

REPORT ON MACHINERY.

No. 1753

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Date of writing Report Nov. 13 1919 When handed in at Local Office Nov. 13 1919 Port of Montreal
 Date, First Survey Mar. 24 Last Survey Nov. 10 1919
 No. in Survey held at Montreal (Number of Visits)
 Reg. Book. on the Shel. S.S. 'ALSACE' Tons { Gross 5787 Net 3538

Master L. Brunet Built at Montreal By whom built Canadian Vickers Ltd When built 1919
 Engines made at Montreal By whom made Canadian Vickers Ltd when made 1919
 Boilers made at Montreal By whom made " " " when made 1919
 Registered Horse Power 231 Owners Compagnie Francaise d'Armenement d'Importation de Montreal de Souda. Port belonging to Dunkirk
 Nom. Horse Power as per Section 28 397 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Triple Expansion S.C. No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 25"-41"-68" Length of Stroke 45 Revs. per minute 75 Dia. of Screw shaft as per rule 13.68" as fitted 14.25" Material of screw shaft S
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube Yes Is the after end of the liner made water tight
 Is the propeller boss Yes If the liner is in more than one length are the joints burned Yes If the liner does not fit tightly at the part
 between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive Yes If two
 liners are fitted, is the shaft lapped or protected between the liners Yes Length of stern bush 5'6 1/2"
 Dia. of Tunnel shaft as per rule 12.47" as fitted 12.75" Dia. of Crank shaft journals as per rule 13.1" as fitted 13.25" Dia. of Crank pin 13.25" Size of Crank webs 875" x 24" Dia. of thrust shaft under
 collars 13.25" Dia. of screw 16'3" Pitch of Screw 15'6" No. of Blades 4 State whether moveable No Total surface 87.4 sq
 No. of Feed pumps 2 Diameter of ditto 7 1/2" x 9" Stroke 21 Can one be overhauled while the other is at work Yes
 No. of Bilge pumps 2 Diameter of ditto 4" Stroke 24 Can one be overhauled while the other is at work Yes
 No. of Donkey Engines 3 Sizes of Pumps Bilge 5.10 1/2" x 14" x 24" Donkey 12" No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room 4 - 2 - 3 1/2" P. 2 - 3 1/2" S. In Holds, &c. Bilge 1-8" 1-4" 1-5" 2-3" P. 2-3" S. 2-3" 1-4" 2-3"
 No. of Bilge Injections 1 sizes 9" Connected to condenser, or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size Yes 1 1/2" x 1 1/2"
 Are all the bilge suction pipes fitted with roses Yes Are the roses in Engine room always accessible Yes Are the sluices on Engine room bulkheads 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 Above
 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 Yes
 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 Top E.R. platform.

BOILERS, &c.—(Letter for record S) Manufacturers of Steel Lukens U.S. Co. Pa. U.S.A.
 Total Heating Surface of Boilers 6930 sq Is Forced Draft fitted No. No. and Description of Boilers 3 Scotch type.
 Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs Date of test 20-9-19 No. of Certificate 66
 Can each boiler be worked separately Yes Area of fire grate in each boiler 69 sq No. and Description of Safety Valves to
 each boiler 2 Area of each valve 8.296 sq Pressure to which they are adjusted 184 lbs Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers on woodwork 18" Mean dia. of boilers 15'6" Length 10'6" Material of shell plates S
 Thickness 15/16" Range of tensile strength Are the shell plates welded or flanged No Descrip. of riveting: cir. seams DR
 long. seams DBS. T.R. Diameter of rivet holes in long. seams 15/16" Pitch of rivets 9" Lap of plates or width of butt straps 19 1/2"
 Per centages of strength of longitudinal joint rivets 85.3% plate 85.42% Working pressure of shell by rules 193 Size of manhole in shell 16" x 12"
 Size of compensating ring 37" x 33" No. and Description of Furnaces in each boiler 3 Brighton. Material S Outside diameter 4'2 1/2"
 Length of plain part top - bottom - Thickness of plates crown 19/32" bottom 19/32" Description of longitudinal joint Weld. No. of strengthening rings —
 Working pressure of furnace by the rules 188 Combustion chamber plates: Material S Thickness: Sides 5/8" Back 5/8" Top 5/8" Bottom 1"
 Pitch of stays to ditto: Sides 7 1/2" x 9" Back 8" x 8 1/2" Top 9" x 7 1/2" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 198
 Material of stays S Area at smallest part 1.760 Area supported by each stay 680 Working pressure by rules 232 End plates in steam space:
 Material S Thickness 1 1/8" Pitch of stays 18" x 15" How are stays secured With Nuts Working pressure by rules 201 Material of stays S
 Area at smallest part 5.270 Area supported by each stay 2790 Working pressure by rules 194 Material of Front plates at bottom S
 Thickness 13/16" Material of Lower back plate S Thickness 7/8" Greatest pitch of stays 8" x 14" Working pressure of plate by rules 203
 Diameter of tubes 3 1/2" Pitch of tubes 4 3/4" x 4 3/4" Material of tube plates S Thickness: Front 13/16" Back 3/4" Mean pitch of stays 9 1/2" x 9 1/2"
 Pitch across wide water spaces 14 1/2" Working pressures by rules 216 Girders to Chamber tops: Material S Depth and
 thickness of girder at centre 10" x 1 1/2" Length as per rule 30 1/2" Distance apart 9" Number and pitch of stays in each 3 - 4 1/2"
 Working pressure by rules 272 Steam dome: description of joint to shell Yes % of strength of joint —
 Diameter — Thickness of shell plates — Material — Description of longitudinal joint — Diam. of rivet holes —
 Pitch of rivets — Working pressure of shell by rules — Crown plates — Thickness — How stayed —

SUPERHEATER. Type — Date of Approval of Plan — Tested by Hydraulic Pressure to —
 Date of Test — Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler —
 Diameter of Safety Valve — Pressure to which each is adjusted — Is Easing Gear fitted —

