

REPORT ON MACHINERY.

No. 40952

Received at London Office

WED. 16 MAR. 1921

Date of writing Report 14 March 1921 When handed in at Local Office 14 March 1921 Port of Glasgow

No. in Survey held at Glasgow Reg. Book. S.S. "Corpio" Date, First Survey 5-2-1920 Last Survey 9-3-1921
(Number of Visits 59)

Master _____ Built at Liverpool By whom built A & C Grayson Tons } Gross }
When built 1921 } Net }

Engines made at Glasgow By whom made McKie & Baxter when made 1921

Boilers made at Birkenhead By whom made Cammell, Laird Ltd. when made _____

Registered Horse Power _____ Owners MacAndrews & Co. Port belonging to London

Nom. Horse Power as per Section 28 252 Is Refrigerating Machinery fitted for cargo purposes _____ Is Electric Light fitted _____

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

Dia. of Cylinders 21-34-56 Length of Stroke 36 Revs. per minute _____ Dia. of Screw shaft as per rule 11.75 Material of screw shaft } Steel
as fitted 12 }

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 ✓ 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 _____ If two liners are fitted, is the shaft lapped or protected between the liners ✓ Length of stern bush 4'-0"

Dia. of Tunnel shaft as per rule 10.22 Dia. of Crank shaft journals as per rule 10.73 Dia. of Crank pin 11 Size of Crank webs 78x20 Dia. of thrust shaft under collars 11 Dia. of screw 14'-9" Pitch of Screw 15'-0" No. of Blades 4 State whether moveable yes Total surface 70 sq ft.

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

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

No. of Donkey Engines 3 Sizes of Pumps 8x8x8 8x6x12 8x6x6 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 _____

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

Total Heating Surface of Boilers 15504 Is Forced Draft fitted _____ No. and Description of Boilers _____

Working Pressure 180 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 _____ 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 _____ Thickness of plates _____ 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 stays _____ 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 _____

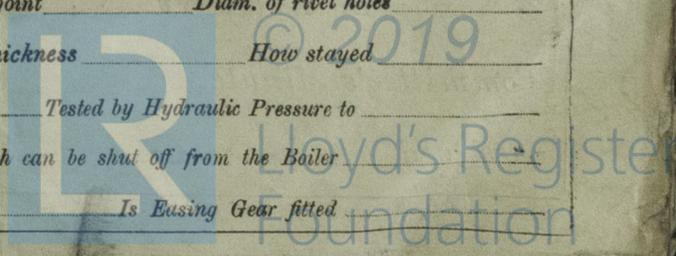
Diameter _____ Thickness of shell plates _____ Material _____ Description of longitudinal joint _____ Diam. of rivet holes _____

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 _____

Material 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,

Mickie & Baxter

Manufacturer.

Dates of Survey while building: During progress of work in shops... During erection on board vessel... Total No. of visits 59.

Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts—Cylinders 24-2-21 Slides 3-2-21, 21-2-21 Covers 21-2-21 Pistons 3-2-21 Rods 28-2-21

Connecting rods 24-2-21 Crank shaft 17-2-21 Thrust shaft 3-11-20 Tunnel shafts 29-9-20 Screw shaft 15-11-20 Propeller 17-11-20

Stern tube 15-11-20 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 Steel Identification Mark on Do. 979 Lloyd's 17/2/21 Material of Thrust shaft Steel Identification Mark on Do. 979 Lloyd's 2-11-20

Material of Tunnel shafts Steel Identification Marks on Do. 979 Lloyd's 29/9/20 Material of Screw shafts Steel Identification Marks on Do. 979 Lloyd's 15/11/20

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 Yes. If so, state name of vessel S. S. Le Rhin.

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 Rules. The workmanship and materials are good.

The engines are being forwarded to Liverpool to be fitted on board.

The machinery of this vessel will in my opinion be eligible to be classed *LMC with date when securely fitted on board and satisfactorily tried under steam.

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 ... £ 4 : 0 : When applied for, 15/3/21
Special (2/5ths) .. £ 25 : 2/6 :
Donkey Boiler Fee ... £ : : When received, 4-5-19
Travelling Expenses (if any) £ : : Hon. Sec. to Com. L.R.

Peter M. Chegor. Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW. 15 MAR 1921

Assigned Deferred.

