

REPORT ON MACHINERY.

No. 46217

Received at London Office

23 DEC 1920

Date of writing Report 19 _____ When handed in at Local Office 24-12-1926 Port of Glasgow

No. in Survey held at Glasgow Date, First Survey 2nd June 1926 Last Survey 23-12-1926
 Reg. Book. on the *Steel Screw Steamer "GOLETA"* (Number of Visits 52)

Master Built at Buntisland By whom built Buntisland SBC (S/N^o 134) When built 1926

Engines made at Glasgow By whom made David Rowan & Co L^d (N^o 824) when made 1926

Boilers made at Glasgow By whom made David Rowan & Co L^d (N^o 824) when made 1926

Registered Horse Power Owners *La Tunisienne S.N. Co. Ltd.* Port belonging to Swansea

Nom. Horse Power as per Section 28 259 Is Refrigerating Machinery fitted for cargo purposes *no* Is Electric Light fitted *yes*

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

Dia. of Cylinders 22-36-60 Length of Stroke 39" Revs. per minute _____ Dia. of Screw shaft as per rule 12.05" Material of steel as fitted 12.5" screw shaft

Is the screw shaft fitted with a continuous liner the whole length of the stern tube *yes* No O.G. 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 and non-corrosive *yes* If two liners are fitted, is the shaft lapped or protected between the liners _____ Length of stern bush 4-1 1/2"

Dia. of Tunnel shaft as per rule 10.76" as fitted 10.7" Dia. of Crank shaft journals as per rule 11.298" as fitted 11.2" Dia. of Crank pin 11 1/2" Size of Crank webs 18"x7 1/4" Dia. of thrust shaft under collars 11 3/4" Dia. of screw 15-3" Pitch of Screw 16-6" No. of Blades 4 State whether moceable *no* Total surface 73.6 sq ft

No. of Feed pumps 2 Diameter of ditto 3 1/2" Stroke 21" Can one be overhauled while the other is at work *yes*

No. of Bilge pumps 2 Diameter of ditto 3 1/2" Stroke 21" Can one be overhauled while the other is at work *yes*

No. of Donkey Engines 3 Sizes of Pumps 8x10x8. 8x5x8. 5x3 1/2x6 No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room 3 @ 2 1/2 In Holds, &c. N-1-2 @ 2 1/2. N-2-2 @ 3. N-3-2 @ 3

No. of Bilge Injections 1 sizes 4 1/2 Connected to condenser, or to circulating pump Is a separate Donkey Suction fitted in Engine room & size 1-4"

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 *cocks*

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*

Is the Screw Shaft Tunnel watertight *yes* Is it fitted with a watertight door *yes* worked from *top platform*

OILERS, &c.—(Letter for record (5)) Manufacturers of Steel Plates - Mannesmann Werke (Schulz-Knandt) Stay - Lanarkshire Steel Co

Total Heating Surface of Boilers 42000 sq ft Is Forced Draft fitted *no* No. and Description of Boilers *two, single ended* 2SB

Working Pressure 180 Tested by hydraulic pressure to 320 Date of test 6-12-26 No. of Certificate 17244

Can each boiler be worked separately *yes* Area of fire grate in each boiler 57.76 sq ft No. and Description of Safety Valves to each boiler *two direct spring* Area of each valve 7.060" Pressure to which they are adjusted 185 lbs Are they fitted with easing gear *yes*

Smallest distance between boilers or uptakes and bunkers or woodwork 3 feet *sur* Mean dia. of boilers 14-9" Length 10-6" Material of shell plates *steel*

Thickness 1 1/4" Range of tensile strength 28-32 tons Are the shell plates welded or flanged *no* Descrip. of riveting: cir. seams *W.T. lap*

ong. seams *W.B.S. TR* Diameter of rivet holes in long. seams 1 1/4" Pitch of rivets 8 21/32" Lap of plates or width of butt straps 18 3/4"

Per centages of strength of longitudinal joint rivets 88.5 Working pressure of shell by rules 180 Size of manhole in shell 19 1/2" x 15 1/2"

10"x2-6"x1 1/2" flanged 3" to 16"x12" plate 85.87

Size of compensating ring manhole No. and Description of Furnaces in each boiler 3 *Heighiton* Material *steel* Outside diameter 43 3/32"

Length of plain part top _____ bottom _____ Thickness of plates crown 35" bottom 64" Description of longitudinal joint *welded* No. of strengthening rings *none*

Working pressure of furnace by the rules 184 Combustion chamber plates: Material *steel* Thickness: Sides 23/32" Back 21/32" Top 23/32" Bottom 23/32"

Pitch of stays to ditto: Sides 10 3/8" x 9 1/2" Back 9 1/4" x 8 7/8" Top 10 3/8" x 9 1/2" If stays are fitted with nuts or riveted heads *nuts* Working pressure by rules 182

Material of stays *steel* Area at smallest part 1.730" Area supported by each stay 8220" Working pressure by rules 185 End plates in steam space: Material *steel* Thickness 1 1/4" Pitch of stays 20 1/2" x 19 3/4" How are stays secured *W.N* Working pressure by rules 180 Material of stays *steel*

Area at smallest part 5.940" Area supported by each stay 3620" Working pressure by rules 181 Material of Front plates at bottom *steel*

Thickness 23/32" Material of Lower back plate *steel* Thickness 3/4" Greatest pitch of stays 13 5/8" x 8 7/8" Working pressure of plate by rules 181

