

Rpt. 4c

Date of writing report 26th May, 1959.

Received London

Port KOBE

No. FE-6717

Survey held at Kobe

No. of visits 65

First date 17th August, '57 Last date 25th May, 1959.

FIRST ENTRY REPORT ON AUXILIARY STEAM TURBINE OR STEAM
RECIPROCATING ENGINES

Name of Ship s.s. "GEKKO MARU"
(Or Contract No. if name unknown)
Ship Built at Kobe, Japan
Auxiliary turbines or engines made at Kobe, Japan
Total No. of sets and description 2 sets 1140 S.H.P. Mitsubishi Westinghouse All Impulse Single
Reduction Geared Steam Turbines for 800 KVA A.C. Electric Generator.

Owners Tokyo Tanker Co., Ltd.
(Or Consignees)

STEAM TURBINES. No. of turbines per set 1 S BHP per set 1140 Steam pressure 41.1kg/cm² Steam temperature 449°C
Type of turbines Mitsubishi Westinghouse All Impulse Single Reduction Geared Turbine
Particulars of gearing Double Helical Gear (No. of Teeth 37:278 Spiral angle 40°-2'-12"
(Tooth Windth 110mm x 2 Pressure angle 14½" D.P. 11 (Hob)
RPM of turbine shaft(s) 9016 PCD of pinion(s) 111.59 mm PCD of wheel(s) 838.43 mm Material of
pinion(s) Ni-Steel Forging Material of wheel rim(s) Steel Forging Has rotor been dynamically balanced? Yes Diameter of rotor
shaft at bearings 55 mm Does the set include a steam condenser? Yes Is an emergency governor fitted? Yes No. and purpose of
attached pumps 2 (1 - Main L.O. Gear Pump (1 - Aux. L.O. Gear Pump for Starting Has the set been tested in the shop? Yes If so, for how long at full
power? 4 hours Was the governing tested and found satisfactory? Yes Was the set tested with driven machinery attached? Yes
Identification marks LLOYD'S KOB M.NO.1638 JN 25-4-59 LR Particulars of driven machinery A.C. Generator
LLOYD'S KOB M.NO.1639 JN 25-4-59 LR (Rated Output 800 KVA
(Speed of Generator 1200 R.P.M.
(Voltage 450 V.
(Current 1026 A.

STEAM RECIPROCATING ENGINES. BHP of each at RPM Steam pressure
Dia. of cylinders Stroke Dia. of crankshaft journals Pins Material of
crankshaft Is crankcase enclosed? If so, is the internal volume 20 cu. ft. or over? No. and total area of crankcase
explosion relief devices fitted? Are the bearings forced lubricated? No. and purpose of attached pumps
Is a Governor Fitted? Identification Marks
Particulars of Driven Machinery

ELECTRIC GENERATORS. Port and No. of Certificate for generators of 100 Kw. and over Kobe Certificate No.M-55915
For generators under 100 Kw., has Makers' Certificate been obtained? Are Certificates attached?

The foregoing description is correct.

for H. Shimizu
H. SHIMIZU, GENERAL MANAGER Manufacturer

KOBE SHIPYARD & ENGINE WORKS.
MITSUBISHI HEAVY INDUSTRIES, REORGANIZED, LIMITED.
s.s. "ARCTIC SEA" "BERING SEA"

Is this machinery duplicate of a previous case? Yes 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.

These steam turbines have been constructed under special survey in accordance with the Rules, approved plans and Secretary's letters.

The materials and workmanship are sound and good.

These turbo generator sets have been examined under full working condition in the shop and found satisfactory.

Survey Fee

Expenses

Date when a/c rendered

R.D. Sutherst & J. Nonomura
Engineer Surveyor to Lloyd's Register
R.D. Sutherst. & J. Nonomura.

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 Kawasaki Dockyard, Kobe in a proper manner and found satisfactory when tested on the (date) 27th Aug. '59 under full working
conditions.