

## REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

SEP 19 1938

Date of writing Report 30/8/1938 When handed in at Local Office 1/9/1938 Port of Kobe  
 No. in Survey held at Osaka Date, First Survey 28<sup>th</sup> Sept 1937 Last Survey 22<sup>nd</sup> June 1938  
 Reg. Book. on the Steel Screw Lug "TAYGA" (Number of Visits) 355  
 Built at Osaka By whom built Namura Shipyard Co. Ltd Yard No. 197 Tons { Gross 355 Net 1938  
 Engines made at Osaka By whom made Namura Shipyard Co. Ltd Engine No. 11 when made 1938  
 Boilers made at Osaka By whom made Namura Shipyard Co. Ltd Boiler No. - when made 1938  
 Registered Horse Power 134 Owners M. S. S. R. Port belonging to Vladivostok  
 Nom. Horse Power as per Rule 134 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted yes  
 Trade for which Vessel is intended Towing Services

ENGINES, &c.—Description of Engines Triple Expansion Revs. per minute 100  
 Dia. of Cylinders 390 x 660 x 1040 Length of Stroke 800 No. of Cylinders 3 No. of Cranks 3  
 Crank shaft, dia. of journals 218 as per Rule 218 Crank pin dia. 220 Crank webs 265 Mid. length breadth 135 Thickness parallel to axis shrunk  
 Intermediate Shafts, diameter 208 as per Rule 208 Thrust shaft, diameter at collars 218 as per Rule 218  
 Tube Shafts, diameter 240 as per Rule 240 Is the { tube } shaft fitted with a continuous liner { yes }  
 Screw Shaft, diameter 240 as per Rule 240 Is the { tube } shaft fitted with a continuous liner { yes }  
 Bronze Liners, thickness in way of bushes 14.85 as per Rule 15 Thickness between bushes 15 as per Rule 15 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 junctions made by fusion through the whole thickness of the liner solid  
 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 Oil Gland or other appliance fitted at the after end of the tube shaft No  
 Length of Bearing in Stern Bush next to and supporting propeller 930mm  
 Propeller, dia. 2950 Pitch 3480 No. of Blades 4 Material C.S. whether Moveable solid Total Developed Surface 3.84 sq. m.  
 Feed Pumps worked from the Main Engines, No. 2 Diameter 84 Stroke 460 Can one be overhauled while the other is at work yes  
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 84 Stroke 460 Can one be overhauled while the other is at work yes  
 Feed Pumps { No. and size One 7 1/2 x 4 x 6 Pumps connected to the { No. and size 1 G.S. Pump 6 x 4 x 6 : 1 Bilge Pump 6 x 4 x 6 }  
 How driven steam Main Bilge Line { How driven steam : steam }  
 Ballast Pumps, No. and size None Lubricating Oil Pumps, including Spare Pump, No. and size None  
 Are two independent means arranged for circulating water through the Oil Cooler yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room Four at 65mm bore and one 2" in shaft space.  
 In Holds, &c. one 2" bore

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1-126 Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1-45  
 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 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 yes  
 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 pass through the bunkers Suction pipes for F.P., D.T., and for bilge How are they protected Steel casing  
 What pipes pass through the deep tanks None Have they been tested as per Rule yes  
 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 SPACE watertight yes Is it fitted with a watertight door yes worked from yes

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 172 sq. m. 1851 #  
 Is Forced Draft fitted yes No. and Description of Boilers One Single Ended Multitubular Working Pressure 200 lb/in<sup>2</sup>  
 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 16-4-36 Main Boilers 14-4-36 Auxiliary Boilers yes Donkey Boilers yes  
 (If not state date of approval)  
 Superheaters 4-7-36 General Pumping Arrangements 15-7-36 Oil fuel Burning Piping Arrangements yes  
 SPARE GEAR. State the articles supplied:—

One set top end bolts and nuts, One set bottom end bolts and nuts,  
 One set main bearing bolts and nuts, One set coupling bolts,  
 One set feed pump valves, One set H.P., M.P. & L.P. piston rings,  
 One set H.P. piston rod metallic packing, 4 tube stoppers,  
 1 tube expander, One set brush holders and brushes for generator.

The foregoing is a correct description,

Namura NAMURA SHIP-YARD CO. LTD. OSAKA Manufacturer.



© 2021

Lloyd's Register Foundation

010466-010477-0188



1937: SEPT. 28. Oct. 6-19, Nov 5-16-18-25-29. DEC 4. 14. 20. 29.  
 During progress of work in shops - - - 1938: JAN. 13. 20. 24. 26 FEB. 3. 14. 25. MAR. 8. 10. 14. 16. 18. 26 APRIL 1. 5. 6. 8. 11.  
 Dates of Survey while building During erection on board vessel - - - 1938. APRIL 16. 18. 23. 28. MAY 5. 10. 14. 17. 23. 30. JUNE 1. 7. 9. 13. 15. 14. 22.  
 Total No. of visits 46

Dates of Examination of principal parts—Cylinders 19. 12. 37 Slides 8. 3. 38 Covers 19. 12. 37.  
 Pistons 8. 3. 38 Piston Rods 8. 3. 38 Connecting rods 8. 3. 38  
 Crank shaft 10. 3. 38 Thrust shaft 10. 3. 38 Intermediate shafts 10. 3. 38  
 Tube shaft ✓ Screw shaft 10. 3. 38 Propeller 1-4-38  
 Stern tube 26. 3. 38 Engine and boiler seatings 5-4-38 Engines holding down bolts 14-5-38.  
 Completion of fitting sea connections 5-4-38  
 Completion of pumping arrangements 4. 6. 38 Boilers fixed 23. 5. 38 Engines tried under steam 7. 6. 38  
 Main boiler safety valves adjusted 17. 6. 38 Thickness of adjusting washers P 22 1/2 S 20 1/2 S/li 19 1/2  
 Crank shaft material Steel Identification Mark K42 N° 6126 Thrust shaft material Steel Identification Mark K44 N° 6128  
 Intermediate shaft material Steel Identification Marks K34 N° 5844 Tube shaft material ✓ Identification Mark ✓  
 Screw shaft, material Steel Identification Mark K34 N° 5844 Steam Pipes, material Steel Test pressure 600 lb/sq in Date of Test 23. 5. 38  
 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 "POSYET" & "KONGAUS"

General Remarks (State quality of workmanship, opinions as to class, &c.)  
 This machinery has been constructed under special survey in accordance with the Rules and approved plans and for navigation in Ice.  
 The materials and workmanship are good.  
 On completion the machinery was installed in the vessel in accordance with the Rules and tested under full working conditions and is eligible in my opinion for classification with the record of + L.M.C. 6-38 and notation T.S.(C.L.) 6-38.

The amount of Entry Fee ... Yen 51.42: When applied for,  
 Special ... £ 71.7.83: June 14th 1938  
 Donkey Boiler Fee ... £ : : When received,  
 Travelling Expenses (if any) £ : : June 12th 1938

A. R. Kiddall.  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI 23 SEP 1938  
 Assigned + June 6. 38  
 CL FD Spt.