

REPORT ON MACHINERY.

TUE 13 NOV 1917
No. 2058

Received at London Office 12 NOV 1917

Date of writing Report 30 Aug. 1917 When handed in at Local Office 10 Port of Kobe
 No. in Survey held at Kobe Date, First Survey 17 Jan'y 17 Last Survey 8th August 1917
 Reg. Book. on the Steel Single Screw Steamer "Genmei Maru" (Number of Visits) Gross Tons 3180.8
 Master I. Matsubayashi Built at Kobe By whom built The Mitsubishi Dryd & E. Wks When built 1917
 Engines made at Kobe By whom made The Mitsubishi Dryd & E. Wks when made 1917
 Boilers made at do By whom made do when made do
 Registered Horse Power 270 Owners Myenishi Shokai, Ltd Port belonging to Kobe
 Nom. Horse Power as per Section 28 270 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 19:32:54 Length of Stroke 48 Revs. per minute 68 Dia. of Screw shaft as per rule 12 3/4 Material of screw shaft Steel
 Is the 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 in the propeller boss Yes If the liner is in more than one length are the joints burned 1 length 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 Light If two liners are fitted, is the shaft lapped or protected between the liners Yes Length of stern bush 4' 8 1/2"
 Dia. of Tunnel shaft as per rule 11.17 Dia. of Crank shaft journals as per rule 11 1/4 Dia. of Crank pin 12 1/4 Size of Crank webs 8 x 22 1/2 Dia. of thrust shaft under collars 12 Dia. of screw 15.10 Pitch of Screw 16.6 No. of Blades 4 State whether moveable No Total surface 77
 No. of Feed pumps 2 Diameter of ditto 3 3/4 Stroke 24 Can one be overhauled while the other is at work Yes
 No. of Bilge pumps 2 Diameter of ditto 3 3/4 Stroke 24 Can one be overhauled while the other is at work Yes
 No. of Donkey Engines 2 Sizes of Pumps Duplex ballast 8.9.10 No. and size of Suctions connected to both Bilge and Donkey pumps In Engine Room three 3" + one 3" to tunnel well. In Holds, &c. two 3" dia to each hold.

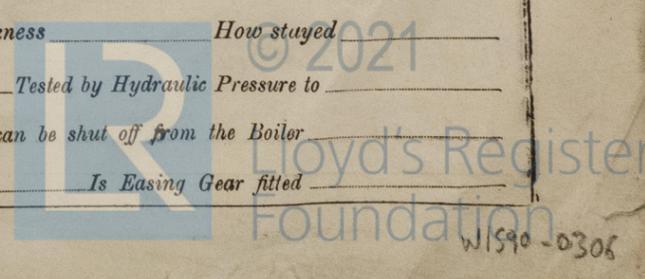
No. of Bilge Injections 1 sizes 5 1/2 Connected to condenser, or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size Yes 3 1/2"
 Are all the bilge suction pipes fitted with roses Yes Are the roses in Engine room always accessible Yes Are the sluices on Engine room bulkheads always accessible Now
 Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Larger valves: smaller cocks.
 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 None
 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 Upper grating in E. Hold

BOILERS, &c.—(Letter for record S.) Manufacturers of Steel Glasgow Iron & Steel Co. Ltd. Glasgow
 Total Heating Surface of Boilers 3704 Is Forced Draft fitted Yes No. and Description of Boilers Two Single Ended
 Working Pressure 200 lbs Tested by hydraulic pressure to 400 lbs Date of tests 14 June 1917 No. of Certificate LLOYD'S TEST HYD. 400. LBS 14.6.17 A.L.S.
 Can each boiler be worked separately Yes Area of fire grate in each boiler 46 1/2 No. and Description of Safety Valves to each boiler Two direct spring Area of each valve 3 1/4 dia. Pressure to which they are adjusted 205 lbs Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 12" Mean dia. of boilers 13.6 Length 11.6 Material of shell plates Steel
 Thickness 1 1/4" Range of tensile strength 28-32 tons Are the shell plates welded or flanged No Descrip. of riveting: cir. seams Double riv.
 long. seams Str. no. straps Diameter of rivet holes in long. seams 1 1/4" Pitch of rivets 8 5/8 Top of plates or width of butt straps 18 3/8
 Per centages of strength of longitudinal joint 85.0 Working pressure of shell by rules 207 lbs Size of manhole in shell 12" x 16"
 Size of compensating ring 7 1/2 x 1 1/2 No. and Description of Furnaces in each boiler 3 Brighton Material Steel Outside diameter 40 1/2"
 Length of plain part top 16 1/2" Thickness of plates bottom 32 Description of longitudinal joint Welded No. of strengthening rings None
 Working pressure of furnace by the rules 202 lbs Combustion chamber plates: Material Steel Thickness: Sides 25/32 Back 21/32 Top 23/32 Bottom 25/32
 Pitch of stays to ditto: Sides 8 x 10 1/2 Back 8 1/2 x 8 Top 10 1/2 x 8 If stays are fitted with nuts or riveled heads Nuts Working pressure by rules 210 lbs
 Material of stays Steel Area at smallest part 1.73 Area supported by each stay 8.8 1/2 Working pressure by rules 209 lbs End plates in steam space: Material Steel Thickness 1 1/8" Pitch of stays 16 1/2 How are stays secured Double nuts Working pressure by rules 200 lbs Material of stays Steel
 Area at smallest part 6.4 Area supported by each stay 16 1/2 x 18 1/2 Working pressure by rules 220 lbs Material of Front plates at bottom Steel
 Thickness 29/32 Material of Lower back plate Steel Thickness 27/32 Greatest pitch of stays 14 at widest Working pressure of plate by rules 200 lbs
 Diameter of tubes 3 Pitch of tubes 4 1/2 x 4 1/4 Material of tube plates Steel Thickness: Front 29/32 Back 1/8" Mean pitch of stays 8 3/4
 Pitch across wide water spaces 13 5/8 Working pressures by rules 200 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 11 1/4 x 13 Length as per rule 34 1/2 Distance apart 10 1/2 x 8 1/4 Number and pitch of stays in each 3 @ 8"
 Working pressure by rules 240+ Steam dome: description of joint to shell None % of strength of joint None
 Diameter None Thickness of shell plates None Material None Description of longitudinal joint None Diam. of rivet holes None
 Pitch of rivets None Working pressure of shell by rules None Crown plates None Thickness None How stayed None

