

REPORT ON MACHINERY.

No. 9657
Received at London Office 14 MAR. 1917

Date of writing Report 10 When handed in at Local Office 10.3.17 19 Port of Middlesbrough
 No. in Survey held at Stockton-on-Tees Date, First Survey 27th Sept. 1915 Last Survey 3rd March 1917
 Reg. Book. on the Steel Screw Steamer Beechleaf (S.S. No. 649) Tons Gross 586 1/2 Net 344 1/8
 Master J.M. Housegoe Built at Stockton By whom built Richardson Duck & Co When built 1917
 Engines made at Stockton By whom made Messrs Blair & Co Ltd (No 1877) when made 1917
 Boilers made at Stockton By whom made Messrs Blair & Co Ltd when made 1917
 Registered Horse Power Owners Lane Macandrew & Co Port belonging to London
 Nom. Horse Power as per Section 28 395 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

ENGINES, &c.—Description of Engines Tri-compound No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 26-42-70 Length of Stroke 48 Revs. per minute 65 Dia. of Screw shaft as per rule 14-48 Material of screw shaft W. Iron
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube yes 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 in one 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 tight fit If two liners are fitted, is the shaft lapped or protected between the liners yes Length of stern bush 5'-4"
 Dia. of Tunnel shaft as per rule 12-97 Dia. of Crank shaft journals as per rule 13-62 Dia. of Crank pin 14 3/4 Size of Crank webs 28 1/2 x 9 1/2 Dia. of thrust shaft under collars 14 3/4 Dia. of screw 17-6 Pitch of Screw 17-3 No. of Blades 4 State whether moveable no Total surface 96 sq ft
 No. of Feed pumps 2 Diameter of ditto 3 1/2 Stroke 34 Can one be overhauled while the other is at work yes
 No. of Bilge pumps 2 Diameter of ditto 5 Stroke 34 Can one be overhauled while the other is at work yes
 No. of Donkey Engines 4 Sizes of Pumps Blair's 2 x 10 7 x 7 1/2 x 24 No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room 4 @ 3 1/2 + one 3 Lanoub 2 1/2 x 8 8 x 6 x 8 8 x 6 x 8 In Holds, &c. Fore hold 2 @ 3 Fore afterdam 2 @ 3
2 @ 3 1/2 in Boiler Room Special pumping arrangement for oil cargo holds
 No. of Bilge Injections 1 sizes 7 Connected to condenser or to circulating pump yes Is a separate Donkey Suction fitted in Engine room of size yes - 4
 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 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 yes
 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
 Is the Screw Shaft Tunnel watertight none Is it fitted with a watertight door yes worked from yes

BOILERS, &c.—(Letter for record (S)) Manufacturers of Steel Messrs John Spencer & Sons Ltd
 Total Heating Surface of Boilers 6435 Is Forced Draft fitted no No. and Description of Boilers 3 single ended
 Working Pressure 180 Tested by hydraulic pressure to 360 Date of test 24.1.16 No. of Certificate 5609
 Can each boiler be worked separately yes Area of fire grate in each boiler oil fuel No. and Description of Safety Valves to each boiler 2 direct spring Area of each valve 7.07 Pressure to which they are adjusted 185 Are they fitted with easing gear yes
 Smallest distance between boilers or plates and bunkers on deck 1'-8" Mean dia. of boilers 15'-3" Length 11'-0" Material of shell plates steel
 Thickness 1 1/2 Range of tensile strength 28-32 Are the shell plates welded or flanged no Descrip. of riveting: cir. seams 2 R. lap long. seams 2 B-3 Riv Diameter of rivet holes in long. seams 1 1/4 Pitch of rivets 8 1/2 Lap of plates or width of butt straps 18 5/8 x 1 1/2
 Per centages of strength of longitudinal joint rivets 85.8 Working pressure of shell by rules 180 Size of manhole in shell 16 x 12 plate 85.6
 Size of compensating ring 7 1/2 x 1 1/2 No. and Description of Furnaces in each boiler 3 Brighton Material steel Outside diameter 45 1/2
 Length of plain part top yes bottom yes Thickness of plates crown 9/16 bottom 9/16 Description of longitudinal joint Weld No. of strengthening rings yes
 Working pressure of furnace by the rules 192 Combustion chamber plates; Material steel Thickness: Sides 1/16 Back 1/16 Top 1/16 Bottom 13/16
 Pitch of stays to ditto: Sides 10 x 8 1/2 Back 9 1/2 x 9 Top 8 1/2 x 10 1/2 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 183
 Material of stays steel Area at smallest part 1.99 Area supported by each stay 85.5 Working pressure by rules 209 End plates in steam space: Material steel Thickness 1 1/2 Pitch of stay 18 1/2 20 1/2 21 1/2 How are stays secured nuts & 9 x 1 washers Working pressure by rules 189 Material of stays steel
 Area at smallest part 7.24 Area supported by each stay 385 Working pressure by rules 195 Material of Front plates at bottom steel
 Thickness 1 1/2 Material of Lower back plate steel Thickness 1 1/2 Greatest pitch of stays 16 x 10 1/2 Working pressure of plate by rules 228
 Diameter of tubes 3 1/2 Pitch of tubes 4 1/2 x 4 1/2 Material of tube plates steel Thickness: Front 1 1/2 Back 1 1/2 Mean pitch of stays 10 27/32
 Pitch across wide water spaces 14 1/2 Working pressures by rules 182 Girders to Chamber tops: Material steel Depth and thickness of girder at centre 7 3/4 x 1 3/4 Length as per rule 29 Distance apart 10 Number and pitch of stays in each 2 @ 8 1/2
 Working pressure by rules 191 Steam dome: description of joint to shell none % of strength of joint yes
 Diameter Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes
 Pitch of rivets Working pressure of shell by rules Crown plates Thickness How stayed

SUPERHEATER. Type _____ Date of Approval of Plan _____ Tested by Hydraulic Pressure to _____
 Date of Test _____ Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler _____
 Diameter of Safety Valve _____ Pressure to which each is adjusted _____ Is Easing Gear fitted _____

If not, state whether, and when, it will be sent to the Registrar of Shipping

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