

REPORT ON MACHINERY.

No. 11910
SAT. APR. 26 1924

Received at London Office

Survey Report 19 When handed in at Local Office 22.4.24 Port of MIDDLESBROUGH

Survey held at Glasgow & Middlesbrough Date, First Survey 13.2.24 Last Survey 12.4.1924
on the S.S. MARTINHOE (Number of Visits 16)

Built at Haverton Hill By whom built Furness S. B. Co. Ld. N° 59 When built 1924

made at Glasgow By whom made Ross & Duncan N° 1131 when made 1924

made at Glasgow By whom made Ross & Duncan N° 1695-6 when made 1924

Indicated Horse Power Owners Port belonging to

Horse Power as per Section 28 156 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted no

VES, & Co. — Description of Engines Triple expansion No. of Cylinders 3 No. of Cranks 3

Cylinders 17-27½-45 Length of Stroke 33 Revs. per minute Dia. of Screw shaft 9.84 as per rule 9.25 Material of screw shaft steel as fitted 10 3/4

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

propeller boss If the liner is in more than one length are the joints burned If the liner does not fit tightly at the part

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

are fitted, is the shaft lapped or protected between the liners Length of stern bush 40 1/2

Tunnel shaft as per rule 8.62 Dia. of Crank shaft journals as per rule 9 Dia. of Crank pin 9 1/4 Size of Crank web 17 1/2 x 6 Dia. of thrust shaft under

9 1/8 Dia. of screw 12-3 Pitch of Screw 12-6 No. of Blades 4 State whether moveable no Total surface 50 1/4

Feed pumps 2 Diameter of ditto 2 3/4 Stroke 16 1/2 Can one be overhauled while the other is at work yes

Bilge pumps 2 Diameter of ditto 3 Stroke 16 1/2 Can one be overhauled while the other is at work yes

Donkey Engines 2 Sizes of Pumps 6 x 8 x 8 : 6 x 4 1/2 x 6 No. and size of Suctions connected to both Bilge and Donkey pumps

Engine Room 3 @ 2 1/2 In Holds, &c. Fore hold 2 @ 3; aft hold 3 @ 3

Tunnel Well 1 @ 2 1/2

Bilge Injections 1 sizes 4 Connected to condenser or to circulating pump yes Is a separate Donkey Suction fitted in Engine room & size yes - 3 1/2

the bilge suction pipes fitted with mud-bores yes Are the roses in Engine room always accessible yes Are the sluices on Engine room bulkheads always accessible none

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

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

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

pipes are carried through the bunkers none How are they protected

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

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

examination of completion of fitting of Sea Connections 20.2.24 of Stern Tube 25.2.24 Screw shaft and Propeller 25.2.24

Screw Shaft Tunnel watertight yes Is it fitted with a watertight door yes worked from Top platform

ERS, & Co. — (Letter for record S) Manufacturers of Steel D. Schiller & Sons

Heating Surface of Boilers 2806 Is Forced Draft fitted no No. and Description of Boilers 2 Single ended 2SB

Working Pressure 185 Tested by hydraulic pressure to 320 Date of test 22.1.24 No. of Certificate 16407

each boiler be worked separately yes Area of fire grate in each boiler 39.5 1/4 No. and Description of Safety Valves to

boiler 2 spring loaded Area of each valve 4.90 Pressure to which they are adjusted 185 Are they fitted with easing gear yes

distance between boilers or uptakes and bunkers or woodwork 2'-0" Mean dia. of boilers 12'-0" Length 10'-6" Material of shell plates steel

1" Range of tensile strength 28-32 Are the shell plates welded or flanged no Descrip. of riveting: cir. seams D.R

seams T.R.D.B.S Diameter of rivet holes in long. seams 1" Pitch of rivets 7" Lap of plates or width of butt straps 14 3/8

stages of strength of longitudinal joint rivets 86.4 Working pressure of shell by rules 182 Size of manhole in shell 16" x 12"

plate 85.7 compensating ring 30 1/2 x 26 1/2 No. and Description of Furnaces in each boiler 2 2000 Material S Outside diameter 3'-7 1/8

of plain part top Thickness of plates crown 9/16 Description of longitudinal joint Weld No. of strengthening rings

bottom Thickness of plates bottom 1/8

Working pressure of furnace by the rules 189 Combustion chamber plates: Material S Thickness: Sides 1/8 Back 1/8 Top 1/8 Bottom 1/8

of stays to ditto: Sides 9 1/2 x 9 Back 8 1/2 x 8 1/2 Top 9 1/2 x 9 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 187

al. of stays S Diameter at smallest part 2.07 Area supported by each stay 85.5 Working pressure by rules 195 End plates in steam space

al S Thickness 1" Pitch of stays 16" x 17" How are stays secured DN-4W Working pressure by rules 197 Material of stays S

er at smallest part 4.57 Area supported by each stay 272 Working pressure by rules 182 Material of Front plates at bottom S

