

# REPORT ON MACHINERY

No. 42453

WED. JAN. 24 1923

Registered at London Office

Date of writing Report 8<sup>th</sup> Jan 1923 when handed in at Local Office 22-1-1923 Port of Glasgow

Survey held at Glasgow Date, First Survey 15th October Last Survey 22<sup>nd</sup> Dec: 1922.

on the T.S. "Murtai" (Number of Visits) Tons Gross Net When built

Built at Montrose By whom built Coaster Bros C<sup>o</sup> L<sup>td</sup> Engines made at Glasgow By whom made W. & A. R. Bastin N<sup>o</sup> 1081-2 when made 1922

Boilers made at Glasgow By whom made Ross & Duncan N<sup>o</sup> 1672-3 when made 1922

Registered Horse Power Owners Eastbourne Borough Council Port belonging to Wellington

nom. Horse Power as per Section 28 130 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Triple expansion Twin No. of Cylinders 6 No. of Cranks 3 each engine

Dia. of Cylinders 10 1/2 - 17 - 28 Length of Stroke 20 Revs. per minute Dia. of Screw shaft as per rule 5.86 Material of screw shaft as fitted 6.25 8.

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

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

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

bearers are fitted, is the shaft lapped or protected between the liners 5.555 Length of stern bush 25 1/4

Dia. of Tunnel shaft as per rule 5.3 Dia. of Crank shaft journals as per rule 5.565 Dia. of Crank pin 5 5/8 Size of Crank webs 3 3/4 x 10 1/2 Dia. of thrust shaft under

rollers 5 5/8 Dia. of screw 7-0 Pitch of Screw 8-9 No. of Blades 4 State whether moveable No Total surface 16 sq.

No. of Feed pumps none Diameter of ditto Stroke Can one be overhauled while the other is at work

No. of Bilge pumps none 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 In Holds, &c.

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

Are all the bilge suction pipes fitted with roses Are the roses in Engine room always accessible Are the sluices on Engine room bulkheads always accessible

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

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the Discharge Pipes above or below the deep water line

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Are the Blow Off Cocks fitted with a spigot and brass covering plate

What pipes are carried through the bunkers How are they protected

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges

Is the Screw Shaft Tunnel watertight Is it fitted with a watertight door worked from

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

Total Heating Surface of Boilers 2200 Is Forced Draft fitted No. and Description of Boilers 2- S.E. see Gu R<sup>o</sup> N<sup>o</sup> 42369.

Working Pressure 180 LBS sq. Tested by hydraulic pressure to Date of test No. of Certificate

Can each boiler be worked separately Area of fire grate in each boiler No. and Description of Safety Valves to

each boiler Area of each valve Pressure to which they are adjusted Are they fitted with easing gear

Smallest distance between boilers or uptakes and bunkers or woodwork Mean dia. of boilers Length Material of shell plates

Thickness Range of tensile strength Are the shell plates welded or flanged Descrip. of riveting: cir. seams

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

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

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

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

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

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

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

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

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

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

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

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

thickness of girder at centre Length as per rule Distance apart Number and pitch of stays in each

Working pressure by rules Steam dome: description of joint to shell % of strength of joint

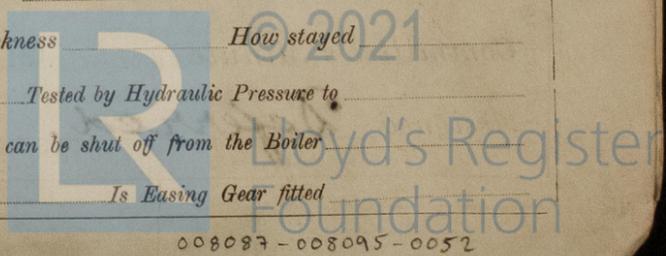
Diameter Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes

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

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



IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,

*McKie & Baxter*

Manufacturer.

Dates of Survey while building { During progress of work in shops -- 1922 Oct 12 Nov 16 20 23 24 27 Dec 8 22  
During erection on board vessel ---  
Total No. of visits 8

Is the approved plan of main boiler forwarded herewith

" " " donkey " " "

Dates of Examination of principal parts—Cylinders 22-12-22 Slides 22-12-22 Covers 22-12-22 Pistons 22-12-22 Rods 22-12-22

Connecting rods 22-12-22 Crank shaft 8-12-22 Thrust shaft 8-12-22 Tunnel shafts 8-12-22 Screw shaft 8-12-22 Propeller 8-12-22

Stern tube 24-11-22 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 Thickness of adjusting washers

Material of Crank shaft S Identification Mark on Do. 1081-2 H.C.F. Material of Thrust shaft S Identification Mark on Do. 1081-2 H.C.F.

Material of Tunnel shafts S Identification Marks on Do. 1081-2 H.C.F. Material of Screw shafts S Identification Marks on Do. 1081-2 H.C.F.

Material of Steam Pipes Test pressure

Is an installation fitted for burning oil fuel 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. These Engines have been built under special survey, and in accordance with the Rules and approved plans, the materials and workmanship are good.

The Engines are being shipped to Montreal, at which Port they will be fitted on board.

This machinery will be eligible in my opinion to be classed L.M.C. (with date) when satisfactorily placed on board and and tried under steam.

For Boilers see Gls Report N° 42369.

These Engines have been fitted on board the vessel in an efficient manner

The amount of Entry Fee ... £ 3 : 0 : 0 When applied for, 22-1-23.  
Special ... £ 7 : 0 : 0  
Donkey Boiler Fee ... £ 13 : 0 : 0  
Travelling Expenses (if any) £ : : : When received, 6/3/23

*Harry Clarke & J. S. Little*  
Engineer Surveyor to Lloyd's Register of Shipping.

FRI. MAR. 2 1923

Committee's Minute GLASGOW 23 JAN 1923  
Assigned Deferred.



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