

REPORT ON MACHINERY.

Port of Sunderland

THUR, 2 MAR 1899

Received at London Office

No. in Survey held at Sunderland Date, first Survey 8th June 1898 Last Survey 21st Feby 1899

Reg. Book. on the Steel Screw Steamer Velle de Tamatave (Number of Visits 45) Tons { Gross 3712 Net 2395

Master Vastan Built at Sunderland By whom built Sir J Laing & Sons When built 1899

Engines made at Sunderland By whom made George Clark & Co when made 1899

Boilers made at Sunderland By whom made George Clark & Co when made 1899

Registered Horse Power Owners Le Havraise Pen de Nord Prop Port belonging to Havre

Nom. Horse Power as per Section 28 314 Is Electric Light fitted yes

ENGINES, &c.—Description of Engines Tri. compound No. of Cylinders 3 No. of Cranks 3

Diameter of Cylinders 24 1/2" x 40" x 66" Length of Stroke 45" Revolutions per minute 62 Diameter of Screw shaft as per rule 12 1/8"

Diameter of Tunnel shaft as fitted 12 1/8" Diameter of Crank shaft journals 12 5/8" Diameter of Crank pin 12 5/8" Size of Crank webs 24 1/4" x 8 1/2"

Diameter of screw 14.0 Pitch of screw 18.0 No. of blades 4 State whether moveable no Total surface 86 sq ft

No. of Feed pumps 2 Diameter of ditto 3 1/4" Stroke 26 Can one be overhauled while the other is at work yes

No. of Bilge pumps 2 Diameter of ditto 4 1/4" Stroke 26 Can one be overhauled while the other is at work yes

No. of Donkey Engines 2 Sizes of Pumps 4 1/2" x 4 1/2" x 6" 8" x 10" x 9" No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room 4 of 3 1/2" In Holds, &c. In each hold 2 of 3 1/2" after well 2 3/4" tanks 3 1/2" centre wings 2 3/4"

No. of bilge injections 1 sizes 6 Connected to condenser, or to circulating pump 6.2" Is a separate donkey suction fitted in Engine room & size yes 3 1/2"

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 none

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 above

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 new vessel Is the screw shaft tunnel watertight yes

Is it fitted with a watertight door yes worked from top platform

OILERS, &c.— (Letter for record S) Total Heating Surface of Boilers 3839 sq ft Is forced draft fitted yes

No. and Description of Boilers 3 Ordinary Mar. Type Working Pressure 180 Tested by hydraulic pressure to 360

Date of test 23.1.99 Can each boiler be worked separately yes Area of fire grate in each boiler 34 sq ft No. and Description of safety valves to each boiler 2 direct spring

Area of each valve 9.62 sq in Pressure to which they are adjusted 180 lbs Are they fitted with easing gear yes Smallest distance between boilers or uptakes and bunkers or woodwork 18" Mean diameter of boilers 11'6"

Length 11.0 Material of shell plates S Thickness 1 3/4" Description of riveting: circum. seams d r b long. seams t r d b s

Diameter of rivet holes in long. seams 1 1/8" Pitch of rivets 4 1/2" Lap of plates or width of butt straps 1.5 1/8"

Per centages of strength of longitudinal joint: rivets 91 plate 85 Working pressure of shell by rules 194 Size of manhole in shell 16" x 13"

Size of compensating ring 8 3/4" x 1 1/8" No. and Description of Furnaces in each boiler 2 Adamsons Material S Outside diameter 3'6"

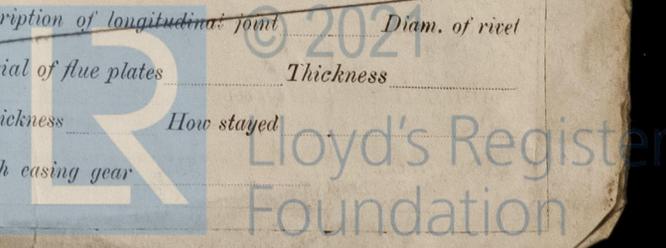
Length of plain part top 2.0 bottom 2.0 Thickness of plates crown 39/64" bottom 39/64" Description of longitudinal joint welded No. of strengthening rings 3

Working pressure of furnace by the rules 184 Combustion chamber plates: Material S Thickness: Sides 21/32" Back 21/32" Top 21/32" Bottom 29/32"

