



pt. 4c.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 274.

FEB 1927

Received at London Office.

Date of writing Report.

19

When handed in at Local Office.

19

Port of.

NOTTINGHAM.

No. in Survey held at Lincoln.

Date, First Survey.

Last Survey.

19

eg. Book.

Number of Visits.

Single
on the Twin
Triple
Quadruple

Screw vessel.

Tons

Gross. 5030

Net. 2766

Built at Glasgow.

By whom built Barclay Curle.

Yard No. 711.

When built.

Made to order of H.M. Spiers & Co.

Port belonging to.

Engines made at Lincoln.

By whom made Ruston & Hornsby Ltd.

Contract No. 460503

When made.

Generators made at.

By whom made Laurence Scott & Co. Ltd.

Contract No.

When made.

No. of Sets. 1

Engine Brake Horse Power. 44

M.N. as per Rule.

11

Total Capacity of Generators. 26

Kilowatts.

Set intended for essential services.

IL ENGINES, &c.—Type of Engines. 4VRHZ. Eng. No. 251652. 2 or 4 stroke cycle. 4. Single or double acting. SA

Maximum pressure in cylinders. 300 lbs. Diameter of cylinders. 4 1/2". Length of stroke. 5 1/2". No. of cylinders. 4. No. of cranks. 4

Mean indicated pressure. 112.5. Firing order in cylinders. 1-3-4-2. Span of bearings, adjacent to the Crank, measured from inner edge to inner edge. 6.15/16"

Is there a bearing between each crank. Yes. WD2. Moment of inertia of flywheel. 1164 lbs.ft². Revolutions per minute. 1100

Flywheel dia. 26". Weight. 420 lbs. Means of ignition. Compression. Kind of fuel used. Diesel Oil.

Crank Shaft, dia. of journals. 3". Crank pin dia. 3". Crank Webs. Mid. length breadth. 3 1/2". Thickness parallel to axis. 1.11 shrunk. Mid. length thickness. 16". Thickness round eyehole.

Flywheel Shaft, diameter. C'shaft. Intermediate Shafts, diameter. 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. Forced. Kind of damper if fitted.

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

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

Lubricating Oil Pumps, No. and size. one - 165 gals./hour. Engine driven.

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

Saving Air Pumps, No. Diameter. Stroke. Driven by.

AIR 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.

Are 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.

Unless, lap welded or riveted longitudinal joint. Material. Range of tensile strength. Working pressure by Rules.

Low Pressure Air Receivers, No. Total cubic capacity. Internal diameter. thickness.

Unless, lap welded or riveted longitudinal joint. Material. Range of tensile strength. Working pressure by Rules.

ELECTRIC GENERATORS:—Type. No. 203944.

Pressure of supply. 220 volts. Full Load Current. 113 Amperes. Direct or Alternating Current. D.C.

Is an alternating current system, state the periodicity. Has the Automatic Governor been tested and found as per Rule when full load is suddenly thrown 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.

Are the generators shielded that they cannot be accidentally earthed, short circuited, or touched. Yes. Are the lubricating arrangements of the generators as per Rule. Yes.

Are the generators under 100 kw. full load rating, have the makers supplied certificates of test. Yes. and do the results comply with the requirements. Yes.

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

Are there any other driven machinery other than generator.

ANS.—Are approved plans forwarded herewith for Shafting. 7.10.38. Receivers. Separate Tanks.

Have Torsional Vibration characteristics if applicable been approved. Not applicable. Armature shaft Drawing No.

ARE GEAR To Rule Requirements.

The foregoing is a limited edition.

Ruston & Hornsby Ltd.
1 hour 28 I 48
Engineering Divn.

Manufacturer.



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Lloyd's Register
Foundation

002591-0232

Dates of Survey while building { During progress of work in shops - -)
{ During erection on board vessel - -)
Total No. of visits.....

Dates of Examination of principal parts—Cylinders 22.10.47. Covers 22.10.47. Pistons 22.10.47. Piston rods.....

Connecting rods 22.10.47. Crank and Flywheel shafts 22.10.47. Intermediate shafts.....

Crank shaft { Material..... Tensile strength.....
{ Elongation..... Identification Marks LL.1221. T.D.S. 3097.BW.

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 Standard.

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

This machinery has been built under Special Survey, in accordance with the approved plans and rules of the Society, material and workmanship being good.

On completion the generating set was tried in the shops under working conditions and found to be satisfactory.

The set has been forwarded to Glasgow for installation on board the vessel.

This generating set has been efficiently installed, examined under full working conditions & found satisfactory.

R. D. Lumsden
Glasgow

The amount of Fee ... £ 4 : 0 : 0

When applied for 18-3-1947. Est. C 5766

Travelling Expenses (if any) £ :

When received 19

Committee's Minute

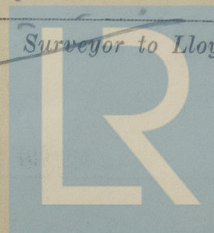
GLASGOW 27 JUL 1948

Assigned

See accompanying Machy Rpt.

W. D. M.

Surveyor to Lloyd's Register of Shipping.



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