

COPY

1930 Rpt. 4c.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 6863

Received at London Office 22 APR 1930

Date of writing Report 19 When handed in at Local Office 7-3-1930 Port of Kobe

No. in Survey held at Kobe Date, First Survey 16 July 1929 Last Survey March 1930 Reg. Book. Number of Visits 80

Single on the Twin Triple Quadruple } Screw vessel

Nagasaki Yard No. 471

Tons } Gross Net

Built at Nagasaki By whom built Mitsubishi Zosen Kaisha Ltd Yard No. 471 When built 1930

Owners Osaka Shosen Kaisha Port belonging to Osaka

Oil Engines made at Kobe By whom made Mitsubishi Zosen Kaisha Ltd Contract No. 87-909 When made 1930

Generators made at Nagasaki By whom made " " " Contract No. When made 1930

No. of Sets 2 Engine Brake Horse Power 390 each Nom. Horse Power as per Rule 81 Total Capacity of Generators 780 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 6 No. of cranks 6

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. 1,700 mm Weight abt. 355 kg. Means of ignition Compression Kind of fuel used Diesel oil F.P. class 150°F

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

Flywheel Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule 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 Water cooled

Cooling Water Pumps, No. 1 @ 110 mm x 45 mm Grand D. Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Lubricating Oil Pumps, No. and size 1 @ 110 mm x 45 mm Gear driven

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

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

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

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. Total cubic capacity abt. 267 litres Internal diameter 21" thickness .625"

Seamless, lap welded or riveted longitudinal joint D.R.D.B.S. Material Steel Range of tensile strength 28/35 tons Working pressure by Rules 645 lbs

ELECTRIC GENERATORS:—Type Mitsubishi compound wound.

Pressure of supply 225 volts. Load 1160 per machine 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

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

are they over compounded 5 per cent. Yes, 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 25th April 1929 Receivers 3rd June 1929 Separate Tanks

SHAFTING AND GEAR

See Separate List

The foregoing is a correct description,

Manufacturer.



© 2021

Lloyd's Register Foundation

009869-009878-0123

Dates of Survey while building } From 4th July 1929 To March 3rd 1930
 During progress of work in shops - - - }
 During erection on board vessel - - - }
 Total No. of visits 50

Dates of Examination of principal parts—Cylinders 9/10 6/11 7/12 Covers 24/9 25/9 1.2.6.25.27 13.14 12 Pistons 28/8/11/12/13/11 Piston rods ✓
 Connecting rods 5/9 25/10 Crank and Flywheel shaft 30/7/29 9/8/29 Intermediate shaft ✓
 Crank and Flywheel shaft, Material 04. Steel Identification Mark VS. 3449 VS. 3450 323 J.L. 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 crank shafts of these engines were supplied by Messrs Krupp, Essen, Germany in finished condition. These engines have been constructed under special survey in accordance with the Rules & approved plans. The materials have been tested found efficient & the workmanship throughout is good. They have been tried under full load & overload working conditions, connected to their generators, & run in parallel test, also the efficiency of the governors was tested & the whole found satisfactory. This machinery is eligible in my opinion for the Merit of + L.M.C. in the Register Book. They have now been shipped to Nagasaki where it is intended to install them on Vessel No 471, & have been stamped as follows.

ENG: 89. LLOYDS No 2406 R. H.D.B. 19-2-30	ENG: 90 LLOYDS No 2407 R. H.D.B. 19-2-30	ENG: 91 LLOYDS No 2408. R. H.D.B. 19-2-30
--	---	--

To Board Nagasaki Rep

[Handwritten signatures and notes]

The amount of Fee ... $£ 975^{00}$: When applied for, 19...
 Travelling Expenses (if any) $£ 90^{00}$: When received, 19...

For W. Kimbu self
 H.D. Buchanan
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