SUPERHEATER. Type None Date of Approval of Plan None Tested by Hydraulic Pressure to None
 Date of Test None Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler None
 Diameter of Safety Valve None Pressure to which each is adjusted None Is Easing Gear fitted None

If not, state whether, and when, one will be sent

Is a Report also sent on the Hull of the Ship?



IS A DONKEY BOILER FITTED? No

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

Two main bearing bolts + nuts ✓ Set feed + bilge pump valves ✓
 Two crank pin bolts + nuts ✓ Piston packing for each size ✓
 Two crosshead bolts + nuts ✓ Set safety valve spring ✓
 Set coupling bolts + nuts ✓ Assorted bolts + nuts + iron various sizes ✓

The foregoing is a correct description,

MITSUBISHI DOCKYARD & ENGINE WORKS, KOBE.

Manufacturer.

General Manager.

Dates of Survey while building { During progress of work in shops -- } 17th Jan'y to 30th June 1917
 { During erection on board vessel --- } 30th June to 8th August 1917
 Total No. of visits Continuous attendance Is the approved plan of main boiler forwarded herewith Yes

Dates of Examination of principal parts—Cylinders 21/3/17 etc Slides 26/5/17 etc Covers 19/5/17 etc Pistons 11/5/17 etc Rods 6/5/17 etc
 Connecting rods 30/4/17 etc Crank shaft 29/5/17 etc Thrust shaft 30/3/17 etc Tunnel shafts 15/6/17 etc Screw shaft 22/6/17 Propeller 21/6/17 etc
 Stern tube 10/6/17 Steam pipes tested 19/7/17 Engine and boiler seatings 12/6/17 etc Engines holding down bolts 12/7/17
 Completion of pumping arrangements 23/7/17 Boilers fixed 12/7/17 Engines tried under steam 31/7/17
 Completion of fitting sea connections 30/6/17 Stern tube 22/6/17 Screw shaft and propeller 30/6/17
 Main boiler safety valves adjusted 26/7/17 Thickness of adjusting washers Lock nuts 1/2" intervals
 Material of Crank shaft Steel Identification Mark on Do. LLOYDS 29.5.17 Material of Thrust shaft Steel Identification Mark on Do. MT. 1. 30.3.17
 Material of Tunnel shafts Steel Identification Marks on Do. R. A.L.J. Material of Screw shafts Steel Identification Marks on Do. R. 22.6.17
 Material of Steam Pipes Steel ✓ Test pressure 600 lbs ✓ R. A.L.J.

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 No. If so, state name of vessel

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

The machinery has been made + fitted under Special Survey in accordance with the requirements of the Rules + the materials + workmanship have been found good.

The machinery in my opinion renders the vessel eligible for the notation + L.M.C. 8.17 in the Register Book.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 8.17. F.D.

Arthur L. Jones
 14/11/17
 Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... Yes 20⁰⁰ : When applied for, 31st Aug 1917
 Special ... Yes 502⁵⁰ :
 Donkey Boiler Fee ... £ : : When received, 5th Sep 1917
 Travelling Expenses (if any) £ : :

FRI. 16 NOV. 1917

Committee's Minute

Assigned

+ L.M.C. 8.17

MACHINERY SURVEYOR



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