

REPORT ON MACHINERY.

Port of Genoa

Received at London Office MUN. 10 NOV 1902

No. in Survey held at Spezia
eg. Book.

Date, first Survey Sept 1st Last Survey Nov 4 1902

(Number of Visits 24)

on the

S. S. "Monviso"

Tons { Gross 4205
Net 2737
When built 1902

Master S. Premolini Built at Muggiano Spezia By whom built Cantiere Navale di Muggiano

Engines made at W. Hartlepool By whom made Richardsons Westgarth & Co when made 1902

Boilers made at do By whom made do when made 1902

Registered Horse Power 356 Owners L. Capuccio & Co Port belonging to Genoa

Tom. Horse Power as per Section 28 356 Is Refrigerating Machinery fitted no Is Electric Light fitted no

ENGINES, &c.—Description of Engines

No. of Cylinders	Length of Stroke	Revs. per minute	Dia. of Screw shaft	No. of Cranks
Dia. of Tunnel shaft	Dia. of Crank shaft journals	Dia. of Crank pin	Size of Crank webs	Dia. of thrust shaft under
Collars	Dia. 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 Four 3" In Holds, &c. Holds no. 1, 2, 3 & 4 each 2-3"

suctions. after well one 3". Tunnel well one 3"

To. of bilge injections sizes Connected to condenser, or to circulating pump yes Is a separate donkey suction fitted in Engine room & size yes 4"

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 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 to the fore holds How are they protected By wooden casing

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 landing of 1902 Is the screw shaft tunnel watertight yes

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

BOILERS, &c.— (Letter for record 5) Total Heating Surface of Boilers 755 sq ft Is forced draft fitted no

No. and Description of Boilers one horizontal multitubular Working Pressure 100 lbs Tested by hydraulic pressure to 200 lbs

Date of test 1902 Can each boiler be worked separately yes Area of fire grate in each boiler 269 sq ft No. and Description of safety valves to

each boiler 2 Spring Area of each valve 443 sq in Pressure to which they are adjusted 100 lbs Are they fitted with easing gear yes

Smallest distance between boilers or uptakes and bunkers or woodwork 12" Mean dia. of boilers 9-6" Length 9-0" Material of shell plates steel

Thickness 3/4" Range of tensile strength 27-32 Are they welded or flanged no Descrip. of riveting: cir. seams double outside J.R. & B. straps 5

Diameter of rivet holes in long. seams 29/32" Pitch of rivets 3" Lap of plates or width of butt straps 8 9/16"

Percentages of strength of longitudinal joint rivets 86.3 Working pressure of shell by rules 112 Size of manhole in shell 15" x 11"

Size of compensating ring 30 3/4" x 22 3/4" No. and Description of Furnaces in each boiler 2 Plain Material steel Outside diameter 32"

Length of plain part top 12.5 ins Thickness of plates crown 3/2" Description of longitudinal joint single lap No. of strengthening rings none

Working pressure of furnace by the rules 97 lbs Combustion chamber plates: Material steel Thickness: Sides 15/32" Back 15/32" Top 1/2" Bottom 15/32"

Pitch of stays to ditto: Sides 6 1/16" x 6 1/2" Back 4 5/8" x 4 5/8" Top 6 1/2" x 4 5/8" If stays are fitted with nuts or riveted heads yes Working pressure by rules 150 lbs

Material of stays steel Diameter at smallest part 1 3/4" x 2" Area supported by each stay 45 x 50" Working pressure by rules 118 End plates in steam space:

Material steel Thickness 5 1/4" x 3 3/4" Pitch of stays 14 1/4" x 14 1/4" How are stays secured 220 bolts Working pressure by rules 104 Material of stays steel

Diameter at smallest part 2 1/4" Area supported by each stay 200 sq in Working pressure by rules 100.05 Material of Front plates at bottom steel

Thickness 5 1/4" Material of Lower back plate steel Thickness 3 3/4" Greatest pitch of stays 14 3/8" Working pressure of plate by rules 111

Diameter of tubes 5" Pitch of tubes 4 3/8" Material of tube plates steel Thickness: Front 5 1/4" Back 4 5/8" Mean pitch of stays 8 0 3/8"

Pitch across wide water spaces 14 1/4" Working pressures by rules 104.4 Girders to Chamber tops: Material steel Depth and

thickness of girder at centre 6" x 1 3/32" Length as per rule 20 5/8" Distance apart 7 7/8" Number and pitch of Stays in each 2-6 1/16"

