

RECEIVED

46

Rpt. 4c.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 12686.

Date of writing Report 14th October, 1946. When handed in at Local Office 17th October, 1946. Received at London Office 18 OCT 1946. Port of MANCHESTER.

No. in Survey held at Altrincham. Date, First Survey 24th September, 1946. Last Survey 12th October, 1946. Reg. Book. Number of Visits 4.

on the ^{Single} ~~Twin~~ ~~Triple~~ ~~Quadruple~~ Screw vessel Australian Commonwealth "B" & "D" Freighters. Tons {Gross... Net...}

Built at By whom built Yard No. When built

Oil Engines made at Altrincham. By whom made Russell Newbery & Co. Ltd. Engine No. 4031. When made 1946.

Generators made at Bedford. By whom made W.H. Allen Sons & Co. Ltd. Generator No. E3/54680/9. When made 1946.

No. of Sets 1. Engine Brake Horse Power 27. Nom. Horse Power as per Rule 6.75. Total Capacity of Generators 15. Kilowatts.

OIL ENGINES, &c.—Type of Engines Vertical, Solid Injection, Heavy Oil. 2 or 4 stroke cycle 4. Single or double acting Single.

Maximum pressure in cylinders 860 lbs per sq. inch. Diameter of cylinders 4 1/8". Length of stroke 6". No. of cylinders 3. No. of cranks 3.

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 5 1/8". Is there a bearing between each crank Yes.

Revolutions per minute 1000. Flywheel dia. 22". Weight 263 lbs. Means of ignition Compression. Kind of fuel used Diesel Oil.

Crank Shaft, dia. of journals as per Rule Approved. as fitted 2 1/2". Crank pin dia. 2 3/8". Crank Webs Mid. length breadth 3 1/2". Thickness parallel to axis 1 5/16".

Flywheel Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted Thickness of cylinder liners 11/32".

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 No. Are the exhaust pipes and silencers water cooled or lagged with non-conducting material -

Cooling Water Pumps, No. One-plunger type. Is the sea suction provided with an efficient strainer which can be cleared within the vessel.

Lubricating Oil Pumps, No. and size One-gear type.

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

Scavenging Air Pumps, No. Diameter Stroke Driven by

AIR RECEIVERS:—Have they been made under Survey State No. of Report or Certificate

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. 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 Compound Wound, Continuous Rating, E.V.D.P.

Pressure of supply 220 volts. Full Load Current 68 Amperes. Direct or Alternating Current Direct.

If alternating current system, state the periodicity Has the Automatic Governor been tested and found as per Rule when full load is suddenly thrown on and 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 or shielded that they cannot be accidentally earthed, short circuited, or touched Yes. Are the lubricating arrangements of the generators as per Rule Yes.

If 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.

If the generators are 100 kw. or over have they been built and tested under survey

PLANS.—Are approved plans forwarded herewith for Shafting 25th January, 1945. Receivers. Separate Tanks

SPARE GEAR AS PER RULE REQUIREMENTS.

The foregoing is a correct description, per pro, RUSSELL, NEWBERY & Co. Ltd. Manufacturer. A. J. Waterworth SECRETARY.



012891-012897-0112

No. 12686

Dates of Survey while building: During progress of work in shops - - 1946, Sept. 24, 25, 26, Oct. 12.
During erection on board vessel - -
Total No. of visits

Dates of Examination of principal parts—Cylinders 24.9.46. Covers 25 & 26.9.46. Pistons 24.9.46. Piston rods -
Connecting rods 24.9.46. Crank and Flywheel shafts 24.9.46. Intermediate shafts

Crank shaft: Material O.H. Steel. Tensile strength 45.6 tons per sq. inch.
Elongation 27% on 2". Identification Marks LLOYD'S 3332 F.H. 5.7.45.

Flywheel shaft, Material Identification Marks

Is this machinery duplicate of a previous case Yes. Identification Marks

Identification marks on Air Receivers

Is this machinery duplicate of a previous case Yes. If so, state name of vessel See Mch. Rpt. No. 12604 Same Contract.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This engine has been constructed under special survey, of tested materials and is in accordance with the Secretary's letters, Approved Plans and Rule Requirements. The materials and workmanship are of a good quality and the engine, when tested in the shop under full load conditions, showed satisfactory results. In my opinion, this engine is suitable to be placed, on board a vessel classed with this Society for the purpose intended.

The amount of Fee ... £ 4 : 4 0. When applied for 17.10 19 463

Travelling Expenses (if any) £ : 8 8. When received 19

Committee's Minute FRI 28 OCT 1946

Assigned See F.E. mech. rpt

Edwards
Surveyor to Lloyd's Register of Shipping.



Lloyd's Register Foundation