

REPORT ON MACHINERY.

No. 16005
MON. 12 MAY 1919

REC'D NEW YORK Jan 11 1919

Received at London Office

Date of writing Report 1919 When handed in at Local Office 3rd May 1919 Port of New York & Philadelphia Pa.
No. in Survey held at Schuylkill & Philadelphia Date, First Survey 2nd Oct 1918. Last Survey 2nd May 1919
Reg. Book. (Number of Visits 37)

on the STEEL SCREW STEAMER "SARCOXIE"

Tons { Gross 5784
Net 3513

Master C. E. Kelton Built at Philadelphia Pa By whom built American International Corp. When built 1919.

Engines made at Schuylkill & Philadelphia By whom made General Electric Company when made 1918.

Boilers made at Bayonne N.J. By whom made Babcock & Wilcox Co. MB576. when made 1918.

Registered Horse Power 600. Owners Emergency Fleet Corporation. Port belonging to Philadelphia

Shaft Horse Power at Full Power 2500. Is Refrigerating Machinery fitted for cargo purposes. No Is Electric Light fitted yes

TURBINE ENGINES, &c.—Description of Engines Grand Turbine (Turbine 13515) No. of Turbines One

Diameter of Rotor Shaft Journals, H.P. 8" L.P. 7" Diameter of Pinion Shaft 7"

Diameter of Journals 10" Distance between Centres of Bearings 28" Diameter of Pitch Circle 57.888"

Diameter of Wheel Shaft 14" Distance between Centres of Bearings 63.5" Diameter of Pitch Circle of Wheel 65.458"

Width of Face 20.44" Diameter of Thrust Shaft under Collars 13.25" Diameter of Tunnel Shaft as per rule 12.625"

No. of Screw Shafts 1 Diameter of same as per rule 14.5" Diameter of Propeller 17" Pitch of Propeller 13" 9"

No. of Blades 11 State whether Moveable. No Total Surface 98.8" 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

PARTICULARS OF BLADING.

	ACTIVE HEIGHT OF BLADES.	H.P. PITCH DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	L.P. DIAMETER AT TIP.	NO. OF ROWS.	ACTIVE HEIGHT OF BLADES.	ASTERN. PITCH DIAMETER AT TIP.	NO. OF ROWS.
1ST EXPANSION	7.5-12.5	2'-11.5"	2				8.125-1.5	3'-3"	2
2ND	6.25	3'-9"	1				3.375	3'-3"	1
3RD	1.25	3'-10.5"	1						
4TH	2.5	4'-0"	1						
5TH	6	4'-2"	1						
6TH									
7TH									
8TH									

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 2-3 1/2" Fire room 2-3 1/2"

In Holds, &c. No. 1 Two-3 1/2" No. 2 Two-3 1/2" No. 3 Two-3 1/2"

No. of Bilge Injections No. sizes 10" Connected to condenser, or to circulating pump pump. 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

What 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

SEE REPORT 5

TUBES, &c.—(Letter for record S.) Manufacturers of Steel

Total Heating Surface of Boilers 8706. Is Forced Draft fitted yes No. and Description of Boilers 3 Watertube Boilers

Working Pressure 200. Tested by hydraulic pressure to Date of test No. of Certificate

Is 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

Greatest 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 rivets Working pressure of shell by rules Size of manhole in shell

plates

of compensating ring No. and Description of Furnaces in each Boiler Material Outside diameter

top Thickness of plates crown Description of longitudinal joint No. of strengthening rings

bottom

Working pressure of furnace by the rules Combustion chamber plates: Material Thickness: Sides Back Top Bottom

No. 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

Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays

across wide water spaces Working pressures by rules Girders to Chamber tops: Material Depth and

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

