

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 Received at London Office

opening No. in Survey held at London Date, First Survey 14-10-48 Last Survey 9 November 1948

on the Single on the Twin Triple Quadruple Screw vessel "OTTOBANK" Number of Visits 3 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 D 955 When made 1948

Generators made at By whom made Campbell Schwab Contract No D07264 When made

and fitted. 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 1/8 Length of stroke 6 No. of cylinders 3 No. of cranks 3

Mean 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 973 lbs in 4 lbm 2 or Kg. cm. 2 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

Flywheel Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule General armature, moment of inertia (16 m 2 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 pumps, half engine speed 2 gal/min

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

Saving 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

Working 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

Are the shafts of driven machinery other than generator

ANS.—Are approved plans forwarded herewith for Shafting Receivers Separate Tanks

Have Torsional Vibration characteristics if applicable been approved Armature shaft Drawing No.

ARE GEAR

The foregoing is a correct description,

John Andrew

Manufacturer.

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



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Lloyd's Register Foundation

010652-010661-0047

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 Pelance 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, Bootle, order No D 07264 and intended for job No BTL/24509.

20.8.47.—T. (MADE AND PRINTED IN ENGLAND) (The Surveyors are requested not to write on or below the space for Committee Minute.)

The amount of Fee ... £ 4 : 0 : 0 } When applied for 22 Nov 19 48
 Travelling Expenses (if any) £ : : } When received 19

Committee's Minute
 Assigned

Em Selley
 Surveyor to Lloyd's Register of Shipping.

