

pt. 4c.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 1, 144

Received at London Office

6 NOV 1954

Date of writing Report 28.10.54. When handed in at Local Office 19 Port of Nottingham.

No. in Survey held at Lincoln, Date, First Survey 25.8.54. Last Survey 15.9.54. 19

Reg. Book. Single on the Twin Triple Quadruple Screw vessel. Number of Visits 2. Tons Gross Net.

Vessel No. P. 15.

to the order of:- By whom built Chantier Et Ateliers de St. Nazaire. Vessel No. When built.

Port belonging to C1/63620/13/530094. B. 4362.

Oil Engines made at Lincoln. By whom made Ruston & Hornsby Ltd., Contract No. 385951. When made.

Generators made at Bedford. By whom made W. H. Allen, Sons & Co. Ltd., Contract No. E3/60692/2. When made.

Set of Sets 1 Engine Brake Horse Power 240 M.N. as per Rule 48. Total Capacity of Generators 150 Kilowatts.

Set intended for essential services.

OIL ENGINES, &c.—Type of Engines 4VEBZ. 2 or 4 stroke cycle 4 Single or double acting SA.

Maximum pressure in cylinders $715 \pm 3\%$ Diameter of cylinders $10\frac{1}{2}"$ Length of stroke $14\frac{1}{2}"$ No. of cylinders 4 No. of cranks 4

Mean indicated pressure 100 Firing order in cylinders 2 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge $12.5/16$

Is there a bearing between each crank Yes. GD - 38.7 tons ft. ~~XXXXXX of crank flywheel~~ (16 m² or Kg.-cm.²) Revolutions per minute 514

Flywheel dia. $4'-6"$ Weight 61 cwt. Means of ignition Compression. Kind of fuel used Diesel Oil

Crank Shaft, dia. of journals as per Rule. 8" Crank pin dia. $6\frac{1}{2}"$ Crank Webs Mid. length breadth 11" Thickness parallel to axis. 3.7/16 shrunk Thickness round eyehole.

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. Kind of damper if fitted.

Are the cylinders fitted with safety valves Yes. Are the exhaust pipes and silencers water cooled or lagged with non-conducting material.

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

Lubricating Oil Pumps, No. and size. One Engine driven 772 gals/hour.

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 DP, CW, CR. Machine No. E3/60692/2.

Pressure of supply 187.5 volts. Full Load Current 514 Amperes. Direct or Alternating Current DC.

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. and do the results comply with the requirements.

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

Details of driven machinery other than generator.

PLANS.—Are approved plans forwarded herewith for Shafting 20.12.38. Receivers. Separate Tanks.

Have Torsional Vibration characteristics if applicable been approved 14.8.53. Armature shaft Drawing No.

SPARE GEAR Supplied to Rule Requirements.

The foregoing is a correct description,

Ruston & Hornsby, Limited.

Manufacturer.

YD Burchall



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ON ELECTRICAL EQUIPMENT

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Dates of Survey while building During progress of work in shops - 25.8.54. 15.9.54.
 During erection on board vessel -
 Total No. of visits 2.

Dates of Examination of principal parts—Cylinders 25.8.54. Covers As cyls. Pistons As cyls. Piston rods -

Connecting rods As cyls. Crank and Flywheel shafts As cyls. Intermediate shafts -

Crank shaft Material Steel. Tensile strength

Elongation Identification Marks LL. 4777. LF. 4541.

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 built under Special Survey in accordance with the Approved Plans and the Rules of the Society, materials and workmanship being good.

On completion, the generating set was tested in the Shops under working conditions and the governing tested with satisfactory results.

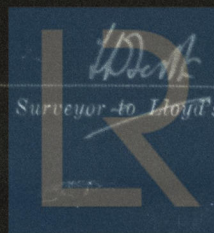
The set has been forwarded for installation in the vessel.

Amount of Fee £ 19 : 0 : 0 When applied for 28.10.54. C. 19792. A/C No. 8210.

Travelling Expenses (if any) £ When received 19

Committee's Minute

Signed



Surveyor to Lloyd's Register of Shipping.

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Set fitter to "Indora".
Yard no P.15.

Ints Rpt no 500

Engine fitter with crankcase explosion device

J.C.



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