

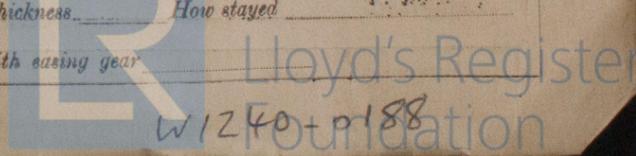
Received at London Office

Date of writing Report 28 May 1917 When handed in at Lloyd's Office 19 Port of Nobe
 No. in Survey held at Osaka & Inuoshima Date, First Survey 3rd Oct 1916 Last Survey 14 April 1917
 Reg. Book. on the Steel Single Screw Steamer "Kaifuku Maru" (Number of Visits) Gross 3181.08
 Master D Niimi Built at Inuoshima By whom built The Osaka Iron Works When built 1917 Net 1973.90
 Engines made at Osaka By whom made The Osaka Iron Works Ltd when made 1917
 Boilers made at Osaka By whom made do when made do
 Registered Horse Power 288 Owners G. Katsuda Port belonging to Nobe
 Nom. Horse Power as per Section 28 288 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
 Dia. of Cylinders 22.37.61 Length of Stroke 42 Revs. per minute 40 Dia. of Screw shaft as per rule 12.8 Material of 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 ✓ 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 ✓ If two
 liners are fitted, is the shaft lapped or protected between the liners ✓ Length of stern bush 4" 8 3/4"
 Dia. of Tunnel shaft as per rule 11.2 Dia. of Crank shaft journals as per rule 11.77 Dia. of Crank pin 12 Size of Crank webs 7 3/8, 23 Dia. of thrust shaft under
 collars 12 Dia. of screw 16.0 Pitch of Screw 16.0 No. of Blades 4 State whether moveable No Total surface 73 1/2
 No. of Feed pumps Two Diameter of ditto 3 1/4" Stroke 24" Can one be overhauled while the other is at work Yes
 No. of Bilge pumps Two Diameter of ditto 3 1/2" Stroke 24" Can one be overhauled while the other is at work Yes
 No. of Donkey Engines Two Sizes of Pumps Bal. 7.8 1/2, 9 duplex No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room Two 3" in Boiler room two 3" In Holds, &c. Two 3" in each hold After web 3 1/2"
 No. of Bilge Injections 1 size 4" Connected to condenser, or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room of 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 No
 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 ✓
 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 24 Mar 1917 of Stern Tube 18 Mar 1917 Screw shaft and Propeller 24 Mar 1917
 Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Engine room upper grating

BOILERS, &c.—(Letter for record S) Manufacturers of Steel Wm Beardmore & Co. Ltd. Sth Dusham Sth & L. Co. Ltd.
 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 260 lbs Date of test 28 Feb 1917 No. of Certificate LLOYDS TEST 360 LAS A.L.J. 28-2-17
 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 185 lbs Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 10" Mean dia. of boilers 13" 6" Length 11" 6" Material of shell plates Steel
 Thickness 1 3/32" Range of tensile strength 28 3/4 - 30 1/2 Are the shell plates welded or flanged No Descrip. of riveting: cir. seams Double riv.
 long. seams Double riv. Diameter of rivet holes in long. seams 1 3/16" Pitch of rivets 8 1/8" & 4 1/2" Lap of plates or width of butt straps 17 3/4" x 1
 Per centages of strength of longitudinal joint 92.9 & 88.5 Working pressure of shell by rules 184 lbs Size of manhole in shell 12" x 16" in end plate
 Size of compensating ring Hanged end pl. No. and Description of Furnaces in each boiler Three Beighton Material Steel Outside diameter 40 1/4"
 Length of plain part top Thickness of plates bottom 1/2" Description of longitudinal joint Weld No. of strengthening rings ✓
 Working pressure of furnace by the rules 187 lbs Combustion chamber plates: Material Steel Thickness: Sides 23/32" Back 23/32" Top 23/32" 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 lbs
 Material of stays Steel Diameter at smallest part 2 1/2" Area supported by each stay 94 1/2" Working pressure by rules 200 lbs End plates in steam space
 Material Steel Thickness 1 3/8" Pitch of stays 25" x 19" How are stays secured Double nuts Working pressure by rules 180 lbs Material of stays Steel
 Diameter at smallest part 3 1/4" Area supported by each stay 25" x 19" Working pressure by rules 180 lbs Material of Front plates at bottom Steel
 Thickness 1" Material of Lower back plate Steel Thickness 15/16" Greatest pitch of stays 14" at ends Working pressure of plate by rules 180 lbs
 Diameter of tubes 3" Pitch of tubes 4 3/8" x 4 1/2" Material of tube plates Steel Thickness: Front 1" Back 13/16" Mean pitch of stays 10 1/2"
 Pitch across wide water spaces 14" Working pressures by rules 180 lbs Girders to Chamber tops: Material Steel Depth and
 thickness of girder at centre 4 1/2" x 13 (top) Length as per rule 32" Distance apart 10 1/2" Number and pitch of stays in each Two @ 9"
 Working pressure by rules ✓ Superheater or Steam chest; how connected to boiler ✓ Can the superheater be shut off and the boiler worked
 separately ✓ Diameter ✓ Length ✓ Thickness of shell plates ✓ Material ✓ Description of longitudinal joint ✓ Diam. of rivet
 holes ✓ Pitch of rivets ✓ Working pressure of shell by rules ✓ Diameter of flue ✓ Material of flue plates ✓ Thickness ✓
 If stiffened with rings Distance between rings Working pressure by rules End plates: Thickness How stayed ✓
 Working pressure of end plates Area of safety valves to superheater Are they fitted with easing gear ✓

