

pt. 4c.

4 AUG 1944

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 11904.

Date of writing Report 8. 1. 1944 When handed in at Local Office 1-8-1944 Port of MANCHESTER. Received at London Office 23 AUG 1944
No. in Survey held at PATRICROFT, MANCHESTER. Date, First Survey 12. 11. 43. Last Survey 15. 12. 1943.
Reg. Book. Number of Visits Five
on the ^{Single} ~~Twin~~ ^{Triple} ~~Quadruple~~ Screw vessel COASTING TANKER. "EMPIRE TAPLEY." Tons { Gross
Net
Built at NORTHWICH. By whom built I. Pimblott & Sons Ltd. Yard No. 662 When built 1944
Owners - Port belonging to -
Oil Engines made at PATRICROFT. By whom made L. Gardner & Sons Ltd. Engines Nos. 60430-When made 1943.
Generators made at - By whom made - both Contract No. 60431. When made -
No. of Sets 2 Engine Brake Horse Power 2 x 21 Com. Horse Power as per Rule 12 Total Capacity of Generators - Kilowatts.

622 OIL ENGINES, &c. Type of Engines Heavy Oil. 2 or 4 stroke cycle 4 Single or double acting Single.
Maximum pressure in cylinders 850 lbs. Diameter of cylinders 4.25" Length of stroke 6" No. of cylinders 2 No. of cranks 2
Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 5.75" Is there a bearing between each crank Yes.
Revolutions per minute 1080 Flywheel dia. 22" Weight 304 lbs. Means of ignition Compression Kind of fuel used Heavy Oil.
Crank Shaft, dia. of journals as per Rule Approved & as fitted 2.625" Crank pin dia. 2.625" Crank Webs Mid. length breadth 4" Thickness parallel to axis -
Mid. length thickness 1.375" Thickness around eyehole -
Flywheel Shaft, diameter as per Rule Flywheel mounted on Crankshaft Intermediate Shafts, diameter as per Rule - Thickness of cylinder liners .096"
as fitted Coupling.
Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes. Means of lubrication Forced.
Engine started by hand.
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 each Engine. Is the sea suction provided with an efficient strainer which can be cleared within the vessel -
Lubricating Oil Pumps, No. and size One each Engine - Gear Type. 13 Pints per min.

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
Pressure of supply volts. Full Load Current Amperes. Direct or Alternating Current
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
Generators, are they compounded as per rule 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
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
If the generators are 100 kw. or over have they been built and tested under survey

PLANS. Are approved plans forwarded herewith for Shafting 21.9.43. Receivers - Separate Tanks -
(If not, state date of approval)

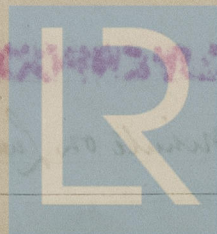
SPARE GEAR AS PER RULE REQUIREMENTS.

The foregoing is a correct description,

For & on behalf of L Gardner & Sons Ltd.

R E Jones

Manufacturer.



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Dates of Survey while building { During progress of work in shops - - 12.11.43, 16.11.43, 19.11.43, 13.12.43, 15.12.43. During erection on board vessel - - - } Total No. of visits

Dates of Examination of principal parts—Cylinders 12.11.43 16.11.43. Covers 16.11.43. Pistons 19.11.43. Piston rods -

Connecting rods 12.11.43. 19.11.43. Crank and Flywheel shafts 12.11.43. Intermediate shafts -

Crank and Flywheel shafts, Material O. H. Steel. Identification Marks LLOYD'S C.229 & C.60. ELK, WJF, 20

Intermediate shafts, Material - Identification Marks -

Identification marks on Air Receivers -

Is this machinery duplicate of a previous case Yes. If so, state name of vessel J. PIMBLOTT Yard No. 655. Mch. Rpt. 11

General Remarks (State quality of workmanship, opinions as to class, &c. THESE ENGINES HAVE BEEN CONSTRUCTED UNDER SPECIAL SURVEY, OF TESTED MATERIAL IN ACCORDANCE WITH THE SECRETARY'S LETTERS, APPROVED PLANS AND REQUIREMENTS OF THE RULES.

THE MATERIALS AND WORKMANSHIP ARE GOOD AND THE ENGINES WERE FOUND TO BE SATISFACTORY WHEN TESTED IN SHOP UNDER FULL LOAD CONDITIONS. THE ENGINES ARE SUITABLE, IN MY OPINION, FOR FITTING ON BOARD A VESSEL BUILDING TO THE CLASS OF THIS SOCIETY.

NOTE. THESE ENGINES ARE INTENDED FOR DRIVING CARGO PUMPS TO BE SUPPLIED BY THE SHIP BUILDERS.

ENGINE NO. 60430 ALSO DRIVES A ROTARY BILGE PUMP.

The amount of Fee ... £ 8 : 8 : When applied for, 1/8/1944
Travelling Expenses (if any) £ : 10 : When received, 19

W. J. Ferguson
Surveyor to Lloyd's Register of Shipping.

Committee's Minute LIVERPOOL 20 FEB 1945
Assigned See Minute on Liverpool I.E. Machinery Repors.



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