

REPORT ON MACHINERY.

Port of Leghorn

Received at London Office MON. 8 OCT 1900

No. in Survey held at Leghorn
Reg. Book.

Date, first Survey January 1899 Last Survey 6th October 1900
(Number of Visits 75)

on the S.S. Gola & "Faurguana"

Tons { Gross 3914.09
Net 2855.95
When built 1899-900

Master E. Nicobono Built at Leghorn By whom built Orlando Broff

Engines made at Leghorn By whom made Orlando Broff when made 1899-900

Boilers made at Itto By whom made Itto when made Itto

Registered Horse Power 246.30 Owners J & V Florio of Palermo Port belonging to Palermo

Nom. Horse Power as per Section 28 246.30 Is Electric Light fitted at work

ENGINES, &c.—Description of Engines Triple expansion No. of Cylinders 3 No. of Cranks 3

Diameter of Cylinders 22", 37", 46", 61", 81" Length of Stroke 39", 37" Revolutions per minute 11 1/8 Diameter of Screw shaft 11 1/8"

Diameter of Tunnel shaft 11" Diameter of Crank shaft journals 11 3/8" Diameter of Crank pin 11 1/8" Size of Crank webs 7 1/2" x 14 3/16"

Diameter of screw 16 1/4" Pitch of screw 15.5" No. of blades 4 State whether moveable no Total surface 75.25

No. of Feed pumps 2 Diameter of ditto 3 5/16" Stroke 22 1/2" Can one be overhauled while the other is at work yes

No. of Bilge pumps 2 Diameter of ditto 3 5/16" Stroke 22 1/2" Can one be overhauled while the other is at work yes

No. of Donkey Engines 2 Working Sizes of Pumps 6" x 9" - 8 5/8" x 9" No. and size of Suctions connected to both Bilge and Donkey pumps
In Engine Room 3 1/2" In Holds, &c. No 1 two 3" No 2 two 3" No 3 two 3"

No. of bilge injections 1 sizes 5" Connected to condenser, on to circulating pump yes 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 valves

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

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 ✓ 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 before Is the screw shaft tunnel watertight yes

Is it fitted with a watertight door yes worked from upper main deck.

BOILERS, &c.— (Letter for record MS) Total Heating Surface of Boilers 5071 Is forced draft fitted no

No. and Description of Boilers 2 single ended cylindrical multitubular Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs

Date of test 19/12/99 Can each boiler be worked separately yes Area of fire grate in each boiler 77.5 No. and Description of safety valves to each boiler two spring Area of each valve 9.52 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 1' to bunker Mean diameter of boilers 15.1 1/8"

Length 10' Material of shell plates steel Thickness 1 1/4" Description of riveting: circum. seams double & triple long. seams quadruple

Diameter of rivet holes in long. seams 1 3/8" Pitch of rivets 4.725 - 9.45 - 18.90 Lap of plates or width of butt straps inside 20"

Per centages of strength of longitudinal joint ribs 92.75 Working pressure of shell by rules 180 lbs Size of manhole front 11" x 15"

Size of compensating ring 4 3/4" x 29 3/32" No. and Description of Furnaces in each boiler 4 corrugate (Fox) Material steel Outside diameter 5.4"

Length of plain part 8.2" Thickness of plates 1 1/4" Description of longitudinal joint welded No. of strengthening rings ✓

Working pressure of furnace by the rules 188.8 Combustion chamber plates: Material steel Thickness: Sides 1 1/2" Back 1 1/2" Top 1 1/2" Bottom 1 1/2"

Pitch of stays to ditto: Sides 7" x 7" Back 6 1/16" x 6 1/16" Top 7" x 7" If stays are fitted with nuts or riveted heads with nuts Working pressure by rules 189 lbs

Material of stays steel Diameter at smallest part 1 1/4" Area supported by each stay 44 3/4" x 44" Working pressure by rules 200 lbs End-plates in steam space: Material steel Thickness 7/8" Pitch of stays 14 3/20" - 15" How are stays secured double nuts & washers Working pressure by rules 191 lbs Material of stays steel

Diameter at smallest part 2 1/20" Area supported by each stay 225" Working pressure by rules 184 lbs Material of Front plates at bottom steel

Thickness 13 1/16" Material of Lower back plate steel Thickness 23 1/32" Greatest pitch of stays 16 1/2" Working pressure of plate by rules 182 lbs

Diameter of tubes 3 1/4" Pitch of tubes 4 1/32" Material of tube plates steel Thickness: Front 25 1/32" Back 25 1/32" Mean pitch of stays 8 1/32"

Pitch across wide water spaces 13 3/4" Working pressures by rules 268 lbs Girders to Chamber tops: Material cast steel Depth and thickness of girder at centre 6.3" x 1 1/4" Length as per rule 23 1/2" Distance apart 7 3/32" Number and pitch of Stays in each two 7 3/32"

