

REPORT ON MACHINERY.

No. 19961

Ref 5714

Port of Glasgow

Survey held at Glasgow

Date, first Survey 1st Nov. 1999

Received at London Office

FRI MAR 9 1900

Last Survey 1st March 1900

(Number of Visits 48)

The Screw Steamer "Marte"

Tons { Gross 3714
Net 2399

Built at Londonderry By whom built Londonderry S.S. Coy. Ltd. When built 1900

at Glasgow By whom made Dunsmuir & Jackson when made 1900

at Glasgow By whom made Dunsmuir & Jackson when made 1900

orse Power Owners Port belonging to Bilbao

ower as per Section 28 344

Is Refrigerating Machinery fitted No

Is Electric Light fitted No

&c.—Description of Engines Triple expansion No. of Cylinders Three No. of Cranks Three
Diameters 24 1/2 - 40 - 64 Length of Stroke 45 Revs. per minute 75 Dia. of Screw shaft 12 3/4 as per rule 12 3/4 as fitted 13 1/2 Lgth. of stern bush 4 1/4
Dia. of Crank shaft journals 12 1/2 as per rule 12 1/2 as fitted 12 3/4 Dia. of Crank pin 12 3/4 Size of Crank webs 8 3/8 x 18 Dia. of thrust shaft under
Dia. of screw 16 1/2 Pitch of screw 18 1/2 No. of blades 4 State whether moveable Yes Total surface 80 Sq. ft.
Pumps 2 Diameter of ditto 3 1/2 Stroke 24 Can one be overhauled while the other is at work Yes
Pumps 2 Diameter of ditto 4 Stroke 24 Can one be overhauled while the other is at work Yes
Engines Two Sizes of Pumps Feed (7 1/2 x 3 1/2 x 8) Ballast (9 x 10 x 10) No. and size of Suctions connected to both Bilge and Donkey pumps
In Holds, &c. No. 1 Hold: 2 - 3 1/2" dia. No. 2 Hold: 2 - 3 1/2" dia. No. 3 Hold: 2 - 3 1/2" dia. No. 4 Hold: 1 - 3 1/2" dia. Tunnel Well: 1 - 2 1/2" dia.
Connections 1 sizes 5 Connected to condenser, or to circulating pump C.P. Is a separate donkey suction fitted in Engine room & size Yes: 3 1/2"
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
Connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Both
Efficiently 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
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
Carried through the bunkers None How are they protected Yes
Cocks, valves, and pumps in connection with the machinery and all boiler mountings accessible at all times Yes
Suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges Yes
In tube, propeller, screw shaft, and all connections examined in dry dock See vessel Is the screw shaft tunnel watertight Yes
Is a watertight door Yes worked from Top platform

&c.— (Letter for record S) Total Heating Surface of Boilers 4500 Sq. ft. Is forced draft fitted Yes
Description of Boilers 2: Cylindrical - Single Ended. Working Pressure 180 lbs. Tested by hydraulic pressure to 360 lbs.
11/99 Can each boiler be worked separately Yes Area of fire grate in each boiler 46 sq. ft. No. and Description of safety valves to
Direct Spring Area of each valve 4.06 sq. in. Pressure to which they are adjusted 185 lbs. Are they fitted with easing gear Yes
between boilers or uptakes and bunkers or woodwork About 18" Mean dia. of boilers 14 1/2" Length 11 1/2" Material of shell plates Steel
Range of tensile strength 58-32500 Are they welded or flanged No Descrip. of riveting: cir. seams Lap D'ble long. seams D'ble Butt Strap
Holes in long. seams 1 1/2" Pitch of rivets 8 1/4" 4 3/8" Top of plates width of butt straps 18 1/2"
Strength of longitudinal joint 8.8 Working pressure of shell by rules 182 lbs. Size of manhole in shell 16" x 13"
Ring 34 x 26 1/2 x 1 1/2 No. and Description of Furnaces in each boiler 3: Mouson's Material Steel Outside diameter 44"
Top 4 1/4" Thickness of plates 9 1/2 Description of longitudinal joint Welded No. of strengthening rings
Bottom 10 1/2 of furnace by the rules 183 lbs. Combustion chamber plates: Material Steel Thickness: Sides 5 1/8" Back 9 1/2" Top 5 1/8" Bottom 1 1/2"
Ditto: Sides 9 x 8 1/4" Back 8 x 7 1/2" Top 8 1/2 x 8 1/4" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 182 lbs.
Steel Diameter at smallest part 1 3/4" Area supported by each stay 7 1/4 sq. in. Working pressure by rules 190 lbs. End plates in steam space:
Thickness 1 3/2" Pitch of stays 18 x 16" How are stays secured D'ble nuts Working pressure by rules 185 lbs. Material of stays Steel
Smallest part 2 9/16" Area supported by each stay 288 sq. in. Working pressure by rules 183 lbs. Material of Front plates at bottom Steel
Material of Lower back plate Steel Thickness 1 1/2" Greatest pitch of stays 13 1/2" Working pressure of plate by rules 185 lbs.
Pitch of tubes 3 1/4 x 3 5/8" Material of tube plates Steel Thickness: Front 3 1/2" Back 1 1/2" Mean pitch of stays 9 1/4"
Side water spaces 13 1/2" Working pressures by rules 185 lbs. 194 lbs. Girders to Chamber tops: Material Steel Depth and
er at centre 8 x 2" Length as per rule 33" Distance apart 8 1/2" Number and pitch of Stays in each 2: 8 1/4"
re by rules 184 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
Rings Distance between rings Working pressure by rules End plates: Thickness How stayed
e of end plates Area of safety valves to superheater Are they fitted with easing gear

SPARE GEAR. State the articles supplied:— 2 Propeller Blades, 2 main bearing Bolts, 2 crank pin Bolts, 2 crosshead Bolts, 1 set coupling Bolts, 40 I.p. piston Rings, 3 crank shaft, 6 Boiler tubes, 6 Condenser tubes, 1 set feed & Relief pump valves, 1 set check valves, 1 set safety valve springs, 1 set valves for Ballast pump, 1 set valves for feed pump & 1/2, Bolts, Iron etc

The foregoing is a correct description,

Wm. Mui & Jack Koon

Is the approved plan of main boiler forwarded herewith Yes.

" " " *donkey* " " " *Yes.*

The Engines and Boilers of this vessel have been built under special survey and the materials and workmanship are good. When completed they were run on a full speed trial in the Firth and worked satisfactorily.

The Machinery is now in good and efficient condition and eligible in my opinion to have the record of £ L. M. C. 3, 00. marked in the Society's Register Book.

THE RECORD **+** LMC 3.00, F.D

9.3.00

6m. B.D.
9/3/00.

The amount of Entry Fee..	£	3	:	.	:	When applied for,
Special	£	57	:	7	:	<i>8th Dec 1890</i>
Donkey Boiler Fee	£		:		:	When received,
<i>Due Belfast a/c.</i>	£		:		:	<i>£40.7.0 Paid</i>
Travelling Expenses (if any)	£	1	:	16	:18.....

When received,

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

Committee's Minute

TUES 13 MAR 1900

TUES. 3 APR '1900

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Lloyd's Register
Foundation

MACHINERY CERTIFICATE
WRITTEN.