

REPORT ON MACHINERY.

No. 35489

Received at London Office WED. 6-OCT. 1915

Date of writing Report 2 Oct. 1915 Which was held at at Local Office 2 Oct. 1915 Port of Glasgow
 No. in Survey held at Glasgow Date, First Survey 6/11/14 Last Survey 30 Sept 1915
 Reg. Book. on the Machinery of S. WHEATSHEAF (Number of Vents 36)
 Master Herbert Proctor Built at Ardrossan By whom built Ardrossan S.D. 186 (263) When built 1915
 Engines made at Glasgow By whom made McKies & Baxter Eng 804 when made 1915
 Boilers made at G. By whom made A. D. Dalgleish Bala 1866 when made 1915
 Registered Horse Power _____ Owners Spillers & S. Co Ltd Port belonging to Cardiff
 Nom. Horse Power as per Section 28 110 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

ENGINES, &c.—Description of Engines Compound No. of Cylinders 2 No. of Cranks 2
 Dia. of Cylinders 20 & 42 Length of Stroke 30 Revs. per minute _____ Dia. of Screw shaft 9.5 Material of Iron
 as per rule 9.5 as fitted 9.5 screw shaft
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube no liners Is the after end of the liner made water tight in the propeller boss ✓ 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 3-3
 Dia. of Tunnel shaft 8.47 as per rule 8.47 Dia. of Crank shaft journals 8.98 as per rule 8.98 Dia. of Crank pin 8.78 Size of Crank webs 16x3.5 Dia. of thrust shaft under collars 8.78 Dia. of screw 10-3 Pitch of Screw 13-0 No. of Blades 4 State whether moveable no Total surface 40.5
 No. of Feed pumps 2 Diameter of ditto 2.78 Stroke 15 Can one be overhauled while the other is at work yes
 No. of Bilge pumps 2 Diameter of ditto 2.78 Stroke 15 Can one be overhauled while the other is at work yes
 No. of Donkey Engines 3 Sizes of Pumps one 7x4x8, one 5x4x8, one 4x4x8 No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room one 2" central, one 2" Port, one 2" Star In Holds, &c. one 2" Port, one 2" Star
 No. of Bilge Injections 1 sizes 4.2 Connected to condenser, or to circulating pump Pump Is a separate Donkey Suction fitted in Engine room & size 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 one Port & one Star hold bilge 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 17-6-15 of Stern Tube 17-6-15 Screw shaft and Propeller 17-6-15
 Is the Screw Shaft Tunnel watertight no Is it fitted with a watertight door ✓ worked from _____

BOILERS, &c.—(Letter for record (5)) Manufacturers of Steel _____
 Total Heating Surface of Boilers 20000 Is Forced Draft fitted no No. and Description of Boilers One single ended
 Working Pressure 135 lbs. Tested by hydraulic pressure to _____ Date of test _____ No. of Certificate 13/07
 Can each boiler be worked separately ✓ Area of fire grate in each boiler _____ No. and Description of Safety Valves to each boiler 2 Direct Spring Area of each valve 8-30 Pressure to which they are adjusted 160 lbs. Are they fitted with easing gear yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 4'8" 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 _____
 Per centages 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 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 _____ Diameter 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 _____
 Diameter 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 _____ 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 _____

IS A DONKEY BOILER FITTED?

Yes

If so, is a report now forwarded?

Already forwarded Glasgow Report No 34820

SPARE GEAR. State the articles supplied:

Propeller, 2 ends of top & bottom end & main bearing bolts & nuts, a set of coupling bolts & nuts, a set of feed & bilge pump valves, assorted bolts & nuts, iron of various sizes.

The foregoing is a correct description,

Mekie Baxter

Manufacturer.

Dates of Survey while building: During progress of work in shops - 1914 Nov. 6-12-19-24-30 Dec. 3-8-10-23. 1915 Jan. 5-8-13-21 Feb. 2-9-11-12-17-26 Mar. 2-9-10-22-26-29 Apr. 7-9-15-26 May 6-10-14-18-20-21-27-31 June 7-11-14-17-24 July 5-15 Aug 7-12-17-23 Sept 7-10-15-18-22-26-30. Total No. of visits 56

Is the approved plan of main boiler forwarded herewith? NO

Dates of Examination of principal parts - Cylinders 2-2-15 Slides 26-2-15 Covers 15-7-15 Pistons 14-6-15 Rods 21-1-15. Connecting rods 6-5-15 Crank shaft 2-8-15 Thrust shaft 7-8-15 Tunnel shafts none Screw shaft 15-4-15 Propeller 17-2-15. Stern tube 9-4-15 Steam pipes tested 15-15-9-15 Engine and boiler seatings 17-6-15 Engines holding down bolts 7-9-15. Completion of pumping arrangements 14-9-15 Boilers fixed 17-9-15 Engines tried under steam 30-9-15.

Main boiler safety valves adjusted 14-9-15 Thickness of adjusting washers Port 3/32 Star 5/16

Material of Crank shaft Mild Steel Identification Mark on Do. N. 6. 17. Material of Thrust shaft Mild Steel Identification Mark on Do. N. A. C.

Material of Tunnel shafts none Identification Marks on Do. Material of Screw shafts W. Iron Identification Marks on Do. G. D. R.

Material of Steam Pipes Solid drawn Copper Test pressure 270 lbs.

Is an installation fitted for burning oil fuel? NO Is the flash point of the oil to be used over 150°F? YES

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

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.) This machinery has been constructed under special survey. The materials & workmanship are good. It has been satisfactorily fitted into the vessel & tried under steam & the case is eligible in our opinion for the notation + L.M.C. 9.15.

It is submitted that this vessel is eligible for THE RECORD + L.M.C. 9.15.

W.D. 11/10/15. H. Dennis Reek. Whitehead & William H. Popeman. Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

The amount of Entry Fee ... £ 2 : 0 : 0. When applied for. Special ... £ 11 : 0 : 0. 5/10/1915. Donkey Boiler Fee ... £ 1 : 13 : 0. Travelling Expenses (if any) £ 0.

Committee's Minute Glasgow 5 OCT. 1915. Assigned + L.M.C. 9.15.

MACHINERY CERTIFICATE WRITTEN 6-10-15



Glasgow

The Registrar is requested not to write on or below the space for Committee's Minute.