

Bel. 11852

Rpt. 4c.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS

No. 57599

28 OCT 1936

Received at London Office

-1 DEC 1936

Date of writing Report 19 When handed in at Local Office 20. 10. 36 Port of Glasgow

No. in Survey held at Glasgow Reg. Book. Date, First Survey 19. 8. 36 Last Survey 8. 10. 1936 Number of Visits 13

on the ^{Single} Twin ^{Triple} Screw vessel Tons { Gross Net

Built at Belfast By whom built Harland & Wolff, Ltd. Yard No. 983 When built 1936

Owners Union Castle Mail S.S. Co. Ltd. Port belonging to London

Oil Engines made at Glasgow By whom made Harland & Wolff, Ltd. Contract No. 983 When made 1936

Generators made at Belfast By whom made Harland & Wolff, Ltd. Contract No. 983 When made 1936

No. of Sets 3 Engine Brake Horse Power 90 each Nom. Horse Power as per Rule 26 each Total Capacity of Generators 180 Kilowatts.

OIL ENGINES, &c.—Type of Engines Enclosed trunk type 2 or 4 stroke cycle 2 Single or double acting S.A. ✓

Maximum pressure in cylinders 300 lb. Diameter of cylinders 220 mm. Length of stroke 370 mm No. of cylinders 2 ✓ No. of cranks 2

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 304 mm. Is there a bearing between each crank yes

Revolutions per minute 300 Flywheel dia. 1200 mm Weight 1 1/2 tons Means of ignition Compression Kind of fuel used Diesel oil.

Crank Shaft, dia. of journals as per Rule 136 mm. as fitted 180 mm. Crank pin dia. 180 mm. Crank Webs Mid. length breadth 390 mm. dia. Thickness parallel to axis shank Thickness around eyehole ✓

Flywheel Shaft, diameter as per Rule 136 mm. as fitted Intermediate Shafts, diameter as per Rule Thickness of cylinder liners 18 to 16 mm.

Is a governor or other arrangement fitted to prevent racing of the engine when detached 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. yes

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

Lubricating Oil Pumps, No. and size One cog wheel pump. 3 tons per hour.

Air Compressors, No. One No. of stages 2 Diameters 280 + 250 mm. Stroke 190 mm Driven by Engine.

Scavenging Air Pumps, No. One rotary blower Diameter 390 mm. per min. Stroke Driven by Engine.

AIR 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 Open marine type. ✓

Pressure of supply 220 volts. Load 270 Amperes. Direct or Alternating Current Direct current

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 yes ✓ Receivers Separate Tanks

SPARE GEAR As per Rule & enclosed list.

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

Wm. J. Wrights

Manufacturer.

Finnlestone Secretary



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W138-0184

Dates of Survey while building { During progress of work in shops - - } 1936 Aug: 19. 24. 25. 27. 28 Sep: 18. 22. 24. 30 Oct: 1. 2. 6 8
 { During erection on board vessel - - - }
 Total No. of visits 13

Dates of Examination of principal parts—Cylinders 3- 19/8/36 Covers 27-8-36 Pistons 2- 18/9/36 - Piston rods ✓
 3- 24/8/36

Connecting rods 24-9-36 - Crank and Flywheel shaft 24-8-36 - Intermediate shaft ✓
 Crank and Flywheel shaft, Material steel Identification Mark 6700 12-6-36 M.A.B.
 6840 7-8-36 M.A.B.
 6683 24-6-36 M.A.B. Identification Marks -

Is this machinery duplicate of a previous case ✓ If so, state name of vessel

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

These auxiliary engines have been built under Special Survey and in accordance with the approved plans and the Rules of this Society. The materials and workmanship are good. The engines have been tried together with the dynamo under full load & found satisfactory. They have been despatched to Belfast where they will be installed on board the vessel, and the air compressors tried under working conditions.

20/10/36 These engines have been effectually installed on board the vessel and tested out under full working conditions with satisfactory results

Charles H. Hunter
 Belfast.
 20.11.36.

1m.7.20—Transfer. (The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Fee Engines £ 7 : 16 : 27 OCT 1936
 Compressor £ 3 : 3 :
 Travelling Expenses (if any) £ 10 : 19 :
 When received, 25 Nov 1936

P. Fitzgerald & Charles H. Hunter,
 Surveyors to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 27 OCT 1936

Assigned Deferred.

FRI. 4 DEC 1936
 See Bel. 70
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