

REPORT ON MACHINERY.

No. 19962

Port of Hull

Received at London Office WED. 15 APR 1908

No. in Survey held at Hull Date, first Survey Aug 23rd 07 Last Survey 13th April 1908
 Reg. Book. 38 on the Steel S. S. Bienvaux Abbey (Number of Visits 60)
 Master Hull Built at Hull By whom built Messrs Earles & Co Ltd Tons { Gross 1162 Net 509
 Engines made at } Hull By whom made } Messrs Earles & Co Ltd when made } 1908
 Boilers made at } Hull By whom made } Messrs Earles & Co Ltd when made } 1908
 Registered Horse Power 499 Owners Hull & Netherlands S. S. Co. Ltd Port belonging to Hull
 Nom. Horse Power as per Section 28 499 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Triple Expansion No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 25 1/4 - 40 1/2 - 64 Length of Stroke 42 Revs. per minute 106 Dia. of Screw shaft 13 x 7 1/2 Material of 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 liners 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 No liners Length of stern bush 60 1/4
 Dia. of Tunnel shaft 12.26 as per rule 12.26 Dia. of Crank shaft journals 12.87 as per rule 12.87 Dia. of Crank pin 13 Size of Crank webs 19 1/2 x 8 1/2 Dia. of thrust shaft under
 collars 13 Dia. of screw 13 - 6 Pitch of Screw 16 - 6 No. of Blades 4 State whether moceable No Total surface 68 ϕ
 No. of Feed pumps 2 Diameter of ditto 5 1/4 Stroke 14 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 10 1/2 Cent. 10 x 6 x 10 No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room Two 2, One 2 1/4, Special Bilge 4 In Holds, &c Aft hold port 2, star 2, Tunnel well 2 1/4
No 1 tank, port 2 1/2, star 2 1/2, No 2 tank, One 2 1/2, A.P. tank one 2 1/2, Main hold port 2, Star 2, Fore hold one 2 1/4
 No. of Bilge Injections 1 sizes 7 Connected to condenser, or to circulating pump pump Is a separate Donkey Suction fitted in Engine room & size Yes
 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 0
 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
 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 hold suction 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
 Dates of examination of completion of fitting of Sea Connections 5.2.08 of Stern Tube 5.2.08 Screw shaft and Propeller 5.2.08
 Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from deck

BOILERS, &c.—(Letter for record 5) Manufacturers of Steel The Steel Company of Scotland
 Total Heating Surface of Boilers 8100 ϕ Is Forced Draft fitted Yes No. and Description of Boilers 3 Cyl. Multi
 Working Pressure 185 lbs Tested by hydraulic pressure to 370 lbs Date of test 24.12.07 No. of Certificate 1621, 1625, 1628
 Can each boiler be worked separately Yes Area of fire grate in each boiler 60 1/2 ϕ No. and Description of Safety Valves to
 each boiler Two Spring Area of each valve 8.290 Pressure to which they are adjusted 189 lbs Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 18 Mean dia. of boilers 15-0 Length 12-0 Material of shell plates Steel
 Thickness 1 3/8 Range of tensile strength 29 Are the shell plates welded or flanged No Descrip. of riveting: cir. seams L. D.
 long. seams D. S. S. J. C. Diameter of rivet holes in long. seams 1 1/16 Pitch of rivets 9 1/16 Lap of plates or width of butt straps 2 1/4
 Per centages of strength of longitudinal joint rivets 90.6 Working pressure of shell by rules 215 lbs Size of manhole in shell 16 x 12
 plate 85.1 Size of compensating ring 40 x 30 x 1 3/8 No. and Description of Furnaces in each boiler 3 Brown's Material Steel Outside diameter 45 1/4
 Length of plain part 5 Thickness of plates 5 Description of longitudinal joint Welded No. of strengthening rings 1
 Working pressure of furnace by the rules 205 lbs Combustion chamber plates: Material Steel Thickness: Sides 5/8 Back 5/8 Top 5/8 Bottom 5/8
 Pitch of stays to ditto: Sides 8 x 8 Back 8 x 8 Top 8 x 7 1/2 If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 210 lbs
 Material of stays Steel Diameter at smallest part 1 3/8 Area supported by each stay 64 Working pressure by rules 185 lbs End plates in steam space:
 Material Steel Thickness 1 5/8 Pitch of stays 20 x 14 1/4 How are stays secured able. Nuts Working pressure by rules 186 lbs Material of stays Steel
 Diameter at smallest part 2 1/16 Area supported by each stay 335 Working pressure by rules 192 lbs Material of Front plates at bottom Steel
 Thickness 3/32 Material of Lower back plate Steel Thickness 3/32 Greatest pitch of stays 14 x 8 Working pressure of plate by rules 189 lbs
 Diameter of tubes 2 1/2 Pitch of tubes 3 3/4 x 3 3/4 Material of tube plates Steel Thickness: Front 3/32 Back 7/8 Mean pitch of stays 7 1/2
 Pitch across wide water spaces 12 1/2 Working pressures by rules 186 lbs Girders to Chamber tops: Material Steel Depth and
 thickness of girder at centre 9 1/2 x 1 3/4 Length as per rule 36 1/2 Distance apart 7 3/8 Number and pitch of stays in each 3 - 8
 Working pressure by rules 219 lbs 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 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

