

REPORT ON MACHINERY.

No. 6802

Received at London Office THURSDAY 15 JAN 1885

No. in Survey held at
Reg. Book.

Date, first Survey 14th Feb 1884 Last Survey 13th January 1885

(Number of Volls 40) 2834-58

on the

S. S. Glamorganshire.

Tons 1842-69

Master Williams Built at Glasgow By whom built The London & Glasgow Co. Ltd When built 1884

Engines made at Glasgow By whom made The London & Glasgow Co. Ltd when made 1884

Boilers made at Do By whom made Do when made 1884

Registered Horse Power 450 Owners Jenkins & Co Port belonging to London

ENGINES, &c.—

Description of Engines Inverted Direct acting Compound Surface Condensing

Diameter of Cylinders 43 & 78 Length of Stroke 54 No. of Rev. per minute 58 Point of Cut off, High Pressure 42 1/2 Low Pressure

Diameter of Screw shaft 14 1/2 Diam. of Tunnel shaft 13 3/4 Diam. of Crank shaft journals 14 1/2 Diam. of Crank pin 14 1/2 size of Crank webs 20 x 10

Diameter of screw 17 1/4 Pitch of screw 20 1/4 No. of blades Four state whether moveable Y/N total surface 85 sq ft

No. of Feed pumps Two diameter of ditto 5 1/4 Stroke 30 Can one be overhauled while the other is at work yes

No. of Bilge pumps Two diameter of ditto 4 1/2 Stroke 30 Can one be overhauled while the other is at work yes

Where do they pump from Engine room bilges & holds

No. of Donkey Engines Two Size of Pumps 6 x 5 x 10 & 10 1/2 x 9 x 10 Where do they pump from Donkey from bilges, holds

holwell & sea Ballast from sea & tanks also connected to condenser.

Are all the bilge suction pipes fitted with roses yes Are the roses always accessible yes Are the sluices on Engine room bulkheads always accessible yes

No. of bilge injections One and sizes 6 Are they connected to condenser, or to circulating pump Circulating

How are the pumps worked By levers from crosshead

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 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

What pipes are carried through the bunkers Main steam & bilge pipes & warm How are they protected Steam pipes by iron casing others by wood

Are all pipes, cocks, valves, and pumps in connection with the machinery accessible at all times yes

Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilges yes

When were stern tube, propeller, screw shaft, and all connections examined in dry dock Before vessel was launched

Is the screw shaft tunnel watertight yes and fitted with a sluice door yes worked from Engine room platform at deck

BOILERS, &c.—

Number of Boilers Two Description Cylindrical Mult-Drum ended Whether Steel or Iron Steel, with steam chest

Working Pressure 90 lbs Tested by hydraulic pressure to 180 lbs Date of test 29-10-84 which is of iron

Description of superheating apparatus or steam chest Horizontal

Can each boiler be worked separately yes Can the superheater be shut off and the boiler worked separately

No. of square feet of fire grate surface in each boiler 115 sq ft Description of safety valves Direct springs No. to each boiler Two

of each valve 30-60 lbs Are they fitted with easing gear yes No. of safety valves to superheater area of each valve

Are they fitted with easing gear yes Smallest distance between boilers and bunkers of woodwork 12 Diameter of boilers 14-0

Length of boilers 17-2 description of riveting of shell long. seams Two rows Butt circum. seams Lap, double Thickness of shell plates 3/32

Diameter of rivet holes 1 1/16 whether punched or drilled Drilled pitch of rivets 5 1/2 x 2 3/4 Lap of plating 1-0 1/2 butt strap

Percentage of strength of longitudinal joint 80 working pressure of shell by rules 103 lbs size of manholes in shell 16 x 12

No. of compensating rings 78 plate double riveted No. of Furnaces in each boiler Six

Inside diameter 3-6 1/2 length, top 6-9 bottom 16-9 thickness of plates 3/32 description of joint Butt & weld if rings are fitted yes