Material of Lower back plate S Thickness 3/32 Greatest pitch of stays 14" x 8 1/2 Working pressure of plate by rules 216

er of tubes 3 1/4 Pitch of tubes 4 1/2 x 4 1/4 Material of tube plates S Thickness: Front 7/8 Back 3/4 Mean pitch of stays 10"

across wide water spaces 14 Working pressures by rules 183 Girders to Chamber tops: Material S Depth and

ss of girder at centre 7 x 1 1/4 Length as per rule 30 3/8 Distance apart 9 Number and pitch of stays in each 2 @ 9 1/2

Working pressure by rules 214 Superheater or Steam chest; how connected to boiler Can the superheater be shut off and the boiler worked

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

Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness

med with rings Distance between rings Working pressure by rules End plates: Thickness How stayed

Working pressure of end plates Area of safety valves to superheater Are they fitted with easing gear

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IS A DONKEY BOILER FITTED? no

If so, is a report now forwarded? ✓

SPARE GEAR. State the articles supplied:— Two each of connecting and top-end, bottom-end and main bearing bolts and nuts; One set of coupling bolts and nuts; One set of feed & bridge valves; Assorted bolts & nuts, iron of various sizes; One main & one donkey feed check; One safety valve spring

The foregoing is a correct description,

(Signed) Ross & Duncan

Manufacturer. See Gls Rpt. No. 43364

Dates of Survey while building { During progress of work in shops. - - 1924/ Feb 13. 20. 24. Mar 4. 10. 14. 20. 24. 27. 31. Apr. 3. 7. 10. 11. 12. }
{ During erection on board vessel. - - - }
Total No. of visits 16

Is the approved plan of main boiler forwarded herewith ✓

" " " donkey " " " ✓

Dates of Examination of principal parts—Cylinders 28. 11. 23 Slides 23. 1. 24 Covers 23. 1. 24 Pistons 23. 1. 24 Rods 23. 1. 24
Connecting rods 28. 1. 24 Crank shaft 4. 12. 23 Thrust shaft 23. 1. 24 Tunnel shafts 23. 1. 24 Screw shaft 15. 2. 24 Propeller 29. 1. 24
Stern tube 29. 1. 24 Steam pipes tested 19. 3. 24 Engine and boiler seatings 25. 2. 24 Engines holding down bolts 24. 3. 24
Completion of pumping arrangements 11. 4. 24 Boilers fixed 11. 4. 24 Engines tried under steam 11. 4. 24
Main boiler safety valves adjusted 11. 4. 24 Thickness of adjusting washers Port Bk. S-3/8 Star Bk. S-3/8
Material of Crank shaft S Identification Mark on Do 1131 J.S.C. Material of Thrust shaft S Identification Mark on Do 1131
Material of Tunnel shafts S Identification Marks on Do 1191 J.S.C. Material of Screw shafts S Identification Marks on Do 1121
Material of Steam Pipes Solid drawn copper (4" N. 7) Test pressure 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 ✓

Is this machinery duplicate of a previous case yes If so, state name of vessel S.S. Bishopston; Gls Rpt. 116

General Remarks (State quality of workmanship, opinions as to class, &c. The machinery of this vessel was built under Special Survey, See Glasgow Report No. 43364, has now been satisfactorily secured on board, in accordance with the Rules, and the Engines, Boilers & Auxiliaries examined under steam and all found satisfactory.

The machinery is in a good and safe working condition and under the rules eligible in my opinion to have the notation of LMC-4.24 in the Register B

It is submitted that
this vessel is eligible for
THE RECORD. + LMC 4. 24. CL.

The amount of Entry Fee ... £ ✓ : : When applied for,
Special ... 1/3 £ 7. 16. 0 25. 4. 1924
Donkey Boiler Fee ... £ ✓ : :
Travelling Expenses (if any) £ ✓ : : 5/5 24

Committee's Minute

Assigned

TUE. APR. 29 1924

+ LMC 4. 24
CL

Wm Morrison

Engineer-Surveyor to Lloyd's Register of British & Foreign Ships



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Foundation