

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 10608A

Received at London Office

APR 19 1938

Date of writing Report

19

When handed in at Local Office

19

Port of

Kobe

No. in Survey held at
Reg. Book.

Date, First Survey

2-9-1937

Last Survey

19

Number of Visits

37151 on the ^{Single}
~~Twin~~
^{Trip}
~~Quadruple~~ Screw vessel

SAZUMARU

Tons { Gross 6646
Net 5651

Built at Nagasaki

By whom built Mitsubishi Jukogyo K.K.

Yard No. 700

When built 1938

Owners Nippon Yusen K.K.

Port belonging to Tokyo

Oil Engines made at Kobe

By whom made Mitsubishi Jukogyo K.K.

Contract No.

When made 1934

Generators made at Nagasaki

By whom made Mitsub shi Denki K.K.

Contract No.

When made 1937

No. of Sets 1 Engine Brake Horse Power 45 Nom. Horse Power as per Rule 10 Total Capacity of Generators 30 Kilowatts.

OIL ENGINES, &c.—Type of Engines H.R.W. 3 V.T.P. 2 or 4 stroke cycle 4 Single or double acting Single

Maximum pressure in cylinders 55 Kgs/cm² Diameter of cylinders 150 m/m Length of stroke 230 m/m No. of cylinders 3 No. of cranks 3

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

Is there a bearing between each crank

Revolutions per minute 650

Flywheel dia. 340 m/m

Weight 564 Kgs

Means of ignition Airless

Kind of fuel used Heavy oil

Crank Shaft, dia. of journals as per Rule 85
as fitted 22 92

Crank pin dia. 92

Crank Webs

Mid. length breadth 136

Thickness parallel to axis

Mid. length thickness 48

Thickness around eyehole

Flywheel Shaft, diameter as per Rule
as fittedIntermediate Shafts, diameter as per Rule
as fitted

Thickness of cylinder liners 14 m/m

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

Cooling Water Pumps, No. one

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

Lubricating Oil Pumps, No. and size

one gear type

Air Compressors, No. None

No. of stages

Diameters

Stroke

Driven by

Scavenging Air Pumps, No.

Diameter

Stroke

Driven by

AIR RECEIVERS:—Have they been made under Survey

Yes

State No. of Report or Certificate

No. 6043

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

Hole at Top

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

Internal drain pipe

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 35 Litres

Internal diameter

120 m/m

thickness 7.5 m/m

Seamless, lap welded or riveted longitudinal joint

Seamless

Material Steel

Range of tensile strength 44-55 Kgs/cm²Working pressure by Rules 30 Kgs/cm²

ELECTRIC GENERATORS:—Type

Pressure of supply volts. Full Load Current

Amperes.

Direct or Alternating Current

Direct

If alternating current system, state the periodicity

Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on and off

Yes

Generators, are they compounded as per rule

Yes

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

If the generators are under 100 kw. full load rating, have the Makers supplied certificates of test

and do the results comply with the requirements

If the generators are 100 kw. or over have they been built and tested under survey

PLANS. Are approved plans forwarded herewith for Shafting

18/1/37

Receivers

18/1/37

Separate Tanks

Yes

SPARE GEAR

Sufficient, see builder's list forwarded under separate cover

The foregoing is a correct description,

KOBE WORKS, MITSUBISHI JUKOGYO

KARUSHIKI
KAISHA

M. Sekiz

Manufacturer.

Superintendent Engineer.



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Lloyd's Register
Foundation

009301 - 009310 - 0069

1937
Dates of Survey { During progress of work in shops - - } Sep 27, 11, 13, 14, 22, 24, 28, Oct 6, 9, 11, 19, 25, 29, 30 Nov. 1, 2, 4, 5, 6, 10, 16, 20, 25, 26, 27.
while building { During erection on board vessel - - - }
Total No. of visits

Dates of Examination of principal parts—Cylinders 24-9-37 Covers 18-9-37 Pistons 4-7-37 Piston rods ✓
Connecting rods 1-11-37 Crank and Flywheel shafts 1-11-37 Intermediate shafts ✓
Crank and Flywheel shafts, Material Forged MILD STEEL Identification Marks 788E-1 Lloyd's No 6803 F.I.R.
Intermediate shafts, Material Identification Marks ✓
Identification marks on Air Receivers MT 150 Lloyd's No 6043 R.S.S 8-3-37

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

General Remarks (State quality of workmanship, opinions as to class, &c.)

This engine has been constructed under Special Survey in accordance with the Rules and approved plans.
The Materials and Workmanship are good.
Stamped as follows:—

E. NO 801
LLOYD'S
NO 146
Y.H.R.
27-11-37

The Spear gear is in accordance with the Requirement of the Rules.

This machinery has been efficiently installed on board and tried under full working and overload conditions with satisfactory results.

This machine tried using one cylinder as an air compressor charging auxiliary starting air tank and found satisfactory.

Hand compressor tried charging small air bottle and found satisfactory.

1m, 5, 37.—Transfer.
(The Surveyors are requested not to write on or below the space for Committee Minute.)

The amount of Fee ... £ 150⁰⁰ Kobe : When applied for, 21-7-97
Travelling Expenses (if any) £ : When received, 31-3-38

Committee's Minute

TUE. 26 APR 1938

Assigned

See Vol F.E. 2326

Manada & Fe. Ilenka.
Surveyor to Lloyd's Register of Shipping.



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