

# REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

Bel 9717  
No. 90,901

114754

24 DEC 1926

Writing Report Dec. 24 19 26 When handed in at Local Office 24 DEC 1926 Port of London  
Survey held at Bedford Date, First Survey August 9<sup>th</sup> Last Survey Dec. 17<sup>th</sup> 19 26  
Number of Visits

on the Single Screw vessel "PORT FREEMANTLE" Tons Gross  
Triple  
Quadruple  
at Belfast By whom built Wakman, Clark & Co Yard No. 489 When built 1927  
Commonwealth & Dominion Line, Ltd. Port belonging to London  
Engines made at Bedford By whom made Jess. W. H. Allen Sons & Co Contract No. 42901/1/3 When made 1926  
Motors made at Bedford By whom made Jess. W. H. Allen Sons & Co Contract No. 42901/1/3 When made 1926  
Sets 3 Engine Brake Horse Power 375 each set Nom. Horse Power as per Rule 100 each set Total Capacity of Generators 250 each set Kilowatts. 750

ENGINES, &c.—Type of Engines Diesel (Barnister Main.) 2 or 4 stroke cycle 4 Single or double acting S.A.  
Pressure in cylinders 530 lbs/sq in Diameter of cylinders 4 10 7/8 Length of stroke 5 20 7/8 No. of cylinders 4 No. of cranks 4  
Bearings, adjacent to the Crank, measured from inner edge to inner edge 4 7 6 7/8 Is there a bearing between each crank Yes  
Revolutions per minute 230 Flywheel dia. 2 180 7/8 Weight 6 Tons Means of ignition Compression Kind of fuel used Diesel  
Shaft, dia. of journals as per Rule 223 7/8 Crank pin dia. 240 7/8 Crank Webs Mid. length breadth 380 7/8 Thickness around eye Solid forged.  
Main Shaft, diameter as per Rule 223 7/8 Intermediate Shafts, diameter as fitted 235 7/8 Thickness of cylinder liners 34 1/2 7/8  
Governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication Forced, geared from engine  
Cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material lagged  
Cooling Water Pumps, No. None Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes  
Lubricating Oil Pumps, No. and size One driven off each engine  
Compressors, No. 1 on each engine No. of stages 3 Diameters 62, 285, 325 7/8 Stroke 210 7/8 Driven by Engine  
Suctioning Air Pumps, No. None Diameter ✓ Stroke ✓ Driven by ✓

RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule Fusible Plug  
Internal surfaces of the receivers be examined Yes What means are provided for cleaning their inner surfaces Removal of top & bottom fittings  
Is a drain arrangement fitted at the lowest part of each receiver Yes  
Pressure Air Receivers, No. 3 Cubic capacity of each 90 litres Internal diameter 9 3/4" thickness 3/8  
Material Seamless Steel Range of tensile strength 33 to 39 Working pressure by Rules 1167  
Suctioning Air Receivers, No. 3 Total cubic capacity 230 litres Internal diameter 14" thickness 1/2"  
Material Seamless Steel Range of tensile strength 26 to 30 Working pressure by Rules 897  
(See Sec. 24. 20-2-26)

ELECTRIC GENERATORS:—Type Open  
Voltage of supply 220 volts. Load 1135 Amperes. Direct or Alternating Current Direct  
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 Compo. & I.P.  
Do they over compound 5 per cent. No, if not compound wound state distance between each generator.  
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  
Approved plans forwarded herewith for Shafting No, See Sec. 24. 1-4-26 Receivers No Separate Tanks ✓

SHAFTING AND GEAR  
See attached List K2/69124

The foregoing is a correct description,

Reinst.

For W. H. ALLEN, SONS & Co., Ltd.

Manufacturer.



© 2020  
Lloyd's Register  
Foundation

00354A-003555-0129

Dates of Survey while building { During progress of work in shops - - } May 3. Aug 9. 13. 20. 25. 27. 31. Sep. 10. 17. Oct. 8. 26. Nov. 4. 19. Dec. 17. = Six full visits.  
 { During erection on board vessel - - - }  
 { Total No. of visits }

Dates of Examination of principal parts—Cylinders Aug. 9, 31. Nov. 19. Covers Aug. 9, 13, 31. Sep. 10. Nov. 19. Pistons Aug. 13. Piston rods ✓

Connecting rods May 3<sup>d</sup> Crank and Flywheel shaft Aug. 9, 20, 25, 27. Sep. 17. Intermediate shaft ✓

Crank and Flywheel shaft, Material Solid forged Steel Identification Mark (1) 675226 (2) 29-8-26 (3) 31-5-26  
 LLOYDS TEST 1280 29-8-26 31-5-26 17-9-26

Is this machinery duplicate of a previous case No. If so, state name of vessel

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

This machinery has been constructed under Special Survey in accordance with approved plans and Rule requirements.

The workmanship and material, so far as can be seen, are good and satisfactory bench trials have been carried out under survey.

The three sets which are numbered 42901/1/2/3 have been despatched to Belfast where they are to be installed on board and, in my opinion, will be eligible for inclusion in the classification and record of T.M.C. of the vessel.

These engines have been efficiently installed on board the vessel and tried out under working conditions at both morning and sea trials. The vessel is now, in my opinion, eligible for record in T.M.C. of 27.  
 R Lee Amear

1m. 7.20—Transfer. (The Surveymen are requested not to write on or below the space for Committee's Minute.)

The amount of Fee ... £ 32-2-0  
 Travelling Expenses (if any) £ 8-5-5  
 When applied for, 24 DEC 1926  
 When received, 23/4/1927

Richard Palmer  
 Surveyor to Lloyd's Register of Shipping.

1048. 12 APR 1927

Committee's Minute  
 Assigned

See Bel. Rpt. 9717

