

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 93099

24 SEP 1928

Rpt. 4c.

Date of writing Report 19 When handed in at Local Office 10 Port of London

No. in Survey held at Bedford Date, First Survey Last Survey 19

Reg. Book. on the Single/Twin/Triple/Quadruple Screw vessel STAFFORDSHIRE Tons Gross 10655 Net

Built at Glasgow By whom built Fairfield Shpg. & Inf. Co. Yard No. When built 1928

Owners Bibby S.S. Co. Ltd. Port belonging to Liverpool

Oil Engines made at Bedford By whom made Messrs. W.H. Allen Sons & Co. Contract No. 9850/1/2 When made 1928.

Generators made at Bedford By whom made Messrs. W.H. Allen Sons & Co. Contract No. 9850/1/3 When made 1928.

No. of Sets 3 Engine Brake Horse Power 900 Nom. Horse Power as per Rule 257 Total Capacity of Generators 630 Kilowatts.

OIL ENGINES, &c. Type of Engines Burmeister & Wain, Diesel 2 or 4 stroke cycle 4 Single or double acting S.A.

Maximum pressure in cylinders 570 lbs/sq. in. Diameter of cylinders 450 mm Length of stroke 600 mm No. of cylinders 4 No. of cranks 4

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 476 mm Is there a bearing between each crank Yes

Revolutions per minute 185 Flywheel dia. 2180 mm Weight 7 tons. Means of ignition Compression Kind of fuel used Diesel.

Crank Shaft, dia. of journals as per Rule 226 mm as fitted 235 mm Crank pin dia. 240 mm Mid. length breadth 380 mm Mid. length thickness 127 mm Thickness parallel to axis SOLID FORGED.

Flywheel Shaft, diameter as per Rule CRANK SHAFT Intermediate Shafts, diameter as fitted Thickness of cylinder liners 34 1/2 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 silencers 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 Driven by Engine.

Air Compressors, No. One to each Eng. No. of stages Three Diameters 62x285x325 mm Stroke 250 mm Driven by Crank Shaft.

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 Fusible plugs.

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

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 inches thickness 3/8 inches

Seamless, lap welded or riveted longitudinal joint Seamless Material Steel Range of tensile strength 29/33 1/2 Working pressure by Rules

Starting Air Receivers, No. None 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 with Canopy.

Pressure of supply 220 volts. Load 950 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 with Interpoles

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

Are there an adjustable regulating resistance fitted in series with each shaft 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

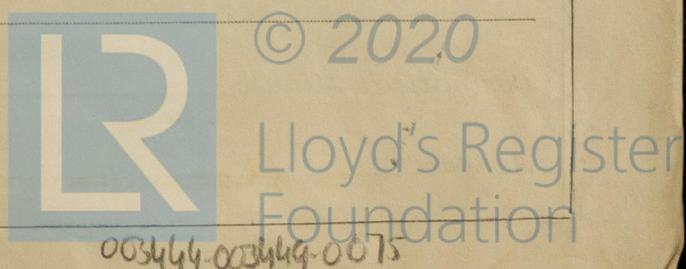
PLANS. Are approved plans forwarded herewith for Shafting No Receivers Separate Tanks

SHAFTING AND GEAR

As per attached List.

The foregoing is a correct description, For W. H. ALLEN, SONS & Co., Ltd., H. Geo. Kimber.

Manufacturer.



003444-003449-0015

Dates of Survey while building { During progress of work in shops - - } May 9. June 5. July 3. 15. 22. 25. 31. Sep 8. 17. 22. 1928
 { During erection on board vessel - - - }
 Total No. of visits

Dates of Examination of principal parts—Cylinders Aug. 3. 15. 25. Sep. 17. Covers Aug. 3. 15. 22. 25. Sep. 17. Pistons Aug. 3. Sep. 22. Piston rods ✓

Connecting rods Aug. 9. June 5. July 3. 15. Crank and Flywheel shaft Aug. 15. 25. Intermediate shaft ✓

Crank and Flywheel shaft, Material Steel Identification Mark SEE BELOW. Identification Marks

Is this machinery duplicate of a previous case Yes If so, state name of vessel "CHESHIRE"

General Remarks (State quality of workmanship, opinions as to class, &c.)
Crank Shafts Identification Marks:—

Eng. A. TEST N^o 981
 LLOYDS
 8047
 31-3-28
 J.P.
 LR
 15-8-28

Eng. B. TEST N^o 24 T.B.
 LLOYDS
 8081
 15-5-28
 J.P.
 25-8-28
 LR

Eng. C. TEST N^o 25
 LLOYDS
 8085
 31-5-28
 J.P.
 25-8-28
 LR

This Machinery has been constructed under Special Survey in accordance with approved plans and Rule Requirements. The Workmanship & Material, so far as can be seen, are good and satisfactory bench trials have been carried out under survey. The three sets which are numbered 98501/A/B/C have been despatched to Glasgow where they are to be installed and, in my opinion, will be eligible for inclusion in the Classification and record of T.M.C. of the vessel.

The amount of Fee ... £ 25-14-0 When applied for, 24 SEP 1928
 Travelling Expenses (if any) £ 3-10-4 When received, 19 16/10/28

Richard 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.)