

Newcastle-on-Tyne 94702

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 8813

pt. 4c.

Received at London Office 22 JAN 1937
 Date of writing Report JAN. 18 1937 When handed in at Local Office JAN. 21 1937 Port of MANCHESTER
 Date, First Survey DEC 19 1936 Last Survey JAN. 5 1937
 Number of Visits 2

No. in Survey held at 8580 on the Single Screw vessel
 Reg. Book. (Supl.) Triple
Quadruple

"HULLGATE"

Tons { Gross 409
 Net 219

Built at NEWCASTLE-ON-TYNE. By whom built MESSRS. CLELANDS (SUCCESSORS) Yard No. 35 When built 1937
 Owners HULL GATES SHIPPING CO. Port belonging to HULL

Oil Engines made at ASHTON-U. LYNE. By whom made NATIONAL GAS OIL ENGINE CO. ENGINE No. 45300. When made
 Generators made at MANCHESTER By whom made LANCASHIRE DYNAMO CRYPTO. GENERATOR No. 122615 When made 1936
 No. of Sets ONE Engine Brake Horse Power 28. Nom. Horse Power as per Rule 8 Total Capacity of Generators 15 Kilowatts.

TYPE ENGINES, &c. Type of Engines VERTICAL SOLID INJECTION 2 or 4 stroke cycle 4 Single or double acting SINGLE
 Maximum pressure in cylinders 630 LBS. Diameter of cylinders 4 1/8" Length of stroke 6" No. of cylinders 3 No. of cranks 3
 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 4 3/4" Is there a bearing between each crank YES
 Revolutions per minute 1000. Flywheel dia. 25" Weight 340 LBS. Means of ignition COMPRESSION Kind of fuel used HEAVY OIL
 Crank Shaft, dia. of journals as per Rule APPROVED. 2 3/8" Crank pin dia. 2 3/8" Mid. length breadth 3 1/4" Thickness parallel to axis SOLID
 as fitted 2 3/8" Crank Webs Mid. length thickness 1 5/16" shrunk Thickness around eye hole 3/8"
 Flywheel Shaft, diameter as per Rule Intermediate Shafts, diameter as fitted Thickness of cylinder liners 3/8"

Is there 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 NO 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. 78 GALS/HR.
 Air Compressors, No. - No. of stages - Diameters - Stroke - Driven by -
 Scavenging Air Pumps, No. - Diameter - Stroke - Driven by -

AIR RECEIVERS:—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
 Pressure of supply 110 volts. Load 136 Amperes. Direct or Alternating Current DIRECT.
 If 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 YES
 Are they over compounded 5 per cent. YES, if not compound wound state distance between each generator -
 Is an adjustable regulating resistance fitted in series with each shunt field - Are all terminals accessible, clearly marked, and furnished with sockets -

Are they so spaced or shielded that they cannot be accidentally earthed, short circuited, or touched - Are the lubricating arrangements of the generators as per Rule YES
 Are approved plans forwarded herewith for Shafting YES Receivers - Separate Tanks -
 (If not, state date of approval)
 GEAR AS PER RULE REQUIREMENTS.

The foregoing is a correct description,
 THE NATIONAL GAS AND OIL ENGINE CO. LIMITED.

Manufacturer.



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Lloyd's Register
Foundation

W415-0171

Dates of Survey while building { During progress of work in shops - - } 1 Dec 19 1936. JAN 5. 1937.
{ During erection on board vessel - - - }
Total No. of visits 2.

Dates of Examination of principal parts—Cylinders 19-12-36 Covers 19-12-36 Pistons 19-12-36 Piston rods —

Connecting rods 19-12-36 Crank and Flywheel shaft 19-12-36 Intermediate shaft —

Crank and Flywheel shafts, Material STEEL. Identification Mark LLOYDS. 7275. M.A.B. 9-12-36.

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.)

THIS ENGINE HAS BEEN CONSTRUCTED UNDER SPECIAL SURVEY OF TESTED MATERIALS AND IS IN ACCORDANCE WITH THE SECRETARY'S LETTERS, APPROVED PLANS AND RULE REQUIREMENTS. THE MATERIALS AND WORKMANSHIP ARE OF A GOOD QUALITY AND THE SET WHEN TESTED IN SHOP UNDER FULL LOAD CONDITIONS SHOWN GOOD RESULTS. IN OUR OPINION THIS ENGINE IS SUITABLE TO BE PLACED ON BOARD A VESSEL, CLASSED WITH THIS SOCIETY, FOR THE PURPOSE INTENDED. CERTIFICATE OF TEST FOR DYNAMO IS ATTACHED. (TO ELEC. RPT.)

This engine has now been installed on board the above vessel and has been satisfactorily tested under working conditions and in my opinion is satisfactory for the purpose intended - viz supplying power for the electric cargo winches.

Newcastle 27/1/34

G. Dixon.

The amount of Fee ... £ 4 : 4 : 0 When applied for, 21.1.37 M.
Travelling Expenses (if any) £ 4 : 0 When received, as per letter LON/NWL 30.1.19.37
Committee's Minute FRI 12 MAR 1937
Assigned See Nwa J.E. 94702

Minute book + G.R. Chappel
Surveyor to Lloyd's Register of Shipping.

