

## REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

Date of writing Report 2-3-26 19 When handed in at Local Office 12<sup>th</sup> April 1926 Port of Kobe

No. in Survey held at INNOSHIMA Date, First Survey 30<sup>th</sup> SEPT. 1924 Last Survey 17<sup>th</sup> MARCH 1926  
 Reg. Book. on the STEEL SINGLE SC: "SEIRYU MARU" (Number of Visits 38)

Gross 1895.82  
 Net 1166.80  
 Tons

Built at INNOSHIMA By whom built OSAKA IRON WORKS LTD Yard No. 1066 When built 1926-3

Engines made at INNOSHIMA By whom made OSAKA IRON WORKS LTD Engine No. 1066 when made 1926-3

Boilers made at INNOSHIMA By whom made OSAKA IRON WORKS LTD Boiler No. 1066 when made 1926-3

Registered Horse Power 1561 Owners KITA NIPPON KISEN KAB. K. OSAKA IRON WORKS LTD Port belonging to NISHINOMIYA

Nom. Horse Power as per Rule 211 ✓ Is Refrigerating Machinery fitted for cargo purposes No ✓ Is Electric Light fitted YES ✓

ENGINES, &c.—Description of Engines TRIPLE EXPANSION SURFACE CONDENSING ✓

Dia. of Cylinders 18" 30" 50" Length of Stroke 36" Revs. per minute 190 ✓ No. of Cylinders 3 ✓ No. of Cranks 3 ✓

Dia. of Crank shaft journals as per rule 10.00" as fitted 10 $\frac{1}{4}$ " ✓ Dia. of Crank pin 10 $\frac{1}{2}$ " ✓ Crank webs Mid. length breadth 19 $\frac{1}{2}$ " ✓ shrunk Thickness parallel to axis 6 $\frac{1}{2}$ " ✓ Mid. length thickness 6 $\frac{1}{2}$ " ✓ Thickness around eye-hole 4 $\frac{3}{8}$ " ✓

Diameter of Thrust shaft under collars as per rule 10 as fitted 10 $\frac{1}{4}$ " ✓ Diameter of Tunnel shaft as per rule 9.515" as fitted 9 $\frac{3}{4}$ " ✓ Diameter of Screw shaft as per rule 10.61 as fitted 11 $\frac{1}{4}$ " ✓ 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 watertight 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 ✓ Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated ✓

Pitch of Propeller 15'0" ✓ No. of Blades 4 ✓ State whether Moveable NO ✓ Total Surface 60 $\phi$  ✓ square feet.

No. of Feed Pumps fitted to the Main Engines 2 ✓ Diameter of ditto 3 $\frac{1}{4}$ " ✓ Stroke 20" ✓ Can one be overhauled while the other is at work YES ✓

No. of Bilge Pumps fitted to the Main Engines 2 ✓ Diameter of ditto 3 $\frac{1}{4}$ " ✓ Stroke 20" ✓ Can one be overhauled while the other is at work YES ✓

Total number and size of power driven Feed and Bilge Auxiliary Pumps ONE G.S. 8 $\times$ 5 $\frac{1}{2}$ " ✓

No. and size of Pumps connected to the Main Bilge Line ONE 6 $\times$ 7 $\frac{1}{2}$ " ✓ ONE 8 $\times$ 5 $\frac{1}{2}$ " ✓

No. and size of Ballast Pumps ONE 6" ✓ No. and size of Lubricating Oil Pumps, including Spare Pump ✓

Are two independent means arranged for circulating water through the Oil Cooler ✓ No. and size of suction connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room 2@3 $\frac{1}{2}$ " + 2@2 $\frac{3}{4}$ " ✓ and in Holds, &c. 2 OFF 3" DIA: IN FORE HOLD. ✓

2 OFF 3" DIA & 2 OFF 2 $\frac{3}{4}$ " DIA: IN AFTER HOLD. ✓ 1 OFF 2 $\frac{1}{2}$ " DIA: IN TUNNEL. ✓

No. and size of Main Water Circulating Pump Bilge Suctions ONE @ 6" DIA: ✓ No. and size of Donkey Pump Direct Suctions YES ✓

to the Engine Room Bilges TWO OFF 3 $\frac{1}{2}$ " DIA: ✓ Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes YES ✓

Are the Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges AS APPROVED. ✓

Are all connections with the sea direct on the skin of the ship YES ✓ Are they Valves or Cocks BOTH ✓

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 VENT PIPES TO DOUBLE BOTTOM TANKS ONLY ✓ How are they protected WOOD CASING & CLIPPED TO WEB FRAMES. ✓

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times YES ✓

Is the arrangement of Valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one compartment to another YES ✓ Is the Screw Shaft Tunnel watertight YES ✓ Is it fitted with a watertight door YES ✓ worked from ✓

