

4.

REPORT ON MACHINERY

No. 5149

Received at London Office

TUE. MAY. 8

Writing Report 7th May 1923 When handed in at Local Office 7. 5. 23 Port of MANCHESTER
Survey held at MANCHESTER Date, First Survey 3. 5. 23. Last Survey 5. 5. 1923.
(Number of Visits 3)

Book. 7 on the T.S.S. 'NOWSHERA' Tons { Gross 7920
Net 4975 When built 1919

made at Belfast By whom built Wahman Clark & Co. Ltd. when made 1919
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Indicated Horse Power 740 Owners British India Steam Navigation Co. Ltd. Port belonging to Glasgow
Horse Power as per Section 28 1138 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines

Cylinders	Length of Stroke	Revs. per minute	Dia. of Screw shaft	No. of Cylinders	No. of Cranks
as per rule			as per rule		
as fitted			as fitted		

Material of screw shaft) as per rule
Material of screw shaft) as fitted

crew shaft fitted with a continuous liner the whole length of the stern tube Yes Is the after end of the liner made water tight Yes
propeller boss Yes If the liner is in more than one length are the joints burned Yes If the liner does not fit tightly at the part Yes
the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive Yes If two Yes
are fitted, is the shaft lapped or protected between the liners Yes Length of stern bush 14.385
Tunnel shaft 14.75 Dia. of Crank shaft journals 14.385 Dia. of Crank pin 14 3/4 Size of Crank webs 22 1/4 x 9 Dia. of thrust shaft under 14.75

Feed pumps	Diameter of ditto	Stroke	Can one be overhauled while the other is at work

Bilge pumps	Diameter of ditto	Stroke	Can one be overhauled while the other is at work

Donkey Engines	Sizes of Pumps	No. and size of Suctions connected to both Bilge and Donkey pumps

Engine Room 4 - 3 1/2, Tunnel 1 - 2 1/2 In Holds, &c. Forward Holds. (Nos 1, 2, 3).
- 3 1/2, Aft Holds. (Nos 4, 5, 6) 6 - 3 1/2

Large Injections Yes sizes 1 - 3 1/2 Connected to condenser, or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size 1 - 3 1/2
Are 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 Yes
connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Yes

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 Yes
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 Yes 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 Yes

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

Working Surface of Boilers	Is Forced Draft fitted	No. and Description of Boilers

Pressure	Tested by hydraulic pressure to	Date of test	No. of Certificate

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

Distance between boilers or uptakes and bunkers or woodwork	Mean dia. of boilers	Length	Material of shell plates

Range of tensile strength	Are the shell plates welded or flanged	Descrip. of riveting: cir. seams

Diameter of rivet holes in long. seams	Pitch of rivets	Lap of plates or width of butt straps

Working pressure of longitudinal joint	Working pressure of shell by rules	Size of manhole in shell

Compensating ring	No. and Description of Furnaces in each boiler	Material	Outside diameter

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

Stays to ditto: Sides	Back	Top	If stays are fitted with nuts or riveted heads	Working pressure by rules

Area at smallest part	Area supported by each stay	Working pressure by rules	End plates in steam space:

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

Material of Lower back plate	Thickness	Greatest pitch of stays	Working pressure of plate by rules

of tubes	Pitch of tubes	Material of tube plates	Thickness: Front	Back	Mean pitch of stays

cross wide water spaces	Working pressures by rules	Girders to Chamber tops: Material	Depth and

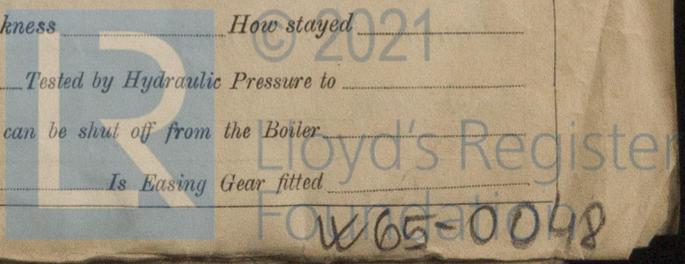
of girder at centre	Length as per rule	Distance apart	Number and pitch of stays in each

Working pressure by rules	Steam dome: description of joint to shell	% of strength of joint

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

Working pressure of shell by rules	Crown plates	Thickness	How stayed

SAFETY VALVE. Type Spring Date of Approval of Plan 3. 5. 23 Tested by Hydraulic Pressure to 205 lb
Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler Yes
Is Easing Gear fitted Yes
Pressure to which each is adjusted 14.19



If so, is a report now forwarded?

IS A DONKEY BOILER FITTED?

SPARE GEAR. State the articles supplied: - 4 Top and both + nuts, 4 bottom and nuts, 4 main bearing nuts, 6 coupling nuts, spare valves for air, feed and high pumps, 1 slide valve spindle, 1 air pump nut, 4 crosshead brasses, 2 bottom and brasses, 1 main bearing bush, 1 mounting strap, 1 propeller 1 propeller box, 2 propeller blades and 9 studs + nuts for nuts.

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops - - - } { During erection on board vessel - - - } Total No. of visits

Is the approved plan of main boiler forwarded herewith " " " donkey " " "

Dates of Examination of principal parts - Cylinders Slides Covers Pistons Rods Connecting rods Crank shaft Thrust shaft Tunnel shafts Screw shaft Propellers Stern tube 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 5.5.23. Thickness of adjusting washers P. B.R. 7/16 C. 5/16 S. 1/4 C.A.N. B.R. 7/16 C. 5/16 S. 1/4 Material of Crank shaft Identification Mark on Do. 17.9.18 77K Material of Thrust shaft Identification Mark on Do. below Material of Tunnel shafts Identification Marks on Do. Material of Screw shafts Identification Marks on Do. Material of Steam Pipes Test pressure Is the flash point of the oil to be used over 150°F.

Is an installation fitted for burning oil fuel 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.) The machinery of this vessel as now seen, is in a good and efficient condition, and in my opinion I have never seen L.C. 4.23 as per British Standard Letter dated 28th April 1923.

Certificate (if required) to be sent to The Surveyors are requested not to write on or below the space for Committee's Minute.

Table with columns for fee types (Entry Fee, Special, Donkey Boiler Fee, Travelling Expenses) and amounts, with checkmarks and dates.

Committee's Minute Assigned

FRI. MAY 11 1923

Signature: M. Lane, Engineer Surveyor to Lloyd's Register

