

REPORT ON OIL ENGINE/ELECTRIC GENERATOR SETS.

Date of writing Report 19.2.43. When handed in at Local Office 27.2.43. Port of MANCHESTER. (LOWESTOFT) 14 FEBRUARY 1944. Date, First Survey 20.10.42. Last Survey 1.2.1943. Number of Visits 3.

No. in Survey held at REDDISH. Reg. Book. on the Single/Twin/Triple/Quadruple Screw vessel N.A.V. "CHATTENDEN". Tons Gross 322.02 Net 144.09

Built at LOWESTOFT. By whom built Richards Ironworks Ltd. Yard No. 310/11. When built 1944. Owners ADMIRALTY. Port belonging to LONDON.

Oil Engines made at REDDISH. By whom made Crossley Bros. Ltd. Engine No. 130896. When made 1943. Generator made at LIVERPOOL. By whom made Campbell & Isherwood. Generator No. 17009. When made 1942.

No. of Sets One. Engine Brake Horse Power 14. Nom. Horse Power as per Rule 2.5. Total Capacity of Generators 3. Kilowatts.

OIL ENGINES, &c.—Type of Engines Vertical Solid Injection. 2 or 4 stroke cycle 4. Single or double acting Single. Maximum pressure in cylinders 850 lbs/sq. in. Diameter of cylinders 5". Length of stroke 6.25". No. of cylinders 1. No. of cranks 1.

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 6 3/8". Is there a bearing between each crank - . Revolutions per minute 1000. Flywheel dia. 24. Weight - . Means of ignition Compression. Kind of fuel used Diesel Oil.

Crank Shaft, dia. of journals as per Rule Approved. with 2" dia. Mid. length breadth 4 1/2". Thickness parallel to axis - . as fitted 3 1/2". Crank pin dia. 3 1/4" hole. Crank Webs Mid. length thickness 1.13/16". Thickness around eye-hole - .

Flywheel Shaft, diameter as per Rule - . Intermediate Shafts, diameter as fitted - . Thickness of cylinder liners 9/32". 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. incorporated in engine. Are the exhaust pipes and silencers water cooled or lagged with non-conducting material - . Cooling Water Pumps, No. One. Is the sea suction provided with an efficient strainer which can be cleared within the vessel - .

Lubricating Oil Pumps, No. and size One - incorporated in engine. Air Compressors, No. One. No. of stages One. Diameters 3 1/4". Stroke 3 1/4". Driven by Clutch.

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.

Pressure of supply 110 volts. Full Load Current 27 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 22.6.42. Receivers - Separate Tanks -

SPARE GEAR AS PER RULE.

The foregoing is a correct description, CROSSLEY BROTHERS LIMITED, Manufacturer.



© 2020 Lloyd's Register Foundation

009040 - 009049 - 0282

Dates of Survey while building
 During progress of work in shops - 20.10.42, 21.10.42, 1.2.43.
 During erection on board vessel - 1943. Oct 19. 30 Nov 5. 10. 12. 29. 30 Dec 2. 15. Jan 3. 11 Feb 2. 9. 14.
 Total No. of visits Three. + 15.

Dates of Examination of principal parts—Cylinders 20.10.42. Covers 21.10.42. Pistons 21.10.42. Piston rods -
 Connecting rods 1.2.43. Crank and Flywheel shafts 1.2.43. Intermediate shafts -
 Crank and Flywheel shafts, Material O.H. Ingot Steel. Identification Marks LLOYD'S 1824. 20.10.42. E.G.
 Intermediate shafts, Material - Identification Marks -
 Identification marks on Air Receivers -

Is this machinery duplicate of a previous case Yes. If so, state name of vessel Richards Ironworks Yard Nos.310/11.

General Remarks (State quality of workmanship, opinions as to class, &c. THIS ENGINE HAS BEEN CONSTRUCTED UNDER SPECIAL SURVEY OF TESTED MATERIALS AND IN ACCORDANCE WITH THE SECRETARY'S LETTERS, APPROVED PLANS AND RULE REQUIREMENTS.

THE MATERIALS AND WORKMANSHIP ARE OF GOOD QUALITY AND THE ENGINE WHEN TESTED IN THE SHOP UNDER FULL LOAD CONDITIONS SHEWED 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 WELDED BEDPLATE WAS EXAMINED BEFORE AND AFTER SHOP TRIALS AND FOUND, SO FAR AS COULD BE SEEN, SATISFACTORY.

COPY OF GENERATOR TEST CERTIFICATE HEREWITH ATTACHED, TOGETHER WITH COPIES OF CERTIFICATES FOR CENTRIFUGAL PUMP, AIR COMPRESSOR, FABRICATED BASE PLATE AND FORGING REPORTS.

This engine has been satisfactorily installed on board the vessel under Special Survey and in accordance with the approved plans & Rule requirements & has been tested under full working conditions with satisfactory results.

The exhaust-pipes & silencers are lagged with non-conducting material

The sea suction is provided with an efficient-strainer which can be cleared within the vessel.

F. E. Turpie

The amount of Fee ... £ 4 : 4 : 0
 Travelling Expenses (if any) £ - 10 0
 When applied for, 27.2.19.42. *sent.*
 When received, 19.....

D. S. Taylor
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI. 3 MAR 1944

Assigned

See Ipo fe marks RH. 111723



© 2020

Lloyd's Register Foundation