Diameter of tubes 3 1/4" Pitch of tubes 4 1/2" x 4 3/8" Material of tube plates *steel* Thickness: Front 27/32" Back 23/32" Mean pitch of stays 10"

Pitch across wide water spaces 13 7/8" x 8 3/4" Working pressures by rules 183 Girders to Chamber tops: Material *steel* Depth and thickness of girder at centre 7 3/4" x 7 1/8" (20) Length as per rule 32 3/4" Distance apart 9 1/2" Number and pitch of stays in each 2 @ 10 3/8"

Working pressure by rules 181 Steam dome: description of joint to shell *none* % of strength of joint _____

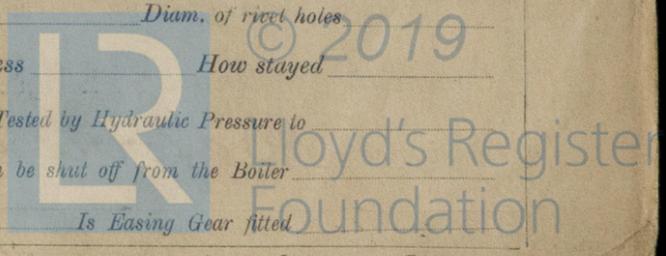
Diameter _____ Thickness of shell plates _____ Material _____ Description of longitudinal joint _____ Diam. of rivet holes _____

Pitch of rivets _____ Working pressure of shell by rules _____ Crown plates _____ Thickness _____ How stayed _____

PERHEATER. Type *none* Date of Approval of Plan _____ Tested by Hydraulic Pressure to _____

Date of Test _____ Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler _____

Diameter of Safety Valve _____ Pressure to which each is adjusted _____ Is Easing Gear fitted _____



W42-0014

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

2 connecting rod bolts and nuts, top end, 2 connecting rod bottom end bolts and nuts, 2 main bearing bolts, 1 set of coupling bolts, 1 set of feed and bilge pump valves, 1 set of piston rings, a quantity of assorted bolts and nuts, iron of various sizes. Spare propeller. A number of condenser tubes. H.P. piston valve. Several boiler tube stoppers

The foregoing is a correct description,

For David Roway & Co. Ltd }
Archd. N. Grierson } Manufacturer.

Dates of Survey while building { During progress of work in shops -- } 1925 June 2-9-15-23-31 July 31 Aug 4-12-18-11-24 Sep 2-4-9-10-14-22-24-25 Oct 5-13-15-16-22-28-30
{ During erection on board vessel --- } Nov 4-10-12-23-24 Dec 9-14-21-22 (1926) Jan 29 Feb 9-23 Mar 8-18 Sep 13 Nov 3-10-11-16-26-30 Dec 3-6-15-16
Total No. of visits 52
Is the approved plan of main boiler forwarded herewith
fitting out 1926 Dec. 8. 22. 1927 Jan. 17. Feb. 2. 11. 14. 15. 26 " " " donkey " " "
March 10. 14

Dates of Examination of principal parts—Cylinders 31-7-25 Slides 15-10-25 Covers 4-9-25 Pistons 25-9-25 Rods 13-10-25

Connecting rods 7-9-24 Crank shaft 4-9-25 Thrust shaft 10-9-25 Tunnel shafts 10-9-25 Screw shaft 26-11-26 Propeller 10-11-26

Stern tube 16-11-26 Steam pipes tested at Glasgow Engine and boiler seatings 2-2-27 Engines holding down bolts 1-3-27

Completion of pumping arrangements 14-3-27 Boilers fixed 26-2-27 Engines tried under steam 22-2-27

Completion of fitting sea connections 17-1-27 Stern tube 8-12-26 Screw shaft and propeller 22-12-26, 17-1-27

Main boiler safety valves adjusted 4-3-27 Thickness of adjusting washers Piston 5 11/32 Stand 5 11/32 D. Bk. F 3/8 A 3/8

Material of Crank shaft J. Steel Identification Mark on Do. LLOYD'S NO 1204 L.S.D. 4-9-25 Material of Thrust shaft J. Steel Identification Mark on Do. LLOYD'S NO 1203 L.S.D. 10-9-25

Material of Tunnel shafts J. Steel Identification Marks on Do. LLOYD'S NO 824 L.S.D. 10-9-25 Material of Screw shafts J. Steel Identification Marks on Do. LLOYD'S NO 159 J.F.N. 26-11-26

Material of Steam Pipes Wootton (Main) Copper (Aux) Test pressure Main 540 lbs. Auxiliary 360 lbs.

Is an installation fitted for burning oil fuel no Is the flash point of the oil to be used over 150°F.

Have the requirements of Section 49 of the Rules been complied with yes

Is this machinery duplicate of a previous case no If so, state name of vessel

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

The materials and workmanship are good.
The machinery has been constructed under Special Survey in accordance with the Rules. It is about to be sent to Burntisland to be fitted in the vessel.
The machinery has been satisfactorily fitted in the vessel, tried under full working conditions and found satisfactory.
The machinery is now in a good and safe working condition and renders the vessel eligible in an opinion to have the notation + L.M.C. 3.27

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 3.27. CL.

W.D. 18/3/27

S. Davis, Ab. Morris, Engineer Surveyor to Lloyd's Register of Shipping.

TUES. 29 MAR 1927

The amount of Entry Fee ... £ 4 :
Special 4/5 fee ... £ 51 : -
Donkey Boiler Fee ... £ 12 : 17
Travelling Expenses (if any) £ :

Committee's Minute GLASGOW 28 DEC 1926

Assigned Deferred.



24/12/26 A.B. Glasgow

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