

REPORT ON MACHINERY.

No. 2442

Received at London Office

of writing Report 27/3/1919 When handed in at Local Office 19 Port of Kobe
 in Survey held at Imoshima + Osaka Date, First Survey 2nd December 1918 Last Survey 31/3/1919
 on the Single Steel Screw Steamer Jinsbo Maru (Number of Visits 24)
 Master K. Abe Built at Imoshima By whom built Osaka Iron Works Ltd Tons { Gross 3914.76
 Lines made at Imoshima By whom made Osaka Iron Works Ltd (Imoshima Branch) When built 1919
 Builders made at Osaka By whom made Osaka Iron Works Ltd when made 1919
 Registered Horse Power 288 Owners Taiyo Kisen Kaisha Ltd. Port belonging to Kobe
 Net Horse Power as per Section 28 288 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

GINES, &c.—Description of Engines Triple Expansion No. of Cylinders Three No. of Cranks Three
 No. of Cylinders 22" 34" 61" Length of Stroke 12" Revs. per minute 90.5 Dia. of Screw shaft 12.8" 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
 the propeller boss Yes If the liner is in more than one length are the joints burned one 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 Yes If two
 cranks are fitted, is the shaft lapped or protected between the liners Yes Length of stern bush 4' 9 3/4"
 Dia. of Tunnel shaft 11.2" Dia. of Crank shaft journals 11.74" Dia. of Crank pin 12" Size of Crank webs 8x25 1/2" Dia. of thrust shaft under
 cranks 12" Dia. of screw 16" Pitch of Screw 16' - 4 1/2" No. of Blades 4 State whether moveable No Total surface 80 sq. ft.
 No. of Feed pumps 2 Diameter of ditto 3 1/2" Stroke 24" Can one be overhauled while the other is at work Yes
 No. of Bilge pumps 2 Diameter of ditto 3 1/2" Stroke 24" Can one be overhauled while the other is at work Yes
 No. of Donkey Engines 3 Duplex Sizes of Pumps 2 @ 6x4x16 feed + General No. and size of Suctions connected to both Bilge and Donkey pumps
 Engine Room 1 main bilge 4" 2 E.R. bilge P+S 3" In Holds, &c. 1 No. 1 + 2 holds 2 No. 3 hold 2 Boiler room
all 3" dia. 1 No. 3 hold 3 1/2" Tunnel bilge 2 1/2"
 No. of Bilge Injections 1 sizes 4 1/2" Connected to condenser, or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size Yes 3"
 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 Yes
 Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Both 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
 How are they protected Wood + Iron bands
 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

Dates of examination of completion of fitting of Sea Connections 30th Jan. 1919 of Stern Tube 27-1-19 Screw shaft and Propeller 30-1-19
 Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from to R. middle grating
MILERS, &c.—(Letter for record S.) Manufacturers of Steel Kokusai Iron Works Ltd. Pacific Coast S.S. Co. Allegheny S.S. Co.
Beighton Pat. Steel Co.
 Total Heating Surface of Boilers 3824 Is Forced Draft fitted Yes No. and Description of Boilers Two single ended
 Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs Date of test 13-1-19 No. of Certificate LLOYD'S TEST 360 LBS 13-1-19 Y.J.
 Can each boiler be worked separately Yes Area of fire grate in each boiler 45 No. and Description of Safety Valves to
 each boiler Two spring loaded Area of each valve 3 1/2" dia. Pressure to which they are adjusted 180 lbs Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 1' 6" Mean dia. of boilers 13' 6" Length 11' 6" Material of shell plates Steel
 Thickness 1 3/16" Range of tensile strength 26.79-27 Are the shell plates welded or flanged No Descrip. of riveting: cir. seams D.R.L.
 Long. seams T.R.D.B.S. Diameter of rivet holes in long. seams 1 1/2" Pitch of rivets 8 3/8" x 1" Lap of plates or width of butt straps 1' 6 1/2"
 Per centages of strength of longitudinal joint rivets 92.9 Working pressure of shell by rules 184 Size of manhole in shell 12" x 16" + 11" x 15"
 plate 85.8
 Size of compensating ring Flanged No. and Description of Furnaces in each boiler 3 Beighton Material Steel Outside diameter 3' 4 1/2"
 Length of plain part top 1 1/2" Thickness of plates crown 1 1/2" Description of longitudinal joint Welded No. of strengthening rings 1
 bottom 1 1/2" bottom 1 1/2"
 Working pressure of furnace by the rules 187 Combustion chamber plates: Material Steel Thickness: Sides 3/4" Back 3/4" Top 3/4" Bottom 7/8"
 Pitch of stays to ditto: Sides 9" x 10" Back 8 3/4" x 10" Top 9" x 10 1/2" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 187
 Material of stays Steel Diameter at smallest part 2.1" Area supported by each stay 90" Working pressure by rules 200 End plates in steam space:
 Material Steel Thickness 1 3/8" Pitch of stays 25" x 19" How are stays secured On + No. Working pressure by rules 180 Material of stays Steel
 Diameter at smallest part 8.76" Area supported by each stay 25" x 19" Working pressure by rules 180 Material of Front plates at bottom Steel
 Thickness 1" Material of Lower back plate Steel Thickness 1 5/16" Greatest pitch of stays 14" wide water Working pressure of plate by rules 180
 Diameter of tubes 3" Pitch of tubes 4.3 mean Material of tube plates Steel Thickness: Front 1" Back 1/8" Mean pitch of stays 10 1/2"
 Pitch across wide water spaces 14" Working pressures by rules 180 Girders to Chamber tops: Material Steel Depth and
 thickness of girder at centre 10" x 7 1/8" two Length as per rule 32" Distance apart 10 1/2" Number and pitch of stays in each 2 @ 9"
 Working pressure by rules 200 Superheater or Steam chest; how connected to boiler Yes Can the superheater be shut off and the boiler worked
 separately Yes Diameter 14" Length 14" Thickness of shell plates 1/2" Material Steel Description of longitudinal joint Welded Diam. of rivet
 holes 1 1/2" Pitch of rivets 1 1/2" Working pressure of shell by rules 180 Diameter of flue 14" Material of flue plates Steel Thickness 1/2"
 If stiffened with rings Yes Distance between rings 14" Working pressure by rules 180 End plates: Thickness 1 1/2" How stayed By stays
 Working pressure of end plates 180 Area of safety valves to superheater 14" Are they fitted with easing gear Yes

