

REPORT ON MACHINERY.

No. 43965

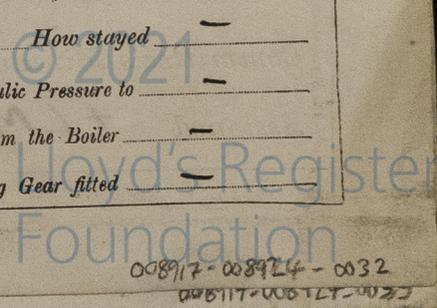
Received at London Office

Date of writing Report 6th Sept. 1924 When handed in at Local Office 13th Sept. 1924 Port of Glasgow
 No. in Survey held at Glasgow Date, First Survey 8-10-1920 Last Survey 3-9-1924
 Reg. Book. 65 (Number of Visits)
 on the s.s. "ALBATROSS" Tons Gross 1943
 Master Built at Grangemouth By whom built Grangemouth Dockyard Co. Ltd. (N^o 409) When built 1924
 Engines made at Glasgow By whom made D. Rowan & Co. Ltd. (N^o 760) when made 1924
 Boilers made at Glasgow By whom made D. Rowan & Co. Ltd. (N^o 760) when made 1924
 Registered Horse Power Owners General Steam Navigation Co. Ltd. Port belonging to London
 Nom. Horse Power as per Section 28 227 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 21" - 35" - 57" Length of Stroke 36 Revs. per minute 77 Dia. of Screw shaft as per rule 11.78 Material of screw shaft 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 Yes 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-charged If two
 liners are fitted, is the shaft lapped or protected between the liners Yes Length of stern bush 4'-0"
 Dia. of Tunnel shaft as per rule 10.28 Dia. of Crank shaft journals as per rule 10.8 Dia. of Crank pin 11 Size of Crank webs 2 1/2" x 7 Dia. of thrust shaft under
 collars 11 1/2" Dia. of screw 14'-9" Pitch of Screw 16'-0" No. of Blades 4 State whether moveable NO Total surface 68 sq
 No. of Feed pumps 2 Diameter of ditto 3 1/4" Stroke 18" Can one be overhauled while the other is at work Yes
 No. of Bilge pumps 2 Diameter of ditto 3 1/2" Stroke 18" Can one be overhauled while the other is at work Yes
 No. of Donkey Engines 2 Sizes of Pumps 7" x 5" x 8" 9" x 11" x 10" No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room 2 @ 2 3/4" and 2 @ 3" to dry tank in stokehold Holds, &c. N^o 1 Hold 2 @ 2 1/2", N^o 2 Hold 2 @ 2 1/2"
After Hold 2 @ 2 3/4" and 1 @ 2 1/2" to Hold Well; 1 @ 2 1/2" to Tunnel Well.
 No. of Bilge Injections 1 sizes 4 1/2" Connected to condenser, or to circulating pump Pump Is a separate Donkey Suction fitted in Engine room & size 1 @ 3"
 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 Yes Is it fitted with a watertight door Yes worked from Upper deck

BOILERS, &c.—(Letter for record S) Manufacturers of Steel Gas. Dunlop & Co. Ltd., D. Colville Sons, Ltd.
 Total Heating Surface of Boilers 37 1/2 sq Is Forced Draft fitted NO No. and Description of Boilers Two Single Ended
 Working Pressure 180 lbs./sq Tested by hydraulic pressure to 360 lbs./sq Date of test 26.9.22 No. of Certificate 16/21
 Can each boiler be worked separately Yes Area of fire grate in each boiler 56.5 sq No. and Description of Safety Valves to
 each boiler Two Spring loaded Area of each valve 5.98 sq Pressure to which they are adjusted 185 lbs./sq Are they fitted with easing gear Yes
 Smallest distance between boilers on uptakes and bunkers or woodwork 9" Int. dia. of boilers 14'-6" Length 10'-6" Material of shell plates Steel
 Thickness 1 1/4" Range of tensile strength 28/32 tons/sq Are the shell plates welded or flanged NO Descrip. of riveting: cir. seams D.R. LAP
 long. seams T.R.D.B.S Diameter of rivet holes in long. seams 1 1/4" Pitch of rivets 8 3/32" Top of plates or width of butt straps 18 1/2"
 Per centages of strength of longitudinal joint riots 90.6 Working pressure of shell by rules 181 lbs./sq Size of manhole in shell 19 1/2" x 15 1/2"
 Size of compensating ring 33 1/2" x 29 1/2" x 1 1/4" plate 85.6 flanged 3" to 16" x 12" manhole No. and Description of Furnaces in each boiler 3 Corrugated Material Steel Outside diameter 3'-9 1/2"
 Length of plain part top bottom Thickness of plates 32 Description of longitudinal joint weld No. of strengthening rings None
 Working pressure of furnace by the rules 181 lbs./sq Combustion chamber plates: Material Steel Thickness: Sides 23/32" Back 5/8" Top 23/32" Bottom 23/32"
 Pitch of stays to ditto: Sides 9 7/8" x 9" Back 9 1/4" x 8" Top 9 7/8" x 10" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 180 lbs./sq
 Material of stays Steel Area at smallest part 2.07 sq Area supported by each stay 74 sq Working pressure by rules 251 lbs./sq End plates in steam space:
 Material Steel Thickness 1 1/4" Pitch of stays 2 1/4" x 19" How are stays secured D. Nuts Working pressure by rules 182 lbs./sq Material of stays Steel
 Area at smallest part 7.06 sq Area supported by each stay 40.3 sq Working pressure by rules 181 lbs./sq Material of Front plates at bottom Steel
 Thickness 29/32" Material of Lower back plate Steel Thickness 25/32" Greatest pitch of stays 13" x 8" Working pressure of plate by rules 181 lbs./sq
 Diameter of tubes 3 1/2" Pitch of tubes 5" x 5" Material of tube plates Steel Thickness: Front 29/32" Back 13/16" Mean pitch of stays 11 1/4"
 Pitch across wide water spaces 14" Working pressures by rules 187 lbs./sq Girders to Chamber tops: Material Steel Depth and
 thickness of girder at centre 8 1/2" x 2 @ 7/8" Length as per rule 30 7/16" Distance apart 10" Number and pitch of stays in each 2 @ 9 7/8"
 Working pressure by rules 189 lbs./sq Steam dome: description of joint to shell None % 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 -
 Tested by Hydraulic Pressure to -

