

Rpt. 4c.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 122324

Date of writing Report 19 April 1951 When handed in at Local Office 26 April 1951 Port of London Received at London Office 30 APR 1951
 No. in Reg. Book. 66206 Survey held at London Date, First Survey 21 February Last Survey 24 March 1951
 on the ~~Triple~~ ^{Single} Screw vessel "KYLE" Number of Visits 2
 Built at Middlesbrough By whom built Smiths & Co. Ltd. Yard No. X When built 1930-3
 Owners. Sharp SS Co. Ltd. Port belonging to Newcastle
 Oil Engines made at Dagenham By whom made Russell Newbery & Co. Ltd. Contract No. 3022328 When made 1957
 Generators made at By whom made Contract No. D8265
 No. of Sets Engine Brake Horse Power 27 M.N. as per Rule Contract No. When made
 Set intended for essential services marine auxiliary Total Capacity of Generators 15 Kilowatts.

OIL ENGINES, &c.—Type of Engines high speed compression ignition 2 or 4 stroke cycle 4 Single or double acting SA
 Maximum pressure in cylinders 850 p.s.i. 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 1/2"
 Is there a bearing between each crank Yes Moment of inertia of flywheel (16 m² or Kg.-cm.²) 22000 lbs in² Revolutions per minute 1000
 Flywheel dia. 22" Weight 271 lbs Means of ignition Compression Kind of fuel used pool
 Crank Shaft, dia. of journals as per Rule as applied Crank pin dia. 2 5/8" Crank Webs Mid. length breadth 3 1/2" Thickness parallel to axis
 as fitted 2 1/2" Mid. length thickness 1 3/4" shrunk Thickness round eye hole

Intermediate Shafts, diameter as per Rule as fitted General armature, moment of inertia (16 m² or Kg.-cm.²)
 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. Are the exhaust pipes and silencers water cooled or lagged with non-conducting material

Is the sea suction provided with an efficient strainer which can be cleared within the vessel.
 Suction Water Pumps, No. 1 - CENTRIFUGAL TYPE
 Lubricating Oil Pumps, No. and size 1 gear pump 2 gal/minute
 Compressors, No. No. of stages Diameters Stroke Driven by

Exhausting Air Pumps, No. Diameter Stroke Driven by
 RECEIVERS:—Have they been made under Survey Stroke Driven by
 Each receiver, which can be isolated, fitted with a safety valve as per Rule State No. of Report or Certificate
 Are the internal surfaces of the receivers be examined What means are provided for cleaning their inner surfaces.

Are there a drain arrangement fitted at the lowest part of each receiver.
 Pressure Air Receivers, No. Cubic capacity of each Internal diameter thickness
 Material Range of tensile strength Working pressure by Rules
 Are they less, lap welded or riveted longitudinal joint. HAND STARTING
 Suction Air Receivers, No. Total cubic capacity Internal diameter thickness
 Material Range of tensile strength Working pressure by Rules

ELECTRIC GENERATORS:—Type continuous compound
 Voltage of supply 110 volts Full Load Current 137 Amperes Direct or Alternating Current DC
 Alternating current system, state the periodicity Has the Automatic Governor been tested and found as per Rule when full load is suddenly thrown
 off Yes Generators, are they compounded as per Rule Yes is an adjustable regulating resistance fitted in series with each shunt field Yes
 Are all terminals accessible, clearly marked, and furnished with sockets. Yes Are they so spaced
 Are the generators under 100 kw. full load rating, have the makers supplied certificates of test. Yes Are the lubricating arrangements of the generators as per Rule. Yes
 Are the generators 100 kw. or over have they been built and tested under survey. Yes and do the results comply with the requirements. Yes
 Are there any other driven machinery other than generator. No

Are approved plans forwarded herewith for Shafting. Approved Standards
 Torsional Vibration characteristics if applicable been approved. (state date of approval) Type Receivers. Separate Tanks
 E GEAR makes supply covering Rule Requirements Armature shaft Drawing No. To be used on ship

The foregoing is a correct description,
 ON BEHALF OF RUSSELL NEWBERY & CO. LTD. Manufacturer.

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Dates of Survey while building { During progress of work in shops - - } 21st February 24th March 1951
{ During erection on board vessel - - } 2.
Total No. of visits 2 in ships

Dates of Examination of principal parts—Cylinders 21-2-51 Covers 21-2-51 Pistons 21-2-51 Piston rods ✓

Connecting rods 21-2-51 Crank and Flywheel shafts 21-2-51 Intermediate shafts ✓

Crank shaft { Material EN8 Tensile strength 40 ton
Elongation 20% Identification Marks Lloyds S 317 C.D. 71250

Flywheel shaft, Material ✓ Identification Marks ✓

Identification marks on Air Receivers ✓

Is this machinery duplicate of a previous case Yes If so, state name of vessel

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

This engine has been constructed under part Special Survey of tested materials. The engine was examined partially erected, owing to unforeseen circumstances the engine was not examined when completed or under load conditions.

It is stated the engine will be connected to D. McClure generator No 1214 both secured to fabricated steel underbase.

The set is intended for S.S. 'KYLOE', and has been dispatched to Sunderland for installation.

SUNDERLAND

Complete generator set placed on board and satisfactorily tested under working conditions.

Spare Gear placed on board - see attached list

The amount of Fee £ 4 : 0 : 0

When applied for 26 April 1951

Travelling Expenses (if any) £

When received 19

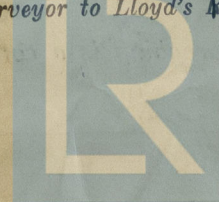
FRI. 8 JUN 1951

Committee's Minute

Assigned

Lib. 9. 35567

Inspector & R. J. Dunn.
Surveyor to Lloyd's Register of Shipping.



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