

REPORT ON MACHINERY.

Received at London Office

Date of writing Report 11-2-1925 When handed in at Local Office 16.2.1925 Port of Glasgow 25 FEB 1925

No. in Survey held at Glasgow Date, First Survey 30.7.24 Last Survey 10-2-1925

Reg. Book. 88295 on the Steel Twin S.S. "CHERITA" (Number of Visits 26 ENG 18 134) Gross Tons 2702 Net 1482

Master Built at Glasgow By whom built Wm Beardmore & Co Ltd When built 1925

Engines made at Coatbridge By whom made Wm Beardmore & Co Ltd when made 1925

Boilers made at Glasgow By whom made Wm Beardmore & Co Ltd when made 1925

Registered Horse Power Owners Curacaoische Scheep Maats. Port belonging to Willemstad

Nom. Horse Power as per Section 28 252 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

ENGINES, &c.—Description of Engines Twin Screw Single Expansion No. of Cylinders 6 No. of Cranks 6

Dia. of Cylinders 14" x 23" x 38" Length of Stroke 27" Revs. per minute 158 Dia. of Screw shaft as per rule 7.7 1/4" Material of screw shaft steel as fitted 8"

Is the screw shaft fitted with a continuous liner the whole length of the stern tube yes 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 yes 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 Oil Blank fitted Length of stern bush 34"

Dia. of Tunnel shaft as per rule 7.117" Dia. of Crank shaft journals as per rule 7.47" Dia. of Crank pin 7 3/4" Size of Crank webs 5 x 3 3/4" Dia. of thrust shaft under collars 7 3/4" Dia. of screw 8-9" Pitch of Screw 8.0" No. of Blades 4 State whether moveable no Total surface 28 sq ft

No. of Feed pumps 2 Diameter of ditto 5" Stroke 4 1/2" Can one be overhauled while the other is at work yes

No. of Bilge pumps 2 Diameter of ditto 5" Stroke 4 1/2" Can one be overhauled while the other is at work yes

No. of Donkey Engines 2 Sizes of Pumps 6 x 8 1/2 x 18" No. and size of Suctions connected to both Bilge and Donkey pumps In Engine Room 1-3, 2-2 1/4, 3-3, 7 1/2 x 5 x 6"

In Holds, &c. Pump Room 3-4" Fore Hold 1-3 1/2" Tons peak tank top 2-2 1/2"

No. of Bilge Injections 2 sizes 7 1/2" Connected to condenser, or 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 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

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 none Is it fitted with a watertight door worked from

BOILERS, &c.—(Letter for record S.V.) Manufacturers of Steel Plates Wm Beardmore & Co Ltd. (Bar) David Colville & Son

Total Heating Surface of Boilers 4100 sq ft Is Forced Draft fitted yes No. and Description of Boilers Two single ended return tubes 25B

Working Pressure 180 lbs. Tested by hydraulic pressure to 320 lbs. Date of test 14-11-24 No. of Certificate 16655

Can each boiler be worked separately yes Area of fire grate in each boiler Oil fired No. and Description of Safety Valves to each boiler 2 - direct spring Area of each valve 12.5 sq in 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 5-0" Mean dia. of boilers 13-0" Length 12-3" Material of shell plates steel

Thickness 1 1/2" Range of tensile strength 28/32 tons Are the shell plates welded or flanged no Descrip. of riveting: cir. seams D.R.L. long. seams T.R.D.B.S. Diameter of rivet holes in long. seams 1/4" Pitch of rivets 8 1/2" Lap of plates or width of butt straps 18 5/8"

Per centages of strength of longitudinal joint rivets 96/97 plate 85/87 Working pressure of shell by rules 184 lbs. Size of manhole in shell 16 x 12"

Size of compensating ring 6 x 1 1/2" No. and Description of Furnaces in each boiler Two Morrison Material Steel Outside diameter 3-6 1/8"

Length of plain part top 9 1/6" bottom 9 1/6" Thickness of plates crown 9 1/6" Description of longitudinal joint weld No. of strengthening rings

Working pressure of furnace by the rules 193 lbs. Combustion chamber plates: Material steel Thickness: Sides 7/8" Back 3/4" Top 7/8" Bottom 7/8"

Pitch of stays to ditto: Sides 9 1/8 x 8 1/2" Back 8 x 8 1/2" Top 9 7/8 x 9" If stays are fitted with nuts or riveted heads nuts + rivets Working pressure by rules 193 lbs.

Material of stays steel Area at smallest part 1 5/8 x 1 1/2" Area supported by each stay 68 sq in Working pressure by rules 185 lbs. End plates in steam space: Material steel Thickness 1 1/2" Pitch of stays 18" How are stays secured secured through plates Working pressure by rules 186 lbs. Material of stays steel

Area at smallest part 3 1/4 x 2 7/8" Area supported by each stay 324 sq in Working pressure by rules 212 lbs. Material of Front plates at bottom steel

Thickness 1 1/2" Material of Lower back plate steel Thickness 13/16" Greatest pitch of stays 14 x 18" Working pressure of plate by rules 200 lbs.

