

RECEIVED

SUNDERLAND RPT. No. 34766

Rpt. 4c.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 114701

Date of writing Report 4 FEB 1947 When handed in at Local Office 4 FEB 1947 Port of London
 No. in Survey held at Bedford Date, First Survey 17.12.46 Last Survey 27-1-1947
 Reg. Book. "PELAYO" Number of Visits 7
 Single on the Twin Triple Screw vessel. Tons Gross 2578.71 Net 1001.96
 Built at Sunderland By whom built William Duxford Sons Yard No. 744 When built 1947
 Owners MacAndrews & Co. Ltd Port belonging to London
 Oil Engines made at Bedford By whom made W H Allen Sons & Co. Ltd Contract No. K/57888 When made 1947
 Generators made at " By whom made " Contract No. E/57889 When made "
 No. of Sets 3 Engine Brake Horse Power 222 each Nom. Horse Power as per Rule Total Capacity of Generators 150 each Kilowatts.

OIL ENGINES, &c.—Type of Engines Diesel 2 or 4 stroke cycle 4 Single or double acting Single
 Maximum pressure in cylinders 750 lb/sq in Diameter of cylinders 240 1/2 Length of stroke 300 1/2 No. of cylinders 5 No. of cranks 5
 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 282 1/2 Is there a bearing between each crank yes
 Revolutions per minute 600 Flywheel dia. 1200 1/2 dia Weight 3500 lbs Means of ignition Compression Kind of fuel used Diesel
 Crank Shaft, dia. of journals as per Rule 140 1/2 Crank pin dia. 150 1/2 Mid. length breadth 204 1/2 Thickness parallel to axis shrunk
 as fitted 140 1/2 Crank Webs Mid. length thickness 70 1/2 Thickness round eyehole
 Flywheel Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule Thickness of cylinder liners 19 1/2
 as fitted 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 yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material
 Cooling Water Pumps, No. One Centrifugal each engine Is the sea suction provided with an efficient strainer which can be cleared within the vessel
 Lubricating Oil Pumps, No. and size One Rotary 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. Three Total cubic capacity 15 Cuft Internal diameter 18" thickness 5/16"
 Seamless, lap welded or riveted longitudinal joint Sealers Material Steel Range of tensile strength 26/30 Tons Working pressure by Rules 300 lb

ELECTRIC GENERATORS:—Type Open
 Pressure of supply 220 volts Full Load Current 682 Amperes Direct or Alternating Current D.C.
 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

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

SPARE GEAR One complete set of valves for one cyl, 4 nozzles, 3 pistons + 2 scraper rings
 6 cyl. Head Studs + Nuts 2 Bolts + Nuts for Main Brgs. 2 Bolts + Nuts for Crankpin bearing
 1 Fuel Pump, 1 Gudgeon pin, 1 Crankpin bearing, 1 Top end bearing.
 1 Injection Pipe.
 Generator Spares:— 2 Brush Holder, 1 set Brushes for one generator

The foregoing is a correct description,

W. H. ALLEN SONS & Co., Ltd. Manufacturer.

H. H. Clarke 29.1.47.



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Lloyd's Register
Foundation

009682-009688-0128

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

Dec 17. 20. 31 Jan. 3. 7. 16. 27

7

Dates of Examination of principal parts—Cylinders 3.12.46 7.1.47 Covers 3.12.46 16.1.47 Pistons 7.1.47 3.12.46 Piston rods

Connecting rods 17.12.46

Crank and Flywheel shafts 17.12.46 3.1.47 7.1.47 Intermediate shafts

Crank shaft

Material

Elongation

Steel

SET D. 152 LLOYDS F.S. 466 17.5.46 17.12.46 (P)

E. 370 " " 4780 1.11.46 3.1.47 (P)

F. 267 " " 4774 29.10.46 7.1.47 (P)

Tensile strength

Identification Marks

Flywheel shaft, Material

Identification Marks

Is this machinery duplicate of a previous case Yes Doford 743.

Identification Marks

Identification marks on Air Receivers (1) 81/460359 LLOYDS TEST 4.7.600lb W.P. 300lb T.O.S. 15.11.46 S.17149

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Is this machinery duplicate of a previous case Yes

If so, state name of vessel

Doford 743.

Low Rpt 11.4.49 sent 11/12/46

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

The sets have been constructed

under special survey in accordance with the requirements of the Rules and Approved plans; The steel was made at works approved by the Committee; the workmanship is good, and on completion the sets were tested upon the the bench under full and overload conditions with satisfactory results

The torsional calculations have been approved see letter 24.6.46

The sets have been forwarded to Sunderland for fitting on board the vessel

Attached:- Forging Rpts F.6937, F.7544, F.7578 (B.M.) & 665. Not. C.4712/3/4 (Air Receiver)

The amount of Fee ... £ 24 18

When applied for 7 FEB 1947

Travelling Expenses (if any) £ 3 8 1

When received 19

Committee's Minute

FRI, 21 NOV 1947

Assigned

See F.E. mch. rpt.

R.W. Bomber.

Surveyor to Lloyd's Register of Shipping.



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