

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 7609.

Received at London Office

29 JAN 1932

Date of writing Report 18-12-31 19 When handed in at Local Office 13-1-32 19 Port of Kobe

No. in Survey held at Tama Date, First Survey 13-10-30 Last Survey 8-12-31 19
Reg. Book. Number of Visits 20

on the ^{Single} ~~Triple~~ ~~Quadruple~~ Screw vessel "NACHISAN MARU" Tons { Gross Net

Built at Tama By whom built Mitsui Bussan Kaisha Yard No. 183 When built 1931

Owners Mitsui Bussan Kaisha Port belonging to Kobe

Oil Engines made at Tama By whom made Mitsui Bussan Kaisha Contract No. 183 When made 1931

Generators made at Turumi By whom made Shibaura Denki-sho Ltd. Contract No. 3140755 3140756 3140757 3140758 When made 1931

No. of Sets 3 Engine Brake Horse Power 105 Nom. Horse Power as per Rule Total Capacity of Generators 210 Kilowatts.

OIL ENGINES, &c.—Type of Engines Mitsui B.W. crank engine ^{Piston} 2 or 4 stroke cycle 4 Single or double acting single

Maximum pressure in cylinders 85 kg/cm² Diameter of cylinders 310 Length of stroke 350 No. of cylinders 2 No. of cranks 2

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 360 Is there a bearing between each crank yes

Revolutions per minute 400 Flywheel dia. 1240 mm Weight 2650 kg. Means of ignition automatic Kind of fuel used Californian

Crank Shaft, dia. of journals as per Rule 162 mm as fitted 170 mm Crank pin dia. 170 Crank Webs Mid. length breadth 346 Thickness parallel to axis shrunk Mid. length thickness 95 Thickness around eyehole

Flywheel Shaft, diameter as per Rule 162 as fitted 335 Intermediate Shafts, diameter as per Rule as fitted Thickness of cylinder liners

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

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

Cooling Water Pumps, No. 1 dia. 90 8-90 mm Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes

Lubricating Oil Pumps, No. and size 1 x gear pump

Air Compressors, No. one each engine No. of stages 2 Diameters 320-280 mm Stroke 170 mm Driven by Direct coupled

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 Handhole

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 Internal diameter 400 mm thickness 13 mm

Seamless, lap welded or riveted longitudinal joint Solid drawn Material Steel Range of tensile strength 34.4 Working pressure by Rules 30 kg/cm²

ELECTRIC GENERATORS:—Type Direct current

Pressure of supply 220 volts. Load 318 Amperes. Direct or Alternating Current Direct current

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. 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 31-7-30 Receivers Separate Tanks

SPARE GEAR

As required by the Rules

The foregoing is a correct description,
PER PRO. MITSUI BUSSAN KAISHA, LTD.
J. Ukas
MANAGER, SHIPBUILDING DEPT

Manufacturer.



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Dates of Survey while building

{ During progress of work in shops - - { During erection on board vessel - - - { Total No. of visits	1930 Oct 13 - Nov 7 Dec 22	1931 Feb 23 March 13 June 27, July 3 Aug 13-25-27-31 Oct 2, 5, 15 Nov 9
	Nov 18-21-25-30 Dec 8	
	20	

Dates of Examination of principal parts—Cylinders 15-10-31 Covers 2-10-31 Pistons 27-8-31 Piston rods ✓

Connecting rods 22-12-30 Crank and Flywheel shaft 15-8-31 Intermediate shaft ✓

Crank and Flywheel shaft, Material *Steel* Identification Mark *LLOYD N° 5007 28.5.31 H.A.G.* 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 herein described has been constructed under Special Survey in accordance with the Rules and approved plans; the materials & workmanship are good, and on completion the machinery was efficiently installed in the vessel, coupled to the generator & tested under full working & parallel running conditions and found to be efficient and eligible, in my opinion, for classification.

1m, 7, 28—Transfer.
 (The Streeptors are requested not to write on or below the space for Committee's Minute.)

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

G. Pickering & Self *A.D. Morrison*

Surveyor to Lloyd's Register of Shipping.

Committee's Minute **FRI. 5 FEB 1932**

Assigned *Sec. F. C. Rpt.*



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