

REPORT ON MACHINERY.

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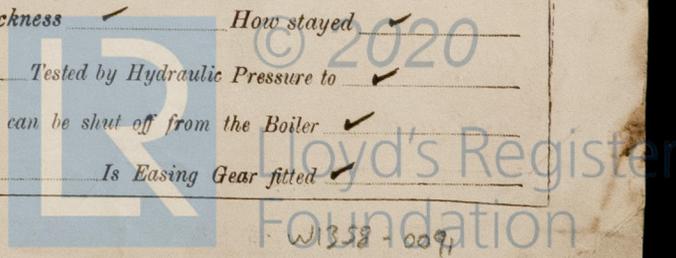
FRI 15 JUN 1917

Date of writing Report 30th April 1917 When handed in at Local Office 10 Port of Yokohama
 No. in Survey held at Uraga Date, First Survey 24th May 1916 Last Survey 29th April 1917
 Reg. Book. on the Steel Screw Steamer "Shinsei Maru" (Number of Visits 26)
 Master Uraga Built at Uraga By whom built Uraga Dock Co. Ltd Tons Gross 4723.69 Net 3417
 Engines made at Uraga By whom made Uraga Dock Co. Ltd when made 1917
 Boilers made at do By whom made do when made 1917
 Registered Horse Power 378 Owners Kishimoto Kusen Kaisha Ltd belonging to Kishinomiya
 Nom. Horse Power as per Section 28 378 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted no

ENGINES, &c.—Description of Engines Triple expansion No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 24 1/4", 40 1/2", 67" Length of Stroke 48 Revs. per minute 85 Dia. of Screw shaft 13.9" Material of screw shaft Steel
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube no Is the after end of the liner made water tight no
 Is the propeller boss no If the liner is in more than one length are the joints burned no 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 no If two liners are fitted, is the shaft lapped or protected between the liners no Length of stern bush 61"
 Dia. of Tunnel shaft 12.15" Dia. of Crank shaft journals 12.76" Dia. of Crank pin 13.12" Size of Crank webs 23" x 8 3/4" Dia. of thrust shaft under rollers 13 1/4" Dia. of screw 16.9" Pitch of Screw 18.0" No. of Blades 4 State whether moveable no Total surface 82.2 sq. ft.
 No. of Feed pumps 2 Diameter of ditto 5" Stroke 24" Can one be overhauled while the other is at work no
 No. of Bilge pumps 2 Diameter of ditto 5" Stroke 24" Can one be overhauled while the other is at work no
 No. of Donkey Engines 4 Sizes of Pumps 1-8. donkey 7 1/2" x 6" x 10" No. and size of Suctions connected to both Bilge and Donkey pumps 1-8. pumps 5 1/2" x 10 1/2" x 16"
 In Engine Room 3-3 1/2" In Holds, &c. Nº1 hold. 2-2 3/4", Nº2 hold 2-2 3/4", Nº3 hold 1-3 1/2", Nº4 hold 1-3 1/2"
 No. of Bilge Injections 1 sizes 7 Connected to condenser, or to circulating pump no Is a separate Donkey Suction fitted in Engine room & size no-3 1/2"
 Are all the bilge suction pipes fitted with roses no Are the roses in Engine room always accessible no Are the sluices on Engine room bulkheads always accessible no
 Are all connections with the sea direct on the skin of the ship no Are they Valves or Cocks Both
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates no 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 no Are the Blow Off Cocks fitted with a spigot and brass covering plate no
 Are that pipes are carried through the bunkers no How are they protected no
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times no
 Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges no
 Is the Screw Shaft Tunnel watertight no Is it fitted with a watertight door no worked from E. R. top platform

