

REPORT ON MACHINERY.

Port of Glasgow

Received at London Office THUR 11 NOV 1897

No. in Survey held at Dumbarton Date, first Survey 26 August Last Survey 1st Nov 1897
Reg. Book. 204 on the Screw Steamer "Manorad" (Number of Visits 9)

Master J Henderson Built at Dumbarton By whom built A Denny & Co Tons } Gross 4697
Net 2995
When built 1883

Engines made at Dumbarton By whom made Denny & Co when made 1883

Boilers made at Dumbarton By whom made Denny & Co when made 1883

Registered Horse Power _____ Owners British India S.S. Co Ltd Port belonging to Glasgow

Nom. Horse Power as per Section 28 _____ Is Electric Light fitted _____

ENGINES, &c.—Description of Engines

Description of Engines		No. of Cylinders	No. of Cranks
Diameter of Cylinders	Length of Stroke	Revolutions per minute	Diameter of Screw shaft as per rule as fitted
Diameter of Tunnel shaft as per rule as fitted	Diameter of Crank shaft journals	Diameter of Crank pin	Size of Crank webs
Diameter of screw	Pitch of screw	No. of blades	State whether moveable
No. of Feed pumps	Diameter of ditto	Stroke	Can one be overhauled while the other is at work
No. of Bilge pumps	Diameter of ditto	Stroke	Can one be overhauled while the other is at work
No. of Donkey Engines	Sizes of Pumps	No. and size of Suctions connected to both Bilge and Donkey pumps	
In Engine Room		In Holds, &c.	
No. of bilge injections	sizes	Connected to condenser, or to circulating pump	Is a separate donkey suction fitted in Engine room & size
Are all the bilge suction pipes fitted with roses		Are the roses in Engine room always accessible	Are the sluices on Engine room bulkheads always accessible
Are all connections with the sea direct on the skin of the ship		Are they Valves or Cocks	
Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates		Are the discharge pipes above or below the deep water line	
Are they each fitted with a discharge valve always accessible on the plating of the vessel		Are the blow off cocks fitted with a spigot and brass covering plate	
What pipes are carried through the bunkers		How are they protected	
Are all pipes, cocks, valves, and pumps in connection with the machinery and all boiler mountings accessible at all times			
Are the bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges			
When were stern tube, propeller, screw shaft, and all connections examined in dry dock		Is the screw shaft tunnel watertight	

If not, state whether, and when, one will be sent?

Is it fitted with a watertight door worked from _____

BOILER, &c.— (Letter for record _____) Total Heating Surface of Boilers _____ Is forced draft fitted _____

No. and Description of Boilers one built 1883: cylindrical Working Pressure 80 lbs Tested by hydraulic pressure to 160 lbs
Date of test 1/11/97 Can each boiler be worked separately ✓ Area of fire grate in each boiler 38 1/2 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 easing gear _____
Smallest distance between boilers or uptakes and bunkers or woodwork _____ Mean diameter of boilers 11' 6"
Length 9' 0" Material of shell plates Steel Thickness 7/8" Description of riveting: circum. seams Lap double long. seams Butt Straps
Diameter of rivet holes in long. seams 13/16" Pitch of rivets 3 1/2" Top of plates or width of butt straps 9"
Per centages of strength of longitudinal joint rivets 78.5% Working pressure of shell by rules 81 lbs Size of manhole in shell 14 x 13"
plate 76.4%
Size of compensating ring 10" x 3/16" No. and Description of Furnaces in each boiler 2: plain Material Steel Outside diameter 48"
Length of plain part top 3' 9" Thickness of plates crown 3/8" Description of longitudinal joint welded No. of strengthening rings _____
bottom 3' 9" Working pressure of furnace by the rules 91 lbs Combustion chamber plates: Material Steel Thickness: Sides 1/2" Back 1/2" Top 1/2" Bottom 9/16" with taper
Pitch of stays to ditto: Sides 9 x 9" Back 9 x 8 1/4" Top 9 x 8 1/4" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 95 lbs
Material of stays Steel Diameter at smallest part 1 1/8" Area supported by each stay 81 sq in Working pressure by rules 98 lbs End plates in steam space: Material Steel Thickness 3/4" Pitch of stays 16 x 16" How are stays secured By nuts & washers Working pressure by rules 104 lbs Material of stays Steel
Diameter at smallest part 1 1/8" Area supported by each stay 256 sq in Working pressure by rules 90 lbs Material of Front plates at bottom Steel
Thickness 3/4" Material of Lower back plate Steel Thickness 3/8" Greatest pitch of stays 15" Working pressure of plate by rules 101 lbs
Diameter of tubes 3" Pitch of tubes 4 1/2 x 4 1/2" Material of tube plates Steel Thickness: Front 3/4" Back 3/4" Mean pitch of stays 10.6"
Pitch across wide water spaces 15" Working pressures by rules 90 lbs Girders to Chamber tops: Material Iron Depth and thickness of girder at centre 5' x 1 1/2" Length as per rule 27' Distance apart 8 1/4' Number and pitch of Stays in each 2: 9"
Working pressure by rules 98 lbs 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 _____

L1076-5000-24/280-Copyable Ink.]



15605 gls.

DONKEY BOILER— Description

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 can 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. _____

Plates _____

Dia. of stays _____ Diameter of furnace Top _____ Bottom _____ Length of furnace _____ Thickness of furnace plates _____ Description of 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:—

The foregoing is a correct description,

Manufacturer.

W. Deane & Co

Dates of Survey while building

During progress of work in shops - 1894 - August 25, Sept 1, 9, 11, 21, Oct 1, 13, 25, Nov 1 -

During erection on board vessel -

Total No. of visits 9

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

This Boiler has been built under special survey and the materials and workmanship are good. When finished it was tested by hydraulic pressure to 160 lbs and found tight & sound.

J. Donkey.
This Boiler appears to have been constructed under special survey but as it does not appear to be intended for a classed vessel it is submitted that no further action need be taken.

J. H. Austin
11/11/97

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

Special £ : : 5/11 18.94

Donkey Boiler Fee £ 2 : 2 : When received, 9/11 18.94

Travelling Expenses (if any) £ : : :

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

Committee's Minute

Assigned

Not for Council
(Disclassd)



© 2019

Lloyd's Register Foundation

Certificate (if required) to be sent to the Surveyors are requested not to write on or behind the space for Committee's Minute.