

Is a Donkey an Auxiliary Boiler fitted? If so, is a report now forwarded?

Is the donkey boiler intended to be used for domestic purposes only?

Plans. Are approved plans forwarded herewith for Shafting Main Boilers Auxiliary Boilers Donkey Boilers
(If not, state date of approval)

Superheaters General Pumping Arrangements Oil Fuel Burning Arrangements

Geared turbines situated aft. Have torsional vibration characteristics of system been approved? Date of approval

SPARE GEAR.

Has the spare gear required by the Rules been supplied? Yes

State the principal additional spare gear supplied:

1. Bearing for HP & LP Turbine Journals & Thrust	1 set for each size
1. Bearing for reduction gear wheels & pinions	1 set " "
1. Main thrust bearing pads	1/2 set (8 pieces)
1. Various sizes of seal rings for HP & LP Turbine	1 set for each size
1. Reamer Bolts for 1st & 2nd reduction coupling	1 set " "
1. HP & LP Gear Coupling shafts & sleeves	1 set " "

The foregoing is a correct description.

K. Ogata
K. Ogata
Manager of Inspection Dep't.
Kobe Shipyard & Engine Works, Mitsubishi
Heavy Industries Reorganized Ltd. Manufacturer

Dates of Survey while building: During progress of work in shops - 1956: Dec. 14, 1957: Jan. 21, 22, Feb. 18, Mar. 2, 6, 7, 11, 18, 25, 30, Apr. 10, 15, 18, 27, May 28, June 10, 11, July 4, 5, Aug. 7, 15, 17, 27, Sept. 4, 12, 28, Oct. 8, 10, 12, 19, 21, 26, 29, 31, Nov. 1, 13, 20, 21, 30, Dec. 2, 4, 6, 16, 17, 26, 1958: Jan. 8, 17, 20, 25, 27, Feb. 7, 8, 12, 14, 18, 24, Mar. 1, 6, 8, 12, 13, 14, 19, 20, 28, 31, Apr. 2, 5, 10, 12, 15, 16, 19, 21, 22, 23, 25, 28, May 10, 20, 24, 26, 28

Total No. of visits: 87

Dates of Examination of principal parts—Casings: 13-3-58 (HP), 14-3-58 (LP) Rotors: 12-3-58 (HP), 2-4-58 (LP) Blading: 12-3-58 (HP), 2-4-58 (LP) Gearing: 6-5-58 (1st), 10-5-58 ("), 22-4-58 (2nd)

Wheel shaft: 8-4-58 Thrust shaft: 13-2-58 Intermediate shafts: Tube shaft: Screw shaft:

Propeller: Stern tube: Engine and boiler seatings: Engine holding down bolts:

Completion of fitting sea connections: Completion of pumping arrangements: Boilers fixed: Engines tried under steam:

Main boiler safety valves adjusted. Thickness of adjusting washers.

Rotor shaft, Material and tensile strength: Ni-Cr-Mo Steel Forging 47.9 - 49.3 T/in² (HP), 46.9 - 49.1 T/in² (LP), Identification Mark NAG No. 1776 NAG No. 1776

1st Pinion Shaft, Material and tensile strength: Ni-Cr-Mo Steel Forging 47.5 - 48.5 T/in² (HP), 47.3 - 48.5 T/in² (LP), Identification Mark NAG No. MS2382 (HP), NAG No. MS2703 (LP)

2nd Pinion Shaft, Material and tensile strength: Ni-Cr-Mo Steel Forging 47.9 - 50.7 T/in² (HP), 48.9 - 51.1 T/in² (LP), Identification Mark NAG No. 1056-A (HP), NAG No. 1056-B (LP)

Chemical analysis: 2nd Pinion HP 0.31 0.21 0.64 0.006 0.009 3.40 0.06 0.39 0.06, LP 0.30 0.26 0.58 0.009 0.006 3.47 0.10 0.46 0.06

If Pinion Shafts are made of special steel state date of approval of chemical analyses, physical properties and heat treatment: 36.6 - 37.4 (HP), 37.4 - 37.8 (LP), Identification Mark KOB No. KTF735 (HP), KOB No. KTF742 (LP)

1st Reduction Wheel Shaft, Material and tensile strength: Steel Forging 37.4 - 37.8 T/in² (LP), Identification Mark KOB No. KTF776

Wheel shaft, Material: Steel Forging Identification Mark KOB No. KTF776 Thrust shaft, Material: Steel Forging Identification Mark KOB No. KTF864

Intermediate shafts, Material: Identification Marks Tube shaft, Material: Identification Marks

Screw shaft, Material: Identification Marks Steam Pipes, Material: Test pressure:

Date of test: 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 the use of oil as fuel been complied with?

Full description of Fire Extinguishing Apparatus fitted in machinery spaces:

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.)

The steam turbine and gearing as indicated above, intended for Ship No. 823 being built by Mitsubishi Nippon Heavy Ind., Ltd., Yokohama Shipyard & Engine Works, Yokohama have been constructed under Supervision of the Society's Surveyors in accordance with the Rules, approved plans and Secretary's letters.

The materials and workmanship are sound and good.

The turbine & gearing have been tested in the shop under no load condition and subsequently opened up, examined and found in good order.

It is submitted that this engine is eligible for Classification with the Society's with the Notation of **LMC** (with date) when satisfactorily installed on the vessel.

The amount of Entry Fee ... £398.000- When applied for JUL - 4 1958

Special ... £ : : 19

Donkey Boiler Fee ... £ : : When received

Travelling Expenses (if any) £ 2,000- FRIDAY 27 FEB 1959

Met. Mason
Engineer Surveyor to Lloyd's Register of Shipping.



(The Committee's Minute) Assigned *See Rpt. 1*

Certificate (if required) to be sent to
The Surveyors are requested not to write on or below the space for Committee's Minute.
20.1.59
JK