

## REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

No. 6420

26 MAR 1929

Date of writing Report 20<sup>th</sup> Feb. 1929. When handed in at Local Office

Port of Osaka

No. in Survey held at Reg. Book.

Osaka

Date, First Survey 15<sup>th</sup> September 18. Last Survey 22<sup>nd</sup> Feb 1929  
(Number of Visits 22.)

Built at Osaka

By whom built

Osaka Iron Works Ltd

Yard No. 1124

Tons { Gross 4735  
Net 2660

When built 1929.2

Engines made at do.

By whom made

do

Engine No. 1124

when made 1929

Boilers made at do.

By whom made

do.

Boiler No. 1124

when made 1929

Registered Horse Power

Owners Daini Kisen Kaisha Ltd

Port belonging to Dairen

Nom. Horse Power as per Rule 346.

Is Refrigerating Machinery fitted for cargo purposes

no.

Is Electric Light fitted yes

Trade for which Vessel is intended ✓

## ENGINES, &amp;c.—Description of Engines

Triple expansion surface condensing

Dia. of Cylinders 22 x 37 x 61

Length of Stroke 42"

No. of Cylinders 3

Revs. per minute 75

Crank shaft, dia. of journals as per Rule 12"

as fitted 12 1/4"

Crank pin dia. 12 1/2"

Crank webs

Mid. length breadth 17.5"

No. of Cranks 3

Thickness parallel to axis 7 3/4"

Intermediate Shafts, diameter as per Rule 11.43"

as fitted 11 9/8"

Thrust shaft, diameter at collars as per Rule 12"

as fitted 12 1/4"

Tube Shafts, diameter as per Rule

as fitted

Screw Shaft, diameter as per Rule 13.29"

as fitted 13 3/4"

Is the { tube } shaft fitted with a continuous liner { no.

Bronze Liners, thickness in way of bushes as per Rule

as fitted

Thickness between bushes as per Rule

as fitted

Is the after end of the liner made watertight in the

propeller boss

If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner ✓

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 Oil Gland or other appliance fitted at the after

end of the tube shaft

Propeller, dia. 15'-6"

Pitch 18

No. of Blades 4

Material Bronze

whether Movable yes

Total Developed Surface 80 sq. feet

Feed Pumps worked from the Main Engines, No. 2

Diameter 3 1/2"

Stroke 21"

Can one be overhauled while the other is at work yes

Bilge Pumps worked from the Main Engines, No. 2

Diameter 4"

Stroke 21"

Can one be overhauled while the other is at work yes

Feed Pumps { No. and size 2 Wein type

How driven Steam

Pumps connected to the Main Bilge Line

{ No. and size 2 main eng. 4" 1 Ballast 9 1/2 x 12 x 10 1 G.S. 8 1/2 x 6 x 9

How driven Steam

Ballast Pumps, No. and size one 2 9 1/2 x 12 x 10

Lubricating Oil Pumps, including Spare Pump, No. and size ✓

Are two independent means arranged for circulating water through the Oil Cooler ✓

Bilge Pumps;—In Engine and Boiler Room 4 2 3 1/2" &amp; 2 direct 2 4 1/2" ✓

Suctions, connected to both Main Bilge Pumps and Auxiliary

In Holds, &amp;c. No. 1 hold 2 2 3 1/2" No. 2 hold 2 2 3 1/2" No. 3 &amp; 4 holds 2 2 3 1/2" No. 5 hold 2 2 3 1/2" ✓

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 2 7 1/2" ✓

No. and size 2 2 4 1/2" ✓

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 yes

Are all Sea Connections fitted direct on the skin of the ship yes

Are they fitted with 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 Overboard Discharges 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 ✓

What pipes pass through the deep tanks ✓

Have they been tested as per Rule ✓

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 Shaft Tunnel watertight ✓

Is it fitted with a watertight door no

worked from ✓

MAIN BOILERS, &amp;c.—(Letter for record 5.)

Total Heating Surface of Boilers 5902

Is Forced Draft fitted yes

No. and Description of Boilers 2 S.B. ✓

Working Pressure 200

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 3/12/28

Main Boilers 7.6.28

Auxiliary Boilers ✓

Donkey Boilers ✓

(If not state date of approval)

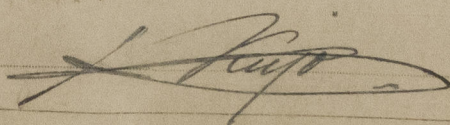
General Pumping Arrangements 19.6.28.

Oil fuel Burning Piping Arrangements ✓

SPARE GEAR. State the articles supplied:—

2 connecting rod top end bolts and nuts, 2 connecting rod bottom end bolts and nuts, 2 main bearing bolts and nuts, 1 set of coupling bolts, 1 set of feed and bilge pump valves, 1 set of piston springs and rings for each piston, H.P. &amp; L.P. valve rods, 1 set of bottom end bases complete, 2 eccentric straps, 1 spare propeller, a number spare tubes for boiler &amp; condenser &amp; a quantity of assorted bolts and nuts.

The foregoing is a correct description,



Manufacturer.



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Lloyd's Register  
Foundation

W1307-0286



Rpt.

*Dates  
of Survey  
while  
building*

January 1929. 24<sup>th</sup> Feb. 4. 8. 9. 14. 22.

Total No. of visits

22

Pistons 7. 11-28 Piston Rods 15-12-28 Connecting rods 18-12-28

Crank shaft 5-10-28 Thrust shaft 12-9-28 Intermediate shafts 12-9-28

Tube shaft ✓ Screw shaft 15-12-28 Propeller 15-12-28.

Stern tube 7-11-28. Engine and boiler seatings 24-1-29. Engines holding down bolts 4-2-29.

Completion of pumping arrangements 9-2-29. Boilers fixed 24-2-29. Engines tried under steam 14-2-29.

Main boiler safety valves adjusted 14. 2. 29. Thickness of adjusting washers  
 120 VDS No 1583-455

Crank shaft material Steel Identification Mark 5-10-28 AW Thrust shaft material Steel Identification Mark 12-9-28 AW

Intermediate shafts, material Steel Identification Marks 12-9-28 au Tube shaft, material ☒ Identification Mark ☒

Screw shaft, material *steel* Identification Mark *29728* <sup>all</sup> Steam Pipes, material *steel* Test pressure *600 lbs* Date of Test *31.1.29*

Is an installation fitted for burning oil fuel ☒ 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 no If so, state name of vessel ✓

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 requirements of the Rules and approved plans; the workmanship and materials are good and after being efficiently installed in the vessel the machinery was tested under full working conditions ahead and astern and found to be in good and efficient condition and is eligible, in my opinion, to be classed in the Register Book with the Records of T.M.C. 2.29. T.S. (OG).  
2.S.B. 200 lbs. ELECTRIC LIGHT.

It is submitted that  
this vessel is eligible for  
THE RECORD. - + L.M.C. 2.29. F.D. O.G

Y/Rm  
9.4.29

The amount of Entry Fee	... £	54.	When applied for,
Special	... £	1240.	25-2-1929
Donkey Boiler Fee	... £	:	When received,
Travelling Expenses (if any)	£	See Hall Rpt.	2.5.29

When applied for,

25-2-1929

When received.

2.5.29

## Committee's Minute

FRI. 12 APR 1929

*Assigned*

June 2. 29 70 09

CERTIFICATE WRITTEN.

*M. J. Garnett*  
Engineer Surveyor to Lloyd's Register of Shipping.

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