

RECEIVED

276

Rpt. 4c.
I.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 Survey held at Reg. Book. 64027. on the Twin Triple Quadruple Screw vessel "JOSEF BERGENDORFF" 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. Tons Gross 724. Net 338.

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 Brittanias 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 -

Flywheel Shaft, diameter of crankshaft Intermediate Shafts, diameter as per Rule - General armature, moment of inertia (16 m² or Kg.-cm.²) -

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 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

Have Torsional Vibration characteristics if applicable been approved (state date of approval) Armature shaft Drawing No.

SHAFTING GEAR As per Rule Requirements.

The foregoing is a correct description,
M. A. Duffin
Manufacturer.

FOR J. & H. MCLAREN LTD.



004635 - 004644 - 0264

40 364

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. 1. 1. - 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.



Lloyd's Register Foundation