

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 7439.

Date of writing Report 27-7-31 When handed in at Local Office Kobe Port of Kobe Received at London Office 19 AUG 1931

No. in Survey held at Kobe Date, First Survey March 1930 Last Survey 31st July 1931

Reg. Book. Single on the Twin Triple Quadruple Screw vessel MITSUBISHI YARD NAGASAKI No. 486 Tons { Gross Net

Built at NAGASAKI By whom built MITSUBISHI ZOSEN KAISHA LTD Yard No. 486 When built

Owners Port belonging to Kobe Eng. Works No. 116, 117, 2118

Oil Engines made at Kobe By whom made MITSUBISHI Z.K. LTD Contract No. 486 When made 1931

Generators made at NAGASAKI By whom made do Contract No. " When made 1931

No. of Sets 3 Engine Brake Horse Power 190 EACH Nom. Horse Power as per Rule Total Capacity of Generators 175 Kilowatts.

OIL ENGINES, &c.—Type of Engines MITSUBISHI VICKERS 2 or 4 stroke cycle 4 Single or double acting Single

Maximum pressure in cylinders 50 kg/cm² Diameter of cylinders 300 mm Length of stroke 450 mm No. of cylinders 3 No. of cranks 3

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 355 mm Is there a bearing between each crank Yes

Revolutions per minute 340 Flywheel dia. 1700 mm Weight 3230 kg Means of ignition Compression Kind of fuel used Diesel Oil

Crank Shaft, dia. of journals 177 mm as per Rule 185 mm Crank pin dia. 185 mm Crank Webs 270 mm Mid. length breadth 98 mm Thickness parallel to axis Thickness around eye hole

Flywheel Shaft, diameter KEYED TO as per Rule COUPLING Intermediate Shafts, diameter as fitted Thickness of cylinder liners 30 mm

Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication Forced

Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material Yes

Cooling Water Pumps, No. one D.A. 35 dia x 45 stroke Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Lubricating Oil Pumps, No. and size one @ 50 mm dia x 45 mm stroke. Gear driven. (Single acting)

Air Compressors, No. No. of stages Diameters Stroke Driven by

Scavenging Air Pumps, No. Diameter Stroke Driven by

AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes

Can the internal surfaces of the receivers be examined Yes What means are provided for cleaning their inner surfaces manhole fitted

Is there a drain arrangement fitted at the lowest part of each receiver Yes

High Pressure Air Receivers, No. Cubic capacity of each Internal diameter thickness

Seamless, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules

Starting Air Receivers, No. one Total cubic capacity about 267 litres Internal diameter 21" thickness .625"

Seamless, lap welded or riveted longitudinal joint D.R.; D.B.S. Material O.H. Steel Range of tensile strength 28-35 Tm Working pressure by Rules 645 lb.

ELECTRIC GENERATORS:—Type Mitsubishi Compound wound

Pressure of supply 225 volts. Load 555 Amperes. Direct or Alternating Current Direct

If alternating current system, state frequency of periods per second

Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on or off Yes

Generators, do they comply with the requirements regarding rating Yes are they compound wound Yes

are they over compounded 5 per cent. , if not compound wound state distance between each generator

is an adjustable regulating resistance fitted in series with each shunt field Yes Are all terminals accessible, clearly marked, and furnished with sockets Yes

are they so spaced or shielded that they cannot be accidentally earthed, short circuited, or touched Yes Are the lubricating arrangements of the generators as per Rule Yes

PLANS. Are approved plans forwarded herewith for Shafting No. 22/1/30 Receivers 5/3/30 Separate Tanks

(If not, state date of approval)

SPARE GEAR

SEE SEPERATE LIST. which will be forwarded later.

The foregoing is a correct description,

Manufacturer.

Kobe SHIPYARD & ENGINE WORKS, M.Z.K., LTD.,

Tokuza Masam.

For Superintendent Engineer.

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Lloyd's Register
Foundation

010369-010377-0215

PEAT

Dates of Survey while building
During progress of work in shops -
During erection on board vessel -
Total No. of visits

1930. March 8, 20. April, 2, 7, 9, 14, 16, 18, 24, 25, 28 May 12, 21, 26, 30 July 9, 14, 16, 22, Aug 1, 6, 15, 18, 22, Sept 15, 26, Oct. 2, 3, 4, 22, 23, 24, 25, Nov. 1, 12, Dec. 9, 18, 22 1931 Feb. 3, 12, 17, 26 March 5, 6, 7, April 8, 9, 15, 16, 20 May 16, July 8, 9, 17, 18, 20, 21.

Dates of Examination of principal parts—Cylinders 22/8/30 Covers 15/8/30 Pistons 20/7/31 Piston rods ✓

Connecting rods 9/7/30. Crank and Flywheel shaft Intermediate shaft ✓

Crank and Flywheel shaft, Material O.H. Steel Identification Mark 7994:3/6/30 H. Intermediate shafts, Material ✓ Identification Marks ✓

Is this machinery duplicate of a previous case? No If so, state name of vessel ✓

General Remarks (State quality of workmanship, opinions as to class, &c.)

The machinery described in this report has been constructed under special survey in accordance with the Rules & approved plans, materials have been tested, found efficient & the workmanship throughout is good. They were finally connected to their respective generators & tested under full load, overload, & parallel running conditions found to be efficient, & eligible in my opinion to have record of + L.M.C. 7.31. in Register Book.

These Engines have now been shipped to Nagasaki where it is intended to instal them in M.Z.K. hull N° 486

Mark on Dynamometer	ENGINE N° 116	ENGINE N° 117	ENGINE N° 118
	LLLOYD'S	LLLOYD'S	LLLOYD'S
	N° 369 B.	N° 369 A.R.	N° 169.
	G.A. 21-11-30	T.K. 19-11-30	T.K. 16-11-30.

1m. 7.30—Transfer. (The Surveys are requested not to write on or below the space for Committee's Minute.)

Per 9/18/31
The amount of Fee ... £ 46.75
Travelling Expenses (if any) £ 2.50

When applied for, 19...
When received, 19...

For G. Pickering & Co. H.O. Buchanan.
Surveyors to Lloyd's Register of Shipping.

Committee's Minute TUE. 19 JAN 1932
Assigned See F.C. Rpt.