

REPORT ON MACHINERY.

No. 50874.

RECEIVED FROM SURVEYOR

3 SEP 1906

Port of Newcastle & Liverpool

Received at London Office SEP 5 1906

No. in Survey held at Newcastle

Date, first Survey July 5th '05 Last Survey 29th Aug 1906

Reg. Book.

on the S.S. "St George"

Master Liverpool Built at Liverpool By whom built Cammell Laird & Co Tons Gross 2456
Net 204

Turbines Engines made at Newcastle By whom made Parson & Co when made 1906

Boilers made at Rirkenhead By whom made Cammell Laird & Co when made 1905 & 6

Registered Horse Power 1342.35 Owners Great Western Railway Co Port belonging to London

Is Refrigerating Machinery fitted No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Turbines

Dia. of Cylinder 4' 2 3/4 to 4' 8" (2) LP Astern Cyds 4' 1 1/2 to 4' 6" No. of Cylinders 3 No. of Cranks —

Length of Stroke 4' 0" Revs. per minute 500 Dia. of Screw shaft 8 1/2" Material of screw shaft Steel

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 banded No 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 If two

liners are fitted, is the shaft lapped or protected between the liners — Length of stern bushes 4' 6"

Dia. of Tunnel shaft 8" Dia. of Crank shaft journals 10" Dia. of Crank pin — Size of Crank webs — Dia. of thrust shaft under

collars 12" Dia. of screw 7 1/4" Pitch of screw 42 No. of blades 3 State whether moveable f Total surface 2350"

No. of Feed pumps 2 Diameter of ditto 10" Stroke 24" Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2 Diameter of ditto 5" Stroke 10" Can one be overhauled while the other is at work Yes

No. of Donkey Engines See List Sizes of Pumps See list attached No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room See 3 1/2 and 2 1/2 In Holds, &c. One 2 1/2" in each compartment.

No. of bilge injections 2 sizes 8 1/2" Connected to condenser, or to circulating pump Pump Is a separate donkey suction fitted in Engine room & size Yes 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 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 At line

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 20.8.06 Is the screw shaft tunnel watertight Yes

Is it fitted with a watertight door Yes worked from Upper platform 17,865 £

BOILERS, &c.—

(Letter for record (8)) Total Heating Surface of Boilers 185 sq. ft. Is forced draft fitted Horizontal

No. and Description of Boilers Eight Simple ended Working Pressure 185 lb Tested by hydraulic pressure to 340 lb

Date of test 8.12.05 Can each boiler be worked separately Yes Area of fire grate in each boiler 54.45 No. and Description of safety valves to

each boiler See Spring Area of each valve 8.61 Pressure to which they are adjusted 185 lb Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 9" Mean dia. of boilers 14.3 1/2" Length 11.4" Material of shell plates Steel

Thickness 1 1/2" Range of tensile strength 28.32 Are they welded or flanged — Descrip. of riveting: cir. seams Cap and double long. seams As per rules

Diameter of rivet holes in long. seams 1 3/8" Pitch of rivets 9.3 Lap of plates or width of butt straps 20 1/4"

Per centages of strength of longitudinal joint 85.21 Working pressure of shell by rules 203 Size of manhole in shell 16 x 13

Size of compensating ring 8 x 1 3/8" No. and Description of Furnaces in each boiler 3 Horizontal Material Steel Outside diameter 3' 10 1/2"

Length of plain part 5.0 Thickness of plates 1 3/8" Description of longitudinal joint Butt No. of strengthening rings —

Working pressure of furnace by the rules 205 Combustion chamber plates: Material Steel Thickness: Sides 3/16 Back 3/16 Top 3/16 Bottom 3/8

Pitch of stays to ditto: Sides 4 1/2 Back 4 Top 4 1/2 If stays are fitted with nuts or riveted heads Yes Working pressure by rules 195

Material of stays Steel Diameter at smallest part 1 3/8" Area supported by each stay 56" Working pressure by rules 200 End plates in steam space:

Material Steel Thickness 1 5/16" Pitch of stays 17 x 15 How are stays secured As per rules Working pressure by rules 193 Material of stays Steel

Diameter at smallest part 2 5/8" Area supported by each stay 255" Working pressure by rules 211 Material of Front plates at bottom Steel

Thickness 1" Material of Lower back plate Steel Thickness 1" Greatest pitch of stays 12 1/2" Working pressure of plate by rules 221

Diameter of tubes 2 1/2" Pitch of tubes 3 5/8" Material of tube plates Steel Thickness: Front 1" Back 3/8" Mean pitch of stays As per rules

Pitch across wide water spaces 13 1/2" Working pressures by rules 194 Girders to Chamber tops: Material Steel Depth and

thickness of girder at centre 4 x 2 1/2" Length as per rule 2.4" Distance apart 4 1/2" Number and pitch of Stays in each Three 7 1/2"

Working pressure by rules 185 Superheater or Steam chest; how connected to boiler None 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

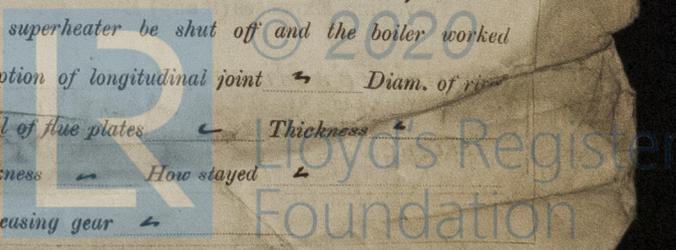
holes — Pitch of rivets — Working pressure of shell by rules — Diameter of flue — Material of flue plates — Thickness —

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 —

If no, state whether, and when, one will be sent?

Is a Report also sent on the Hull of the Ship?



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