

REPORT ON MACHINERY.

No. 15,996.

Received at London Office

THU. 22 SEP. 1921

Report 20th Sept 1921 When handed in at Local Office 20th Sept 1921 Port of *Leith*

vey held at *Leith* Date, First Survey 6th July 1921 Last Survey 17th Sept 1921

the S.S. "City of Westminster" in "Auld Burg" (Number of Visits 34)

Built at *Flensburg* By whom built *Flensburgt Schiffst Geo* Tons { Gross 6094.47 Net 3771.26

at *Flensburg* By whom made *Flensburgt Schiffst Geo* When built 1916

at *do* By whom made *do* when made 1916

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orse Power Owners *City of Otan S.S. Co Ltd* Port belonging to *Liverpool*

Power as per Section 28 701 Is Refrigerating Machinery fitted for cargo purposes *no* Is Electric Light fitted *yes*

S, &c. — Description of Engines *Triple Expansion* No. of Cylinders 3 No. of Cranks 3

nders 31¹/₈, 50³/₈, 82¹/₂ Length of Stroke 55" Revs. per minute Dia. of Screw shaft as per rule 17.25 Material of *steel*

shaft fitted with a continuous liner the whole length of the stern tube *no* Is the after end of the liner made water tight

after boss *gland* If the liner is in more than one length are the joints burned *✓* If the liner does not fit tightly at the part

bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive *✓* If too

ted, is the shaft lapped or protected between the liners *no* Length of stern bush 7'-2"

shaft as per rule 15.97 Dia. of Crank shaft journals as per rule 16.76 Dia. of Crank pin 16³/₄" Size of Crank webs 28x10⁵/₈" Dia. of thrust shaft under

as fitted 15⁹/₁₆ as fitted 16³/₄ Dia. of screw 20'-0" Pitch of Screw 17'-4" No. of Blades 4 State whether moreable *yes* Total surface

pumps 2 Diameter of ditto 4³/₄" Stroke 27¹/₂" Can one be overhauled while the other is at work *yes* ✓

pumps 2 Diameter of ditto 4¹/₄" Stroke 27¹/₂" Can one be overhauled while the other is at work *yes* ✓

icy Engines 4 Sizes of Pumps 1-13¹/₂ 2-11³/₄ 3-8⁵/₈ 4-3³/₄ No. and size of Suctions connected to both Bilge and Donkey pumps

Room + Bilge Am. = 4 - 3¹/₂ x 1 1/2 x 3¹/₂ In Holds, &c. 2 - 3¹/₂ in each

inlet will 1 - 3¹/₂ Injections 1 sizes 11" Connected to condenser, or to circulating pump *yes* Is a separate Donkey Suction fitted in Engine room & size *yes* - 3¹/₂"

lge suction pipes fitted with roses *yes* Are the roses in Engine room always accessible *yes* Are the sluices on Engine room bulkheads always accessible

otions with the sea direct on the skin of the ship *yes* Are they Valves or Cocks *yes*

ufficiently high on the ship's side to be seen without lifting the stokehold plates *yes* Are the Discharge Pipes above *below* the deep water line *yes*

is 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*

are carried through the bunkers *none* How are they protected *✓*

es, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times *yes*

ge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges *yes*

Shaft Tunnel watertight *yes* Is it fitted with a watertight door *yes* worked from *E. R. top platform*

S, &c. — (Letter for record *S*) Manufacturers of Steel

ing Surface of Boilers 9920⁶ Is Forced Draft fitted *yes* No. and Description of Boilers *4 Single Ended*

Pressure 200 lbs. Tested by hydraulic pressure to *✓* Date of test *✓* No. of Certificate *✓*

nter be worked separately *yes* Area of fire grate in each boiler 54.25 sq. ft. No. and Description of Safety Valves to *17.00*

Double spring loaded Area of each valve 12.56" Pressure to which they are adjusted 205 lbs. Are they fitted with easing gear *yes*

tance between boilers or uptakes and bunkers or woodwork 18" dia. of boilers 14'-8" Length 12'-14" Material of shell plates *steel*

76" Range of tensile strength 27.94 min. Are the shell plates welded or flanged *no* Descrip. of riveting: cir. seams *D.T.R.*

