

# REPORT ON MACHINERY.

No. 40370  
WED. SEP. 22 1920

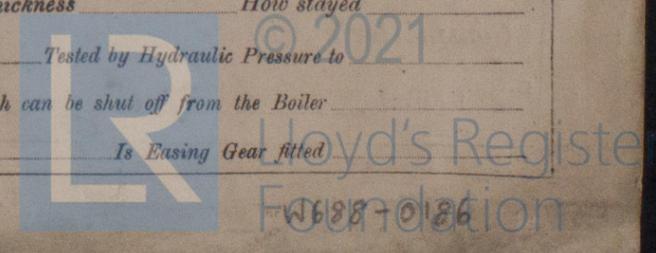
Received at London Office

Date of writing Report 20.9.20 When handed in at Local Office 20.9.20 Port of Glasgow.  
 No. in Survey held at Coatbridge. Date, First Survey 21 Dec 1919 Last Survey 8<sup>th</sup> Sept 1920  
 Reg. Book. on the Machinery for S.S. "Beatty Rose" (Number of Visits 3)  
 Master          Built at Paisley. By whom built Fullerton & Co. No. 266. Tons          Gross          Net          When built           
 Engines made at Coatbridge. By whom made Wm. Beardmore & Co. No. 544. when made 1920.  
 Boilers made at Glasgow. By whom made A. & W. Dalgleish & Co. No. 7556. when made 1920.  
 Registered Horse Power          Owners Richard Hughes & Co. Port belonging to Liverpool  
 Nom. Horse Power as per Section 28 144.25. Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted no

ENGINES, &c.—Description of Engines Triple Expansion No. of Cylinders 3 No. of Cranks 3  
 Dia. of Cylinders 16" 26" 14 1/2" Length of Stroke 33" Revs. per minute 96 Dia. of Screw shaft 9.29 as per rule 8.29 Material of screw shaft M.S.  
 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          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          If two liners are fitted, is the shaft lapped or protected between the liners          Length of stern bush 3-6"  
 Dia. of Tunnel shaft as per rule 8.32" Dia. of Crank shaft journals as per rule 8.44" Dia. of Crank pin 9" Size of Crank webs 16 1/2" Dia. of thrust shaft under collars 9 1/4" Dia. of screw 11-3" Pitch of Screw 13-0" No. of Blades 4. State whether moveable no Total surface 50 sq ft.  
 No. of Feed pumps 2 Diameter of ditto 3" Stroke 16 1/2" Can one be overhauled while the other is at work yes  
 No. of Bilge pumps 2. Diameter of ditto 3" Stroke 16 1/2" Can one be overhauled while the other is at work yes  
 No. of Donkey Engines 2 Sizes of Pumps 7x8x8" 6x4 1/4x6" No. and size of Suctions connected to both Bilge and Donkey pumps  
 In Engine Room 9 Blt Room: 1-2 1/4" 2-2" + In Holds, &c. 2 1/2 - 2"  
1-2 1/2" Spec. Bilge  
 No. of Bilge Injections 1 sizes 4" Connected to condenser, or to circulating pump Pump Is a separate Donkey Suction fitted in Engine room & size 4 1/2 2 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           
 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           
 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          worked from         

