

49  
Yes. 4c.

# REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 13621.

30 APR 1949

Received at London Office  
by Rules writing Report 11th April 1949. When handed in at Local Office 28th April 1949. Port of MANCHESTER.  
Survey held at MANCHESTER. Date, First Survey 15th Feb., 1949. Last Survey 6th April 1949.  
Number of Visits 5.  
on the Single Screw vessel M.V. "LUCIANO CASTRO".  
Gross Tons  
Net Tons  
at Copenhagen. By whom built Kalmar Varv. Yard No. 365. When built  
Scandinavian Steel & Shipping Agency. Port belonging to  
Engines made at Altrincham. By whom made Russell Newbery & Co. Ltd. Engine Contract No. 4238. When made 1949.  
Generators made at Stockport. By whom made David McClure. Generator Contract No. 11619. When made 1949.  
Set of Sets One. Engine Brake Horse Power 40. M.N. as per Rule 10. Total Capacity of Generators 25. Kilowatts.  
intended for essential services.

**ENGINES, &c.**—Type of Engines Vertical Solid Injection Heavy Oil. 2 or 4 stroke cycle 4. Single or double acting single.  
860 lbs per sq. inch. Diameter of cylinders 4 3/8". Length of stroke 6". No. of cylinders 4. No. of cranks 4.  
indicated pressure 105 lbs per sq. inch. Firing order in cylinders 1.3.4.2. Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 5 1/2".  
ere a bearing between each crank Yes. Moment of inertia of flywheel (16 m<sup>2</sup> or Kg.-cm.<sup>2</sup>) 65,000. Revolutions per minute 1,000.  
wheel dia. 22". Weight 263 lbs. Means of ignition Compression. Kind of fuel used Diesel Oil.  
ank Shaft, dia. of journals as per Rule 2 7/8". Crank pin dia. 2 3/8". Crank Webs Mid. length breadth 3.13/16". Thickness parallel to axis  
as fitted 2 7/8". Mid. length thickness 1.3/16". Thickness round eye hole  
wheel Shaft, diameter as per Rule 22". Intermediate Shafts, diameter as per Rule. General armature, moment of inertia (16 m<sup>2</sup> or Kg.-cm.<sup>2</sup>)  
wheel mounted on end of crankshaft. Yes. Means of lubrication Forced. Kind of damper if fitted  
means provided to prevent racing of the engine when declutched. Are the exhaust pipes and silencers water cooled or lagged with non-conducting material.  
the cylinders fitted with safety valves. No. One Ram Type 240 galls/hr. Is the sea suction provided with an efficient strainer which can be cleared within the vessel.  
ling Water Pumps, No. One geared type integral with engine 116 galls/hr.  
ricating Oil Pumps, No. and size

Compressors, No. No. of stages Diameters Stroke Driven by  
enging Air Pumps, No. Diameter Stroke Driven by

**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

the internal surfaces of the receivers be examined. What means are provided for cleaning their inner surfaces.  
here a drain arrangement fitted at the lowest part of each receiver.

h Pressure Air Receivers, No. Cubic capacity of each Internal diameter thickness  
mless, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules

rting Air Receivers, No. Total cubic capacity Internal diameter thickness  
mless, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules

**ELECTRIC GENERATORS:**—Type Ventilated, Enclosed Louvred, Continuous Rating Compound Wound.  
661. ssure of supply 22 volts. Full Load Current 114 Amperes. Direct or Alternating Current Direct.

alternating current system, state the periodicity. Has the Automatic Governor been tested and found as per Rule when full load is suddenly thrown  
proved and off Yes. Generators, are they compounded as per Rule Yes. is an adjustable regulating resistance fitted in series with each shunt field Yes.

ached all terminals accessible, clearly marked, and furnished with sockets. Yes. Are they so spaced  
etweenshielded that they cannot be accidentally earthed, short circuited, or touched Yes. Are the lubricating arrangements of the generators as per Rule Yes.

the generators are under 100 kw. full load rating, have the makers supplied certificates of test Yes. and do the results comply with the requirements Yes.  
and the generators are 100 kw. or over have they been built and tested under survey

to the tails of driven machinery other than generator

**ANS.**—Are approved plans forwarded herewith for Shafting 30th October, 1947. Receivers Separate Tanks  
(If not, state date of approval)  
ve Torsional Vibration characteristics if applicable been approved. Armature shaft Drawing No.  
(state date of approval)

**ARE GEAR AS PER RULE REQUIREMENTS.**

f Ship

The foregoing is a correct description,

per pro. RUSSELL NEWBERY & Co. Ltd.

Manufacturer.

J. C. Russell  
DIRECTOR



© 2021

Lloyd's Register  
Foundation

014875-014842-0279



4<sup>c</sup> 13621

Dates of Survey while building { During progress of work in shops - - 1949. 15th Feb. 11, 17, 22 March. 6 April.  
During erection on board vessel - - -  
Total No. of visits - - -

Dates of Examination of principal parts—Cylinders 22.3.49. Covers 17.3.49. Pistons 22.3.49. Piston rods  
Connecting rods 22.3.49. Crank and Flywheel shafts - Intermediate shafts -

Crank shaft { Material O.H. Steel. Tensile strength 41.6 Tons per sq. inch.  
Elongation 30% on 2". Identification Marks Lloyd's 5912 J.A.C. 15.2.4  
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.) This engine has been constructed under special survey of tested materials in accordance with the Secretary's letters, approved plans Rule Requirements. The workmanship is good and, the engine, when tested in the shop to 4 hours full load and 1 hour at 10% overload, gave satisfactory results.

In my opinion, this engine is suitable for installation on board a vessel building to this Society's Class for the purpose intended.

Forging Report No. F.5521 & Generator certificates attached herewith.

501.148.-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 28/4/49  
Travelling Expenses (if any) £ - 15 : 0 : 0. When received 19

120

Committee's Minute

Assigned

FRI. 12 MAY 1950

See minute on  
fe. rpl.

W.A. Cook  
Surveyor to Lloyd's Register of Shipping.  
© 2021  
Lloyd's Register  
Foundation