

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 95773

Received at London Office 1 DEC 1930

Date of writing Report 19 When handed in at Local Office DEC 1930 Port of London

No. in Survey held at Bedford Date, First Survey 25th June Last Survey 18th Nov 1930

Reg. Book. Single on the Twin Triple Quadruple Screw vessel Tons Gross Net

Built at Glasgow By whom built Messrs. Barclay, Curle & Co. Yard No. 644 When built 1930

Owners Bedford Port belonging to Messrs. W. H. Allen & Co. Ltd.

Oil Engines made at Bedford By whom made Messrs. W. H. Allen & Co. Ltd. Contract No. 2192/30/1/B When made 1930

Generators made at do By whom made do Contract No. 2192/30/2/B When made 1930

No. of Sets 4 Engine Brake Horse Power 800 Total Nom. Horse Power as per Rule 228 Total Capacity of Generators 520 Kilowatts.

OIL ENGINES, &c. Type of Engines Allen-Burmister & Wain 2 or 4 stroke cycle 4 Single or double acting S.F.

Maximum pressure in cylinders 500 lbs/sq. in. Diameter of cylinders 325 mm Length of stroke 370 mm No. of cylinders 3 No. of cranks 3

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 400 mm Is there a bearing between each crank Yes

Revolutions per minute 400 Flywheel dia. 1540 mm Weight 4740 lbs Means of ignition Compression Kind of fuel used Diesel

Crank Shaft, dia. of journals as per Rule 180 mm as fitted 190 mm Crank pin dia. 190 mm Crank Webs Mid. length breadth 280 mm Mid. length thickness 100 mm Thickness parallel to axis shrunk SOLID FORGED Thickness perpendicular to axis

Flywheel Shaft as per Rule CRANK SHAFT. Intermediate Shafts, diameter as fitted Thickness of cylinder liners 23.5 mm

Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication Mechanical forced.

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

Cooling 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 per engine

Air Compressors, No. One per engine No. of stages 3 Diameter 260x226x56 mm Stroke 225 mm Driven by Eng. Crankshaft

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 Inside plugs

Can the internal surfaces of the receivers be examined Yes What means are provided for cleaning their inner surfaces Ends joggled

Is there a drain arrangement fitted at the lowest part of each receiver Yes

High Pressure Air Receivers, No. One per engine Cubic capacity of each 90 litres Internal diameter 9 3/4" thickness 3/8"

Seamless, lap welded or riveted longitudinal joint Seamless Material Steel Range of tensile strength 29/33 T/5 Working pressure by Rules 1026 lbs/sq. in.

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 Open Pressure of supply 220 volts. Load 591 Amperes. Direct or Alternating Current Direct

If alternating current system, state frequency of periods per second

Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on or off Yes

Generators, do they comply with the requirements regarding rating Yes are they compound wound Yes

are they over compounded 5 per cent. if not compound wound state distance between each generator

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

PLANS. Are approved plans forwarded herewith for Shafting Approved 26-3-29 Receivers Separate Tanks

SPARE GEAR

As per Drawing K/73789 - 1 Set of list 10.

The foregoing is a correct description, W. H. ALLEN, & CO., LTD., Manufacturer.



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W192-0302

Dates of Survey while building { During progress of work in shops - - } June 25. Sep. 3. 10. 17. 25. Oct. 1. 10. 15. 28. 31 Nov. 11. 18. 1930
 { During erection on board vessel - - - }
 Total No. of visits 12 partial = 8 full.

Dates of Examination of principal parts—Cylinders 10-9-30, 17-9-30 Covers 10-9-30, 17-9-30 Pistons 10-9-30, 18-11-30 Piston rods ✓
 25-9-30, 1-10-30 1-10-30, 31-10-30

Connecting rods 25-6-30 Crank and Flywheel shaft 10-10-30 Intermediate shaft ✓

Crank and Flywheel shaft, Material Best Steel Identification Mark SEE BELOW

Is this machinery duplicate of a previous case No If so, state name of vessel ✓

General Remarks (State quality of workmanship, opinions as to class, &c.)

Crank Shaft Identification Marks:-

<u>Eng. A.</u>	LLOYDS	<u>Eng. B.</u>	LLOYDS	<u>Eng. C.</u>	LLOYDS	<u>Eng. D.</u>	LLOYDS
ⓔ		ⓔ		ⓔ		ⓔ	
1742		1743		1754		1755	
ⓁⓇ		ⓁⓇ		ⓁⓇ		ⓁⓇ	
10-10-30		10-10-30		10-10-30		10-10-30	

This Machinery has been constructed under Special Survey in accordance with approved plans and Rule Requirements. The Workmanship and Materials, so far as can be seen, are good and satisfactory bench trials have been carried out under survey.

The four sets, which are numbered 21921/A/B/C/D, have been despatched to Glasgow where they are to be installed on board and, in my opinion, will be eligible for inclusion in the Classification and record of +LMC of the vessel.

The amount of Fee ... £ 22-16-0 When applied for... 1 DEC 1930

Travelling Expenses (if any) £ 12-16-4 When received... 0th FEB 1931

Arthur Palmer
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

Im. 7.26—Transfer. (The Surveyors are requested not to write on or below the space for Committee's Minute.)

