

## REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 8981.

Date of writing Report

19

When handed in at Local Office

19

Port of

Received at London Office

15 APR 1935

No. in Survey held at  
Reg. Book.

Date, First Survey 1st Aug. 1934

Last Survey 21st Feb. 1935

Number of Visits

Single  
on the ~~Tug~~  
Tug Screw vessel

"KONGO MARU"

Tons { Gross  
Net

Built at HARIMA.

By whom built HARIMA S.B. &amp; ENG CO. LTD

Yard No. 205. When built

Owners KOKUSAI KISEN KABUSHIKI KAISHA.

Port belonging to

Oil Engines made at KOBE.

By whom made KOBE STEEL WORKS

Contract No. 222 When made 1934.

Generators made at KOBE

By whom made KAWASAKI DOCKYARD CO.

Contract No. 13685 When made 1934

No. of Sets 1. Engine Brake Horse Power 45.

Nom. Horse Power as per Rule 12.

Total Capacity of Generators 30 Kilowatts.

OIL ENGINES, &amp;c.—Type of Engines HEAVY OIL, AIRLESS INJECTION or 4 stroke cycle 4 Single or double acting SINGLE

Maximum pressure in cylinders 45 KGS/CM<sup>2</sup> Diameter of cylinders 165 MM. Length of stroke 245 MM. No. of cylinders 3. No. of cranks 3

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 182 MM.

Is there a bearing between each crank YES

Revolutions per minute 550 Flywheel dia. 900 MM. Weight 292 KGS.

Means of ignition COMPRESSION Kind of fuel used HEAVY OIL.

Crank Shaft, dia. of journals as per Rule 84 MM

as fitted 100 MM.

Crank pin dia. 100 MM.

Crank Webs Mid. length breadth 145 MM

Mid. length thickness 50 MM

Thickness parallel to axis

Flywheel Shaft, diameter as per Rule

Intermediate Shafts, diameter as per Rule

Thickness of cylinder liners 17.5 MM + 12.5 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. ✓

Is the sea suction provided with an efficient strainer which can be cleared within the vessel ✓

Lubricating Oil Pumps, No. and size 1 GEARED.

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 YES

Can the internal surfaces of the receivers be examined YES

What means are provided for cleaning their inner surfaces

STEAM

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. ONE

Total cubic capacity

90 LITRES

Internal diameter

300 MM.

thickness

9.5 MM.

Seamless, lap welded or riveted longitudinal joint DR. LAP

Material STEEL

Range of tensile strength

44-50 KGS/MM<sup>2</sup>

Working pressure by Rules

39.5 KGS/CM<sup>2</sup>

ELECTRIC GENERATORS:—Type Air prof. self ventilating, Compound wound gen.

Pressure of supply 225 volts. Load 133.5

Amperes. Direct or Alternating Current D.C.

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 2-12-32.

(If not, state date of approval)

Receivers 4-10-34

Separate Tanks ✓

PARE GEAR 1 cylinder cover complete with valves, 3 sets of piston rings for one piston,

1 gudgeon pin bush, 1 crank-pin bearing with bolts &amp; nuts, 1 fuel cam, 1 fuel

valve complete, 1 roller for valve push rod &amp; 1 roller for fuel pump push rod,

1 plunger for fuel pump (with bush), 1 suction &amp; 1 delivery valve for fuel pump,

1 fuel filter element, 1 lub. oil filter element, 1 set of springs, 1 set of joints,

1 set of screws, studs &amp; nuts for cylinder cover, 1 bottom end &amp; 1 main bearing

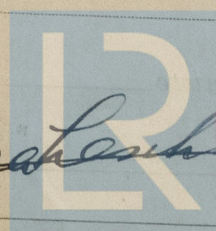
bush, 2 lengths of fuel pipes.

The foregoing is a correct description,

Manufacturer.

J. Lapchinski

010502-010508-0099





1934  
 Dates of Survey while building { During progress of work in shops - - ) Aug. 16<sup>th</sup> Sept 26<sup>th</sup> Oct 5<sup>th</sup> + 25<sup>th</sup> Nov. 5<sup>th</sup> 17<sup>th</sup> 19<sup>th</sup> Dec. 5 + 13<sup>th</sup>  
 { During erection on board vessel - - - ) 1934 Aug. 1st. 16<sup>th</sup>. 1935 Feb. 21<sup>st</sup>.  
 Total No. of visits

Dates of Examination of principal parts—Cylinders 26-9-34. Covers 25-10-34 Pistons 25-10-34 Piston rods ✓

Connecting rods 13-12-34 Crank and Flywheel shaft 13-12-34 Intermediate shaft ✓

Crank and Flywheel shaft, Material SM. STEEL Identification Mark E-5814 D. Intermediate shafts, Material ✓ Identification Marks ✓

Is this machinery duplicate of a previous case YES If so, state name of vessel KOMAKI MARU.

General Remarks (State quality of workmanship, opinions as to class, &c. This engine has been constructed under Special Survey in accordance with the Rules + approved plans. The workmanship + materials are good. On completion this engine was fitted on board the vessel + tried under full working conditions with satisfactory results.

The Surveyors 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...

C. Macpherson & K. Chikigami  
 Surveyors to Lloyd's Register of Shipping.

FRI. 17 MAY 1935  
 FRI. 20 SEP 1935

Committee's Minute

Assigned

FRI. 26 APR 1935

See J.E. Rpt. Koh. 8981



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