

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 8711

Received at London Office

26 NOV 1934

Date of writing Report 19... When handed in at Local Office 19... Port of Nagasaki Kobe
 No. in Survey held at... Date, First Survey... Last Survey 19...
 Reg. Book... Number of Visits...

82167 on the Single Screw vessel "NOTO MARU" Tons ^{Gross} 7184.51 _{Net} 4317.76

Built at Nagasaki By whom built Mitsubishi Jukogyo Kaisha Yard No. 580 When built 1934
 Owners Nippon Yusen Kabushiki Kaisha. Port belonging to Tokio.

Oil Engines made at Kobe works By whom made Mitsubishi Jukogyo Kaisha Contract No. 463 When made 1934
 Generators made at... By whom made Mitsubishi Denki Works. Contract No. ... When made ...

No. of Sets 1 Engine Brake Horse Power 32 Nom. Horse Power as per Rule ... Total Capacity of Generators 20 Kilowatts.

IL ENGINES, &c.—Type of Engines MRW.2-Mitsubishi Vertical Pump Piston 4 stroke cycle 4 Single or double acting Single

Maximum pressure in cylinders 55 Kg/cm² Diameter of cylinders 150 mm Length of stroke 230 mm No. of cylinders 2 No. of cranks 2

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 175 mm Is there a bearing between each crank yes

Revolutions per minute 650 Flywheel dia. 840 mm Weight 490 Kg. Means of ignition airless injection Kind of fuel used Heavy oil

Crank Shaft, dia. of journals 92 mm Crank pin dia. 92 mm Crank Webs Mid. length breadth 136 mm Thickness parallel to axis shrunk
 as fitted 92 mm Mid. length thickness 48 mm Thickness around eyehole ...

Flywheel Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule Thickness of cylinder liners 19 mm
 as fitted ... as fitted ...

Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes Means of lubrication forced feed.

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. 1 Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes

Lubricating Oil Pumps, No. and size 1 geared pump.

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

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

IR 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 Hand hole.

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. 1 Total cubic capacity 35 litre Internal diameter 190 mm thickness 7.5 mm

Seamless, lap welded or riveted longitudinal joint Seamless Material steel Range of tensile strength 28-35 t/c Working pressure by Rules 30 Kg/cm²

ELECTRIC GENERATORS:—Type 20 KW.

Pressure of supply 225 volts. Load 133 Amperes. Direct or Alternating Current DC.

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 ... are they compound wound ...

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 ... Are all terminals accessible, clearly marked, and furnished with sockets ...

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

PLANS. Are approved plans forwarded herewith for Shafting 18-12-33 Receivers 30-11-33 Separate Tanks ...

SHAFTING GEAR

The foregoing is a correct description,

T. Mase Manufacturer.



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010004-010011-0195

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

Jan-30, Feb-21, 24, March-29, April-9, May-28, 30 & 1934.

Dates of Examination of principal parts—Cylinders 19-4-34 30-5-34 Covers 16-4-34 30-5-34 Pistons 31-3-34 Piston rods ✓

Connecting rods 30-1, 21-2, 9-4-34 12-4-34 Crank and Flywheel shaft 30-1, 21-2, 4-2, 29-3-34 Intermediate shaft

Crank and Flywheel shaft, Material Forged steel Identification Mark LLOYD'S NO. 4606 KK 24-3-34 Intermediate shafts, Material Identification Marks

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 Machinery herein described has been constructed under Special Survey in accordance with the Rules and approved plans. The materials and workmanship are good. The machinery has been tried on the test bed under full load, overload, and governor tests when connected to their generators; parallel running tests were also carried out and all found satisfactory and eligible in my opinion for classification.

The machines have been shipped to Nagasaki Works, Mitsubishi Jukogyo Kabushiki Kaisha, where it is intended to install on board ship No. 580, now being built by them.

Stamped as follows:-

Mach no. 463.

LLOYD'S
 No. 66 R

KK. 30-5-34.

This machinery has been efficiently installed on board, & tried under full load, overload Governor & Air compressing tests & found satisfactory. After trial trip this machine with one air compressor was opened up & examined & all found in good order.

Note! This engine is used for pumping up the Aux. Starting air receiver, by using one cylinder - with fuel cut off - as an air compressor. When tried a pressure of 27.5 was obtained after running for a period of 40 minutes.

H. Buchanan
 H. Buchanan
 Surveyor to Lloyd's Register of Shipping.

The amount of Fee ... ¥ 150.-
 Travelling Expenses (if any) £ : : 4.9.34

When applied for,
 10th Aug. 1934
 When received,
 4.9.34

Committee's Minute

TUE. 18 DEC 1934

Assigned

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