

Rpt. 4c.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 6236

NOV 26 1937

Date of writing Report 28/10/37 When handed in at Local Office 28/10/37 Port of YOKOHAMA
Received at London Office YOKOHAMA

No. in Survey held at YOKOHAMA Date, First Survey 6-10-36 Last Survey 24-9-1937
Reg. Book. Number of Visits 20

on the Single Screw vessel "YUKAGIR"

Tons { Gross 1435
Net 860

Built at YOKOHAMA By whom built Mitsubishi Jukogyo K.K. Yard No. 264 When built 1937
Yokohama Dock,

Owners Union of Soviet Socialist Republics. Port belonging to Murmansk

Oil Engines made at YOKOHAMA By whom made Mitsubishi Jukogyo K.K. Contract No. _____ When made 1937
Yokohama Dock,

Generators made at Nagasaki By whom made Mitsubishi Denki K.K. Contract No. _____ When made 1937
One eng.

No. of Sets Two Engine Brake Horse Power 41 Nom. Horse Power as per Rule x Total Capacity of Generators 54 Kilowatts.

OIL ENGINES, &c. — Type of Engines Yokohama Airless Diesel engine 2 or 4 stroke cycle 4 Single or double acting Single
kg/cm² 60 Diameter of cylinders 150 mm Length of stroke 200 mm No. of cylinders 3 No. of cranks 3

Maximum pressure in cylinders 60 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 167 mm Is there a bearing between each crank Yes
Revolutions per minute 600 Flywheel dia. 700 mm Weight 448 Kg. Means of ignition solid Kind of fuel used Grude oil.

Crank Shaft, dia. of journals as per Rule _____ as fitted 105 mm Crank pin dia. 95 mm Crank Webs Mid. length breadth 205mm Thickness parallel to axis x
Mid. length thickness 37mm shrunk Thickness around eyehole x

Flywheel Shaft, diameter as per Rule _____ as fitted x Intermediate Shafts, diameter as per Rule _____ as fitted x Thickness of cylinder liners 11 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, lagged

Cooling Water Pumps, No. One Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes

Lubricating Oil Pumps, No. and size One 0.52 T/H gear pump.

Air Compressors, No. Two No. of stages Two Diameters HP 60mm LP 145mm Stroke 100mm Driven by Diesel engine

Scavenging Air Pumps, No. x Diameter x Stroke x Driven by x

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 x

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

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

Seamless, lap welded or riveted longitudinal joint x Material x Range of tensile strength 550mm Working pressure by Rules x

Starting Air Receivers, No. 2 Riveted & Total cubic capacity 535 Litres Internal diameter 190mm thickness 14mm
Seamless, lap welded or riveted longitudinal joint welded Material steel Range of tensile strength 44-55 Kg/mm² Working pressure by Rules 30Kg/cm²
41-47

ELECTRIC GENERATORS: — Type 4 poles, compound wound, open drip proof & marine type.

Pressure of supply 110 volts. Full Load Current 191 245 Amperes. Direct or Alternating Current direct

If alternating current system, state the periodicity x Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on and off Yes

Generators, are they compounded as per rule Yes 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

If the generators are under 100 kw. full load rating, have the makers supplied certificates of test Tested and do the results comply with the requirements Yes

If the generators are 100 kw. or over have they been built and tested under survey x

LANS. Are approved plans forwarded herewith for Shafting 15/4/37.Kobe. Receivers x Separate Tanks x
(If not, state date of approval)

SPARE GEAR Please see List of Spare gear attached to main engine Report.

The foregoing is a correct description.

H. Hattori

Manufacturer.



© 2020 Lloyd's Register Foundation

0106 31-0106 39-0219

Dates of Survey while building { During progress of work in shops - - } Oct. 6 & 24, Nov. 17, 1936. Jan. 8 & 13. Feb. 6 & 15, Mar. 9, 10, 17, 18 & 29.
 { During erection on board vessel - - - } Apr. 2 & 8, May 25. June 1. July, 8 & 29. 1937.
 Total No. of visits 20.

Dates of Examination of principal parts—Cylinders 8-4-37 Covers 1-6-37 Pistons 26-6-37 Piston rods x

Connecting rods 25-5-37 Crank and Flywheel shaft 25-5-37 Intermediate shaft x

Crank and Flywheel shafts, Material Steel Identification Mark LR 1863
 K.K. 25-5-37

Intermediate shafts, Material x Identification Marks x

Is this machinery duplicate of a previous case Yes If so, state name of vessel "T 9" & "T 21"

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

These auxiliary engines have been built under Special Survey in accordance with the Rules & Approved Plan. Materials & Workmanship good.

On completion of fitting onboard the engines tried under full working condition with satisfactory results.

These auxiliary engines together with the main engines of this vessel are eligible in our opinion to be classed L M C - 10-37.

1m.2.36.—Transfer. (The Surveyors are requested not to write on or below, the space for Committee Minute.)

The amount of Fee £	✓	When applied for,
		19.....
Travelling Expenses (if any) £	:	When received,
		19.....

J. Micholas & C. K. Higgins
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE. 7 DEC 1937
 Assigned See Ma. J.E. 6236

