

REPORT ON MACHINERY.

No. 28403.

REC'D 22 DEC 1909

Received at London Office

Date of writing Report 20/12/09 When handed in at Local Office 20/12/09 Port of Glasgow
 No. in Survey held at Glasgow Date, First Survey 18th Jan 1909 Last Survey Dec. 16th 1909
 Reg. Book. 6 Sup. on the T. S. S. "Mecklenburgs" (Number of Visits 58)
 Master do Built at Glasgow By whom built Fairfield & B. & C. Ltd When built 1909
 Engines made at Glasgow By whom made Fairfield & B. & C. Ltd when made 1909
 Boilers made at do By whom made do when made 1909
 Registered Horse Power 1130 Owners Stoom. Maats. Zeland Port belonging to Flushing
 Nom. Horse Power as per Section 28 1130 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Twin Screw Triple No. of Cylinders 8 No. of Cranks 8
 Dia. of Cylinders 28-H3 1/2-H9-H9 Length of Stroke 33 Revs. per minute 175 Dia. of Screw shaft 1 1/2 Material of screw shaft steel
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube no Is the after end of the liner made water tight in the propeller boss yes If the liner is in more than one length are the joints burned no 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 white metal If two liners are fitted, is the shaft lapped or protected between the liners no Length of stern bush 6-H 1/2-H 3/4-H 5/8
 Dia. of Tunnel shaft 13 1/2 Dia. of Crank shaft journals 13 1/2 Dia. of Crank pin 14 Size of Crank webs 9 7/8 Dia. of thrust shaft under collars 13 1/2 Dia. of screw 11.6 Pitch of Screw 15.9 No. of Blades 3 State whether moveable yes Total surface 45.5
 No. of Feed pumps 2 Diameter of ditto 7 1/2-12 1/2 Stroke 27 Can one be overhauled while the other is at work yes Wing
 No. of Bilge pumps 2 Diameter of ditto 8 1/2-7.6 Stroke 15 Can one be overhauled while the other is at work yes
 No. of Donkey Engines 8 Sizes of Pumps 8 1/2 x 16, 8 1/2 x 22 x 16, 10 No. and size of Suctions connected to both Bilge and Donkey pumps 1-2 1/2
 In Engine Room 2-2 1/2 Boiler Room 2-2 1/2 In Holds, &c. 1-2 1/2 each hold no
 No. of Bilge Injections 7 sizes 10 Connected to condenser, or to circulating pump no Is a separate Donkey Suction fitted in Engine room & size yes 3"
 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 no
 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
 Dates of examination of completion of fitting of Sea Connections 9 of Stern Tube 7 Screw shaft and Propeller 14/12/09
 Is the Screw Shaft Tunnel watertight yes Is it fitted with a watertight door yes worked from Top grating

OILERS, &c.—(Letter for record (5)) Manufacturers of Steel David Colville & Son
 Total Heating Surface of Boilers 19458 Is Forced Draft fitted yes No. and Description of Boilers Four Double Ended
 Working Pressure 190 Tested by hydraulic pressure to 380 lbs Date of test 28/10/09, 13/7/09 No. of Certificate 9827, 10056
 Can each boiler be worked separately yes Area of fire grate in each boiler 133.5 No. and Description of Safety Valves to each boiler Lockdown Triple Area of each valve 12.56 Pressure to which they are adjusted 194 lbs Are they fitted with easing gear yes
 Smallest distance between boilers or uptakes and bunkers or woodwork abt. 12" Mean dia. of boilers 14.6 Length 20.0 Material of shell plates slit
 Thickness 1 7/32 Range of tensile strength 346-38 Are the shell plates welded or flanged no Descrip. of riveting: cir. seams 9 x 7 Lap
 long. seams D. B. S. Diameter of rivet holes in long. seams 1 1/2 Pitch of rivets 8 1/2 Lap of plates or width of butt straps 18 1/4
 Per centages of strength of longitudinal joint rivets 92 plate 85.3 Working pressure of shell by rules 216 lbs Size of manhole in shell 16 x 12
 Size of compensating ring Flanged No. and Description of Furnaces in each boiler 6 Mushion (Suspension) Bull. Material slit Outside diameter 44 7/8
 Length of plain part top 1.57 bottom 1.57 Thickness of plates crown 3/32 bottom 3/32 Description of longitudinal joint weld No. of strengthening rings no
 Working pressure of furnace by the rules 200 Combustion chamber plates: Material slit Thickness: Sides 19/32 Back no Top 19/32 Bottom 7/8
 Pitch of stays to ditto: Sides 7 1/8 Back no Top 7 1/8 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 195
 Material of stays slit Diameter at smallest part 1.48 Area supported by each stay 63 Working pressure by rules 190 End plates in steam space: Material slit Thickness 1 Pitch of stays 15 x 15 1/2 How are stays secured 9. nuts Working pressure by rules 193 Material of stays slit
 Diameter at smallest part 1.97 Area supported by each stay 220 Working pressure by rules 190 Material of Front plates at bottom slit
 Thickness 2 3/32 Material of Lower back plate no Thickness no Greatest pitch of stays no Working pressure of plate by rules no
 Diameter of tubes 2 1/2 Pitch of tubes 3 3/4 x 3 5/8 Material of tube plates slit Thickness: Front 2 3/32 Back 2 3/32 Mean pitch of stays 9 3/16
 Pitch across wide water spaces 13 Working pressures by rules 200 lbs Girders to Chamber tops: Material slit Depth and thickness of girder at centre 8 1/2 x 3/4 x 2 Length as per rule 2.7 1/2 Distance apart 7 7/8 Number and pitch of stays in each 6-7 1/8
 Working pressure by rules 190 Superheater or Steam chest; how connected to boiler none Can the superheater be shut off and the boiler worked separately no
 Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness
 If stiffened with rings Distance between 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

