

Bel 11967

pt. 4c.

# REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 58248

APR 1937

Received at London Office

Date of writing Report 19 When handed in at Local Office 3. 4. 1937 Port of Glasgow  
No. in Survey held at Glasgow Date, First Survey 15. 12. 36 Last Survey 30. 3. 1937  
Reg. Book. Number of Visits 19

Single on the Twin Triple Quadruple Screw vessel Tons { Gross Net

Built at Belfast By whom built Harland & Wolff, Ltd. Yard No. 993 When built 1937.  
Owners Union Castle Co. Ltd. Port belonging to

Oil Engines made at Glasgow By whom made Harland & Wolff, Ltd. Contract No. 9931 When made 1937  
Generators made at Belfast By whom made Harland & Wolff, Ltd. Contract No. 993 When made 1937

No. of Sets 3 Engine Brake Horse Power 435 each Nom. Horse Power as per Rule 373 Total Capacity of Generators 900 Kilowatts.

IL ENGINES, &c.—Type of Engines Enclaved tanks, airless injection. 2 or 4 stroke cycle 4 Single or double acting S.A.

Maximum pressure in cylinders 500 lb. Diameter of cylinders 330 mm. Length of stroke 580 mm. No. of cylinders 6 No. of cranks 6

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 430 mm. Is there a bearing between each crank yes

Revolutions per minute 270 Flywheel dia. 1900 mm. Weight 4.9 tons Means of ignition Compression Kind of fuel used Diesel oil.

Crank Shaft, dia. of journals as per Rule 202 mm. as fitted 280 mm. Crank pin dia. 220 mm. Crank Webs Mid. length breadth 288 mm. Thickness parallel to axis Solid shrunk Thickness around eyehole forged

Flywheel Shaft, diameter as per Rule 202 mm. as fitted Intermediate Shafts, diameter as per Rule Thickness of cylinder liners 24 to 20 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 lagged

Cooling Water Pumps, No. Ship's system Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Lubricating Oil Pumps, No. and size One each engine @ 6 1/2 tons per hour.

Air Compressors, No. None No. of stages Diameters Stroke Driven by

Scavenging Air Pumps, No. None Diameter Stroke Driven by

IR 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 Harland & Wolff, Open Type. Pressure of supply 222 volts. Load 1350 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

Are there 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 30-10-36 Receivers Separate Tanks

SHAFTING AND GEAR As per attached list.

The foregoing is a correct description. FOR HARLAND AND WOLFF, LIMITED.

Wm. J. Wrights.

Manufacturer.

Finneston Secretary



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Lloyd's Register Foundation

W212-0132

1936 Dec: 15 (1937) Jan: 18 20 Feb 2 9 10 15 16 18 22 23 24 25 Mar: 3 4 10

Dates of Survey while building  
 During progress of work in shops - -  
 During erection on board vessel - - -  
 Total No. of visits 19

Dates of Examination of principal parts - Cylinders 15-2-37 18-2-37 25-2-37 10-3-37  
 Covers 24-2-37 4-3-37  
 Pistons 16-2-37 25-2-37 10-3-37  
 Piston rods ✓  
 Connecting rods 22-2-37; 25-2-37; 10-3-37  
 Crank and Flywheel shaft 18-1-37; 9-2-37; 25-2-37  
 Intermediate shaft ✓

Crank and Flywheel shaft, Material *Steel* Identification Mark *6779 P.9.* Intermediate shafts, Material ✓ Identification Marks ✓  
 Is this machinery duplicate of a previous case *yes* If so, state name of vessel *Harland + Wolff's Eng. No. 992. Glasgow Reg. No. 58011*

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

*These engines have been built under Special Survey in accordance with the approved plans and the Rules of this Society. The materials and workmanship are good. The engines have been tested coupled to the dynamo under full load and found satisfactory, and have now been despatched to Belfast to be installed on board the vessel. Reports of tests of dynamo attached.*

*These engines have been efficiently installed and fastened on seats in the Main motor room. They have been tried out under full working conditions with satisfactory results. The vessel is eligible in my opinion for classification in the Society's Register Book.*

*Charles W Hunter  
 Belfast.*

Im. 7, 28 - Transfer. (The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Fee ... £ 37 : 6 :  
 Travelling Expenses (if any) £ : :  
 When applied for, 6 APR 1937  
 When received, 9 8 19 37

*P. Fitzgerald*  
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute **GLASGOW 6-APR 1937**  
 Assigned *Deferred.*

TUE. 6 JUL 1937

