

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS

No. 95571

30 SEP 1930

Received at London Office

Date of writing Report

When handed in at Local Office

30 SEP 1930

Port of

London

12 FEB 1931

No. in Survey held at Reg. Book.

Bedford

Date, First Survey

7th April

Last Survey

10th Sept. 1930

Number of Visits

18

88929 on the

Single
Twin
Triple
Quadruple

Screw vessel

"WORCESTERSHIRE"

Tons { Gross 10800
Net

Built at

Govan Glasgow

By whom built

Messrs. Fairfield Co. Ltd. Yard No. 640

When built 1930

Owners

Messrs. Bibby & Co. Ltd. (Bibby Bros. & Co. Ings.)

Port belonging to

Liverpool

Oil Engines made at

Bedford

By whom made

Messrs. W. H. Allen & Sons Ltd.

Contract No.

11/18781/9/2 When made 1930

Generators made at

Bedford

By whom made

Messrs. W. H. Allen & Sons Ltd.

Contract No.

11/18784/3 When made 1930

No. of Sets

3

Engine Brake Horse Power 1013

Nom. Horse Power as per Rule 290

Total Capacity of Generators

675 Kilowatts.

IL ENGINES, &c.

Type of Engines Allen Burneiser Main 2 or 4 stroke cycle 4 Single or double acting SA

Maximum pressure in cylinders 500 lb/sq. in. Diameter of cylinders 410 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 480 mm Is there a bearing between each crank Yes

Revolutions per minute 185 Flywheel dia. 2180 mm Weight 5 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 Crank Webs Mid. length breadth 320 mm Mid. length thickness 127 mm Thickness parallel to axis SOLID FORGED Thickness around eye-hole

Flywheel Shaft, diameter as per Rule CRANKSHAFT Intermediate Shafts, diameter as per Rule as fitted Thickness of cylinder liners 34.5 mm

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. Two 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 Driven from crankshaft.

Air Compressors, No. One per engine No. of stages 3 Diameters 325 x 285 x 62 mm Stroke 250 mm Driven by Engine Crankshaft

Scavenging Air Pumps, No. Diameter Stroke Driven by

IR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule Fusible plug.

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 40 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 1/2 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 Open Type, drip proof.

Pressure of supply 220 volts. Load 1025 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. Yes, 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 26-4-26 Receivers. Separate Tanks

PREPARE GEAR

As per attached List (3 Sheets.)

The foregoing is a correct description,

W. H. ALLEN, SON & CO., LTD.,

Manufacturers.

W. H. Allen



© 2020

Lloyd's Register Foundation

003154-003161-0134

Dates of Survey while building { During progress of work in shops - - - } Apr. 7. 14. May 5. June 30. July 8. 14. 16. 18. 25. 30. Aug. 12. 15. 18. 27. Sep. 3. 9. 10. 25. Total No. of visits 18 partial = 10 full

Dates of Examination of principal parts - Cylinders July 8, 14, 18, 25 Covers July 14, 16, 18, 25, 30 Pistons Aug. 15, 27 Sep. 3 Piston rods ✓

Connecting rods April 7, 14 May 5. Crank and Flywheel shaft July 8, 16. Intermediate shaft ✓

Crank and Flywheel shaft, Material Steel Identification Mark See Below Intermediate shafts, Material Identification Marks

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

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

Crank shafts Identification Marks:-

Eng. A.	KI/18781	Eng. B.	KI/18781	Eng. C.	KI/18781
	TEST 56		TEST 96		TEST 120
	J.P. BT		J.P. BT		J.P. BT
	LLOYDS E.M.		LLOYDS Y.C.		LLOYDS
	8737		8742		8765
	9-5-30		14-5-30		30-5-30
	LR		LR		LR
	8-7-30		8-7-30		16-7-30

This machinery has been constructed under Special Survey in accordance with approved plans & hull requirements. The workmanship & materials, so far as can be seen, are good and satisfactory bench trials have been carried out under survey.

The three sets which are numbered KI/18781 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 & record of T.M.C. of the vessel.

Im. 7. 26 - Transfer. (The Surveyors are requested not to write on or below the space for Committee's Minutes.)

The amount of Fee ... £ 29-0-0 When received 30 SEP 1930
 Travelling Expenses (if any) £ 14-6-3 When received 9. 2. 31

Arthur A. Palmer
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute **GLASGOW 11 FEB 1931**
 Assigned *See His Rpt 51220.*

