

# REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 111873

27 APR 1944

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Received at London Office 27 APR 1944 16 NOV 1944

Date of writing Report

When handed in at Local Office

Port of LONDON

No. in Survey held at Reg. Book 1944

Date, First Survey 29 Dec 1943 Last Survey 14 APRIL 1944

Number of Visits 19

on the Single Triple Screw vessel  
D.O. Quadruple

EMPIRE RAWLINSON

Tons Gross Net

Built at Glasgow By whom built J. G. Kincaid & Co Ltd Yard No. 1551 When built 1944

Owners M. O. W. T. Port belonging to

Oil Engines made at Bedford By whom made W. H. Allen Sons & Co Ltd Contract No. 44686 When made 1944

Generators made at Bedford By whom made W. H. Allen Sons & Co Ltd Contract No. 44687 When made 1944

No. of Sets 3 Engine Brake Horse Power 311 Nom. Horse Power as per Rule Total Capacity of Generators 210 Kilowatts.

IL ENGINES, &c. Type of Engines Heavy Fuel 2 or 4 stroke cycle 4 Single or double acting Single

Maximum pressure in cylinders 750 lbs Diameter of cylinders 240 mm Length of stroke 300 mm No. of cylinders 7 No. of cranks 7

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 282 mm Is there a bearing between each crank Yes

Revolutions per minute 600 Flywheel dia. 1200 mm Weight 3500 lbs Means of ignition Perfunctory Kind of fuel used Diesel Pool

Crank Shaft, dia. of journals as per Rule 140 mm Crank pin dia. 150 mm Crank Webs Mid. length breadth 216 mm Thickness parallel to axis 70 mm

Flywheel Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule Thickness of cylinder liners 192

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 Yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material

Cooling Water Pumps, No. on engine Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Lubricating Oil Pumps, No. and size

Air Compressors, No. No. of stages Diameters Stroke Driven by

Scavenging Air Pumps, No. Diameter Stroke Driven by

IR 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. one Total cubic capacity 5 cu ft Internal diameter 18" thickness 5/16"

Seamless, lap welded or riveted longitudinal joint Material Steel Range of tensile strength 26/30 Working pressure by Rules 300 lbs sq in

ELECTRIC GENERATORS:—Type

Pressure of supply 220 volts Full Load Current Amperes Direct or Alternating Current Direct

If 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

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 23. 3. 39 Receivers Separate Tanks

SPARE GEAR One complete set of tools for one cylinder, 4 Nozzles, one set of piston rings

one piston, one set of cylinder head studs and nuts for one cylinder, one big end

bearing with bolts, one gudgeon pin, one top end bearing, two bolts and nuts

for main bearing, one fuel pump, one fuel injector pipe, 10 span wrenches for fresh water

and lubricating oil cooler, two brush holders and one set of brushes for one machine

The foregoing is a correct description,

W. H. ALLEN, SONS & CO., LTD.,

Manufacturer.

R. K. Clarke. 19.4.44.

Charles J. Hunter  
Greenwich

Lloyd's Register  
Foundation

007222-007730-0078



Dates of Survey while building { During progress of work in shops - - } 1943: Dec 29 1944: Jan 4, 7, 11, 15, 14, 21, 25, 28 Feb 1, 14, 15, 22, 25 Mar 3, 7 Apr 4, 7, 14.  
{ During erection on board vessel - - - }  
Total No. of visits 19 (in shops)

Dates of Examination of principal parts—Cylinders 29.12.43, 7.1.44, 4.1.44, 21.1.44, 15.1.44, 1.2.44, 18.2.44, 14.2.44 Covers 18.1.44, 14.2.44, 21.1.44, 25.1.44, 14.2.44, 18.2.44, 1.2.44, 14.2.44 Pistons 18.1.44, 1.2.44, 14.2.44 Piston rods

Connecting rods 21.1.44, 14.2.44, 21.1.44 Crank and Flywheel shaft 21.1.44, 25.1.44, 14.2.44 Intermediate shaft

Crank and Flywheel shafts, Material

Identification Marks

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.) The generator engine was constructed under special survey in accordance with the requirements of the Rules and approved plans; The workmanship is good. The steel was made at Works approved by the Committee, and on completion the set was tested upon the bench under full and overload condition and found satisfactory.

The generator sets have been dispatched to Glasgow for fitting on the board vessel. T155.

Marks on Air Receiver

S 11952  
LLOYDS TEST  
600 lb  
W P 300 lb  
J N B 12.3.43.

The amount of Fee ... £ 31 : 10 : 27 APR 1944  
Travelling Expenses (if any) £ 7 : 8 : 9  
When applied for,  
When received,  
19

R. W. Boomer.

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

GLASGOW 14 NOV 1944

Assigned



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