Working pressure by rules 181 Superheater or Steam chest; how connected to boiler none Can the superheater be shut off and the boiler worked

separately yes Diameter no Length no Thickness of shell plates no Material no Description of longitudinal joint no Diam. of rivet

holes no Pitch of rivets no Working pressure of shell by rules no Diameter of flue no Material of flue plates no Thickness no

if stiffened with rings no Distance between rings no Working pressure by rules no End plates: Thickness no How stayed no

Working pressure of end plates no Area of safety valves to superheater no Are they fitted with easing gear no



DONKEY BOILER— No. 37 Description *Horizontal Multitubular*
 Made at *Ampierdarena* By whom made *D. Loriani & Co* When made *1902* Where fixed *on the main*
 Working pressure *100* tested by hydraulic pressure to *200* No. of Certificate *37* Fire grate area *26.95* Description of safety valves *Spring*
 No. of safety valves *2* Area of each *4.43* Pressure to which they are adjusted *100* If fitted with easing gear *yes* If steam from main boiler *no*
 enter the donkey boiler *no* Dia. of donkey boiler *9.6* Length *9.0* Material of shell plates *steel* Thickness *4/16* Range of thickness *28-32*
 strength *27-32* Descrip. of riveting long. seams *S.A. & B. Straps* Dia. of rivet holes *3/32* Whether punched or drilled *yes* Pitch of rivets *0*
 Lap of plating *✓* Per centage of strength of joint Rivets *86* Thickness of shell crown plates *✓* Radius of do. *✓* No. of Stays to do. *✓*
 Dia. of stays *✓* Diameter of furnace Top *32* Length of furnace *92.5* Thickness of furnace plates *1/2* Description of joint *single lap*
 Thickness of furnace crown plates *✓* Stayed by *✓* Working pressure of shell by rules *100*
 Working pressure of furnace by rules *97* Diameter of uptake *✓* Thickness of uptake plates *✓* Thickness of water tubes *✓*

SPARE GEAR. State the articles supplied:— *2 top & 2 bottom and bottom nuts, 2 main bearings, one set of coupling bolts, one set of feed, ridge, air & circulating pump valves, one connecting rod bush, 2 safety valve springs, 10 condensers & 12 boiler tubes, one set of Ramsbottom valves for H.P. & L.P. pistons, 1/2 set of fire bars, set of H.P. piston valve springs, and propeller*

The foregoing is a correct description,
 Manufacturer.

Dates of Survey while building: During progress of work in shops— *Donkey boiler Sept 1st - Sept 18*
 During erection on board vessel— *1902. October 6 - Nov 4th on board*
 Total No. of visits *4* Is the approved plan of main boiler forwarded herewith *no*

General Remarks (State quality of workmanship, opinions as to class, &c. *Note: The design of the "donkey" boiler is the same as that fitted on last year's vessel, & has been approved. The materials & workmanship being of the requirements of the rules having been carried out & completed, the engines of the ship are eligible in my opinion to be classed, with the notation of +L.M.C. -11-02 in the R. B. Book -*

Material of screw shaft *✓* Is the screw shaft fitted with a continuous liner the whole length of the stern tube *✓*
 Is the after end of the liner made water tight in the propeller boss *✓* If the liner is in more than one length are the joints burned *✓*
 If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water non-corrosive *✓* If two liners are fitted, is the shaft lapped or protected between the liners *✓*

This vessel's donkey boiler examined during construction & afterwards tested by hydraulic pressure & found tight & sound.
The engines & boilers examined whilst being fitted on board, the shafting examined after being set, the main steam pipes tested to 360 lb pressure, the spare gear checked over, pumping plan carried out, shaft tunnel made watertight, watertight door fitted, safety valves all adjusted under steam, & the engines examined during a steam trial & found satisfactory.

It is submitted that this vessel is eligible for THE RECORD - L.M.C. 11-02 ED

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

The amount of Entry Fee.. £ : :
 Special Donkey Boiler Fee .. £ 2 : :
 Travelling Expenses (if any) £ 3 - 12 - 9

Committee's Minute TUES. 18 NOV 1902

Assigned

FLAT P
 GARBOZ
 State a thickness way of 1
 Botto
 Write 'Sheer Stroke' opposite its corresponding letter.
 Sheer
 Double at 2
 Length and thickness
 POOP SI
 BRIDGE
 FORECASTLE
 Ma
 manufac
 Plates
 From
 at the
 Has the
 FRAMING
 REVER
 fore part
 LOWER
 Riggers
 Rigging
 Sails.
 EQUIP
 Number of Certificate
 4761
 4761
 4762
 2401
 2401
 4763
 Number Certificate
 230
 Iron Streak or Steel
 Boats
 Pumps
 Windlass
 Engine
 What are
 Coal B
 Number
 Ceiling
 Cargo
 State size
 Number
 Bulwark
 The above
 Builder's

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.)

