

RECEIVED

NOV 1948
Rpt. 4c.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 117404

Date of writing Report 19 Nov 1948 When handed in at Local Office 19 Nov 1948 Port of London
Survey held at London
Date, First Survey 14-10-48 Last Survey 9 November 1948
Number of Visits 3
Screw vessel "OTTOBANK"
Tons { Gross
Net
Built at By whom built Yard No. When built
Owners
Port belonging to
Oil Engines made at Dagenham By whom made Russell Newbery & Co. Ltd. ENG NO 30AL80
Contract No. 955 When made 1948
Generators made at By whom made Campbell Schwann Contract No. D07264 When made
and pitch of Sets 1 Engine Brake Horse Power 27 M.N. as per Rule Total Capacity of Generators Kilowatts
Set intended for essential services

OIL ENGINES, &c.—Type of Engines High speed Compression ignition 2 or 4 stroke cycle 4 Single or double acting Single
Maximum pressure in cylinders 850 lbs/sq in Diameter of cylinders 4 1/2" Length of stroke 6" No. of cylinders 3 No. of cranks 3
Lean indicated pressure 105 Firing order in cylinders 1-3-2 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 5 1/4"
Is there a bearing between each crank? yes Moment of inertia of flywheel (16 m² or Kg.-cm.²) 973 Revolutions per minute 1000
Flywheel dia. 25" Weight 325 lbs Means of ignition Solid Kind of fuel used coal
Crank Shaft, dia. of journals as per Rule 2 1/2" as fitted Crank pin dia. 2 5/8" Crank Webs Mid. length breadth 3 1/2" Thickness parallel to axis one
Mid. length thickness 1 5/16" shrunk Thickness round eyehole piece
Flywheel Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule General armature, moment of inertia (16 m² or Kg.-cm.²)
Are means provided to prevent racing of the engine when declutched? yes Means of lubrication forced Kind of damper if fitted none
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. 1 Centrifugal Is the sea suction provided with an efficient strainer which can be cleared within the vessel
Lubricating Oil Pumps, No. and size gear drive pump, half engine speed 2 gal/min
Compressors, No. No. of stages Diameters Stroke Driven by
Savenging Air Pumps, No. Diameter Stroke Driven by

AIR 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 volts Full Load Current Amperes Direct or Alternating Current
Is the alternating current system, state the periodicity Has the Automatic Governor been tested and found as per Rule when full load is suddenly thrown
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
shielded that they cannot be accidentally earthed, short circuited, or touched Are the lubricating arrangements of the generators as per Rule
Are the generators under 100 kw. full load rating, have the makers supplied certificates of test and do the results comply with the requirements
Are the generators 100 kw. or over have they been built and tested under survey
Details of driven machinery other than generator

ANS.—Are approved plans forwarded herewith for Shafting (If not, state date of approval) Receivers Separate Tanks
Are Torsional Vibration characteristics if applicable been approved (state date of approval) Armature shaft Drawing No.
ARE GEAR

The foregoing is a correct description,

For and on behalf of RUSSELL NEWBERY & CO. LTD. Manufacturer.

Dates of Survey while building
 During progress of work in shops - - 14-10-48 26-10-48 9-11-48
 During erection on board vessel - - -
 Total No. of visits 3

Dates of Examination of principal parts—Cylinders 14-10-48 Covers 14-10-48 Pistons 14-10-48 Piston rods ✓
 Connecting rods 14-10-48 Crank and Flywheel shafts 14-10-48 Intermediate shafts ✓
 Crank shaft Material EN12 Tensile strength 40 ton
 Elongation 22% Identification Marks CZB/TDS 19/7/48 3RNL45
 Flywheel shaft, 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.)

The engine has been built under special survey of listed materials and the workmanship is good

The set comprises one 15KW Compound wound D.C generator, 110 Volt 136 amp, 1000 RPM directly coupled to engine and secured to fabricated steel underframe. The cooling is effected by a Reliance radiator which is bolted direct to underframe

On completion of erection the unit was examined under full working conditions, governor trials carried out. All found in order

The set is to the order of Messrs Campbell Escherwood, Borth, order No D 07264 and intended for job No BTL/24509

20.8.47.—T. (MADE AND PRINTED IN ENGLAND)

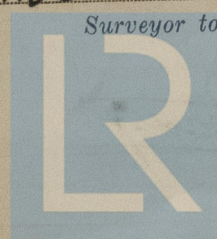
The amount of Fee ... £ 4 : 0 : 0 When applied for 22 Nov 1948
 Travelling Expenses (if any) £ : : When received 19

Committee's Minute

Assigned

Em Selley

Surveyor to Lloyd's Register of Shipping.



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