

REPORT ON MACHINERY.

Port of Greenock

THURS. 19 OCT 1893

Received at London Office

18

No. in Survey held at Greenock & Pt. Glasgow Date, first Survey 14th June Last Survey 16th October 1893
 Reg. Book. (Number of Visits 7)
 Tonnage { Gross 417
 Net 284
 Master Hassenstein Built at Pt. Glasgow By whom built Murdoch & Murray When built 1893
 Engines made at Greenock By whom made Kincaid & Coy (Lime?) when made 1893
 Boilers made at Glasgow By whom made Lindsay Burnet & Coy when made 1893
 Registered Horse Power 80 Owners J. R. & Chisira Port belonging to Para
 Nom. Horse Power as per Section 28 83

ENGINES, &c.— Description of Engines Two sets Triple Expansion, I. D. & L. D. No. of Cylinders Six
 Diameter of Cylinders 10" 16" 26" Length of Stroke 21" Revolutions per minute 140 Diameter of Screw shaft 5 1/2"
 Diameter of Tunnel shaft 5 3/8" Diameter of Crank shaft journals 5 5/8" Diameter of Crank pin 5 5/8" Size of Crank webs 6 1/4" x 4"
 Diameter of screws 6 1/2" Pitch of screw 10 to 4.3" No. of blades 3 State whether moveable yes Total surface 1300 sq ft
 No. of Feed pumps one in each engine Diameter of ditto 2 1/2" Stroke 10 1/2" Can one be overhauled while the other is at work yes
 No. of Bilge pumps one in each engine Diameter of ditto 2 1/2" Stroke 10 1/2" Can one be overhauled while the other is at work yes
 No. of Donkey Engines Two Sizes of Pumps 3 x 6 1/2" & 3 x 6" stroke No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room Three 2" and one 2" in tunnel well In Holds, &c. Eight 2"
 No. of bilge injections Two sizes 2 3/4" Connected to condenser, or to circulating 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 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 no
 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
 When were stern tube, propeller, screw shaft, and all connections examined in dry dock on slip before launching Is the screw shaft tunnel watertight yes
 Is it fitted with a watertight door yes worked from top platform

BOILERS, &c.— (Letter for record) Total Heating Surface of Boilers 1578.5 sq ft
 No. and Description of Boilers see Glasgow report attached Working Pressure — Tested by hydraulic pressure to —
 Date of test — Can each boiler be worked separately — Area of fire grate in each boiler 50 sq ft No. and Description of safety valves to —
 each boiler — Area of each valve — Pressure to which they are adjusted — Are they fitted —
 with casing gear — Smallest distance between boilers or uptakes and bunkers or woodwork — Mean diameter of boilers —
 Length — Material of shell plates — Thickness — Description of riveting: circum. 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 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 — End plates in steam space: —
 Material of stays — Diameter at smallest part — Area supported by each stay — Working pressure by rules — Material of stays —
 Material — Thickness — Pitch of stays — How are stays secured — Working pressure by rules — Material of Front plates at bottom —
 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 casing gear —

DONKEY BOILER—

Description *No Donkey Boiler in this vessel.*

Made at _____ By whom made _____ When made _____ Where fixed _____
 Working pressure _____ tested by hydraulic pressure to _____ No. of Certificate _____ Fire grate area _____ Description of safety valves _____
 No. of safety valves _____ Area of each _____ Pressure to which they are adjusted _____ If fitted with easing gear _____ If steam from main boilers _____
 enter the donkey boiler _____ Diameter of donkey boiler _____ Length _____ Material of shell plates _____ Thickness _____
 Description of riveting long. seams _____ Diameter of rivet holes _____ Whether punched or drilled _____ Pitch of rivets _____
 Lap of plating _____ Per centage of strength of joint _____ Rivets _____ Thickness of shell crown plates _____ Radius of do. _____ No. of Stays to do. _____
 Dia. of stays _____ Diameter of furnace Top _____ Bottom _____ Length of furnace _____ Thickness of furnace plates _____ Description _____
 joint _____ Thickness of furnace crown plates _____ Stayed by _____ Working pressure of shell by rules _____
 Working pressure of furnace by rules _____ Diameter of uptake _____ Thickness of uptake plates _____ Thickness of water tubes _____

SPARE GEAR. State the articles supplied:— *2 top & 2 bottom end bolts & nuts, 2 main bearings**2 sets Coupling bolts. 2 feed check valves. 1 set of feed & bilge pump valves**4 sets air pump valves. 2 propeller shafts. 2 stern bushes. 2 propellers & 6 blades**1 pair crank pin bushes. a safety valve spring. springs for feed pump valves*

The foregoing is a correct description,

Kuicaia & Co. Ltd Manufacturers *Peak*

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

These Engines have been specially surveyed during construction workmanship good. intermediate and screw shafts examined when being turned and found apparently sound. Main steam pipes tested by hydraulic pressure to 350 lbs per sq. in. and found satisfactory. The Engines & Main Boilers are satisfactorily fitted on board. and have been tested up full steam. They are now in good order and safe working condition, and are in my opinion eligible to be noted in Register Book. LMC. 10, 93.

Spare gear Continued

Valves and Cylinder escape valves. 150 fire bars & 6 tubes for main boiler. 6 tubes for surface Condenser. 1 crank shaft.

It is submitted that
this vessel is eligible for
THE RECORD *LMC. 10, 93.*

GR
19/10/93 —

Certificate (if required) to be sent to *Greenock Office*

The amount of Entry Fee. . . £ 1 : : : When applied for,

Special £ 12 : 9 : : 18/10/93 B.M.

Donkey Boiler Fee £ : : : When received,

Travelling Expenses (if any) £ : : : 18/10/93 B.M.

Committee's Minute

FRI 20 OCT 1893

Assigned

+ L.M.C. 10. 93.

Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Greenock District.Lloyd's Register
Foundation