

YACHT. REPORT ON MACHINERY.

No. ⁶⁶⁰⁵ 21805

Port of *Glasgow*

Received at London Office *14th* ¹⁰ MAY 1904

Survey held at *Govan (Glasgow)* Date first Survey *19th Dec 03* Last Survey *24th May 1904*
 on the *Twin Screw Yacht, "Queen of Scots"* (Number of visits *20*)
 Built at *Govan* By whom built *Fairfield S.B. & Eng Co Ltd* When built *1904*
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 made at *Govan* By whom made *Fairfield S.B. & Eng Co Ltd* when made *1904*
 Indicated Horse Power *112* Owners *Peter Coats* Port belonging to _____
 Gross Power as per Section 28 *180* Is Refrigerating Machinery fitted *Yes* Is Electric Light fitted *Yes*

Engines, &c.—Description of Engines *Triple Expansion* No. of Cylinders *Six* No. of Cranks *6*
 Cylinders *10* Length of Stroke *18"* Revs. per minute *190* Dia. of Screw shaft *5 1/8"* Material of *S.M. Steel*
 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
 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
 the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive *✓* If two
 are fitted, is the shaft lapped or protected between the liners *✓* Length of stern bush *28"*
 Tunnel shaft *5 1/8"* Dia. of Crank shaft journals *5 3/8"* Dia. of Crank pin *5 5/8"* Size of Crank webs *11 x 4 1/8"* Dia. of thrust shaft under
5 5/8" Dia. of screw *6-7 1/2"* Pitch of screw *8-0"* No. of blades *4* State whether moveable *No* Total surface *16 sq' each*
 Feed pumps *one to each* Diameter of ditto *2 1/2"* Stroke *10"* Can one be overhauled while the other is at work *Yes*
 Bilge pumps *one to each* Diameter of ditto *2 1/2"* Stroke *10"* Can one be overhauled while the other is at work *Yes*
 Donkey Engines *Two* Sizes of Pumps *7 x 4 1/2 = 8" Duplex* No. and size of Suctions connected to both Bilge and Donkey pumps
 Engine Room *Three 2" & one 2 1/2" diameter* In Holds, &c. *Two 2" forward of boiler space.*
 Water injections *2 sizes 3/4"* Connected to condenser, or to circulating pump *Yes* Is a separate donkey suction fitted in Engine room & size *Yes. 2"*
 Are 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 *✓*
 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 *Below*
 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*
 Are they carried through the bunkers *None* How are they protected *✓*
 Are the 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*
 Are the stern tubes, propeller, screw shaft, and all connections examined in dry dock *24/5/04* Is the screw shaft tunnel watertight *Yes*
 Is it closed with a watertight door *Yes* worked from *Engine Room top platform.*

Boilers, &c.— (Letter for record *S*) Total Heating Surface of Boilers *1871 sq' ft* Is forced draft fitted *Yes*
 Description of Boilers *One, Single Ended.* Working Pressure *200 lbs* Tested by hydraulic pressure to *400 lbs*
 Can each boiler be worked separately *✓* Area of fire grate in each boiler *43 sq' ft* No. and Description of safety valves to
Two direct spring area of each valve *7.07 sq' in* Pressure to which they are adjusted *205 lbs* Are they fitted with easing gear *Yes*
 Distance between boilers or uptakes and bunkers or woodwork *17"* Mean dia. of boilers *13-3"* Length *14 3/4"* Material of shell plates *Steel*
 Range of tensile strength *29/32* Are they welded or flanged *No* Descrip. of riveting: cir. seams *D.R. & R. Lap* long. seams *Double Cut*
 of rivet holes in long. seams *1 1/4"* Pitch of rivets *9"* Lap of plates or width of butt straps *16"*
 Working pressure of longitudinal joint *85.0* Working pressure of shell by rules *201 lbs* Size of manhole in *end 15" x 11"*
 Compensation ring *Flanged* No. and Description of Furnaces in each boiler *Two, Monitors* Material *Steel* Outside diameter *51"*
 plain part top *✓* Thickness of plates crown *21/32* Description of longitudinal joint *Welded* No. of strengthening rings *None*
 bottom *✓* bottom *1/32* Working pressure of furnace by the rules *200* Combustion chamber plates: Material *Steel* Thickness: Sides *5/8"* Back *5/8"* Top *5/8"* Bottom *7/8"*
 Stays to ditto: Sides *8 1/4" x 8"* Back *8 1/4" x 8 1/4"* Top *8" x 8"* If stays are fitted with nuts or riveted heads *Nuts* Working pressure by rules *204*
 of stays *Steel* Diameter at smallest part *1 7/8"* Area supported by each stay *66 sq' in* Working pressure by rules *213* End plates in steam space:
Steel Thickness *1 1/32"* Pitch of stays *16 1/2" = 15 1/2"* How are stays secured *D. Nuts* Working pressure by rules *209* Material of stays *Steel*
 at smallest part *5.27 sq' in* Area supported by each stay *256 sq' in* Working pressure by rules *206* Material of Front plates at bottom *Steel*
 Material of Lower back plate *Steel* Thickness *11/16"* Greatest pitch of stays *12 1/2"* Working pressure of plate by rules *278*
 of tubes *3 1/4"* Pitch of tubes *4 1/2"* Material of tube plates *Steel* Thickness: Front *3/4"* Back *3/4"* Mean pitch of stays *10"*
 cross wide water spaces *1 1/4"* Working pressures by rules *201 lbs* Girders to Chamber tops: Material *Iron* Depth and
 of girder at centre *8 1/2" x 1 1/2"* Length as per rule *29"* Distance apart *8"* Number and pitch of Stays in each *one, 8"*
 Working pressure by rules *200 lbs* Superheater or Steam chest; how connected to boiler *None* Can the superheater be shut off and the boiler worked
 Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet
 Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness
 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

