

REPORT ON MACHINERY.

Port of Greenock

Received at London Office

No. in Survey held at Greenock Date, first Survey 19th March 1901 Last Survey 19th March 1902

Book. "Albuera" (Number of Visits 73)

on the Screw Steamer "Albuera" Tons { Gross Net } When built 1902

ster Built at Port Glasgow By whom built Russell & Co.

ines made at Greenock By whom made John G. Muir & Co. when made 1902

lers made at Paisley By whom made A. J. Craig & Co. when made 1902

istered Horse Power Owners Port belonging to

is Refrigerating Machinery fitted No Is Electric Light fitted No

RETAIN

INES, &c.—Description of Engines Triplic Expansion No. of Cylinders Three No. of Cranks Three

of Cylinders 24"-40"-65" Length of Stroke 45" Revs. per minute 69 Dia. of Screw shaft 14 1/2" Lgth. of stern bush 57"

of Tunnel shaft 12 1/4" Dia. of Crank shaft journals 12 1/4" Dia. of Crank pin 12 1/4" Size of Crank webs 19 1/2" Dia. of thrust shaft under

ers 12 1/4" Dia. of screw 16.6" Pitch of screw 17.6" No. of blades 4 State whether moceable Yes Total surface 86 sq. ft.

of Feed pumps 2 Diameter of ditto 4" Stroke 24" Can one be overhauled while the other is at work Yes

of Bilge pumps 2 Diameter of ditto 4" Stroke 24" Can one be overhauled while the other is at work Yes

of Donkey Engines Two Sizes of Pump Ballast (11 1/2 x 12 x 10) (6 1/2 x 4 x 6) No. and size of Suctions connected to both Bilge and Donkey pumps

Engine Room Four: 3 1/2" dia. In Holds, &c. No. 1 Hold: 2-3 1/2" dia. No. 2 Hold: 2-3 1/2" dia.

2-4 Hold: 2-3 1/2" dia. No. 3 Hold: 2-3 1/2" dia. Tunnel Well: one-2 1/2" dia.

of bilge injections 1 sizes 6" Connected to condenser, or to circulating pump C.P. Is a separate donkey suction fitted in Engine room & size Yes, 3 1/2"

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

all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Both

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

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

t pipes are carried through the bunkers Hold Suctions How are they protected By Wood Casings

all pipes, cocks, valves, and pumps in connection with the machinery and all boiler mountings accessible at all times Yes

the bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges Yes

ere stern tube, propeller, screw shaft, and all connections examined in dry dock Yes Is the screw shaft tunnel watertight Yes

fitted with a watertight door Yes worked from Top platform in Engine Room

ERS, &c.— (Letter for record S) Total Heating Surface of Boilers 4700 sq. ft. Is forced draft fitted No

and Description of Boilers See Glasgow Report Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs

of test 17/2/02 Can each boiler be worked separately Yes Area of fire grate in each boiler 64 sq. ft. No. and Description of safety valves to

boiler 2: Direct Spring Area of each valve 7.66" Pressure to which they are adjusted 185 lbs Are they fitted with easing gear Yes

least distance between boilers or uptakes and bunkers or woodwork 10" Mean dia. of boilers ✓ Length ✓ Material of shell plates ✓

ness Range of tensile strength Are they welded or flanged Descrip. of riveting: cir. seams long. seams

eter of rivet holes in long. seams Pitch of rivets Lap of plates or width of butt straps

entages of strength of longitudinal joint rivets Working pressure of shell by rules Size of manhole in shell

of compensating ring No. and Description of Furnaces in each boiler Material Outside diameter

h of plain part top Thickness of plates crown Description of longitudinal joint No. of strengthening rings

ing pressure of furnace by the rules Combustion chamber plates: Material Thickness: Sides Back Top Bottom

of stays to ditto: Sides Back Top If stays are fitted with nuts or riveted heads Working pressure by rules

rial of stays Diameter at smallest part Area supported by each stay Working pressure by rules End plates in steam space:

rial Thickness Pitch of stays How are stays secured Working pressure by rules Material of stays

eter at smallest part Area supported by each stay Working pressure by rules Material of Front plates at bottom

ness Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules

ter of tubes Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays

across wide water spaces Working pressures by rules Girders to Chamber tops: Material Depth and

ess of girder at centre Length as per rule Distance apart Number and pitch of Stays in each

ing pressure by rules Superheater or Steam chest; how connected to boiler Can the superheater be shut off and the boiler worked

tely 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

ened with rings Distance between rings Working pressure by rules End plates: Thickness How stayed

ing pressure of end plates Area of safety valves to superheater Are they fitted with easing gear

