

Rpt. 4c.

D.O.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 364.

Date of writing Report 26-4-1949 When handed in at Local Office 3-5-1949 Port of LEEDS.
 Received at London Office 52 MAY 1949
 No. in Reg. Book. 64027. Survey held at on the Twin Triple Screw vessel "JOSEF BERGMAN" Date, First Survey 22-7-48 Last Survey 13-4-1949 Number of Visits 3
 Built at Stockholm By whom built OSKARSHAMNS Bergsunds M.V. Aktief. Yard No. 318- When built 1921.
 Owners O.F. Ahlmark & Co. Port belonging to Karlstad, Sweden.
 Oil Engines made at Leeds By whom made J. & H. McLaren Ltd. Engine No. 21189 Contract No. 30650 When made 1949
 Generators made at London By whom made Britannia Manufacturing Co. Generator Contract No. 15447 When made -
 No. of Sets 1 Engine Brake Horse Power 33 M.N. as per Rule 8.25 Total Capacity of Generators 18 Kilowatts.
 Is Set intended for essential services.

OIL ENGINES, &c.—Type of Engines M.R.2 (Mark 2) 2 or 4 stroke cycle 4 Single or double acting Single
 Maximum pressure in cylinders 750 lbs/sq. "Diameter of cylinders 142 mm. Length of stroke 200 mm. No. of cylinders 2 No. of cranks 2
 Mean indicated pressure 90 lbs/sq. "Firing order in cylinders Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 178
 Is there a bearing between each crank Yes Moment of inertia of flywheel (16 m² or Kg.-cm.²) - Revolutions per minute 750
 Flywheel dia. 3' - 0" Weight 604 lbs. Means of ignition Compression Kind of fuel used Diesel Oil
 Crank Shaft, dia. of journals as per Rule approved 85 mm. Crank pin dia. 85 mm. Crank Webs Mid. length breadth 130 mm. Thickness parallel to axis -
 as fitted 85 mm. Fitted on end Mid. length thickness 43 mm. shrunk Thickness round eye-holes -
 Flywheel Shaft, diameter of crankshaft Intermediate Shafts, diameter as per Rule - General armature, moment of inertia (16 m² or Kg.-cm.²) -
 as fitted -

Are means provided to prevent racing of the engine when declutched Yes Means of lubrication Forced Kind of damper if fitted -
 Are the cylinders fitted with safety valves No Are the exhaust pipes and silencers water cooled or lagged with non-conducting material -
 Cooling Water Pumps, No. 1 Plunger Type Is the sea suction provided with an efficient strainer which can be cleared within the vessel -
 Lubricating Oil Pumps, No. and size 1 Gear Type
 Air Compressors, No. No. of stages Diameters Stroke Driven by
 Scavenging Air Pumps, No. Diameter Stroke Driven by

AIR RECEIVERS:—Have they been made under Survey State No. of Report or Certificate
 Is each receiver, which can be isolated, fitted with a safety valve as per Rule
 Can the internal surfaces of the receivers be examined What means are provided for cleaning their inner surfaces
 Is there a drain arrangement fitted at the lowest part of each receiver
 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. Total cubic capacity Internal diameter thickness
 Seamless, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules

ELECTRIC GENERATORS:—Type Compound wound, Drip proof, Continuous rating.
 Pressure of supply 220 volts. Full Load Current 82 Amperes. Direct or Alternating Current Direct
 If alternating current system, state the periodicity. Has the Automatic Governor been tested and found as per Rule when full 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 London Certificate No. D.1957 dated 14-2-49. and do the results comply with the requirements. Yes
 If the generators are 100 kw. or over have they been built and tested under survey
 Details of driven machinery other than generator

PLANS.—Are approved plans forwarded herewith for Shafting 4-11-47 Receivers - Separate Tanks 21-8-48
 (If not, state date of approval)
 Have Torsional Vibration characteristics if applicable been approved - Armature shaft Drawing No.
 (state date of approval)
SHAFTING GEAR As per Rule Requirements.

The foregoing is a correct description,

W. A. Dwyer
 FOR J. & H. MCLAREN LTD.

Manufacturer.



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Dates of Survey while building { During progress of work in shops - - 23-7-48, 22-7-48, 13-4-49.
During erection on board vessel - - -
Total No. of visits 3

Dates of Examination of principal parts—Cylinders 23-7-48 Covers 22-7-48 Pistons 13-4-49 Piston rods -
Connecting rods 13-4-49 Crank and Flywheel shafts 13-4-49 Intermediate shafts -

Crank shaft { Material O.H. Steel Tensile strength 51.4 tons/sq.in.
Elongation 24.0% Identification Marks Lloyd's 27828 B.H. 17-2-48.

Flywheel shaft, Material Identification Marks

Identification marks on Air Receivers

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.)

This engine has been constructed under special survey of tested materials in accordance with approved Plans, Secretary's letters and the requirements of the Rules.

The materials and workmanship are good, and the engine was found satisfactory when tested in the shop under full working conditions.

The Generator set is, in my opinion, suitable for installation in the above vessel.

5m. 4. 18. - T. (MADE AND PRINTED IN ENGLAND)

(The Surveyors are requested not to write on or below the

The amount of Fee £ 4 : 0 : 0 { When applied for 3-5- 19 49
Travelling Expenses (if any) £ : 8 : 0 { When received 19

Committee's Minute

Assigned

No Action

TUES. 22 APR 1952

See No. 109228

R. W. Lellan

Surveyor to Lloyd's Register of Shipping.



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