

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

Date of writing Report *12th Aug. 1924* When handed in at Local Office *19* Port of *Kobe*
 No. in Survey held at *Osaka* Date, First Survey *15th Dec. 1923* Last Survey *24th July 1924*
 Reg. Book. on the *S.S. "KOJUN MARU"* (Number of Visits *39*)
 Built at *Osaka* By whom built *Osaka Iron Works* Yard No. *1058* Tons { Gross *1924*
 Engines made at *Osaka* By whom made *Osaka Iron Works* Engine No. *1058* when made *1924*
 Boilers made at *Osaka* By whom made *Osaka Iron Works* Boiler No. *1058* when made *1924*
 Registered Horse Power *-* Owners *Kiroumi Shoji K.K.* Port belonging to *Kobe*
 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

Dia. of Cylinders *18, 30, 50* Length of Stroke *36* Revs. per minute *87* No. of Cylinders *3* No. of Cranks *3*
 Dia. of Crank shaft journals *as per rule 10.12* Dia. of Crank pin *10 1/4* Crank webs *Mid. length breadth 19* Thickness parallel to axis *6 1/2*
 as fitted *10 1/4* Mid. length thickness *6 1/2* If shrunk Thickness around eye-hole *4 3/8*
 Diameter of Thrust shaft under collars *as per rule 10.12* Diameter of Tunnel shaft *as per rule 9.64* Diameter of Screw shaft *as per rule 10.92* Is the Screw shaft
 as fitted *10 1/4* as fitted *9 3/4* as fitted *11 1/4*
 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 *Yes* 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 liners are fitted, is the shaft lapped or protected between the liners *Yes* Is an approved appliance fitted at the after end of the shaft to permit
 of it being efficiently lubricated *No* Length of Stern Bush *4'-1"* Diameter of Propeller *13'-6"*
 Pitch of Propeller *14'-6"* No. of Blades *4* State whether Moveable *No* Total Surface *60* square feet.
 No. of Feed Pumps fitted to the Main Engines *2* Diameter of ditto *3 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 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 8 x 5 1/2*
 No. and size of Pumps connected to the Main Bilge Line *One 6 x 7 1/2* *One 8 x 5 1/2*
 No. and size of Ballast Pumps *One 6 x 6* No. and size of Lubricating Oil Pumps, including Spare Pump *Yes*

Are two independent means arranged for circulating water through the Oil Cooler *Yes* No. and size of suctions connected to both Main Bilge Pumps and Auxiliary
 Bilge Pumps;—In Engine and Boiler Room *2 of 3 1/2"* and *2 of 2 3/4"* and in Holds, &c. *Two of 3" in fore hold,*
two 2 3/4" & two 3" in after hold, One 2 1/2" in tunnel well

No. and size of Main Water Circulating Pump Bilge Suctions *One 6"* No. and size of Donkey Pump Direct Suctions
 to the Engine Room Bilges *2 of 3 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 *No*
 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 *Tank air & sounding pipes* How are they protected *In wooden casings*
 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 *E.R. top platform*

MAIN BOILERS, &c.—(Letter for record *S*)

Total Heating Surface of Boilers

*3013**25B*

Is Forced Draft fitted *Yes* No. and Description of Boilers *2 S.E. Multitubular* Working Pressure *200 lbs.*

IS A REPORT ON MAIN BOILERS NOW FORWARDED? *Yes*IS A DONKEY BOILER FITTED? *No*If so, is a report now forwarded? *Yes*

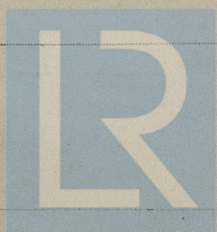
PLANS. Are approved plans forwarded herewith for Shafting *6-8-23* Main Boilers *Yes* Auxiliary Boilers *Yes* Donkey Boilers *Yes*
 (If not state date of approval)

General Pumping Arrangements *E of 7-2-24* Oil uel Burning Piping Arrangements *Yes*

SPARE GEAR. State the articles supplied:—

4 connecting rod top end bolts & nuts. 2 connecting rod bottom end bolts & nuts. 2 main bearing bolts & nuts. One set of coupling bolts. One set of feed & bilge pump valves. One set of piston rings complete. Eccentric bolts & nuts & plates. In addition:— One valve spindle. 2 connecting rod top end braces. One connecting rod bottom end brace. Air pump rod. 2 eccentric rods. Centrifugal pump impeller & shaft. 2 springs for boiler safety valves.

The foregoing is a correct description,



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004505-004513-0180

Dates
of Survey
while
building

During progress of
work in shops - -

During erection on
board vessel - - -

Total No. of visits

1923. Dec. 15, 24. 1924. Jan. 10, 12, 17, 18, 19, 24. Feb. 2, 6, 12, 19, 22, 25, 27, 29.
Mar. 5, 8, 18, 20, 22, 26. Apr. 4, 10, 15, 21. May 2, 15, 19, 31. June 16, 20, 24.
1924. July 5, 8, 12, 17, 19, 24.

Dates of Examination of principal parts - Cylinders

26-3-24.

Slides 15-4-24.

Covers 26-3-24.

Pistons 22-3-24.

Rods 20-3-24.

Connecting rods 20-3-24.

Crank shaft 28-2-24.

Thrust shaft 28-2-24.

Tunnel shafts 20-3-24.

Screw shaft 16-6-24.

Propeller 16-6-24.

Stern tube 31-5-24.

Engine and boiler seatings 24-6-24.

Engines holding down bolts 5-7-24.

Completion of pumping arrangements 8-7-24.

Boilers fixed 5-7-24.

Engines tried under steam 24-7-24.

Completion of fitting sea connections 20-6-24.

Stern tube 20-6-24.

Screw shaft and propeller 24-6-24.

Main boiler safety valves adjusted 17-7-24.

Thickness of adjusting washers

Lock nuts.

Material of Crank shaft O.H. Steel

Identification Mark on Do. 275 L.Y. 24-7-24.

Material of Thrust shaft O.H. Steel

Identification Mark on Do. 276 L.Y. 28-2-24.

Material of Tunnel shafts O.H. Steel

Identification Marks on Do. 286 Y.V. 20-3-24.

Material of Screw shafts O.H. Steel

Identification Marks on Do. 445 L.Y. 20-3-24.

Material of Steam Pipes S.D. Steel

Test pressure

600 lbs.

Date of Test 12-7-24.

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

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 and fitted on board in accordance with the requirements of the Rules and the approved plans. The materials & workmanship are good. The machinery has been tried under full working conditions and found satisfactory, and is eligible in our opinion for the record of L.M.C. - 7.24.

It is submitted that
this vessel is eligible for
THE RECORD. + LMC 7.24. CL. FD.

Paul J. W. D.
30/9/24

The amount of Entry Fee ... £ 40.

Special ... £ 791.

Donkey Boiler Fee ... £ -

Travelling Expenses (if any) £ (with Hull)

When applied for,

25 July 24.

When received,

30/9/24

L. H. F. Young - Y. Jo.
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

+ L.M.C. 7.24
C.L.



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