VERTICAL DONKEY BOILER— Manufacturers of Steel No donkey boiler fitted ✓

No. Description Made at By whom made When made Where fixed Working pressure tested by hydraulic pressure to Date of test No. of Certificate Fire grate area Description of Sa Valves No. of Safety Valves Area of each Pressure to which they are adjusted Date of adjustment If fitted with casing gear If steam from main boilers can enter the donkey boiler Dia. of donkey boiler Length Material of shell plates Thickness Range of tensile strength Descrip. of riveting long. seams Dia. of rivet holes Whether punched or drilled Pitch of rivets Lap of plating Per centage of strength of joint Rivets Plates Working pressure of shell by rules Thickness of shell crown plates Radius of do. No. of stays to do. Dia. of stays Diameter of furnace Top Bottom Length of furnace Thickness of furnace plates Description of joint Working pressure of furnace by rules Thickness of furnace crown plates Radius of do. Stayed by Diameter of uptake Thickness of uptake plates Thickness of water tubes Dates of survey

SPARE GEAR. State the articles supplied:— One set piston springs, one set of top + bottom and brasses bolts + complete. 1 set coupling bolts. 2 feed pump valves + seat. 2 Bilge pump valves + seats. Two slide valve spindles. 1 set of junk ring bolts. Two eccentric rods for main engine. One set circulation pump valves + pump rod. Air pump rod. 30 Total number of condenser tubes. One set main bearing bolts. Two safety valve springs. One set feed valves + seat. Assorted bolts + nuts.

The foregoing is a correct description, Kabachi & Co. Manufacturer.



Dates of Survey while building During progress of work in shops - 2/12/18 - 10/12/18 - 17/12/18 - 19/1/19 - 11/1 - 16/1 - 21/1 - 27/1/19 Engines During erection on board vessel - 13/11/18 - 22/11 - 25/11 - 5/12 - 9/12 - 11/12 - 23/12/18 - 13/1/19 Boilers 30/1/19 - 8/2 - 9/2 - 14/2 - 19/2 - 28/2 - 3/3/19 Total No. of visits Twenty four Is the approved plan of main boiler forwarded herewith yes

Dates of Examination of principal parts—Cylinders 2/12/18 Slides 2/12/18 Covers 26/12/18 Pistons 14/10/18 Rods 14/10/18 Connecting rods 8-10-18 Crank shaft 20-11-18 Thrust shaft 2-8-18 Tunnel shafts 19-11-18 Screw shaft 23-12-18 Propeller 21-1-1 Stern tube 11-1-19 Steam pipes tested 19-2-19 Engine and boiler seatings 14-2-19 Engines holding down bolts 28-2-19 Completion of pumping arrangements 28-2-19 Boilers fixed 28-2-19 Engines tried under steam 3-3-19 Main boiler safety valves adjusted 3-3-19 Thickness of adjusting washers locknuts. ✓ Material of Crank shaft Steel Identification Mark on Do. Y. J. B. Material of Thrust shaft steel Identification Mark on Do. LLOYD'S 2-8-19 A.L.S. Material of Tunnel shafts Steel Identification Marks on Do. LLOYD'S 17-9-19, 29-10-19, 19-7-19, 19-11-19 Material of Screw shafts steel Identification Marks on Do. LLOYD'S 23-12-18 Y. J. B. Material of Steam Pipes Steel tested 19-2-19 Test pressure 360 ✓ 9540

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 and the material and workmanship have been found good. The machinery is eligible in my opinion for the record of + L.M. 3-19.

It is submitted that this vessel is eligible for THE RECORD + LMC 3.19. F.D.

John Sim Engineer Surveyor to Lloyd's Register of British & Foreign Shipping. 22/5/19

The amount of Entry Fee £ Yen. 20.00 When applied for, Special £ 602.00 Feb. 16. 1919 Donkey Boiler Fee £ Travelling Expenses (if any) £ When received, 2nd Apr 1919

Committee's Minute TUE 27 MAY 1919 Assigned + L.M.C 3.19 J.S.



Rpt. 13. Port of No. in Reg. Book Owners Yard No. 90 DESCRIPTION Capacity of D Where is Dyn Position of M Positions of a One for for a If cut outs are circuits If vessel is w Are the cut ou Are all cut out are perm Are all switche Total number A Engines B Officers C Crews D Wireless E Chart R Mas If are lights, 2 a Where are th DESCRIPTION Main cable can Branch cables Branch cables Leads to lamps Cargo light cab DESCRIPTION Office Engi galv Joints in cable Are all the jo made in b Are there any How are the c throu

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