BOILERS, &c.—(Letter for record S.) Manufacturers of Steel Lanarkshire & Beardmore
 Total Heating Surface of Boilers 6382 sq. ft. Is Forced Draft fitted no No. and Description of Boilers 3. Multitubular
 Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs Date of test 2.8.17 No. of Certificate U. 131.
 Can each boiler be worked separately no Area of fire grate in each boiler 60 sq. ft. No. and Description of Safety Valves to each boiler 2 Area of each valve 8.29 sq. ft. Pressure to which they are adjusted 185 lbs Are they fitted with easing gear no
 Smallest distance between boilers or uptakes and bunkers or woodwork 12 1/2" Mean dia. of boilers 13.9" Length 10.10" Material of shell plates Steel
 Thickness 1 5/16" Range of tensile strength 28-32 Are the shell plates welded or flanged no Descrip. of riveting: cir. seams D. riv
 Long. seams T.R.I.B.S. Diameter of rivet holes in long. seams 1 1/4" Pitch of rivets 8 3/4" Lap of plates no width of butt straps 18 1/2"
 Percentages of strength of longitudinal joint: rivets 88.9 plate 85.7 Working pressure of shell by rules 194 Size of manhole in shell 16" x 12"
 Size of compensating ring 33" x 29" No. and Description of Furnaces in each boiler 3. Ironison Material Steel Outside diameter 3.8 1/2"
 Length of plain part top 9" Thickness of plates bottom 9/16" Description of longitudinal joint weld No. of strengthening rings none
 Working pressure of furnace by the rules 198 Combustion chamber plates: Material S. Thickness: Sides 5/8" Back 5/8" Top 5/8" Bottom 7/8"
 Length of stays to ditto: Sides 9" x 7 3/4" Back 8 3/4" x 7 3/4" Top 8 3/4" x 8" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 192
 Material of stays S. Area at smallest part 1.79 sq. ft. Area supported by each stay 67.8 sq. ft. Working pressure by rules 192 End plates in steam space: Material S. Thickness 1" Pitch of stay 16 1/2" x 14 1/2" How are stays secured D. nuts Working pressure by rules 190 Material of stays S.
 Area at smallest part 4.37 sq. ft. Area supported by each stay 233 sq. ft. Working pressure by rules 190 Material of Front plates at bottom S.
 Thickness 1 5/16" Material of Lower back plate S. Thickness 7/8" Greatest pitch of stays 13.5" x 7.75" Working pressure of plate by rules 273
 Diameter of tubes 3 1/4" Pitch of tubes 4 3/8" Material of tube plates S. Thickness: Front 1 5/16" Back 3/4" Mean pitch of stays 8 3/4"
 Pitch across wide water spaces 13 1/2" Working pressures by rules 197 Girders to Chamber tops: Material S. Depth and thickness of girder at centre 7 1/2" x 1 1/2" Length as per rule 2-1 5/8" Distance apart 8" Number and pitch of stays in each 2-8 3/4"
 Working pressure by rules 227 Steam dome: description of joint to shell none % of strength of joint no
 Thickness of shell plates no Material no Description of longitudinal joint no Diam. of rivet holes no
 Working pressure of shell by rules no Crown plates no Thickness no How stayed no

SUPERHEATER. Type no Date of Approval of Plan no Tested by Hydraulic Pressure to no
 Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler no
 Pressure to which each is adjusted no Is Easing Gear fitted no



IS A DONKEY BOILER FITTED? no

If so, is a report now forwarded? ✓

SPARE GEAR. State the articles supplied:— 2 connecting rod bottom end bolts, 4 top end bolts, 1 set coupling bolts, 1 set main bearing bolts, 1 set feed & bilge pumps valves, 1 set piston springs, 3 sets top end brasses, one bottom end, 2 eccentric rods 3 valve spindles, one circulating pump impeller, & shaft for same, one air pump rod. bolts & nuts assorted etc

The foregoing is a correct description,

Y. Kamimura Uraga Dock Manufacturer.

Dates of Survey while building { During progress of work in shops -- } May 24. Sept 21. Nov 22. Dec 2. 5. 8. 13. 26. 29. Jan 13. 20. Feb 8. 16. 22. 23. 28. March 2.
{ During erection on board vessel --- } March 15. 21. 30. April 14. 19. 27. 23. 29.
Total No. of visits 26 Is the approved plan of main boiler forwarded herewith no

Dates of Examination of principal parts—Cylinders 11. Nov. 18. Slides 18. Nov. Covers 11. Nov. Pistons 18. Dec. Rods 18. Dec.
Connecting rods 7. Sept. Crank shaft 15. March Thrust shaft 2. Feb. Tunnel shafts 2. Feb. Screw shaft 8. March Propeller 8. March
Stern tube 21. March Steam pipes tested 6-4-17 Engine and boiler seatings 21. Feb. Engines holding down bolts 21. March
Completion of pumping arrangements 14. April Boilers fixed 21. March Engines tried under steam 23. April
Completion of fitting sea connections 14. April Stern tube 14. April Screw shaft and propeller 14. April
Main boiler safety valves adjusted 19. April Thickness of adjusting washers P. for 2 1/2" a 2 1/4". Start for 19. April
Material of Crank shaft Steel Identification Mark on Do. U. 131. J. S. C. Material of Thrust shaft Steel Identification Mark on Do. U. 131. J. S. C.
Material of Tunnel shafts Steel Identification Marks on Do. U. 131. J. S. C. Material of Screw shafts Steel Identification Marks on Do. U. 131. J. S. C.
Material of Steam Pipes Copper 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. The machinery of this vessel has been built under special survey the materials and workmanship are good, and eligible in my opinion for records + L.M.C. 4.17.

(The plans are retained for duplicate vessels)

APR

It is submitted that this vessel is eligible for THE RECORD. + LMC 4.17.

JWD
26/6/17.
James Cairns
Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ 30.00 When applied for,
Special ... £ 584.00 29.4.17
Donkey Boiler Fee ... £ : : When received,
Travelling Expenses (if any) £ : : 4.5.17

Committee's Minute FRI 29 JUN 1917
Assigned + L.M.C. 4.17.

MACHINERY CERTIFICATE WRITTEN.



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