Working pressure by rules 181 lbs Superheater or Steam chest; how connected to boiler ✓ 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 ✓



DONKEY BOILER— Description *Horizontal multitubular*
 Made at *Leghorn* By whom made *Delanda Ross* When made *1900* Where fixed *on main deck*
 Working pressure *100 lbs* tested by hydraulic pressure to *200 lbs* No. of Certificate *110* Fire grate area *29' 0"* Description of safety valves *two spring*
 No. of safety valves *two* Area of each *5.28* Pressure to which they are adjusted *100 lbs* If fitted with easing gear *yes* If steam from main boilers can enter the donkey boiler *yes* ^{reduction valve} Through the *reduction valve* Diameter of donkey boiler *9' 2 1/2"* Length *9' 2 1/2"* Material of shell plates *steel* Thickness *5 1/8"*
 Description of riveting long seams *double (double butt straps)* Diameter of rivet holes *7/8"* Whether punched or drilled *drilled* Pitch of rivets *3 3/8"*
 Width of ~~butt straps~~ *butt straps* Rivets *85%* Thickness of shell ~~plates~~ *plates* *3/4" & 1/2"* Radius of do. *flat* No. of Stays to do. *14*
 Lap of plating *8 5/8"* Per centage of strength of joint *74%* Plates *74%* Thickness of furnace ~~plates~~ *plates* *1/2"* Description of
 Dia. of stays. *1 1/16"* Diameter of furnace *Top 31" Bottom* Length of furnace *6' 9"* Thickness of furnace plates *1/2"* Description of
 joint *welded - one* ^{strengthening rings} Thickness of furnace ~~plates~~ *plates* Stayed by *one* Working pressure of shell by rules *112 1/2 lbs*
 Working pressure of furnace by rules *177 lbs* Diameter of uptake *✓* Thickness of uptake plates *✓* Thickness of water tubes *✓*

SPARE GEAR. State the articles supplied:— *2 connecting rod top-end & 2 connecting rod bottom-end bolts - 2 main bearings & 1 set of coupling bolts - 1 set of feed & bilge pump valves - 1 set of piston springs - 2 safety valve springs - 10 condenser & 16 boiler tubes - 2 air pump valves - 1 set connecting rod trapezes - 1 set cross-head trapezes & other sundries -*

The foregoing is a correct description,
Delanda Ross Manufacturer.

Dates of Survey while building
 During progress of work in shops - *1899*
 During erection on board vessel - *1900*
 Total No. of visits

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

ENGINES—Length of stern bush *4'* Diameter of crank shaft journals *as per rule 11 1/8" as fitted 11 1/8"* Diameter of thrust shaft under collars *11 1/2"*

BOILERS—Range of tensile strength *17-32 1/2* Are they welded or flanged *no* **DONKEY BOILERS**—No. *1* Range of tensile strength

Is the approved plan of main boiler forwarded herewith *yes* Is the approved plan of donkey boiler forwarded herewith *no*

This vessel's machinery has been built under survey in accordance with the approved plans & the requirements of the rules.

The boiler & main steam pipes have been tested by hydraulic pressure to 200 lbs per square inch.

The engine & boilers were seen fitted on board after which the engines were seen running under steam & the safety valves were then adjusted to the working pressure to 180 lbs per square inch with satisfactory results.

The vessel is therefore eligible in my opinion to be classed & to have the notation of + LMC 10/900 recorded in the Register Book.

It is submitted that this vessel is eligible for the notation + LMC 10/900

G.M. 9.10.00

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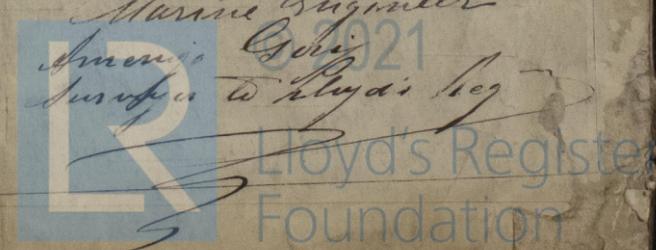
The amount of Entry Fee... £ 2 : 0 :
 Special £ 34 : 10 :
 Donkey Boiler Fee £ 2 : 2 :
 Travelling Expenses (if any) £ : :
 When applied for...
 When received...
land per sec of

Committee's Minute
 Assigned

Nov 9 1900



Giovanni Passini
 Engineer, Surveyor to Lloyd's Register of British & Foreign Shipping.
 Marine Engineer
 Leghorn



Certificate (if required) to be sent to this office

The Surveyors are requested not to write on or below the space for Committee's Minute.