

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 5-95-C

Received at London Office

Port of Nanao Shipyard & Engine Works,
East Japan Heavy Ind., Ltd. Date, First Survey 11th July Last Survey 21st Oct., 1951.
 Number of Visits 26
 Tons { Gross 395.18
 Net 245.21
 M.V. "EANDON 1"
 Japan. Nanao Shipyard & Engine Works,
 Ishikawa Prefecture By whom built East Japan Heavy Ind., Ltd. Yard No. NG 30 When built Oct., 1951.
 Thai Navigation Co., Ltd. Port belonging to Bangkok.
 Japan. Koga Engineering Works,
 at Koga, Ibaraki Pref. By whom made East Japan Heavy Ind., Ltd. Contract No. 31329 When made June 1951.
 Japan. Shinko Electric Co., Ltd.
 at Toba, Mie Pref. By whom made Shinko Electric Co., Ltd. Contract No. 150102 When made April, 1951.
 Engine Brake Horse Power 50 (Metric M.N. as per Rule 10) Total Capacity of Generators 30 Kilowatts.
 essential services Yes

450SA
INES, &c.—Type of Engines 3MC, Pre-Combustion Chamber 2 or 4 stroke cycle 4 Single or double acting Single
 in cylinders 50 kg/cm² Diameter of cylinders 150 m/m Length of stroke 200 m/m No. of cylinders 3 No. of cranks 3
 Firing order in cylinders 1-3-2 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 184 m/m
 between each crank Yes Moment of inertia of flywheel (m^2 or Kg.-cm.²) 419350 kg.-cm² Revolutions per minute 750
 Weight 440 kgs. Means of ignition Compression Kind of fuel used Diesel Oil
 as per Rule 86.24 m/m Crank pin dia 92 m/m Mid. length breadth 120 m/m Thickness parallel to axis -
 as fitted 100 m/m Crank Webs 48 m/m Mid. length thickness 48 m/m Thickness round eyehole -
 Shaft, diameter as per Rule - Intermediate Shafts, diameter as per Rule - General armature, moment of inertia (m^2 or Kg.-cm.²) 21 kg.-m²
 as fitted -

vided to prevent racing of the engine when declutched Yes Means of lubrication Forced Kind of damper if fitted -
 fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material Water cooled
 Water Pumps, No. 1 Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes
 g Oil Pumps, No. and size 1, dia. 12 m/m
 ressors, No. 1 No. of stages 2 Diameters 1st stage 4.25" 2nd stage 1.5" Stroke 3" Driven by Generator shaft
 g Air Pumps, No. - Diameter - Stroke - Driven by clutch

RECEIVERS:—Have they been made under Survey Yes State No. of Report or Certificate M3609 AR226, AR227
 er, which can be isolated, fitted with a safety valve as per Rule Yes
 nal surfaces of the receivers be examined Yes What means are provided for cleaning their inner surfaces Hand Hole on End Plate
 ain arrangement fitted at the lowest part of each receiver Yes

essure Air Receivers, No. - Cubic capacity of each - Internal diameter - thickness -
 welded or riveted longitudinal joint - Material - Range of tensile strength - Working pressure by Rules -
 Air Receivers, No. 2 Total cubic capacity 500 lts Internal diameter 400 m/m thickness 12 m/m
 welded or riveted longitudinal joint Riveted Material Steel Plate Range of tensile strength 28-35 T/D Working pressure by Rules 35.8 kg/cm²

TRIC GENERATORS:—Type D.C. Compound, Drip proof, Semi enclosed type
 e of supply 225 volts. Full Load Current 133 Amperes. Direct or Alternating Current Direct
 ng current system, state the periodicity - Has the Automatic Governor been tested and found as per Rule when full load is suddenly thrown
Yes Generators, are they compounded as per Rule Yes is an adjustable regulating resistance fitted in series with each shunt field Yes
 rminals accessible, clearly marked, and furnished with sockets Yes Are they so spaced
 that they cannot be accidentally earthed, short circuited, or touched Yes Are the lubricating arrangements of the generators as per Rule Yes
 erators are under 100 kw. full load rating, have the makers supplied certificates of test Yes and do the results comply with the requirements Yes
 erators are 100 kw. or over have they been built and tested under survey -

driven machinery other than generator 1 - Auxiliary Air Compressor
NS.—Are approved plans forwarded herewith for Shafting 3-8-51 Receivers 8-6-51 (Kobe) Separate Tanks 31-8-51 (Kobe)
 (If not, state date of approval)
 orsional Vibration characteristics if applicable been approved - Armature shaft Drawing No. 3B-102989
 (state date of approval)

RE GEAR For Oil Engine:—1) Suction vlvae with spring and fittings 1 set, 2) Exhaust valve with
 and fittings 1 set, 3) Starting valve complete 1 set, 4) Piston rings for 1 piston, 5) Fuel needle
 2 sets, 6) Studs and nuts for 1 cylinder cover, 7) Gudgeon pin 1, 8) Crank pin bearing bolts and
 2 sets, 9) Crank pin bearing 1 set, 10) Gudgeon pin bush, 11) Main bearing bolts and nuts 2 sets,
 unger, barrel and spring for fuel injection pump 1 set, 12) Delivery valve and spring for fuel
 injection pump, For Air Compressor:—1) piston rings of each size
 each 1 set. 2) Suction and delivery valves of each stage, each
 1 set. 3) Suction and delivery valve springs of
 each stage, each 1 set.

The foregoing is a correct description,

Matsumi

Manufacturer.

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MO-003190-0149

Dates of Survey while building { During progress of work in shops-- } 1950:- Dec., 22, 1951:- April 20, June 27, 28.
{ During erection on board vessel-- } 1951:- July 11, 12, Aug., 2, Sept., 9, 10, 11, 12, 13, 14, 15, 16, Oct., 20, 21, 24, 25, 26, 27, 28, 29.
Total No. of visits Total 26

Dates of Examination of principal parts—Cylinders 20-4-51 Covers 20-4-51 Pistons 28-6-51 Piston rods -
Connecting rods 28-6-51 Crank and Flywheel shafts - Intermediate shafts -

Crank shaft { Material Electric furnace steel forging Tensile strength 38.2 Ton/Sq.in.
Elongation 32.5 % Identification Marks NO.Y946

Flywheel shaft, Material -

Identification marks on Air Receivers

NO.AR226
LLOYD'S TEST
WTP 48.5 KGS
WP 30 KGS
MS E
26-6-51

Identification Marks -

NO.AR227
LLOYD'S TEST
WTP 48.5 KGS
WP 30 KGS
MS E
26-6-51

K.W.T. 70
LLOYD'S TEST
WTP 14 KGS/CM²
WP 7 KGS/CM²
MH E 10-8-51

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 Engine has been constructed under supervision of the Society's Surveyors in accordance with the Rules and approved plans.

The materials and workmanship were found to be satisfactory.

The Generator set has been examined under full working condition in the shop and found satisfactory.

This machinery has been satisfactorily installed in the vessel and tried under working condition.

It is submitted that the machinery of this vessel is eligible to be classed with this class to have the notation of LMC 10-51

C

Screw

Complete

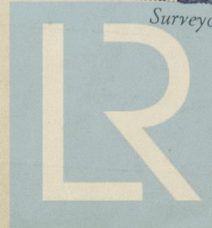
The amount of Fee... (£ 10 : 0 :) When applied for 19
Charged £ 10,000.-
Travelling Expenses (if any) £ : : When received 19

Committee's Minute

TUES. 13 MAY 1952

Assigned

See F.E. mch. rpt.



Surveyor to Lloyd's Register of Shipping.

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