W490-0157



© 2020 Lloyd's Register Foundation

DONKEY BOILER— No. *One* Description *Cylindrical Multi Single Ended with 2 plain pipes*
 Made at *Pollockshaws* By whom made *A.M. Dalgligh* When made *1901* Where fixed *On Deck*
 Working pressure *80 lbs* tested by hydraulic pressure to *160 lbs* No. of Certificate *6113* Fire grate area *24 1/2 sq ft* Description of safety valves *2: Direct Spring*
 No. of safety valves *2* Area of each *5.94 sq ft* Pressure to which they are adjusted *80 lbs* If fitted with easing gear *Yes* If steam from main boilers enter the donkey boiler *No*
 Dia. of donkey boiler *9' 0"* Length *9' 0"* Material of shell plates *Steel* Thickness *1/2"* Range of tensile strength *27-32 tons* Descrip. of riveting long seams *Double* Dia. of rivet holes *13/16"* Whether punched or drilled *Drilled* Pitch of rivets *3 1/2"*
 Rivets *88* Thickness of shell crown plates *7/16"* Radius of do. pitch *No.* of Stays to do. *14*
 Per centage of strength of joint *76%* Thickness of furnace plates *15/32"* Description of joint *Weld* Diameter of furnace *Top 2' 8" Bottom 2' 8"* Length of furnace *8' 1"* Thickness of furnace plates *15/32"*
 Diameter of stays *2' 1"* Diameter of furnace *Top 2' 8" Bottom 2' 8"* Length of furnace *8' 1"* Thickness of furnace plates *15/32"* Description of joint *Weld* Thickness of furnace crown plates *7/16" & 1/2"* Stayed by *8 Area pitch 8 x 4 1/2"* Working pressure of shell by rules *89*
 Working pressure of furnace by rules *80 lbs* Diameter of uptake *3 1/2"* Thickness of uptake plates *11/16" & 5/8"* Thickness of water tubes *1/4"*

SPARE GEAR. State the articles supplied:— *2 Propeller blades; 3 Cylinders Escape valves & Spring 12 Coupling Bolt nuts; 2 Connecting Rod Bolt nuts, 2 piston Rod Bolt nuts, 2 Main Bearing Bolt nuts, 6 Joint King Bolts, 12 propeller shaft nuts, 12 Boiler tubes, 12 Condenser tubes each and circulating pump valves, 1 set feed & relief pump valves etc. etc.*

The foregoing is a correct description,
John G. Lucard & Co. Manufacturer.

Dates of Survey while building	During progress of work in shops	During erection on board vessel	Total No. of visits
1901. March 19. 21. 25. 27. April 10. 12. 23. 30. 31. June 3. July 17. 20. 23. Aug. 7. 29. 30. Sept. 5. 10. 23. 25. 27. Oct. 11. 15. 18. 21. 23. 25. 29. Nov. 1. 5. 8. 11. 13. 15. 19. 29. Dec. 3. 5. 10. 16. 17. 19. 24. 30. 1902. Jan. 9. 21. 24. 29. Feb. 3. 6. 7. 11. 14. 19. 20. 24. 25. 26. 27. March 3. 5. 6. 10. 12. 13.	15. 17. 18. 19.	~ 73 ~	

Is the approved plan of main boiler forwarded herewith
 " " " donkey " " " *None recd*

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

Material of screw shaft *Seas Iron* Is the screw shaft fitted with a continuous liner the whole length of the stern tube *No*
 Is the after end of the liner made water tight in the propeller boss *Yes* 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

The Engines and Boilers of this vessel have been built under special survey and the materials & workmanship are good. When fitted on board and completed they were tried under full steam and worked satisfactorily. The machinery throughout is now in good and efficient condition and eligible in my opinion have the record of *L.M.C. 3,02* marked in the Society Register Book.

It is submitted that this vessel is eligible for THE RECORD - L.M.C. 3,02

The amount of Entry Fee... £ *3*
 Special... £ *28 19:4*
 Monkey Boiler Fee... £ *11 14:8*
 Travelling Expenses (if any) £

When applied for, *19.3.02*
 Received, *21.3.02*
Wm. Austin
 Engineer Surveyor to Lloyd's Register of British & Foreign Ships

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

Committee's Minute
 Assigned

+ L.M.C. 3,02