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



IS A DONKEY BOILER FITTED? No If so, is a report now forwarded? No
 SPARE GEAR. State the articles supplied: Two crosshead bolts & nuts. Two cross R pins bolts & nuts. Two main bearing bolts & nuts. Set coupling bolts & nuts. Feed & help pump valves. Set piston springs. Assorted bolts & nuts. Iron of various sizes.

The foregoing is a correct description,
 OSAKA IRON WORKS, LTD.

Y. Yamaguchi Manufacturer.

Dates of Survey while building { During progress of work in shops -- 3rd & 23rd Oct. 14. 16. 21. 23. 29. 30 Nov. 12. 17. 21 Dec 1916. 16. 17. 23. 29. 30 Jan. 28 Feb.
 { During erection on board vessel --- 1. 8. 10. 14. 18. 20. 26. 29 March. 1st 13 14 April 1917.
 Total No. of visits 29. Is the approved plan of main boiler forwarded herewith Sent with Rpt No 1737 on "Leushe Maru"

Dates of Examination of principal parts—Cylinders 3/10/16 etc Slides 16/11/16 etc Covers 16/11/16 etc Pistons 23/11/16 etc Rods 29/11/16 etc
 Connecting rods 29/11/16 etc Crank shaft 8/3/17 etc Thrust shaft 29/11/17 etc Tunnel shafts 20/3/17 etc Screw shaft 14/1/17 etc Propeller 14/3/17
 Stern tube 14/3/17 Steam pipes tested 1/4/17 Engine and boiler seatings 24/3/17 Engines holding down bolts 13/4/17
 Completion of pumping arrangements 13/4/17 Boilers fixed 1/4/17 Engines tried under steam 13/4/17
 Main boiler safety valves adjusted 13/4/17 Thickness of adjusting washers lock nuts
 Material of Crank shaft Steel Identification Mark on Do. LLOYD'S A.L.J. R Material of Thrust shaft Steel Identification Mark on Do. LLOYD'S 29.1.17 P
 Material of Tunnel shafts Steel Identification Marks on Do. LLOYD'S 20.26/3/17 Material of Screw shafts Steel Identification Marks on Do. LLOYD'S 14.1.17 P
 Material of Steam Pipes Steel Test pressure 540 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 Yes If so, state name of vessel "Pekin Maru" "Yuki Maru" "Romasau Maru" etc. etc.

General Remarks (State quality of workmanship, opinions as to class, &c.)
The machinery has been made & fitted under special survey & in accordance with the Rules & material & workmanship have been found good.
A report upon the electric lighting is forwarded.
The machinery is in my opinion eligible for the notation + LMC. 4.17.

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

Arthur Jones
 13/7/17
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

The amount of Entry Fee ... £20 : When applied for, 18 Apr 1917
 Special ... £516 :
 Donkey Boiler Fee ... £ :
 Travelling Expenses (if any) £ : When received, 26 Apr 1917

Committee's Minute
 Assigned + LMC 4.17

MACHINERY CERTIFICATE WRITTEN