

# REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 104037

10 FEB 1937

Received at London Office 10 FEB 1937

Writing Report 9.2.37 When handed in at Local Office Port of London  
Survey held at Newbury Date, First Survey 4 November 1936 Last Survey 9 Feb 1937

on the Single Twin Triple Quadruple Screw vessel m/v. GRIT. Tons Gross 501 Net 254

Greenock By whom built G. Brown & Co. Yard No. When built 1934/9  
F. T. Leonard & Sons Ltd Port belonging to London

Engines made at Newbury By whom made Newbury Diesel Co. Ltd. Contract No. 3246/A When made 1936  
Parts made at By whom made Contract No. When made

Engines Brake Horse Power 30 Nom. Horse Power as per Rule 8.5 Total Capacity of Generators Kilowatts.

ENGINES, &c. Type of Engines Diesel injection 2 or 4 stroke cycle 4 Single or double acting Single  
Pressure in cylinders 700 lb/sq in Diameter of cylinders 10.5 in Length of stroke 15.2 in No. of cylinders 3 No. of cranks 3

Bearings, adjacent to the Crank, measured from inner edge to inner edge 12.8 in Is there a bearing between each crank 1/2  
Revs per minute 1000 Flywheel dia. 63.4 in Weight 2.5 cwt Means of ignition Compression Kind of fuel used Heavy oil

Crankshaft, dia. of journals as per Rule 60.5 in as fitted 62.7 in Crank pin dia. 62.7 in Crank Webs Mid. length breadth 8.4 in Thickness parallel to axis  
as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted Thickness of cylinder liners 10.7 in

Is there any other arrangement fitted to prevent racing of the engine when declutched 1/2 Means of lubrication Greased  
Cylinders fitted with safety valves No Are the exhaust pipes and silencers water cooled or lagged with non-conducting material

Water Pumps, No. 1 S.A. 4.5 in dia 15 in stroke 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 0.7 gal per minute

Compressors, No. No. of stages Diameters Stroke Driven by  
Suction Air Pumps, No. Diameter Stroke Driven by

RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule  
Internal surfaces of the receivers be examined What means are provided for cleaning their inner surfaces

Drain arrangement fitted at the lowest part of each receiver  
Pressure Air Receivers, No. Cubic capacity of each Internal diameter thickness

Cap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules  
Air Receivers, No. Total cubic capacity Internal diameter thickness

Cap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules  
ELECTRIC GENERATORS:—Type Heating generator onboard

Voltage of supply volts Full Load Current Amperes Direct or Alternating Current  
Regulating current system, state the periodicity Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on and off

Resistors, are they compounded as per rule Is an adjustable regulating resistance fitted in series with each  
Are all terminals accessible, clearly marked, and furnished with sockets

Are the terminals spaced or shielded that they cannot be accidentally earthed, short circuited, or touched Are the lubricating arrangements of the generators as per Rule  
Generators are under 100 kw. full load rating, have the makers supplied certificates of test and do the results comply with the requirements

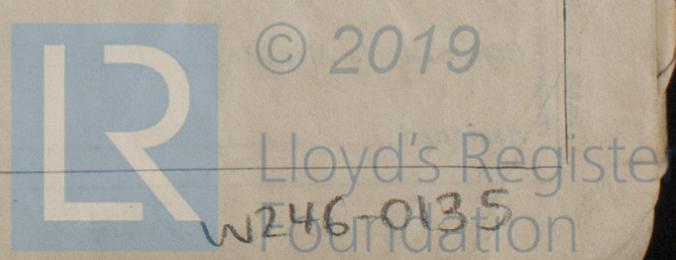
Generators are 100 kw. or over have they been built and tested under survey  
Are approved plans forwarded herewith for Shafting 5-1-35 Receivers Separate Tanks

GEAR 1 set piston rings, 1 inlet valve, 1 exhaust valve, 1 fuel injector and nozzle.  
1 set studs & nuts for cylinder head, 1 guide gear pin, 1 bottom end bearing, 2 bottom end

bolts & nuts, 1 set working parts for one fuel pump. 2 main bearing studs & nuts,  
1 set springs for fuel pump and injector.

The foregoing is a correct description, For & on behalf of THE NEWBURY DIESEL Co. LTD.

Secretary. Manufacturer.



Dates of Survey while building { During progress of work in shops - - } 1936 Nov. 4. 1937 Feb. 9.  
 { During erection on board vessel - - - }  
 { Total No. of visits }

Dates of Examination of principal parts—Cylinders 4. 11. 36 Covers 4. 11. 36 Pistons 4. 11. 36 Piston rods  
 Connecting rods 4. 11. 36 Crank and Flywheel shaft 4. 11. 36 Intermediate shaft  
 Crank and Flywheel shafts, Material *S. D. Steel.* Identification Mark LLOYDS 6690  
MAB 26-10-36  
 Intermediate shafts, Material Identification Marks  
 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.) *Workmanship good.*  
 The materials used in the construction of this three cylinder auxiliary engine have been made at works approved by the Committee and tested by the Surveyor to this Society or required by the Rules and as far as can be seen they are sound and free from defects.  
 This engine has now been fitted and coupled to existing dynamo on board, tried under full load and found satisfactory.

Note: This engine is to replace a Remell Newberry engine No. 3143, original which was badly damaged. Its crank case, headplate & one cylinder broken. one connecting rod bent & its bottom end bolts broken also one balance weight broken off a crank web. Unintentionally one part gave out first in bottom end bolts or studs securing balance

Attached hereto. Copy of crank shaft forging certificate.

The amount of Fee ... £ 4. 4. 0  
 Travelling Expenses (if any) £ : :  
 Committee's Minute FRI 19 FEB 1937  
 Assigned *As now printed*

When applied for, 19 10 FEB 1937  
 When received, 19 22 5 37  
*Geo. A. Parry and Edward Ford*  
 Surveyor to Lloyd's Register of Shipping.



Im. 2. 36. - Transfer. (The Surveyors are requested not to write on or below the space for Committee Minutes.)