

Rpt. 4.

REPORT ON MACHINERY.

No. 83483.

Received at London Office
LIVERPOOL.

SAT. 18 MAR. 1922

Date of writing Report 19 When handed in at Local Office 17 MAR 1922 Port of

No. in Survey held at Ellmers Post,
Reg. Book. on the S. S. Lissie.

Date, First Survey 17th Dec /18 Last Survey 8th March 1922
(Number of Visits 38)

Gross 266.
Net 99.
Tons

Master Built at Ellmers Post. By whom built Manchester Dock Co. Ltd.

Engines made at Manchester. By whom made Manchester Dock Co. Ltd. when made

Boilers made at Birkenhead. By whom made Cammell Laird & Co. Ltd. when made

Registered Horse Power Owners Port belonging to

Nom. Horse Power as per Section 28 52. Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No.

ENGINES, &c.—Description of Engines See Manchester Report No. 4655. No. of Cylinders No. of Cranks

Dia. of Cylinders Length of Stroke Revs. per minute Dia. of Screw shaft as per rule as fitted Material of screw shaft

Is the screw shaft fitted with a continuous liner the whole length of the stern tube Is the after end of the liner made water tight

in the 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

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

Dia. of Tunnel shaft as per rule as fitted Dia. of Crank shaft journals as per rule as fitted Dia. of Crank pin Size of Crank webs Dia. of thrust shaft under

collars Dia. of screw Pitch of Screw No. of Blades State whether moveable Total surface

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

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

No. of Donkey Engines one Sizes of Pumps 5 1/2, 3 1/2 + 8 gals. No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room 2-2 In Holds, &c. 2-2 7. P. 1-2 A.P. 1-2.

No. of Bilge Injections 1 sizes 3" Connected to condenser, or to circulating pump Is a separate Donkey Suction fitted in Engine room & size 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 above.

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 none Is it fitted with a watertight door worked from

OILERS, &c.—(Letter for record 3) Manufacturers of Steel See Liverpool Report No. 80563.

Total Heating Surface of Boilers 952 ft² Is Forced Draft fitted No. No. and Description of Boilers One cylindrical A.E. Boiler.

Working Pressure 130 lbs. Tested by hydraulic pressure to 260 lbs. Date of test 21-3-19. No. of Certificate 2051.

Can each boiler be worked separately Area of fire grate in each boiler 35 ft² No. and Description of Safety Valves to

each boiler 2. Direct spring. Area of each valve 4.91 Pressure to which they are adjusted Are they fitted with easing gear yes.

Smallest distance between boilers or uptakes and bunkers or woodwork 12" 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

ong. 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 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

UPERHEATER. Type Date of Approval of Plan Tested by Hydraulic Pressure

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

004564-004572-0045

IS A DONKEY BOILER FITTED? *no.*

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— *As per Manchester Report no 4655.*

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops -- *1918. Dec. 19. 1919. Jan. 6. 10. 14. 15. 20. 24. 29. 31. Feb. 4. 18. 26. Mar. 4. 7. 10. 16. 13. 17. 20. 26. 24. 1920. Aug. 18. 19. Sept. 6. 28. Oct. 12.*
During erection on board vessel -- *Nov. 4. Dec. 1. Jan. 17. 25. Apr. 15. 28. Oct. 6. 1922 Jan. 12. Mar. 8.*
Total No. of visits *38.*

Is the approved plan of main boiler forwarded herewith *yes.*

“ “ “ donkey “ “ “

Dates of Examination of principal parts—Cylinders Slides Covers Pistons Rods
Connecting rods Crank shaft Thrust shaft Tunnel shafts Screw shaft Propeller *19-8-20.*
Stern tube *19-8-20.* Steam pipes tested *16/11/20. Hull.* Engine and boiler seatings *19-8-20.* Engines holding down bolts *28-9-20.*
Completion of pumping arrangements *25-1-21.* Boilers fixed *19-8-20.* Engines tried under steam
Completion of fitting sea connections *19-8-20.* Stern tube *19-8-20.* Screw shaft and propeller *19-8-20.*
Main boiler safety valves adjusted Thickness of adjusting washers
Material of Crank shaft Identification Mark on Do. Material of Thrust shaft Identification Mark on Do.
Material of Tunnel shafts Identification Marks on Do. Material of Screw shafts Identification Marks on Do.
Material of Steam Pipes *Copper.* Test pressure *260 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. Ben Sept. ex Devon (No. 7)*

General Remarks (State quality of workmanship, opinions as to class, &c. *The Boiler-Liverpool Rpt. no 80563.*

✓ Engines - Manchester Report no 4655. have been securely fitted on board.

This Machinery is in my opinion eligible to be classed with record of Club with date, on completion.

This vessel has been laid up by the Builders for sometime awaiting a purchaser. To complete the survey, the machinery requires to be seen under steam, the pumping arrangement tested and the safety valves adjusted.

The amount of Entry Fee ... £ *2 : 5* :
Special ... £ : :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ *1 : 3/5* :
When applied for, *17 MAR 1922*
When received, *28/11/22*

A. J. Bassett
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute *LIVERPOOL. 17 MAR 1922*

Assigned *Deferred for completion.*