

Rpt. 4.

REPORT ON MACHINERY.

No. 44960

Date of writing Report 10 When handed in at Local Office 31.8.10 Port of Glasgow
 No. in Survey held at Glasgow Date, First Survey 20.1.25 Last Survey 26-8-1925
 Reg. Book. on the new steel SS "WAYFARER". (Number of Visits 54)
 Master Built at Glasgow By whom built Glasbarnell & Co. SPS-403 Tons Gross 5068 Net 3157
 Engines made at Glasgow By whom made David Rowan & Co. Ld. (Nº 819) when made 1925
 Boilers made at Glasgow By whom made David Rowan & Co. Ld. (Nº 819) when made 1925
 Registered Horse Power Owners T. & J. Harrison Ltd Port belonging to Liverpool
 Nom. Horse Power as per Section 28 464 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

ENGINES, &c.—Description of Engines Triple expansion No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 26"-43"-73" Length of Stroke 48" Revs. per minute 77 Dia. of Screw shaft as per rule 14.81" Material of screw shaft 1. steel
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube yes No 09 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 yes If two liners are fitted, is the shaft lapped or protected between the liners — Length of stern bush 5'-10"
 Dia. of Tunnel shaft as per rule 13.5" as fitted 13.5" Dia. of Crank shaft journals as per rule 14.206" as fitted 14.206" Dia. of Crank pin 14.2" Size of Crank webs 9x29 3/4" Dia. of thrust shaft under collars 14 1/2" Dia. of screw 17.6" Pitch of Screw 16'-6" No. of Blades 4 State whether moveable yes Total surface 940 sq ft
 No. of Feed pumps 2 Diameter of ditto 4" Stroke 24" Can one be overhauled while the other is at work yes
 No. of Bilge pumps 2 Diameter of ditto 4 1/2" Stroke 24" Can one be overhauled while the other is at work yes
 No. of Donkey Engines 3 Sizes of Pumps 10 1/2" x 12" 9 1/2" x 9" 7" centrifugal No. and size of Suctions connected to both Bilge and Donkey pumps In Engine Room 4 @ 3 1/2" In Holds, &c. Nº 1 hold - 2 @ 3 1/2" Nº 2 hold - 2 @ 3 1/2" Deep tank (Nº 3 hold - 2 @ 3 1/2")
 No. of Bilge Injections 1 sizes 8" Connected to condenser, or to circulating pump & P. Is a separate Donkey Suction fitted in Engine room & size yes 4 1/2"
 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 none
 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 both
 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 yes
 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 yes Is it fitted with a watertight door yes worked from top platform

BOILERS, &c.—(Letter for record (R) Manufacturers of Steel Wm. Beardmore & Co. Ld. Lammshire steel Co. Ld. & Steel Co. of Scotland Ld. 2DB.
 Total Heating Surface of Boilers 7706 sq ft Is Forced Draft fitted no No. and Description of Boilers Two double ended
 Working Pressure 200 Tested by hydraulic pressure to 350 Date of test 4.6.25 No. of Certificate 16842
 Can each boiler be worked separately yes Area of fire grate in each boiler 105 sq ft No. and Description of Safety Valves to each boiler 2 direct spring Area of each valve 12.56 sq in Pressure to which they are adjusted 205 Are they fitted with easing gear yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 1'-6" Mean dia. of boilers 15'-2 2/3" Length 16'-6" 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 mid T.R.
 long. seams VRS. TR Diameter of rivet holes in long. seams 1 1/8" Pitch of rivets 9 1/2" x 9 1/2" Lap of plates or width of butt straps 21 1/4"
 Per centages of strength of longitudinal joint rivets 92.6 plate 85.3 Working pressure of shell by rules 200 Size of manhole in shell 19 1/2" x 15 1/2"
 Size of compensating ring 36 1/2" x 32 1/2" x 1 1/2" No. and Description of Furnaces in each boiler 6 Morrison Material steel Outside diameter 37 1/2"
 Length of plain part top 19" bottom 32" Thickness of plates crown 19" bottom 32" Description of longitudinal joint welded No. of strengthening rings —
 Working pressure of furnace by the rules 200 Combustion chamber plates: Material steel Thickness: Sides 2 3/32" Back — Top 2 3/32" Bottom 2 3/32"
 Pitch of stays to ditto: Sides 10 1/8" x 8 1/8" Back — Top 10 1/8" x 8 1/8" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 200
 Material of stays Iron Area at smallest part 2.03 sq in Area supported by each stay 89.80 sq in Working pressure by rules 202 End plates in steam space: Material steel Thickness 1 3/8" Pitch of stays 22" x 20" How are stays secured B.N. Working pressure by rules 200 Material of stays steel
 Area at smallest part 2.26 sq in Area supported by each stay 38.50 sq in Working pressure by rules 201 Material of Front plates at bottom steel
 Thickness 1" Material of Lower back plate — Thickness — Greatest pitch of stays — Working pressure of plate by rules —
 Diameter of tubes 3 1/2" Pitch of tubes 4 1/2" x 4 5/8" Material of tube plates steel Thickness: Front 1" Back 7/8" Mean pitch of stays 11 3/4"
 Pitch across wide water spaces 14 5/8" Working pressures by rules F230. B200 Girders to Chamber tops: Material steel Depth and thickness of girder at centre 20 10 3/4" x 7 1/8" Length as per rule 3'-6 1/4" Distance apart 8 1/2" Number and pitch of stays in each 3 @ 10 1/8"
 Working pressure by rules 200 Steam dome: description of joint to shell none % 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 Smith tube Date of Approval of Plan See Mach Rpt Tested by Hydraulic Pressure to 400 lbs.
 Date of Test 10-6-25 Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler yes
 Diameter of Safety Valve 1 1/2" Pressure to which each is adjusted 207 Is Easing Gear fitted yes

