

Date of writing report Received London Port YOKOHAMA No. 2493

Survey held at Tokyo No. of visits 13 First date 12th Feb. 1959 Last date 2nd June, 1959

Name of Ship..... S. S. "GEKKO MARU"
(Or Contract No. if name unknown)..... Owners Tokyo Tanker Co.
Ship Built at Kobe by Kawasaki Dock Yard Co. when..... Yard No. 972
Auxiliary Engines or Gas Turbines made at Tokyo by Tokyo Motor Vehicle Works
Mitsubishi Nippon Heavy Ind. Ltd when June, 59 Eng. Nos. 394
Total No. of sets and description (including type name) 1 x D E 2 M P - 394 type Diesel Engine

SHAFTING. Is a damper or detuner fitted? Yes No. of main bearings 7 Are bearings of ball or roller type? No Distance between inner edges of bearings in way of cranks 179 mm Crankshaft: Built, semi-built, (solid) Material of crankshaft Alloy (Cr-Mn) Steel Approved minimum tensile strength 90kg/mm² Dia. of pins 95mm Journals 100mm Breadth of webs at mid throw 150mm Axial thickness 41mm If shrunk, radial thickness around eyeholes - Dia. of flywheel 590mm Weight 109.7 kg Are balance weights fitted? Yes Total weight 30 kg Rad. of gyration 175mm Dia. of flywheel shaft - Has each engine been tested in shop? Yes How long at full power? 2 Hr Was it tested with driven machinery attached? Yes Was the governing tested and found satisfactory? Yes Date of approval of torsional vibration characteristics (for engines of 150 BHP and over) 18-3-59 Date of approval of shafting 28-1-59 Identification marks on shafting 33-3979-1 LLOYD'S Yka No. Y-13940-1 IS17-4-59 HT. 13-5-59 Particulars of driven machinery Generator: 3 Phase A.C. 60 Cycles, 450V 160A, 125KVA (100KW)

Port and No. of Certificate for Starting Air Receivers

AUXILIARY GAS TURBINES. BHP per set..... At..... RPM of output shaft. Open or closed cycle?

Arrangement of turbines. HP drives..... at..... RPM HP gas inlet temp..... pressure.....

(A small diagram should be attached showing gas cycle) IP ” at..... ” IP ” ” ” ”
LP ” at..... ” LP ” ” ” ”

No. of air compressors per set..... Centrifugal or axial flow type?..... Material of turbine blades.....

Material of compressor blades..... No. of air coolers per set..... No. of heat exchangers per set..... How are
turbines started?..... Are the turbines operated in conjunction with free piston gas generators?.....

Total No. of free piston gas generators..... Dia. of working pistons..... Dia. of compressor pistons..... No. of double strokes
per minute at full power..... Gas delivery pressure..... Gas delivery temperature.....

Have the turbines and attached equipment been tested in shop?..... How long at full power?..... Were they tested with driven machinery
attached?..... Particulars of gearing.....

Date of approval of plans..... Identification marks..... Particulars of driven machinery.....

ELECTRIC GENERATORS. Port and No. of Certificate for generators of 100 Kw. and over..... No. 450406 LLOYD'S TEST KOB
No. A.C.G. 1421 MI LR 20/4/59
For generators under 100 Kw., has Makers' Certificate been obtained?..... Are Certificates attached?.....

The foregoing description is correct and the particulars are as approved for torsional vibration characteristics (strike out words not applicable)
Mitsubishi Nippon Heavy Industries, Ltd. Tokyo Motor Vehicle Works
Chief of Engine Technical Dept. K. Okamura

Is this machinery duplicate of a previous case?..... If so, which?.....

GENERAL REMARKS. *State if the machinery has been constructed under special survey in accordance with the Rules, approved plans and Secretary's letters. State quality of materials and workmanship. Where existing machinery is submitted for classification the circumstances should be explained as fully as possible.*

This auxiliary oil engine have been constructed under Special Survey in accordance with the Society's Rules, Approved Plans and Secretary's Letters.

The material and workmanship are sound and good.

This auxiliary oil engine have been examined under full working condition in the makers shop and found satisfactory.

Survey fee. ¥ 25,500. - YOKOHAMA

Expenses

Date when a/c rendered. JUL 28 1959

Declaration to be signed by Surveyor at fitting-out Port:— The above described machinery has been fitted on board the S. S. "GEKKO MARU" at Kobe in a proper manner and found satisfactory when tested on the (date) 9-9-59 under full working conditions.

/ft

59 *under full working conditions.*

Memorandum
 Engineer Surveyor to Lloyd's Register

013735-013739-0035