



Is  a Donkey Boiler fitted?  No  If so, is a report now forwarded?  -  
 an Auxiliary  
 Is the donkey boiler intended to be used for domestic purposes only  -  
 Plans. Are approved plans forwarded herewith for Shafting 22-7-58 Main Boilers 10-4-58 Auxiliary Boilers - Donkey Boilers -  
 (If not, state date of approval)  
 Superheaters 10-4-58, 27-3-58 General Pumping Arrangements 1-10-58 Oil Fuel Burning Arrangements 5-3-59  
 Geared turbines situated aft. Have torsional vibration characteristics of system been approved  Yes Date of approval 3-3-58

**SPARE GEAR.**

Has the spare gear required by the Rules been supplied  Yes  
 State the principal additional spare gear supplied:  
1 - Cast Iron 5 bladed solid propeller.  
1 - Tail shaft with continuous brass liner (Marked KOB No. KT-F 1330 EI 28-4-59)  
Each type of Labyrinth rings.

The foregoing is a correct description.

*T. Yamamoto* Managing Director of Kawasaki Dockyard, Manufacturer.

Dates of Survey while building  
 During progress of work in shops - 1958: Aug. 4, 6, 20, 22, 25, 29, Sept. 1, 5, 8, 10, 12, 16, 19, 22, 24, 29, Oct. 1, 6, 8, 10, 29, Nov. 4, 5, 10, 21, Dec. 1, 8, 24.  
 During erection on board vessel - 1959: Jan. 19, 28, 30, Feb. 2, 9, 16, 18, 19, 20, 23, 27, March 4, 6, 7, 9, 11, 13, 16, 20, 23, 25, 29, 30, 31, April 1, 5, 8, 13, 15, 16, 17, 24, 25, 27, May 8, 11, 14, 18, 19, 20, 22, 25, 27, 28, 29, June 1, 3, 8, 19, 22, 24, 26, 29, July 1, 6, 8, 17, 20, 24, 27, 29, 31, Aug. 3, 7, 12, 19, Oct. 19  
 Total No. of visits 1959: May, 29, June, 3, 5, 8, 26, July, 3, 28, 31, Aug. 11, 25, Sept. 3, 4, 8, 16, 17, 25, 30, Oct. 5, 15, 19, 22.  
 121 HP 23-3-59 HP 16-4-59 HP 16-4-59 1st 19-2-59

Dates of Examination of principal parts - Casings LP 31-3-59 Rotors LP 24-4-59 Blading LP 24-4-59 Gearing 2nd 13, 16-3-59  
 Wheel shaft 16-3-59 Thrust shaft 29-10-58 Intermediate shafts 3-6-59 Tube shaft - Screw shaft 25-5-59  
 Propeller 7-3-59 Stern tube 3-6-59 Engine and boiler seatings 23-4-59 Engine holding down bolts 28, 31-7-59

Completion of fitting sea connections 8-6-59 Completion of pumping arrangements 30-9-59 Boilers fixed 18-7-59 Engines tried under steam 22-10-59  
 Main boiler safety valves adjusted 11-8-59 Thickness of adjusting washers Drum: F16 A18 F17 A19 Sup: 15 19  
 Stb'd Boiler Pt. B. St. B. Pt. B.

Rotor shaft, Material and tensile strength HP Ni Mo V Steel forging L. 83.4 T. 79.2 R. 80.5 kg/mm<sup>2</sup> Identification Mark LP Y-12712  
 LP 70.3 68.2 67.6 kg/mm<sup>2</sup> LP Y-12735

Flexible Pinion Shaft, Material and tensile strength HP Steel forging T. 83.7 B. 81.4 kg/mm<sup>2</sup> Identification Mark LP Y-12712  
 LP 59.2 60.3 kg/mm<sup>2</sup> LP Y-12735

Pinion shaft, Material and tensile strength 1st HP Ni. Mo. V S.F. L.T. 79.5 L.B. 80.2 T. 80.0 2nd \* (1)  
 LP 78.2 76.4 77.1 (see below) Identification Mark LP Y-12709  
 2nd HP Y-12689 LP Y-12699 ; Chemical analysis 1st LP .29 .34 .54 .016 .015 3.48 .12 .33 .05 2nd (see below)  
 LP .28 .33 .48 .014 .014 3.34 .12 .34 .08 \* (2)

If Pinion Shafts are made of special steel state date of approval of chemical analyses, physical properties and heat treatment 7-6-57  
 1st Reduction Wheel Shaft, Material and tensile strength HP Carbon Steel 45.5 - 48.5 kg/mm<sup>2</sup> Identification Mark 1st HP Y-12691  
 LP Carbon Steel 45.5 - 48.5 " LP Y-12692

Wheel shaft, Material Carbon Steel Identification Mark Y-12714 Thrust shaft, Material Carbon Steel Identification Mark Y-12246  
 Intermediate shafts, Material F.S. Identification Marks Kob KW-F3072 Tube shaft, Material - Identification Marks -  
 Kob KW-F3034

Screw shaft, Material F.S. Identification Marks Kob KT-F1327 Steam Pipes, Material Cr. Mo. Steel Test pressure 94 kg/cm<sup>2</sup> (13)  
 Date of test 1959 May 18, 20, 22, 25, 27, 29 June 18, 19, 22, 24, 26, 29 Is an installation fitted for burning oil fuel Yes  
 July 1, 6, 8, 10, 15, 17, 20, 24, 27, 29, 31 Aug. 3, 7, 12, 19

Is the flash point of the oil to be used over 150°F. Yes Have the requirements of the Rules for the use of oil as fuel been complied with Yes  
 Full description of Fire Extinguishing Apparatus fitted in machinery spaces 15-20 lbs & 1-100 lbs portable frath 12-water hose complings (1 1/2)  
 12-Hose reels each containing 60ft x 1 1/2" hose 4-san boxes with CO2 total flooding in E.R. & B.R.

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo - If so, have the requirements of the Rules been complied with -  
 If the notation for ice strengthening is desired, state whether the requirements in this respect have been complied with -

Is this machinery a duplicate of a previous case. No If so, state name of vessel -

General Remarks. (State quality of workmanship, opinions as to class, &c.) This machinery has been constructed under Special Survey in accordance with the Rules, approved plans and Secretary's letters. The materials and workmanship have been found satisfactory.

The turbine has been tested in the shop under no load condition and found satisfactory.  
 These boilers and main and auxiliary machineries have been fitted on board the steam tanker "GEKKO MARU" in a proper manner and found satisfactory when tested at sea under full working conditions and eligible in our opinion for classification records of +LMC10, 59 MBS10, 59 TS(CL)10, 59 SPS10, 59 O.F.10, 59.

The torsional vibration characteristics of the main propelling machinery were verified by torsiongraph taken during sea trial and confirmed that no gear hammer nor rough running was observed at around 46 R.P.M.

\* (1) 2nd  
 HP) Ni. Mo. V. S.F. L.T. 77.0 L.B. 77.0 T. 77.0  
 LP 79.4 79.1 77.0

\* (2) 2nd C Si Mn P S Ni Cr Mo  
 HP .26 .31 .51 .014 .011 3.54 .12 .34  
 LP .29 .34 .54 .016 0.15 3.48 .25 .33

The amount of Entry Fee ... £	:	:	When applied for
Special ... £	:	:	19
Donkey Boiler Fee ... £	:	:	When received
Travelling Expenses (if any) £	:	:	19

*T. Yamamoto*  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRIDAY 19 FEB 1960  
 Assigned *See Rpt. 1.*



Certificate (if required) to be sent to Committee's Minute.