

# REPORT ON MACHINERY.

SAT APR. 26 1924

No. 433677  
WFO. 20 FEB 1924  
SAT. APR. 26 1924

Received at Office

of writing Report

10

When handed in at Local Office

19. 1.

1924 Port of

Glasgow

Survey held at Glasgow & Fiddlshough Date, First Survey 3rd Oct. 1923 Last Survey 15th Feb 1924  
Book. on the S. S. MARTINHOE (Number of Visits 22)

er Built at By whom built Furness S. B. C. N° 59 Gross Tons 59 Net Tons 59  
When built

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

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

tered 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

INES, &c.—Description of Engines Triple expansion No. of Cylinders 3 No. of Cranks 3

of Cylinders 17" 27 1/2" 45" Length of Stroke 33" Revs. per minute 9.25 Dia. of Screw shaft 10 3/16 Material of screw shaft S.

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

n 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 yes Length of stern bush 40 1/2"

f 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 webs 17 1/8" 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 sq. ft.

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"

and with 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 roses 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

ey 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

ey 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 yes

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

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

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

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

ng Pressure 180 Tested by hydraulic pressure to 320 Date of test 22-1-24 No. of Certificate 16407.

ch boiler be worked separately yes Area of fire grate in each boiler 39.5 sq. ft. No. and Description of Safety Valves to

iler 2-Spring loaded Area of each valve 4:9 sq. ft. Pressure to which they are adjusted 185 lb. Are they fitted with easing gear yes

t distance between boilers or uptakes and bunkers or woodwork 2'-0" Mean dia. of boilers 12'-0" Length 10'-6" Material of shell plates S.

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

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

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

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

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

g pressure of furnace by the rules 189 Combustion chamber plates: Material S Thickness: Sides 11/16" Back 5/8" Top 11/16" Bottom 11/16"

f 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

ul of stays S Area at smallest part 2.07 sq. ft. Area supported by each stay 85.5 sq. ft. Working pressure by rules 195 End plates in steam space:

ul S Thickness 1" Pitch of stays 16" x 17" How are stays secured I. N. L. W. Working pressure by rules 197 Material of stays S.

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

ss 7/8" Material of Lower back plate S Thickness 27/32" Greatest pitch of stays 14" x 8 1/2" Working pressure of plate by rules 216

r of tubes 3 1/4" Pitch of tubes 4 1/2" x 4 1/2" 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

s of girder at centre 7" x 1 3/4" Length as per rule 30 5/8" Distance apart 9" Number and pitch of stays in each 2-9 1/2"

g pressure by rules 214 Steam dome: description of joint to shell yes % of strength of joint

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

rivets Working pressure of shell by rules Crown plates Thickness How stayed

HEATER. Type yes Date of Approval of Plan Tested by Hydraulic Pressure to

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

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

004308-004315-0167

004308-004315-0168



4/ 43364.

IS A 'DONKEY' BOILER FITTED? *NO*

If so, is a report now forwarded? ☒

SPARE GEAR. State the articles supplied:— *Two each of connecting rod top-end, bottom-end and main bearing bolts and nuts: one set of coupling bolt and nuts: one set of and bilge pump valves: assorted bolts & nuts: iron of various sizes: one m and one donkey feed check valve, and one safety valve spring*

The foregoing is a correct description,

*Ross Duncan*

Manufacturer.

Dates of Survey while building { During progress of work in shops - - { *1923 Oct 3. 17 Nov 5. 9. 16. 24. 27. 28 Dec 4. 10. 13. 17. 20. 27. 1924 Jan 8. 11. 15. 22. 23. 29 Feb 4. 15*  
During erection on board vessel - - - {  
Total No. of visits *22*

Is the approved plan of main boiler forwarded herewith *Yes*

" " " 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-*

Connecting rods *23-1-24* Crank shaft *4-12-23* Thrust shaft *23-1-24* Tunnel shafts *23-1-24* Screw shaft *15-2-24* Propeller *29-1-*

Stern tube *29-1-24* Steam pipes tested *19.3.24* Engine and boiler seatings *25.2.24* Engines holding down bolts *24.3.*

Completion of pumping arrangements *11.4.24* Boilers fixed *11.4.24* Engines tried under steam *11.4.24*

Completion of fitting sea connections *20.2.24* Stern tube *25.2.24* Screw shaft and propeller *25.2.24*

Main boiler safety valves adjusted *11.4.24* Thickness of adjusting washers *Port Rhr P-3/8 S-3/8 Star B P-3/8 S-3/8*

Material of Crank shaft *S.* Identification Mark on Do. *1131 HC* Material of Thrust shaft *S* Identification Mark on Do. *1131*

Material of Tunnel shafts *S* Identification Marks on Do. *1131. HC* Material of Screw shafts *S* Identification Marks on Do. *1131*

Material of Steam Pipes *Solid steel* 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 If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c. *These Engines and Boilers have been built under special survey in accordance with the Rules and approved plans, the materials and workmanship are good.*

*The machinery is eligible in my opinion to be classed + L.M.C. (with date) when satisfactorily fitted on board and tried under steam*

*The Engines and boilers are being shipped to middles where they will be fitted on board.*

*The engines and boilers have now been satisfactorily secured on board examined under steam and found satisfactory and render the vessel eligible in my opinion to have the notation of L.M.C.-4.24 in the Register Book*

The amount of Entry Fee ... £ *3* : *0* : *0* When applied for,

Special *4/3* ... £ *31* : *4* : *0* *19.2.24*

Donkey Boiler Fee ... £ : : When received,

Travelling Expenses (if any) £ : : *20.2.24*

Committee's Minute *GLASGOW 19 FEB 1924*

Assigned *Deferred.*

*Jas Cairns*

Engineer Surveyor to Lloyd's Register of Shipping

TUE APR 29 1924



Lloyd's Register Foundation

Certificate (if required) to be sent to

*Glasgow*