Q.R.D.B.S. Diameter of rivet holes in long. seams 1¹/₁₆" Pitch of rivets 20¹/₂" Lap of plates or width of butt straps 30¹/₂"

s of strength of longitudinal joint rivets 120 plate 92.3 Working pressure of shell by rules 219 Size of manhole in shell 16¹/₈" x 12¹/₄"

ensating ring 10¹/₄" x 1¹/₁₆" No. and Description of Furnaces in each boiler 3 *corrugated* Material *steel* Outside diameter 45¹/₄"

lain part top *✓* Thickness of plates crown *5¹/₈"* Description of longitudinal joint *weld* No. of strengthening rings *✓*

asure of furnace by the rules 223 Combustion chamber plates: Material *steel* Thickness: Sides *1¹/₁₆"* Back *1¹/₁₆"* Top *1¹/₁₆"* Bottom *1"*

ys to ditto: Sides *7³/₈" x 7³/₈"* Back *7³/₈" x 7³/₈"* Top *7³/₈" x 7³/₈"* If stays are fitted with nuts or riveted heads *into* Working pressure by rules 263.

stays *steel* Area at smallest part 1.76" Area supported by each stay 62" Working pressure by rules 255 End plates in steam space:

steel Thickness 1¹/₂" Pitch of stays 15x44¹/₂" How are stays secured *D.N. wash* Working pressure by rules 232 Material of stays *steel*

smallest part 6.2" Area supported by each stay 217.5" Working pressure by rules 296 Material of Front plates at bottom *steel*

1¹/₁₆" Material of Lower back plate *steel* Thickness 1¹/₁₆" Greatest pitch of stays 14¹/₈" x 8¹/₂" Working pressure of plate by rules 200

tubes 3 Pitch of tubes 14¹/₁₆" x 4¹/₈" Material of tube plates *steel* Thickness: Front 1¹/₁₆" Back 29¹/₃₂" Mean pitch of stays 8⁵/₁₆"

oss wide water spaces 14¹/₁₆" Working pressures by rules 230 Girders to Chamber tops: Material *steel* Depth and

girder at centre 10¹/₄" x 2 @ 1¹/₁₆" Length as per rule 34¹/₄" Distance apart 7¹/₂" Number and pitch of stays in each 3 @ 7³/₈"

pressure by rules 224 Steam dome: description of joint to shell *✓* % of strength of joint *✓*

Thickness of shell plates *✓* Material *✓* Description of longitudinal joint *✓* Diam. of rivet holes *✓*

Working pressure of shell by rules *✓* Crown plates *✓* Thickness *✓* How stayed *✓*

TEATER. Type *Schmidt* Date of Approval of Plan *✓* Tested by Hydraulic Pressure to *✓*

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler *yes*

of Safety Valve 2³/₈" Pressure to which each is adjusted 208 lbs. Is Easing Gear fitted *yes*

with 700 (13 max)

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IS A DONKEY BOILER FITTED?

no

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— 2 connecting rod top end bolts & nuts: 2 con
rod bottom end bolts & nuts: 2 main bearing bolts: 1 set of coupling bolt
1 set of feed & filge pump valves: a quantity of assorted bolts & nuts: of
various sizes: spare tail shaft: spare section of crank shaft: set
crank pin & crosshead bushes: 1 spare valve spindle.

The foregoing is a correct description,

Manufacturer.

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

Is the approved plan of main boiler forwarded herewith

" " " donkey " " "

Dates of Examination of principal parts—Cylinders

Slides

Covers

Pistons

Rods

Connecting rods

Crank shaft

Thrust shaft

Tunnel shafts

Screw shaft

Propeller

Stern tube

Steam pipes tested

Engine and boiler seatings

Engines holding down bolts

Completion of pumping arrangements

Boilers fixed

Engines tried under steam

Completion of fitting sea connections

Stern tube

Screw shaft and propeller

Main boiler safety valves adjusted

16.9.31

Thickness of adjusting washers

P.B. $\frac{13}{32}$ C.B. $\frac{17}{32}$ S.B. $\frac{21}{32}$ F.B. $\frac{21}{32}$

Material of Crank shaft

Identification Mark on Do.

Material of Thrust shaft

Identification Mark on Do.

Material of Tunnel shafts

Identification Marks on Do.

Material of Screw shafts

Identification Marks on Do.

Material of Steam Pipes

Steel

Test pressure

600 lbs per sq. in.

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

Is this machinery duplicate of a previous case

If so, state name of vessel

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

The machinery has been opened up for survey: the material workmanship appears good, and proved satisfactory under

It is submitted that this vessel is eligible for a V of L.M.C. 9-21 in the Register Book, subject to A.O. valve being renewed at either Middlesbrough or London, the vessel is proceeding

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

The amount of Entry Fee ... £

Special ... £

Donkey Boiler Fee ... £

Travelling Expenses (if any) £

When applied for,

When received,

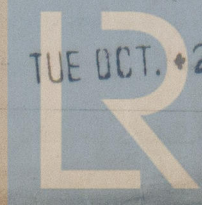
FRI. 26 OCT. 1923 Engineer Surveyor to Lloyd's Register of Sh

Committee's Minute

Assigned

FRI. OCT. 14 1921

TUE OCT. 2 1923



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