

REPORT ON MACHINERY

No. 34292

WED. AUG. 12. 1914

W707-0202

Date of writing Report 21-7-14. When handed in at Local Office D.P. 10 11/2 Port of Glasgow.
 No. in Survey held at Glasgow. Date, First Survey 17-9-13 Last Survey 1-7-14
 Reg. Book 428 on the Triple expansion engines for S.S. "BINGERA" (Number of Visits 34)
 Master H. Macfarlane. Built at Belfast By whom built Messrs Workman Clark & Co. Ltd. Tons Gross 2092 Net 1990
 Engines made at Glasgow By whom made Messrs W. White & Baxter No. 461-E-3. when made 1914
 Pumps made at Belfast By whom made Workman Clark & Co. Ltd. when made 1905.
 Indicated Horse Power Owners Australia's United Steam Nav. Co. Ltd. Port belonging to Brisbane
 Horse Power as per Section 28 498. Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted yes.

LINE, &c.—Description of Engines Triple 3 sets. No. of Cylinders 12 4 each set No. of Cranks 4 each set
 of Cylinders 15 x 24 x 24 x 24. Length of Stroke 21. Revs. per minute 4. Dia. of Screw shaft 4 1/2. Material of screw shaft steel
 screw shaft fitted with a continuous liner the whole length of the stern tube No liners Is the after end of the liner made water tight
 propeller boss — If the liner is in more than one length are the joints burned — If the liner does not fit tightly at the part
 in the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive — If two
 are fitted, is the shaft lapped or protected between the liners — white metal. Length of stern bush 3-6.
 of Tunnel shaft as per rule 6 5/8. Dia. of Crank shaft journals as per rule 4. Dia. of Crank pin 4. Size of Crank webs 8 1/4 x 4 7/8. Dia. of thrust shaft under
 as fitted 6 5/8. Dia. of screw 4-3 Pitch of Screw 9-0. No. of Blades 3 State whether moceable No. Total surface 16 1/2 sq. ft.
 of Feed pumps Diameter of ditto Stroke Can one be overhauled while the other is at work
 of Bilge pumps Diameter of ditto Stroke Can one be overhauled while the other is at work
 of Donkey Engines Sizes of Pumps No. and size of Suctions connected to both Bilge and Donkey pumps
 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
 all the bilge suction pipes fitted with roses Are the roses in Engine room always accessible Are the sluices on Engine room bulkheads always accessible
 all connections with the sea direct on the skin of the ship Are they Valves or Cocks
 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
 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
 at pipes are carried through the bunkers How are they protected
 all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times
 the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges
 tests of examination of completion of fitting of Sea Connections of Stern Tube Screw shaft and Propeller
 the Screw Shaft Tunnel watertight Is it fitted with a watertight door worked from

PLERS, &c.—(Letter for record) Manufacturers of Steel
 total Heating Surface of Boilers 9530 Is Forced Draft fitted Yes No. and Description of Boilers 2 D and 1 J. S. B.
 Working Pressure 160. 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
 percentages of strength of longitudinal joint Working pressure of shell by rules Size of manhole in shell
 size of compensating ring No. and Description of Furnaces in each boiler Material Outside diameter
 length of plain part Thickness of plates Description of longitudinal joint 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 Superheater or Steam chest; how connected to boiler Can the superheater be shut off and the boiler worked
 separately Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet
 holes Pitch of rivets Working pressure of stays Diameter of flue Material of flue plates Thickness
 if stiffened with rings Working pressure by rules End plates: Thickness How stayed
 Working pressure of end plates Area of safety valves to superheater Are they fitted with easing gear