MAIN BOILERS, &c.—(Letter for record S. ✓) Total Heating Surface of Boilers 3011 $\phi$  ✓

Is Forced Draft fitted YES ✓ No. and Description of Boilers TWO SINGLE ENDED CYLINDRICAL ✓ Working Pressure 200<sup>LB</sup> ✓

IS A REPORT ON MAIN BOILERS NOW FORWARDED? YES ✓

IS A DONKEY BOILER FITTED? No ✓ If so, is a report now forwarded? ✓

PLANS. Are approved plans forwarded herewith for Shafting 10/11/24 ✓ Main Boilers 10/11/24 ✓ Auxiliary Boilers ✓ Donkey Boilers ✓

(If not state date of approval)

General Pumping Arrangements 29/9/24. ✓ Oil fuel Burning Piping Arrangements ✓

SPARE GEAR. State the articles supplied:— 1 set of top & bottom end connecting rod bolts & brasses

2 main bearing bolts; 1 set of coupling bolts; 1 set of feed & bilge pump valves; 1 set of piston rings;

1 valve spindle; 1 air pump rod; one impeller & shaft; one down cover & junk ring bolts; 2 down

condenser tubes; 1 set of safety valve springs; A large quantity of bolts, nuts & iron of various

sizes; and a quantity of hand tools. ✓

The foregoing is a correct description

H. Sasaki.

Manufacturer.



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009805-009814-0167



1924 SEPT: 30 OCT: 10 NOV: 6 DEC: 6, 22,

1925 JAN: 10, 15, 30 FEB: 7, 9, 19 MAR: 19, 23, 30, APR: 13, 29, MAY: JUNE 19, JULY 5, AUG 3, 15

During progress of  
work in shops - -

OCT: 2, 27, NOV. 2, 17, 30

Dates  
of Survey  
while  
building

During erection on  
board vessel - -

1925  
DEC. 1, 3, 1926 JAN: 7, 11, 21, 28 FEB: 8, 25, 27, MAR: 8, 9, 17.

Total No. of visits 38

Dates of Examination of principal parts - Cylinders	17-11-25	Slides	17-11-25
Covers	17-11-25	Pistons	17-11-25
Connecting rods	28-1-26	Crank shaft	2-10-25
Tunnel shafts	17-11-25	Screw shaft	30-11-25
Stern tube	27-11-25	Engines holding down bolts	8-2-26
Completion of pumping arrangements	25-2-26	Boilers fixed	8-2-26
Completion of fitting sea connections	1-12-25	Stern tube	30-11-25
Main boiler safety valves adjusted	25-2-26	Thickness of adjusting washers	LOCK NUTS FITTED.
Material of Crank shaft	OPEN HEARTH STEEL	Identification Mark on Do.	LLOYD'S N° 617 2-10-25 H.D.B.
Material of Thrust shaft	DO DO DO	Identification Mark on Do.	" " 618 17-11-25 H.D.B.
Material of Tunnel shafts	DO DO DO	Identification Marks on Do.	" " 619 17-11-25 H.D.B.
Material of Screw shafts	DO DO DO	Identification Marks on Do.	" " 620 30-11-25 H.D.B.
Material of Steam Pipes	SOLID DRAWN STEEL	Test pressure	600 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 the Rules for carrying and burning oil fuel been complied with. ✓

Is this machinery duplicate of a previous case YES ✓ If so, state name of vessel "GENBU MARU" KOBE RPT N° 5101.

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

The machinery of this vessel has been constructed under special survey in accordance with the Rules & approved plans, the materials have been tested found efficient & the workmanship is good. This machinery has now been efficiently placed on board, & tested under full working conditions with satisfactory results, & is eligible in my opinion for the notation + L.M.C. 3-26 & T.S.(CL) 3-26 in the Register Book.

Copies of the principal forging certificates forwarded herewith viz:

Crank shaft	Cert N° 617
Thrust "	" " 618
Tunnel "	" " 619
Tail "	" " 620
Eccentric Rods	" " 732
Valve "	" " 733
Piston "	" " 738
Connecting "	" " 739

It is submitted that  
this vessel is eligible for  
THE RECORD. + LMC 3.26. FD. CL.

17/5/26.

The amount of Entry Fee ...	£ 13.-	When applied for,
Special ...	£ 85.-	Mar. 19 <sup>th</sup> 1926
Donkey Boiler Fee ...	£ NONE FITTED	When received,
Travelling Expenses (if any) ...	£ SEE HULL RPT.	Apr. 12 <sup>th</sup> 1926

Committee's Minute

Assigned

TUES. 18 MAY 1926

+ L.M.C. 3-26. G.B.  
C.R.

A.D. Buchanan  
Engineer Surveyor to Lloyd's Register of Shipping.

CERTIFICATE WRITTEN



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