CYLINDERS, &c.—(Letter for record         ) Manufacturers of Steel           
 Total Heating Surface of Boilers 2550 Is Forced Draft fitted no No. and Description of Boilers 2 Single Ended  
 Working Pressure 180 lbs Tested by hydraulic pressure to 360 Date of test 23.1.20 No. of Certificate 15089-15049  
 Can each boiler be worked separately          Area of fire grate in each boiler          No. and Description of Safety Valves to each boiler double spring loaded Area of each valve 4.9 Pressure to which they are adjusted 185 lbs Are they fitted with easing gear yes  
 Smallest distance between boilers or uptakes and bunkers or woodwork abt 12" side Mean dia. of boilers          Length          Material of shell plates           
 Thickness          Range of tensile strength          Are the shell plates welded or flanged          Descrip. of riveting: cir. seams           
 Long. seams          Diameter of rivet holes in long. seams          Pitch of rivets          Lap of plates or width of butt straps           
 Percentages of strength of longitudinal joint          Working pressure of shell by rules          Size of manhole in shell           
 Size of compensating ring          No. and Description of Furnaces in each boiler          Material          Outside diameter           
 Length of plain part          Thickness of plates          Description of longitudinal joint          No. of strengthening rings           
 Working pressure of furnace by the rules          Combustion chamber plates: Material          Thickness: Sides          Back          Top          Bottom           
 Pitch of stays to ditto: Sides          Back          Top          If stays are fitted with nuts or riveted heads          Working pressure by rules           
 Material of stays          Area at smallest part          Area supported by each stay          Working pressure by rules          End plates in steam space:           
 Material          Thickness          Pitch of stays          How are stays secured          Working pressure by rules          Material of stays           
 Area at smallest part          Area supported by each stay          Working pressure by rules          Material of Front plates at bottom           
 Thickness          Material of Lower back plate          Thickness          Greatest pitch of stays          Working pressure of plate by rules           
 Diameter of tubes          Pitch of tubes          Material of tube plates          Thickness: Front          Back          Mean pitch of stays           
 Pitch across wide water spaces          Working pressures by rules          Girders to Chamber tops: Material          Depth and           
 Thickness of girder at centre          Length as per rule          Distance apart          Number and pitch of stays in each           
 Working pressure by rules          Steam dome: description of joint to shell          % of strength of joint           
 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         



IS A DONKEY BOILER FITTED? no

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied: - 2 connecting rod top end bolts & nuts: 2 connecting rod bottom end bolts & nuts: 2 main bearing bolts: 1 set of coupling bolts: a quantity of assorted bolts & nuts: iron of various sizes: 1 set of feed & bilge pump valves.

The foregoing is a correct description,

WILLIAM BEARDMORE & CO., LIMITED, Manufacturer.

per R Sneddon.

Dates of Survey while building: During progress of work in shops - 1919: Dec 18, 23 (1920) Jan 6, 9, Feb 3, 10, 20, 24, Mar 9, 23, 31, Apr 8, 20, 26, May 3, 14, 19, 25, 28, Jun 1, 8, 16, 23, 27, July 1, 13, Aug 6, 12, 18, 25, 30, Sep 4, 6, 8. Total No. of visits 37. Is the approved plan of main boiler forwarded herewith See boiler Report

Dates of Examination of principal parts - Cylinders 31-3-20 Slides 26-4-20 Covers 31-3-20 Pistons 20-4-20 Rods 20-4-20

Connecting rods 19-5-20 Crank shaft 3-2-20 Thrust shaft 25-6-20 Tunnel shafts none. Screw shaft 25-6-20 Propeller 25-6-20

Stern tube 25-6-20 Steam pipes tested 25-8-20 Engine and boiler seatings 6-8-20 Engines holding down bolts 30-8-20

Completion of pumping arrangements 8-9-20 Boilers fixed 8-9-20 Engines tried under steam 8-9-20

Completion of fitting sea connections 23-6-20 Stern tube 1-7-20 Screw shaft and propeller 1-7-20

Main boiler safety valves adjusted 4-9-20 Thickness of adjusting washers Port Blk 5/8 Start Blk 5/8

Material of Crank shaft M.S. Identification Mark on Do. 4014. #13 Material of Thrust shaft M.S. Identification Mark on Do. 4014. #13

Material of Tunnel shafts none. Identification Marks on Do. 3-2-20 Material of Screw shafts M.S. Identification Marks on Do. 25-6-2

Material of Steam Pipes Copper Test pressure 360 lbs

Is an installation fitted for burning oil fuel no Is the flash point of the oil to be used over 150°F.

Have the requirements of Section 49 of the Rules been complied with

Is this machinery duplicate of a previous case no If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c. The Engines have been built under Special Survey. The materials and Workmanship are good throughout.

The machinery has been securely fitted on board, and proved satisfactory on steam trial

It is submitted that this vessel be eligible for a record of + L.M.C. 9-20 in the Register Book.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 9-20

Retl 25/9/20 JRS

The amount of Entry Fee ... £ 2 . 0 . 0 } When applied for, Special ... £ 21 . 12 . 0 } 17-9-19-20. Donkey Boiler Fee ... £ : : } When received, Travelling Expenses (if any) £ : : } 12/9/20

John Barr. & A. T. Thomas Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 21 SEP 1920

Assigned + L.M.C 9-20 MACHINERY DEALER WRITER 22-9-20

