

REPORT ON MACHINERY

No. 2606
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Writing Report 19 When handed in at Local Office 19 Port of Kobe
 Survey held at Kobe and O'Sarima. Date, First Survey 25th Febry. Last Survey 29th June 1919.
 on the Steel Single Screw Steamer "Yayo Maru" (Number of Visits 12 during erection.)
 Built at O'Sarima By whom built The Narima Dockyard Coy. When built 1919
 made at Kobe By whom made Kobe Steel Works. when made 1919
 made at Kobe By whom made Kobe Steel Works. when made 1919
 Horse Power 547. Owners Tokoku Steamship Coy. Port belonging to
 Horse Power as per Section 28 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted Yes.

ENGINES, &c.—Description of Engines Triple Expansion. No. of Cylinders Three No. of Cranks Three
 Cylinders 27 : 45 : 75. Length of Stroke 51 Revs. per minute 70. Dia. of Screw shaft 15 1/4 Material of screw shaft Steel
 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
 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
 the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive ✓ If two
 are fitted, is the shaft lapped or protected between the liners ✓ Length of stern bush 11-5 3/4
 Tunnel shaft as per rule 13-67 Dia. of Crank shaft journals as per rule 14-35 Dia. of Crank pin 15 Size of Crank webs 4-6 x 2-4 Dia. of thrust shaft under
 as fitted 14-00 as fitted 14 3/4 Dia. of screw 18-6 Pitch of Screw 8-9 No. of Blades 4 State whether moveable Yes Total surface 106.44 sq. ft.
 Feed pumps 2 Diameter of ditto 5 Stroke 25 1/2 Can one be overhauled while the other is at work Yes
 Bilge pumps 2 Diameter of ditto 5 Stroke 25 1/2 Can one be overhauled while the other is at work Yes
 Donkey Engines Three Sizes of Pumps Callast. 9x12x10. 9x8x7. 10x8x7x34 No. and size of Suctions connected to both Bilge and Donkey pumps
 Engine Room 2 @ 3 1/2 In Holds, &c. No 1 hold. 2 @ 3 1/2. No 2 hold 2 @ 3 1/2
hold 2 @ 3 1/2. No 4 hold 2 @ 3 1/2. No 5. 2 @ 3 1/2. Tunnel well
 Water Injections 1 sizes 8 3/4. Connected to condenser, or to circulating pump Circ. pp. 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
 Connections with the sea direct on the skin of the ship Yes. Are they Valves or Cocks Larger valves, smaller cocks.
 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
 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 ✓ How are they protected ✓
 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.
 Crew Shaft Tunnel watertight Yes. Is it fitted with a watertight door Yes. worked from ER. top platform.

BOILERS, &c.—(Letter for record S.) Manufacturers of Steel Cambria Steel Coy. USA & American Spiral Pipe Works.
 Heating Surface of Boilers 7974 sq. ft. Is Forced Draft fitted Yes. No. and Description of Boilers Three Single ended.
 Working Pressure 190 lbs. Tested by hydraulic pressure to 380 lbs. Date of test April 14, 18, 24 No. of Certificate 14-14-19
 Can boiler be worked separately Yes. Area of fire grate in each boiler 64 sq. ft. No. and Description of Safety Valves to
two Spring loaded. Area of each valve 4" Pressure to which they are adjusted 190 lbs. Are they fitted with easing gear Yes.
 distance between boilers or uptakes and bunkers or woodwork Mean dia. of boilers 15-9" Length 11-9" Material of shell plates Steel
 Force 1/2. Range of tensile strength 28-32 tons Are the shell plates welded or flanged no Descrip. of riveting: cir. seams DRK.
 Stays TRABS. Diameter of rivet holes in long. seams 1 9/16. Pitch of rivets 9 7/8. Gap of plates or width of butt straps 20 3/16.
 Ages of strength of longitudinal joint rivets 98 Working pressure of shell by rules 214. Size of manhole in shell 16 x 12.
 Compensating ring 3-4 x 2-6 x 1/2 No. and Description of Furnaces in each boiler Three Morrison Material Steel Outside diameter 4-1 3/4
 of plain part top ✓ Thickness of plates crown 5/8 Description of longitudinal joint Weld. No. of strengthening rings ✓
 pressure of furnace by the rules 202 lbs. Combustion chamber plates: Material Steel Thickness: Sides 21/32 Back 23/32. Top 21/32. Bottom 1"
 stays to ditto: Sides 9 7/8 x 8 1/4. Back 9 7/8 x 9 Top 9 x 8 1/4. If stays are fitted with nuts or riveted heads Nuts. Working pressure by rules 200 lbs.
 Length of stays Steel Area at smallest part 1.79 x 2.10 Area supported by each stay 88.87 sq. in. Working pressure by rules 212. End plates in steam space:
Steel Thickness 1 1/4. Pitch of stays DRK. How are stays secured DRK. Working pressure by rules 196 Material of stays Steel.
 at smallest part 7.50. Area supported by each stay Working pressure by rules 208. Material of Front plates at bottom Steel.
 Material of Lower back plate Steel. Thickness 7/8. Greatest pitch of stays 14 1/2. Working pressure of plate by rules 190 lbs.
 Diameter of tubes 3" Pitch of tubes 4 1/4. Material of tube plates Steel Thickness: Front 3/32. Back 7/8. Mean pitch of stays 9.26.
 across wide water spaces 14" Working pressures by rules 275. Girders to Chamber tops: Material Steel Depth and
 of girder at centre 9 3/4 x 1 1/2. Length as per rule 34 Distance apart 9" Number and pitch of stays in each 3 @ 8 1/4.
 Working pressure by rules 190 lbs. Steam dome: description of joint to shell % of strength of joint
 Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes
 rivets Working pressure of shell by rules Crown plates Thickness How stayed 2020

HEATER. Type _____ Date of Approval of Plan _____ Tested by Hydraulic Pressure to _____
 Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler _____
 Pressure to which each is adjusted _____ Is Easing Gear fitted _____



