

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 743

Received at London Office 28 JUN 1952

Writing Report 2, June, 1952. When handed in at Local Office 1952. Port of Kobe
 Survey held at Kobe, Japan. Date, First Survey Feb. 2, 1951 Last Survey Jan. 28, 1952
 Number of Visits 46
 On the M. V. "Seiho Maru" Tons Gross 13064.82 Net 9368.29
 Single Triple Quadruple
 By whom built Kawasaki Dockyard Co., Ltd. Yard No. 912 When built 1-1951
 Port belonging to Tokyo, Japan
 Lines made at Kobe, Japan By whom made Kawasaki Dockyard Co., Ltd. Contract No. 1148 & 1149 When made 1 - 1952
 Sets made at Kobe, Japan By whom made Kawasaki Dockyard Co., Ltd. Contract No. 67066 & 67067 When made 1 - 1952
 Sets 2 Engine Brake Horse Power 380 M.N. as per Rule 95 x 2 Total Capacity of Generators 250 x 2 Kilowatts.
 Intended for essential services yes

ENGINES, &c.—Type of Engines Kawasaki M.A.N. G6V 28.5/42 2 or 4 stroke cycle 4 Single or double acting Single

Mean pressure in cylinders 52 Kgs/cm Diameter of cylinders 285 mm Length of stroke 420 mm No. of cylinders 6 No. of cranks 6
 Indicated pressure 7.1 Kg/cm² Firing order in cylinders 1-3-5-6-4-2 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 360 mm
 Distance between each crank Yes. Moment of inertia of flywheel 1.29 x 10⁷ 1. Revolutions per minute 375
 Crank dia. 1650 mm Weight 1,600 Kgs Means of ignition Compression Kind of fuel used Diesel Oil
 Crank Shaft, dia. of journals as per Rule 167.8 mm as fitted 185 Crank pin dia 175 mm Crank Webs Mid. length breadth 280 mm Thickness parallel to axis -
 Mid. length thickness 89.5 shrunk Thickness round eyehole -
 Wheel Shaft, diameter as per Rule - as fitted - Intermediate Shafts, diameter as per Rule - as fitted - General armature, moment of inertia (16 m² or Kg-cm.²) 3.07x10⁶

Means provided to prevent racing of the engine when declutched Yes. Means of lubrication Forced Kind of damper if fitted -
 Are cylinders fitted with safety valves Yes. Are the exhaust pipes and silencers water cooled or lagged with non-conducting material Yes. (both)
 Main cooling water pumps 4 Main cooling water pumps
 Cooling Water Pumps, No. 2 harbour use cooling water pumps Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes
 Lubricating Oil Pumps, No. and size 1 - 5 T for each engine

Compressors, No. 2 No. of stages 3 Diameters 350-100 350-295 Stroke 240 Driven by Aux. Engines Directly
 Suctioning Air Pumps, No. - Diameter - Stroke - Driven by -

AIR RECEIVERS:—Have they been made under Survey Yes. State No. of Report or Certificate AR - 304

Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes.
 Are the internal surfaces of the receivers be examined Yes. What means are provided for cleaning their inner surfaces A man hole
 Are 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 -
 Less, lap welded or riveted longitudinal joint - Material - Range of tensile strength - Working pressure by Rules -
 Suctioning Air Receivers, No. 1 Total cubic capacity 400 litre Internal diameter 620 mm thickness 14 mm
 Less, lap welded or riveted longitudinal joint Riveted Material Boiler Steel Range of tensile strength Shell 33.7 T/in² Head 27.3 Working pressure by Rules 34.3 for shell 44.8 for end
 Kg/cm²

ELECTRIC GENERATORS:—Type Semi-enclosed, self ventilated, compound wound, type

Pressure of supply 230 volts. Full Load Current 1087 Amperes. Direct or Alternating Current Direct current
 Alternating current system, state the periodicity - Has the Automatic Governor been tested and found as per Rule when full load is suddenly thrown
 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
 Is it yielded that they cannot be accidentally earthed, short circuited, or touched yes. Are the lubricating arrangements of the generators as per Rule yes.
 Are the generators are under 100 kw. full load rating, have the makers supplied certificates of test - and do the results comply with the requirements -
 Are the generators are 100 kw. or over have they been built and tested under survey yes.
 Details of driven machinery other than generator One compressor by each engine

PLANS.—Are approved plans forwarded herewith for Shafting 19 Dec. 51 (crank S.) Receivers 16 Aug. 51 Separate Tanks 23, Oct. 1951
 (If not, state date of approval)

Are Torsional Vibration characteristics if applicable been approved 7, Dec. 51 Armature shaft Drawing No. M - 30975
 (state date of approval)

SHAFTING GEAR 2 - cylinder Covers. 2 - Pistons. 2 - cylinder liners. 2 - crank-pin Brasses.

1 set - camshaft driving gears.

The foregoing is a correct description,

Takeo Morimoto Manufacturer.
 Standing Director, Kawasaki Dockyard.



© 2021

Lloyd's Register
 Foundation

010580-010588-0131

Dates of Survey while building
During progress of work in shops-- } 1951. Feb. 2.5.15. Mar. 5.12.16. Apr. 4.18. May 16.18.21.30. Jun. 11.15.18.20.22.25.29. 17.20.23.27.28. Aug. 3.17.24.31. Sep. 3.7.14.19 Oct. 5.8.19.25.26. Dec. 26 1952 Jan. 9.
During erection on board vessel-- } Dec. 27. 51, JAN. 23. 52, JAN. 25. 52, JAN. 28. 52
Total No. of visits 46

Dates of Examination of principal parts—Cylinders Aug. 3, 1951 Covers July 23, 1951 Pistons June 20, 1951 Piston rods - Rpt.

Connecting rods Sep. 3, 1951 Crank and Flywheel shafts Aug. 31, 1951 Intermediate shafts -

Crank shafts { Material Forged Steel Tensile strength KW-F768 33.1 T/ "(T) 32.4 T/ "
Elongation 30 % in 2" (top & Bot.) Identification Marks KW-F759 34.7 " (B) KW-F759 35.0 T/ "

Flywheel shaft, Material - Identification Marks -

Identification marks on Air Receivers No. AR 304. LLOYD'S TEST. WTP. 45 Kg. WP. 30 KG. KT. 19-11-51 R

Is this machinery duplicate of a previous case - If so, state name of vessel -

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The Auxiliary Oil Engines of the vessel have been constructed under Special Survey in accordance with the Rules, Approved Plans and Secretary's Letters.

The Workmanship and Materials are sound and good.

The Auxiliary Oil Engines have been examined under working condition during Shop trials and Comprehensive sea trials and found satisfactory.

The amount of Fee... £ 103,824:
(Including 1 Aux. 65 HP)

Travelling Expenses (if any) £ - - - - -

When applied for 19

When received 19

Surveyor to Lloyd's Register of Shipping.

TUES. 22 JUL 1952

Committee's Minute

Assigned

See F. E. Mch. opt.



© 2021

Lloyd's Register Foundation