W1201-0009

IS A DONKEY BOILER FITTED?

yes

If so, is a report now forwarded?

yes

SPARE GEAR. State the articles supplied:— In accordance with the Rules and in addition:—

one propeller shaft, one propeller bar, 2 propeller blades, one thompson coupling, two pairs of top end bushes, one pair of bottom end bushes, one air pump rod, one circulating pump impeller and shaft, one set of air pump valves, one air pump head valve seating, one eccentric sheave and strap, one valve spindle.

The foregoing is a correct description,

For David Rowan & Co. Ltd

Arch^d W. Grierson

Manufacturer.

Dates of Survey while building { During progress of work in shops -- 1925. June 20. Mar 5. 10. 17. 18. 24. Apr 6. 8. 15. 16. 17. 22. 24. 28. May 1. 11. 14. 18. 21. 22. 29. June 2. 4. 5. 8. 9. 10. 11. 12. 17. 18. 22. 23. 24. 25. 26. 29. July 2. 3. 6. 9. 8. 10. 13. 14. 15. 16. 29. 31. During erection on board vessel -- Jan 34. 17. 19. 26. Total No. of visits 54

Is the approved plan of main boiler forwarded herewith

yes

" " " donkey " " " " " yes

Dates of Examination of principal parts—Cylinders 29-5-25 Slides 12-6-25 Covers 29-5-25 Pistons 8-6-25 Rods 8-6-25

Connecting rods 4-6-25 Crank shaft 14-5-25 Thrust shaft 22-5-25 Tunnel shafts 22-5-25 Screw shaft 18-5-25 Propeller 21-5-25

Stern tube 11-5-25 Steam pipes tested 29-6-25 15-7-25 Engine and boiler seatings 4-6-25 Engines holding down bolts 29-7-25

Completion of pumping arrangements 29-7-25 Boilers fixed 29-6-25 Engines tried under steam 26-8-25

Completion of fitting sea connections 4-6-25 Stern tube 4-6-25 Screw shaft and propeller 4-6-25

Main boiler safety valves adjusted 17-8-25 Thickness of adjusting washers Port boiler—both $\frac{7}{16}$ " Stand boiler $\frac{3}{8}$ " $\frac{23}{64}$ "

Material of Crank shaft I. Steel Identification Mark on Do. LLOYDS 7129 L.C.D. 14-5-25 Material of Thrust shaft I. Steel Identification Mark on Do. LLOYDS 7129 L.C.D. 22-5-25

Material of Tunnel shafts I. Steel Identification Marks on Do. LLOYDS 7129 L.C.D. 22-5-25 Material of Screw shafts I. Steel Identification Marks on Do. LLOYDS 7129 L.C.D. 18-5-25

Material of Steam Pipes Lapwelder wrought iron Test pressure 600 lb per sq in

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 "Wanderer" Glo Rpt N° 44460

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

The machinery has been constructed under Special Survey in accordance with the Rules and satisfactorily fitted in the vessel.

The materials and workmanship are good.

The machinery is eligible in my opinion for Classification and the Record + LMC 8, 25.

It is submitted that this vessel is eligible for THE RECORD. + LMC 8. 25. CL.

JWD. 3/9/25.

S. C. Davis.

Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ 5 :

Special ... £ 94 : 12 :

Donkey Boiler Fee ... £ :

Travelling Expenses (if any) £ :

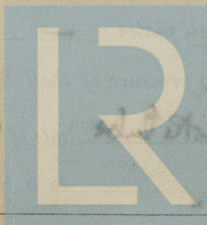
When applied for, 1-SEP-1925

When received, 3/9/25

Committee's Minute GLASGOW 1-SEP-1925

Assigned + LMC 8, 25

CERTIFICATE WRITTEN 9/9/25
dated 2/9/25



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