

REPORT ON MACHINERY.

NEWCASTLE ON TYNE, 58966
No. 13951.

Date of writing Report June 16th 1910 When handed in at Local Office June 17th 1910 Port of Hartlepool
 No. in Survey held at Hartlepool Date, First Survey 13th Dec. 1909 Last Survey 14th June 1910
 Reg. Book. on the Machinery for the S/S Inarabarah (Number of Visits 91)
 Master Built at Newcastle By whom built Suran Hunter & John Richardson when built 1910
 Engines made at Hartlepool By whom made Richardsons Newcastle & Co. Ltd. when made 1910
 Boilers made at Hartlepool By whom made Richardsons Newcastle & Co. Ltd. when made 1910
 Registered Horse Power 755.0 Owners J.B. Royce Port belonging to Hartlepool
 Nom. Horse Power as per Section 28 755.0 Is Refrigerating Machinery fitted for cargo purposes yes Is Electric Light fitted yes

ENGINES, &c.—Description of Engines Twin Screw Triple Expansion No. of Cylinders 6 Is Electric Light fitted yes
 Dia. of Cylinders 22"-37"-62" Length of Stroke 45" Revs. per minute 80 Dia. of Screw shaft as per rule 13.08" No. of Cranks 6
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube Yes Material of screw shaft Cast Steel
 in the propeller bosses Yes If the liner is in more than one length are the joints burned Yes Is the after end of the liners made water tight
 between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive No. If the liner does not fit tightly at the part
 liners are fitted, is the shaft lapped or protected between the liners No. Length of stern bush 4'-6"
 Dia. of Tunnel shaft as per rule 11.9" Dia. of Crank shaft journals as per rule 12.5" Dia. of Crank pin 13 1/4" Size of Crank webs 8 1/2" x 25 1/2" of thrust shaft under
 collars 12 3/4" Dia. of screw 15'-6" Pitch of Screw 17'-0" No. of Blades 3 State whether moveable No Total surface 64 sq
 No. of Feed pumps 2 Diameter of ditto 4 1/4" Stroke 24" Can one be overhauled while the other is at work Yes
 No. of Bilge pumps 1 Diameter of ditto 5 3/4" Stroke 24" Can one be overhauled while the other is at work Yes
 No. of Donkey Engines 3 Sizes of Pumps 9 1/2" x 24" Disk No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room three 3 1/2" 6" x 18" 12" x 12" In Holds, &c. two in each 3 1/2"

No. of Bilge Injections 2 sizes 8" Connected to condenser, or to circulating pump Circulating 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 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 both
 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 forward Suctions How are they protected under floor
 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 8.6.10 of Stern Tubes 8.6.10 Screw shaft and Propeller 8.6.10
 Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Upper platform
 BOILERS, &c.—(Letter for record (S)) Manufacturers of Steel John Spencer & Sons.
 Total Heating Surface of Boilers 11044 Is Forced Draft fitted Yes No. and Description of Boilers 4 Cylindrical Single ended
 Working Pressure 200 lbs. Tested by hydraulic pressure to 400 lbs. Date of test 4.5.1910 No. of Certificate 3195 & 3199
 Can each boiler be worked separately Yes Area of fire grate in each boiler 65.4 sq No. and Description of Safety Valves to
 each boiler 2 Spring loaded Area of each valve 256 sq 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 3'-0" Mean dia. of boilers 15'-9" Length 12'-0" Material of shell plates Steel
 Thickness 1/4" Range of tensile strength 20 1/2 Tons Are the shell plates welded or flanged No Descrip. of riveting: cir. seams T.R.L.A.P.
 long. seams T.R.D.B.S. Diameter of rivet holes in long. seams 1/4" Pitch of rivets 10 1/2" Lap of plates or width of butt straps 23"
 Per centages of strength of longitudinal joint rivets 89 Working pressure of shell by rules 234 lbs. Size of manhole in shell 16 1/2" x 23"
 Size of compensating ring 32" x 31" x 1/4" No. and Description of Furnaces in each boiler 3 Material Steel Outside diameter 49 3/4"
 Length of plain part top Thickness of plates bottom 3 23/32" Description of longitudinal joint Welded No. of strengthening rings Susp.
 Working pressure of furnace by the rules 240 Combustion chamber plates: Material Steel Thickness: Sides 5/8" Back 5/8" Top 5/8" Bottom 1"
 Pitch of stays to ditto: Sides 7 1/4" x 8 1/4" Back 8 1/4" x 8" Top 8 1/2" x 7 1/2" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 204.5
 Material of stays Steel Diameter at smallest part 1 1/2" Area supported by each stay 8 1/4" x 8" Working pressure by rules 214 End plates in steam space:
 Material Steel Thickness 1/8" Pitch of stays 18" x 16 1/4" How are stays secured D.N.W Working pressure by rules 204 Material of stays Steel
 Diameter at smallest part 2 1/8" Area supported by each stay 18" x 16 1/4" Working pressure by rules 231 Material of Front plates at bottom Steel
 Thickness 7/8" Material of Lower back plate Steel Thickness 27/32" Greatest pitch of stays 13 1/2" x 8" Working pressure of plate by rules 200-2
 Diameter of tubes 2 1/2" Pitch of tubes 3 1/6" x 3 3/4" Material of tube plates Steel Thickness: Front 1" Back 3/4" Mean pitch of stays 7 3/8" x 9 3/8"
 Pitch across wide water spaces 13 1/2" Working pressures by rules 211 lbs. Girders to Chamber tops: Material Steel Depth and
 thickness of girder at centre 9" x 1 1/4" Length as per rule 2'-8 1/2" Distance apart 8 1/2" Number and pitch of stays in each 3. 7 1/2"
 Working pressure by rules 203 Superheater or Steam chest; how connected to boiler None Can the superheater be shut off and the boiler worked
 separately Yes 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

If not, state whether, and when, one will be sent

Is a Report also sent on the Hull of the ship?

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