Greatest length between rings 6-6 working pressure of furnace by the rules 92 lbs combustion chamber plating, thickness, sides 1/2 buck top 3/32

Pitch of stays to ditto, sides 8 1/4 back top 8 1/4 If stays are fitted with nuts or riveted heads Nuts working pressure of plating

rules 100 & 113 Diameter of stays at smallest part 1 3/8 working pressure of ditto by rules 105 lbs end plates in steam space, thickness 3/32

Pitch of stays to ditto 16 1/2 how stays are secured Nuts working pressure by rules 96 lbs diameter of stays at

smallest part 2 1/4 working pressure by rules 130 lbs Front plates at bottom, thickness 7/8 Back plates, thickness

Greatest pitch of stays working pressure by rules Diameter of tubes 3 1/2 pitch of tubes 14 3/4 thickness of tubes

plates, front 3/4 back 1/16 how stayed Tubes pitch of stays 14 1/2 x 9 1/2 width of water spaces 5

Diameter of Superheater or Steam chest 4-3 length 17-2 thickness of plates 5/16 description of longitudinal joint Lap-double diam. of rivet holes 13/16

Pitch of rivets 3 1/2 working pressure of shell by rules 115 1/2 diameter of flue thickness of plates If stiffened with rings

Distance between rings working pressure by rules end plates of superheater, or steam chest; thickness 5/8 how stayed By angles 3 x 3

and gusset plates Superheater or steam chest; how connected to boiler 4 necks 13 dia. 3/4 iron plate

680296

DONKEY BOILER—

Description.

Made at Glasgow by whom made London & Glasgow Co when made 1884 where fixed Under deck
Working pressure 50 lb tested by hydraulic pressure to 100 lb No. of Certificate 1451 fire grate area 18 sq ft description of safety
valves Direct spring No. of safety valves Two area of each 7 sq ins if fitted with easing gear yes if steam from main boiler
enter the donkey boiler No diameter of donkey boiler 4-4 length 8-6 x 9-9 description of riveting Lap - double
Thickness of shell plates 7/16 in diameter of rivet holes 13/16 whether punched or drilled Punch pitch of rivets 3 1/8 lap of plating 4 1/2
per centage of strength of joint 73 thickness of crown plates 7/16 in stayed by 1 1/4 in crossed stay, nut - 9 3/4 x 9 1/2 pitch Pressure = 57 6 1/4 in sharp plates
Diameter of furnace, top 40 bottom - length of furnace 6-3 thickness of plates 7/16 in description of joint Butt & weld
Thickness of furnace crown plates 3/32 stayed by 1 1/2 in solid steel stay - pitch 12 x 12 1/2 Pressure = 50 33 lb sharp plates
Working pressure of furnace by rules 68 lb diameter of uptake 3 1/2 thickness of plates 3/32 13 1/2 thickness of water tubes 1/2

THE GEAR.

State the articles supplied:—

Water crank shaft - One propeller complete - One propeller shaft -
Set of gun metal crank pin bushes - Six boiler tubes - One valve spindle & guide - One air
line circulating pump rod - Feed & bilge pump valves - Set of coupling bolts - 4 sp & 4 in
rod connecting rod bolts - Two holding down bolts - 6 rivet bolts nut, iron &c.

The foregoing is a correct description,

Manufacturer.

General Remarks

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

These engines & boilers have been constructed
under special survey - They are of good material and
workmanship - They have been well fitted on board -
satisfactorily tested under steam & I am of opinion they
are eligible to be classed "ELIGIBLE" 1-85 in the
Register Book.

Appended hereto are the Reports on forgings & steel
also the approved tracing of main boiler.

The amount of Entry Fee .. £ 3 : - : - received by me,

Special £ 42 : 10 : -

Donkey Boiler Fee £ - : - : -

Certificate (if required) .. £ - : - : - 14/1 1885

To be sent as per margin.

(Travelling Expenses, if any, £ - 8/-)

Committee's Minute

FRIDAY 13 JAN 1885

Walter Robson

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



Lloyd's Register
Foundation