

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 10,157

Date of writing Report 11th August 1940 When handed in at Local Office 19th Aug. 1940 Port of MANCHESTER Received at London Office 21 1940
 No. in Survey held at ASHTON. U. L. YNE. Date, First Survey 30th May 1940 Last Survey 11th August 1940
 No. of Visits 2

Single on the Twin Triple Quadruple Screw vessel
 Built at BOWLING, GLASGOW. By whom built SCOTT & SONS Yard No. 358 When built 1940.
 Owners Port belonging to

Oil Engines made at ASHTON. U. L. YNE By whom made NATIONAL GAS & OIL ENG. Co. ENGINE Contract No. 53/08. When made 1940.
 Generators made at NORTCH. By whom made LAURENCE SCOTT GENERATOR Contract No. 8/853. When made 1940.
 No. of Sets ONE Engine Brake Horse Power 28 Nom. Horse Power as per Rule 8. Total Capacity of Generators 18 Kilowatts.

L ENGINES, &c.—Type of Engines VERTICAL SOLID INJECTION 2 or 4 stroke cycle 4 Single or double acting SINGLE
 Maximum pressure in cylinders 750 LBS/SQ IN Diameter of cylinders 4.125" 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 25/32" Is there a bearing between each crank YES
 Revolutions per minute 1000. Flywheel dia. 25" Weight 337 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" Crank Webs Mid. length breadth 3 1/4" Thickness parallel to axis SOLID
 as fitted 2 3/8" Mid. length thickness 1 5/16" shrunk Thickness around eye-hole 3/8"
 Flywheel Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule Thickness of cylinder liners 3/8"
 as fitted

Is 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 GEAR TYPE, APPROX. 65 GALLS PER HOUR
 Air Compressors, No. ONE No. of stages 2 Diameters 2 3/8" & 4" Stroke 4" Driven by AIR ENG.
 SAVING Air Pumps, No. — Diameter — Stroke — Driven by —

R RECEIVERS:—Have they been made under Survey State No. of Report or Certificate
 Each receiver, which can be isolated, fitted with a safety valve as per Rule
 Are 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 220. volts. Full Load Current 73. Amperes. Direct or Alternating Current DIRECT
 Alternating current system, state the periodicity - Has the Automatic Governor been tested and found efficient when the whole 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
 Is the 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 the generators under 100 kw. full load rating, have the Makers supplied certificates of test NOT RECEIVED and do the results comply with the requirements
 Are the generators 100 kw. or over have they been built and tested under survey

ANS. Are approved plans forwarded herewith for Shafting 12-1-40. Receivers - Separate Tanks 12-1-40
 (If not, state date of approval)
 GEAR

The foregoing is a correct description.
 THE NATIONAL GAS AND OIL ENGINE Co. Ltd.
 C. K. Gwill

Manufacturer.

Dates of Survey while building { During progress of work in shops - - } 1940 May 30. Aug 11
{ During erection on board vessel - - - } 2
Total No. of visits

Dates of Examination of principal parts—Cylinders 30.5.40 Covers 30.5.40 Pistons 30.5.40 Piston rods
Connecting rods 30.5.40 Crank and Flywheel shafts 30.5.40 Intermediate shafts
Crank and Flywheel shafts, Material OH. 1407 STEEL Identification Marks LLOYDS / 20. WTA. 21.5.40
Intermediate shafts, 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 AND IS IN ACCORDANCE WITH THE SECRETARY'S LETTER APPROVED PLANS AND RULE REQUIREMENTS. THE MATERIALS AND WORKMAN ARE OF A GOOD QUALITY AND THE ENGINE WHEN TESTED IN SHOP UNDER FULL LOAD CONDITIONS SHOWN SATISFACTORY RESULTS. IN MY OPINION THIS ENGINE IS SUITABLE TO BE PLACED ON BOARD A VESSEL, CLASSED WITH THIS SOCIETY, FOR THE PURPOSE INTENDED.

The amount of Fee ... £ 5:5:0 When applied for, 17.8.1940 M.

Travelling Expenses (if any) £ 10:0 When received, 21.10.1940 (per L. W. W.)

Committee's Minute

GLASGOW

25 NOV 1941

Assigned

SEE ACCOMPANYING MACHINERY REPORT.

Alvion
Surveyor to Lloyd's Register of Shipping.



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Foundation