

# REPORT ON MACHINERY.

No. 2860

MON. 21 OCT. 1918

REC'D NEW YORK Sept. 24-1918.

Received at London Office

of writing Report 10 When handed in at Local Office 10 Port of Philadelphia

in Survey held at Trenton Date, First Survey Last Survey 19

Book. on the Hull No 13 SS WESTERN MAID (Number of Visits)

ster Built at Portland By whom built William H. J. S. Co Ltd Tons Gross Net

ines made at Trenton By whom made De Laval Steam Turbine Co (No 27745) When built 1918

o. Ferrulers made at By whom made when made

osts dister Horse Power Owners Port belonging to

ft Horse Power at Full Power 2650 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted

**TURBINE ENGINES, &c.**—Description of Engines *De Laval Double Reduction Turbines* No. of Turbines 1  
 Diameter of Rotor Shaft Journals, H.P. 7 L.P. 6" Diameter of Pinion Shaft 1" Red 7 1/2" 2" Red 9"  
 Diameter of Journals 1 1/2" 2" 9" Distance between Centres of Bearings 1 1/2" 2" 3 1/2" Diameter of Pitch Circle 1" Red 7 1/2" 2" 10 1/2"  
 Diameter of Wheel Shaft 1 1/2" 2" 14 1/2" Distance between Centres of Bearings 1 1/2" 2" 7 1/2" Diameter of Pitch Circle of Wheel 1 1/2" 2" 55 1/2" 2" 52 1/2"  
 Diameter of Face 1 1/2" 2" 45" Diameter of Thrust Shaft under Collars Diameter of Tunnel Shaft as per rule as fitted  
 Diameter of Screw Shafts Diameter of same as per rule as fitted Diameter of Propeller Pitch of Propeller  
 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 3596 Propeller 95

## PARTICULARS OF BLADING.

H. P.				L. P.				ASTERN.			
EXPANSION	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.	HEIGHT OF BLADES.	DIAMETER AT TIP.
1st	1.660	32.551	2				1st	1.660	32.551		
2nd	1.150	33.041	1				2nd	1.150	33.041	2	
3rd	1.787	39.256	1				3rd	1.787	33.869		
4th	1.181	40.040	1				4th	1.181	33.869	2	
5th	1.771	41.220	1								
6th	2.165	40.635	1								
7th	3.150	43.600	1								
8th	4.725	44.190	1								
9th	5.510	45.000	1								

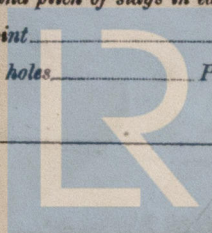
and size of Feed pumps  
 and size of Bilge pumps  
 and size of Bilge suction in Engine Room.

In Holds, &c.

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  
 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  
 Percentages 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 bottom 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



Lloyd's Register Foundation

W296-0156



