

REPORT ON MACHINERY.

Port of Belfast Received at London Office MUN. 29 DEC 1902
 No. in Survey held at Belfast Date, first Survey 3 July Last Survey 20 Dec 1902
 Reg. Book. AB Marere (Number of Visits 52)
 on the Belfast Gross 6443 Tons Net 4159
 Master W. J. Marere Built at Belfast By whom built Workman Clark & Co when built 1902
 Engines made at Belfast By whom made Workman Clark & Co when made 1902
 Boilers made at Belfast By whom made Workman Clark & Co when made 1902
 Registered Horse Power 583 Owners Tysoe Line Ltd Port belonging to London
 Nom. Horse Power as per Section 28 583 Is Refrigerating Machinery fitted Yes Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Two Screw Triple Expansion Six No. of Cranks Six
 Dia. of Cylinders 20-33-56 Length of Stroke 45 Revs. per minute 45 Dia. of Screw shaft 12.36 Lgth. of stern bush 4.6
 Dia. of Tunnel shaft 11.5 Dia. of Crank shaft journals 12.0 Dia. of Crank pin 12 Size of Crank webs 21.8 Dia. of thrust shaft under
 collars 12 Dia. of screw 14.9 Pitch of screw 18.0 No. of blades 3 State whether moveable Yes Total surface 58 sq ft.
 No. of Feed pumps 2 Diameter of ditto 3.5 Stroke 24 Can one be overhauled while the other is at work Yes
 No. of Bilge pumps 2 Diameter of ditto 5 Stroke 24 Can one be overhauled while the other is at work Yes
 No. of Donkey Engines Four Sizes of Pumps Ballast 10x10x10 2 1/2 inch dia. and size of Suctions connected to both Bilge and Donkey pumps
 Engine Room 3-32 In Holds, &c. 10-32 and 1-22
 No. of bilge injections Two sizes 6 1/2 Connected to condenser, or to circulating pump Yes Is a separate donkey suction fitted in Engine room & size Yes-3 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 None
 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 Below
 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
 How are they protected Wood casing
 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
 When were stern tube, propeller, screw shaft, and all connections examined in dry dock 12 Dec 1902 Is the screw shaft tunnel watertight Plated steel
 Is it fitted with watertight doors Yes worked from Upper deck

BOILERS, &c.— (Letter for record 5) Total Heating Surface of Boilers 8266 sq ft. Is forced draft fitted Yes
 No. and Description of Boilers 4 Single ended Cylinders Working Pressure 200 lbs Tested by hydraulic pressure to 400 lbs
 Date of test 18-11-02 Can each boiler be worked separately Yes Area of fire grate in each boiler 52.25 sq ft No. and Description of safety valves to
 each boiler Two Direct Spring Area of each valve 8 1/2 sq in Pressure to which they are adjusted 205 lbs Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 12 in Mean dia. of boilers 13.9 Length 11.6 Material of shell plates Steel
 Thickness 1 1/32 Range of tensile strength 28-32 Are they welded or flanged No Descrip. of riveting: cir. seams Top & Bottom long seams Butt Seams Double
 Diameter of rivet holes in long. seams 1 1/32 Pitch of rivets 9 1/2 Lap of plates or width of butt straps 20 3/8
 Percentages of strength of longitudinal joint rivets 84.9 Working pressure of shell by rules 230 lbs Size of manhole in shell 16 x 12
 No. of compensating ring McNeill No. and Description of Furnaces in each boiler 3 Doughton Material Steel Outside diameter 43 1/4
 Length of plain part 6 Thickness of plates 38 Description of longitudinal joint Weld No. of strengthening rings 4
 Working pressure of furnace by the rules 225 Combustion chamber plates: Material Steel Thickness: Sides 3/32 Back 5/32 Top 3/32 Bottom 1
 No. of stays to ditto: Sides 8 x 7 Back 8 x 6 Top 8 x 7 If stays are fitted with nuts or riveted heads Nuts used Working pressure by rules 211 lbs
 Material of stays Steel Diameter at smallest part 1 1/2 Area supported by each stay 64 sq in Working pressure by rules 220 lbs End plates in steam space:
 Material Steel Thickness 1 3/16 Pitch of stays 6 1/2 x 15 How are stays secured Nuts used Working pressure by rules 262 lbs Material of stays Steel
 Diameter at smallest part 1 1/2 Area supported by each stay 252 sq in Working pressure by rules 240 lbs Material of Front plates at bottom Steel
 Thickness 1 Material of Lower back plates Steel Thickness 3/4 Greatest pitch of stays 16 Working pressure of plate by rules 52 lbs
 Diameter of tubes 2 1/2 Pitch of tubes 3 1/2 x 3 1/2 Material of tube plates Steel Thickness: Front 5/16 Back 1/8 Mean pitch of stays 11 1/2 x 7 1/4
 Working pressures by rules 308 lbs Girders to Chamber tops: Material Steel Depth and
 thickness of girder at centre 8 1/2 x 4 1/2 x 2 Length as per rule 28 1/2 Distance apart 4 1/2 Number and pitch of Stays in each 3-7
 Working pressure by rules 241 lbs Superheater or Steam chest; how connected to boiler Can the superheater be shut off and the boiler worked
 Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet
 Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness
 Stays fitted 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