Pitch of stays to ditto: Sides 9 x 8 3/4" Back 9 x 8 1/2" Top 9 x 9 1/2" stays are fitted with nuts or riveted heads nuts Working pressure by rules 183

Material of stays S Diameter at smallest part 1 1/32" Area supported by each stay 810 Working pressure by rules 221 End plates in steam space: Material S Thickness 1 1/64" Pitch of stays 18 1/2" How are stays secured nuts Working pressure by rules 183 Material of stays S

4610-9101075



DONKEY BOILER— Description *Mult^a Two plain furnaces*
 Made at *Stockton* By whom made *Sudron & Co La* When made *28.1.99* Where fixed *On deck*
 Working pressure *100* tested by hydraulic pressure to *200* No. of Certificate *1882* Fire grate area *22 sq ft* Description of safety valves *Direct spring*
 No. of safety valves *2* Area of each *5.9 sq ft* Pressure to which they are adjusted *100* If fitted with easing gear *Yes* If steam from main boilers can enter the donkey boiler *No.* Diameter of donkey boiler *8' 0"* Length *9' 0"* Material of shell plates *S 24.32* Thickness *9/16*
 Description of riveting long seams *Treb. riv. lap.* Diameter of rivet holes *7/8"* Whether punched or drilled *drilled* Pitch of rivets *3.2*
 Lap of plating *6 3/8* Per centage of strength of joint Rivets *48* Thickness of shell ~~plates~~ *3" washers* Radius of do. *Pitch* No. of Stays to do. *16*
 Dia. of stays *1 3/4" Eff* Diameter of furnace Top *24 1/8* Bottom *-* Length of furnace *6' 2"* Thickness of furnace plates *9/16* Description of joint *Welded* Thickness of furnace crown plates *32 x 16* Stayed by *1 3/8" Eff St. 8 x 8 1/2 p* Working pressure of shell by rules *101*
 Working pressure of furnace by rules *105* Diameter of uptake *3"* Thickness of uptake plates *1/16* Thickness of water tubes *5/16"*

SPARE GEAR. State the articles supplied:— *Top and bottom end connecting rod bolts and nuts, two main bearing bolts and nuts, one set of coupling bolts and nuts feed & bilge pump valves tail end shaft, propeller bolts nuts and iron assorted.*

The foregoing is a correct description,
FOR GEORGE CLARK LIMITED,
George Clark & Co Manufacturer.

Dates During progress of work in shops— *1898 June 8, 9, 11, 13, 15, 17 Oct 8, 20 Nov 2, 4, 5, 18, 22, 24, 25, 28, Dec 1, 12, 14, 15, 16, 20,*
 of Survey During erection on board vessel— *22, 23, 1899 Jan 6, 7, 9, 12, 13, 17, 19, 20, 23, 24, 25, 26, 30 Feb 1, 4, 7, 9, 10, 11, 14, 20,*
 while building Total No. of visits *45*

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

ENGINES—Length of stern bush *4-4 1/16* Diameter of crank shaft journals *as per rule 12"* Diameter of thrust shaft under collars *13"*
BOILERS—Range of tensile strength *26-30* Are they welded or flanged *Flanged* **DONKEY BOILERS**—No. *1* Range of tensile strength *24*
 Is the approved plan of main boiler forwarded herewith *Yes* No. Is the approved plan of donkey boiler forwarded herewith *no*

The machinery of this vessel has been constructed under Special Survey. The material & workman being good and efficient, and the engines when tried under steam worked satisfactory, main steam pipes have been tested by hydraulic pressure to 400 lbs per square inch and the pumps and watertight doors are in efficient working order. In my opinion this vessel is eligible for the notification in the Register Book of *L.M.C.-2.9*

It is submitted that this vessel is eligible for THE RECORD. L.M.C. 2.99.

F. D. & Electric Light.
 A.C.H.
A.S. 2.3.99.
 3.3.99

The amount of Entry Fee... £ 3 : 0 :
 Special... £ 35 : 14 :
 Donkey Boiler Fee... £ : :
 Travelling Expenses (if any) £ : :
 When applied for, 1.3.18.99
 Not received, 3.3.99

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

Committee's Minute
 Assigned
 FRI. 3 MAR 1899
James 2.99

MACHINERY CERTIFICATE WRITTEN.



© 2021 Lloyd's Register Foundation

Certificate (if required) to be sent to Sunderland.