine (Turbine 13500 H.P. 3338)* No. of Turbines *One*
Diameter of Rotor Shaft Journals, H.P. *8"* L.P. *4"* Diameter of Pinion Shaft *4"*
Diameter of Journals *GEAR 10"* Distance between Centres of Bearings *GEAR 28"* Diameter of Pitch Circle *GEAR 57.888"*
Diameter of Wheel Shaft *14"* Distance between Centres of Bearings *L.S. PINION 63.4"* Diameter of Pitch Circle of Wheel *6.54268"*
Width of Face *20.44"* Diameter of Thrust Shaft under Collars *13.25"* Diameter of Tunnel Shaft *as per rule 12.8"*
No. of Screw Shafts *one* Diameter of same *as fitted 14.5"* Diameter of Propeller *14'-0"* Pitch of Propeller *13'-9"*
No. of Blades *14* State whether Moveable *no* Total Surface *98.8 sq ft* 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 *3234* Propeller *90*

ARTICULARS 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.
ST EXPANSION	<i>75-1.25</i>	<i>2'-11 1/2"</i>	<i>2</i>						<i>81.5-1.5</i>	<i>3'-3"</i>	<i>2</i>
ND	<i>4.25</i>	<i>3'-9"</i>	<i>1</i>						<i>3.75</i>	<i>3'-3"</i>	<i>1</i>
RD	<i>1.25</i>	<i>3'-10 1/2"</i>	<i>1</i>								
TH	<i>2.5</i>	<i>4'-0"</i>	<i>1</i>								
EH	<i>6.0</i>	<i>4'-2"</i>	<i>1</i>								
PH											
TH											
EH											

No. and size of Feed pumps *Two 10" x 6" x 24"*
No. and size of Bilge pumps *Two 12" x 8 1/2" x 12" and 10" x 12" x 12"*
No. and size of Bilge suction in Engine Room *Two 3 1/2" dia, Thrust recess 1 1/2", Fire room 2-3 1/2"*
In Holds, &c. *N°1 Two 3 1/2" dia, N°2 Two 3 1/2", N°3 Two 3 1/2"*
N°4 Two 3 1/2", N°5 One 3 1/2", Tunnel well one 3 1/2"
No. of Bilge Injections *One* sizes *10"* Connected to Condenser, or to circulating pump *no* 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 *both*
Are 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*
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*
That pipes are carried through the bunkers *none* 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 *Upper engine platform*

MILERS, &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*
In each boiler be worked separately *Area of fire grate in each boiler* No. and Description of Safety Valves to
Each boiler *Area of each valve* Pressure to which they are adjusted *Are they fitted with easing 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*
Long. seams *Diameter of rivet holes in long. seams* Pitch of rivets *Lap of plates or width of butt straps*
Water Capacity *ribs*
Tons *plates* Working pressure of shell by rules *Size of manhole in shell*
144 S
100 S No. of compensating ring *No. and Description of Furnaces in each Boiler* Material *Outside diameter*
899 S Length of plain part *Thickenss of plates* Description of longitudinal joint *No. of strengthening rings*
131 S 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*
15-22 Diameter at smallest part *Area supported by each stay* Working pressure by rules *Material of Front plates at bottom*
8-30 Thickness *Material of Lower back plate* Thickness *Greatest pitch of stays* Working pressure of plate by rules
34-31 Diameter of tubes *Pitch of tubes* Material of tube plates *Thickness: Front* Back *Mean pitch of stays*
8-18-14-15 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

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MACHINERY CERTIFICATE
WRITTEN 14/5/10