

YACHT. REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

21537
No. 8928

Received at London Office

MAY 20 1937

Date of writing Report 14 May 1937 When handed in at Local Office 19 May 1937 Port of MANCHESTER

No. in Survey held at MANCHESTER Date, First Survey 9-2-1937 Last Survey MAY 14 1937 Number of Visits 4

Reg. Book. 39224 on the Single Screw vessel "Yadorna" Tons Gross 226.25 Net 143.23

Built at Southampton By whom built J. I. THORNYCROFT & Co. Yard No. 1172 When built 1937

Owners G. & W. H. P. Maisiegan Port belonging to Amsterdam

Oil Engines made at MANCHESTER By whom made L. GARDNER & SONS LTD Contract No. 38599. When made 1937

Generators made at DURSLEY GLOS. By whom made MANDSLEYS LTD. Contract No. 1005562 When made 1937

No. of Sets ONE Engine Brake Horse Power 28.5 Nom. Horse Power as per Rule 8. Total Capacity of Generators 16 Kilowatts.

IL ENGINES, &c. Type of Engines VERTICAL SOLID INJECTION 2 or 4 stroke cycle 4 Single or double acting SINGLE

Maximum pressure in cylinders 650 LBS. Diameter of cylinders 4 1/4" 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 3/16" Is there a bearing between each crank YES

Revolutions per minute 1000 Flywheel dia. 26" Weight 511 LBS. Means of ignition COMPRESSION Kind of fuel used HEAVY OIL

Crank Shaft, dia. of journals as per Rule APPROVED as fitted 2.625" Crank pin dia. 2.625" Crank Webs Mid. length breadth 4" Mid. length thickness 1 3/8" shrunk Thickness parallel to axis SOLID Thickness around eyehole

Flywheel Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted Thickness of cylinder liners

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

4. 5. 6. 8. 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 TWO (ONE SPARE) 3/16" x 1/2" STROKE 28 GALL. PER HOUR

10. Air Compressors, No. ONE No. of stages TWO Diameters 4" x 1 3/4" Stroke 3" Driven by AUX. ENGINE

Scavenging Air Pumps, No. Diameter Stroke Driven by

AIR RECEIVERS: 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

Pressure of supply 110 volts. Full Load Current 145.5 Amperes. Direct or Alternating Current DIRECT

Is an alternating current system, state the periodicity Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on and off YES

Generators, are they compounded as per rule is an adjustable regulating resistance fitted in series with each

Are all terminals accessible, clearly marked, and furnished with sockets

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

If the generators are under 100 kw. full load rating, have the makers supplied certificates of test No. SENT TO SOUTHAMPTON and do the results comply with the requirements

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

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

and were PAIRE GEAR AS PER RULE REQUIREMENTS.

Register of Shipping

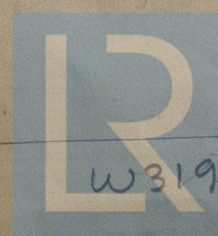
The foregoing is a correct description.

L. GARDNER & SONS LD.

William Gardner

Director.

Manufacturer.



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W319-0020

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

9-2-37. 9-3-37. 3-3-37. 14-5-37.

Dates of Examination of principal parts—Cylinders 9-2-37. Covers 9-3-37. Pistons 30-3-37. Piston rods —

Connecting rods 30-3-37. Crank and Flywheel shaft 30-3-37. Intermediate shaft —

Crank and Flywheel shafts, Material

STEEL

Identification Mark LLOYD'S. No. 74242. 11-3-37

Intermediate shafts, Material

Identification Marks

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 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 SHOP UNDER FULL LOAD CONDITIONS - SHOWN SATISFACTORY RESULTS. IN MY OPINION THIS ENGINE IS SUITABLE TO BE PLACED ON BOARD A VESSEL, CLASSED WITH THIS SOCIETY, FOR THE PURPOSE INTENDED.

Satisfactorily fitted on board and tried under working conditions

1m.236.—Transfer.
(The Surveyors are requested not to write on or below the space for Committee Minute.)

The amount of Fee ... £ 4 : 4 : 0 When applied for, 19-5-1937 M.

Travelling Expenses (if any) £ : 4 : 0 When received, 25th June 1937

Committee's Minute

TUE 7 SEP 1937

Assigned See above F.E. rpt

J. Mearns
Surveyor to Lloyd's Register of Shipping.



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