Diameter of tubes 2 3/4" Pitch of tubes 4" Material of tube plates steel Thickness: Front 1 1/2" Back 3/4" Mean pitch of stays 9 1/4"

Pitch across wide water spaces 14" Working pressures by rules 204 lbs. Girders to Chamber tops: Material steel Depth and thickness of girder at centre 2-8 x 3 1/4" Length as per rule 2-9" Distance apart 9" Number and pitch of stays in each 2-9 7/8"

Working pressure by rules 186 lbs. Steam dome: description of joint to shell % 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

SUPERHEATER. Type 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 Is Easing Gear fitted

IS A DONKEY BOILER FITTED? no ✓

If so, is a report now forwarded? ✓

SPARE GEAR. State the articles supplied:— 1 Section of crank shaft, 1 propeller shaft, 2 Cast-iron propellers, 1 eccentric strap & shaft complete, 1 engine guide shoe, 2 sets of piston rings for one engine, 1 piston rod, 1 valve spindle complete, 1 pair top end & one pair bottom end brass with bolts & nuts complete, 1 feed pump plunger & valves, 1 bilge pump plunger & valves, 1 set of coupling bolts & nuts, 2 main bearing bolts & nuts, 1 opening of each size used, Assorted bolts & nuts, Iron of various sizes.

The foregoing is a correct description,

WILLIAM BROWN & CO., LIMITED
Arthurs Manufacturer.

Dates of Survey while building
During progress of work in shops -- Engs. (1924) July 30, Aug 8, 18, 30. Oct 8, 11, 21, 24. Nov 3, 12, 19, 27. Dec 3, 8, 9, 11, 15, 18, 30.
During erection on board vessel -- (1925) July 14, 15, 16, 23, 30. Aug 4, 10.
Total No. of visits Engs. 26. Bks. 18

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

Dates of Examination of principal parts—Cylinders 30-9-24 Slides 3-12-24 Covers 30-9-24 Pistons 3-12-24 Rods 12-11-24
Connecting rods 12-11-24 Crank shafts 3-11-24 Thrust shafts 3-12-24 Tunnel shafts 3-12-24 Screw shafts 3-12-24 Propellers 3-12-24
Stern tubes 3-12-24 Steam pipes tested 15-1-25 Engine and boiler seatings 5-12-24 Engines holding down bolts 16-1-25
Completion of pumping arrangements 4-2-25 Boilers fixed 30-12-24 Engines tried under steam 10-2-25
Completion of fitting sea connections 9-12-24 Stern tube 9-12-24 Screw shaft and propeller 9-12-24
Main boiler safety valves adjusted 4-2-25 Thickness of adjusting washers Port boiler F 3/32, A 1/32. Star boiler F 9/32, A 9/32.
Material of Crank shafts Steel Identification Mark on Do. Nº 619 732 AF 3-12-24 HB Material of Thrust shafts Steel Identification Mark on Do. 619 732 AF 3-12-24 HB
Material of Tunnel shafts Steel Identification Marks on Do. 619 732 AF 3-12-24 HB Material of Screw shafts Steel Identification Marks on Do. 619 732 AF 3-12-24 HB
Material of Steam Pipes Iron ✓ Test pressure 540 lbs. ✓

Is an installation fitted for burning oil fuel Yes ✓ Is the flash point of the oil to be used over 150°F. Yes ✓
Have the requirements of Section 49 of the Rules been complied with Yes ✓
Is this machinery duplicate of a previous case Yes ✓ If so, state name of vessel S.S. "CONCHITA" S.S. "CARLOTTA" S.S. "CASANDRA"

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

The machinery of this vessel has been constructed under Special Survey in accordance with the approved plans and Rules of the Society.
The materials and workmanship are good.
The machinery has been well built and well fitted on board the vessel and tried under full power with satisfactory results.
The vessel is eligible, in our opinion, to have Record of Survey + LMC. 2-25, with notation: fitted for oil fuel 2-25, flash point above 150°F. and T.S. 2-25 O.L. (O.G.) in the Register-Book

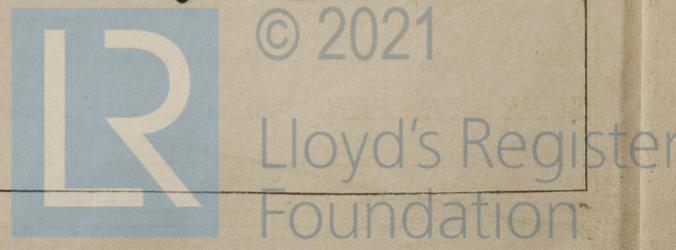
It is submitted that this vessel is eligible for THE RECORD. + LMC 2.25. FD. CL. Fitted for oil fuel 2.25. FP above 150°F.

The amount of Entry Fee ... £ 4 : 0 :
Special ... 3/5 £ 37 : 13 :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : :
When applied for, 23/2/1925
When received, 5/3/1925

W. J. Cairns
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 24 FEB 1925

Assigned + LMC 2.25 FD
Fitted for oil fuel 2.25 F.P. above 150°F.



6/2/25
W. J. Cairns

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