

Rpt. 4c

Date of writing report 1st April, 1960

Received London

Port YOKOHAMA

No.

KOBE-FE7105

3239

Survey held at Tokyo, Japan

No. of visits 23

First date 10th Mar. 1958

Last date 25th Sept. 1959

FIRST ENTRY REPORT ON AUXILIARY STEAM TURBINE OR STEAM  
RECIPROCATING ENGINES

Name of Ship (Or Contract No. if name unknown) Owners (Or Consignees)  
Ship Built at Aioi, Japan by Harima Shipbuilding & Engineering when Yard No. 529  
Auxiliary turbines or engines made at Tokyo, Japan by Ishikawajima Heavy Industries Co. Ltd. when 9-59 Eng. Nos. IA 1583  
Total No. of sets and description Two sets Horizontal Multistage Impulse type Single Reduction Gear Turbine

STEAM TURBINES. No. of turbines per set One BHP per set 875 Steam pressure 40 kg/cm<sup>2</sup> Steam temperature 430°C  
Type of turbines Horizontal multistage impulse turbine with single reduction gearing  
Particulars of gearing Double helical gear  
RPM of turbine shaft(s) 9805 PCD of pinion(s) 120.98mm PCD of wheel(s) 659.02mm Material of pinion(s) Ni-Cr steel Material of wheel rim(s) Forged steel Has rotor been dynamically balanced? Yes Diameter of rotor shaft at bearings 70mm Does the set include a steam condenser? Yes Is an emergency governor fitted? Yes No. and purpose of attached pumps One L.O. pump per set 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 Rotors TI-6627-1 Pinions D32-437  
Wheel rims D32-430 Wheel shaft D-32-822 Particulars of driven machinery Two AC generators  
750 KVA  
Generator V 450 A 963 R.P.M. 1800  
Exciter 125 48 1800

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  
For generators under 100 Kw., has Makers' Certificate been obtained? Are Certificates attached?

The foregoing description is correct.

S. Ohgama

Manufacturer

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.

The materials of these auxiliary steam turbines and reduction gearings were made under the survey of American Bureau of Shipping and the results of the material tests as shown on the A.B. test certificates were checked by means of Brinell tests taken by the Society's Surveyors and found satisfactory.

These turbines and reduction gearings were examined in rough machined and finished condition and found in order. On completions of assembly these turbines have been coupled to 750 KVA generators and tested in the shop under full working condition and found satisfactory. It is submitted that these aux. steam turbines are eligible for classification with the Society with the notation of LMC with date when satisfactorily installed in the vessel.

Survey Fee ¥103,950.- YOKOHAMA

Expenses

Date when a/c rendered APR. 30. 1960

Engineer Surveyor to Lloyd's Register

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