

REPORT ON MACHINERY.

No. 15362

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Date of writing Report

When handed in at Local Office

Port of NEW YORK N.Y.

No. in Survey held at SCHENECTADY N.Y.

Date, First Survey

Last Survey

19

Entry on the Steel Screw Steamer Western Cross

Tons { Gross
Net

Master Built at By whom built When built
Engines made at SCHENECTADY N.Y. By whom made GENERAL ELECTRIC COY. when made 1918.

Boilers made at By whom made when made

Registered Horse Power Owners Port belonging to

Shaft Horse Power at Full Power 2500 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted

TURBINE ENGINES, &c.—Description of Engines GEARED TURBINE (TURBINE 13454 GEAR 3021) No. of Turbines ONE.

Diameter of Rotor Shaft Journals, H.P. 8" L.P. ✓ Diameter of Pinion Shaft 7" H.S. PINION 7.833
Diameter of Journals " GEAR 10" Distance between Centres of Bearings " GEAR 37.5" Diameter of Pitch Circle " GEAR 57.666 L.S. PINION 10.75"
Diameter of Wheel Shaft 14" Distance between Centres of Bearings L.S. PINION 52" Diameter of Pitch Circle of Wheel " GEAR 54.75"
Width of Face 14 3/5" Diameter of Thrust Shaft under Collars Diameter of Tunnel Shaft as per rule
No. of Screw Shafts Diameter of same as per rule Diameter of Propeller Pitch of Propeller
No. of Blades State whether Moveable 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 3374.5 Propeller 90.

PARTICULARS 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.
1ST EXPANSION	75-1.25	2'-11 1/2"	2				8125-1.5	2'-3"	2
2ND	6.25	3'-9"	1				3.375	3'-3"	1
3RD	1.25	3'-10 1/2"	1						
4TH	2.5	4'-0"	1						
5TH	6.0	4'-2"	1						
6TH									
7TH									
8TH									

No. and size of Feed pumps
No. and size of Bilge pumps
No. and size of Bilge suction in Engine Room
In Holds, &c.

No. of Bilge Injections sizes Connected to condenser, or to circulating pump Is a separate Donkey Suction fitted in Engine Room & size
Are all the bilge suction pipes fitted with roses Are the roses in Engine room always accessible
Are all connections with the sea direct on the skin of the ship Are they Valves or Cocks
Are 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
Are 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
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
Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges
Is 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
Can 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
Per centages of strength of longitudinal joint rivets Working pressure of shell by rules Size of manhole in shell plates
Size 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
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