SUPERHEATER. Type None Date of Approval of Plan - Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler -
 Date of Test - Is Easing Gear fitted -
 Diameter of Safety Valve - Pressure to which each is adjusted -



IS A DONKEY BOILER FITTED? Yes If so, is a report now forwarded? Yes.

SPARE GEAR. State the articles supplied:— 2 Connecting rod top-end bolts and nuts; 2 Connecting rod bottom-end bolts and nuts; 2 main bearing bolts; 1 set of Coupling bolts; 1 set of feed and bilge pump valves; 1 set of piston springs; a quantity of assorted bolts and nuts; iron of various sizes; and a quantity of additional spare parts.

The foregoing is a correct description,
 For David Rowan & Co Ltd
 Arch^d W. Grierson, Manufacturer.

Dates of Survey while building
 During progress of work in shops -- 1920 Oct 8 Nov 10-30 1921 Jan 11-25 Feb 7-16 Mar 8-11-25-29 Apr 11-14-25 May 2-3 9-18 30 June 6 8-27-29-30 July 4-7-11 Aug 14-18-26 Aug 8-26 Sep 20 Oct 10 Nov 2-5-6-9-15-20 1923 Sep 26 Nov 1 Dec 19-26 1923 Jan 22-29-31 Feb 5-9 13-20 Mar 2-6 14 Apr 9-17 18-25-30 May 31 Jun 3
 During erection on board vessel ---
 Total No. of visits 65. Is the approved plan of main boiler forwarded herewith Yes.
 " " " donkey " " " Yes.

Dates of Examination of principal parts—Cylinders 18.5.21 Slides 18.5.21 Covers 18.5.21 Pistons 2.3.23 + 30.4.23 Rods 30.4.23
 Connecting rods 30.4.23 Crank shaft 31.1.23 Thrust shaft 18.4.23 Tunnel shafts 1.12.21 Screw shaft 30.4.23 Propeller 30.4.23
 Stern tube 31.5.23 Steam pipes tested 6.3.23 to 5.11.23 Engine and boiler seatings 9.10.23 Engines holding down bolts 15.11.23
 Completion of pumping arrangements 15.11.23 Boilers fixed 15.11.23 Engines tried under steam 20.11.23 + 3.9.24
 Completion of fitting sea connections 21.6.23 Stern tube 21.6.23 Screw shaft and propeller 21.6.23
 Main boiler safety valves adjusted 20.11.23 Thickness of adjusting washers PORT BOILER $P \frac{1}{4}$ S $\frac{1}{8}$ STAR BOILER $P \frac{1}{4}$ S $\frac{5}{16}$
 Material of Crank shaft Steel Identification Mark on Do. LLOYD'S N° 5763 H.C.F. 31.1.23 Material of Thrust shaft Steel Identification Mark on Do. LLOYD'S N° 5763 H.C.F. 18.4.23
 Material of Tunnel shafts Steel Identification Marks on Do. LLOYD'S 5763, 5116, 5163, 5763 J.E.S. 1.12.21 Material of Screw shafts Iron Identification Marks on Do. LLOYD'S N° 2221 H.C.F. 30.4.23
 Material of Steam Pipes Lapwelded Wrot Iron Test pressure 540 lbs/sq
 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 Yes If so, state name of vessel S.S. "Briarpark" Gls. Rpt. N° 42664

General Remarks (State quality of workmanship, opinions as to class, &c.)

This machinery has been constructed under special survey in accordance with the Rules and approved plans, fitted on board the vessel in an efficient manner, examined under full working conditions and found satisfactory; the materials and workmanship are good.

The installation was completed in November, 1923, since which time the vessel has been laid up awaiting ownership; before proceeding on trials the vessel was placed in drydock and the propeller and fastenings of all sea connections examined and found satisfactory; the boilers have also been opened up and examined, and no deterioration found to have taken place.

The machinery is eligible, in our opinion, for classification and to have the record L.M.C. 9.24 in the Register Book. It is submitted that this vessel is eligible for THE RECORD. + LMC 9.24. CL.

The amount of Entry Fee ... £ 4 : 0 : 0 When applied for,
 Special ... £ 56 : 15 : 0 16/9/24
 Donkey Boiler Fee ... £ : : :
 Travelling Expenses (if any) £ 2 : 18 : 10 When received, 18/9/24

M. Forster H. J. Bell
 Engineer-Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 16 SEP 1924
 Assigned + LMC 9.24

CERTIFICATE WRITTEN 23.9.24



Glasgow
 The Surveyors are requested not to write on or below the space for Committee's Minute.
 Certificate (if required) to be sent to
 13/9/24