

-8 JAN 1935

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS

No. 55029

10 OCT 1934

Date of writing Report 6th Oct. 34 When handed in at Local Office 8th Oct. 34 Port of GLASGOW
 No. in Survey held at Glasgow Beepast Date, First Survey 6th April 1934 Last Survey 28th Sept. 1934
 Reg. Book. 89758 on the Single Twin Triple Quadruple Screw vessel IMPERIAL STAR Tons { Gross
 Net

Built at Belfast By whom built Harland & Wolff Ltd. Yard No. 933 When built 1934
 Owners Blue Star Line Ltd. Port belonging to Beepast
 Engines made at Glasgow By whom made Harland & Wolff Ltd. Contract No. 933 When made 1934
 Generators made at Birmingham By whom made General Electric Co. Contract No. 53378 When made 1934
 of Sets 3 Engine Brake Horse Power 479 Nom. Horse Power as per Rule 410 Total Capacity of Generators 990 Kilowatts.

ENGINES, &c. Type of Engines Heavy oil: trunk type: indirect injection 2 or 4 stroke cycle 4 Single or double acting Single
 maximum pressure in cylinders 500 lb./sq. in. Diameter of cylinders 330 mm. Length of stroke 580 mm. No. of cylinders 6 No. of cranks 6
 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 300 Flywheel dia. 1900 mm. Weight 4 tons Means of ignition Compression Kind of fuel used Diesel oil
 Crank Shaft, dia. of journals as per Rule 190 mm. Crank pin dia. 220 mm. Crank Webs Mid. length breadth 288 mm. Thickness parallel to axis solid
as fitted 280 mm. Mid. length thickness 115 mm. Thickness around eye-hole spring
 Wheel Shaft, diameter as per Rule 190 mm. Intermediate Shafts, diameter as fitted Thickness of cylinder liners 24 to 20 mm.
as fitted crank shaft Means of lubrication forced
 governor or other arrangement fitted to prevent racing of the engine when de-clutched yes
 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. ships system Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes
 Lubricating Oil Pumps, No. and size 1 @ 6 1/2 tons/hr.
 Compressors, No. none No. of stages — Diameters — Stroke — Driven by —
 Sucking Air Pumps, No. none Diameter — Stroke — Driven by —

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

the internal surfaces of the receivers be examined What means are provided for cleaning their inner surfaces
 Are a drain arrangement fitted at the lowest part of each receiver
 Pressure Air Receivers, No. Cubic capacity Bel. Rpt. Internal diameter — thickness —
 less, lap welded or riveted longitudinal joint Material — Range of tensile strength — Working pressure by Rules —
 Sucking Air Receivers, No. Total cubic capacity — Internal diameter — thickness —
 less, lap welded or riveted longitudinal joint Material — Range of tensile strength — Working pressure by Rules —

ELECTRIC GENERATORS:—Type General Electric Co. Direct Current.
 Voltage of supply 220 volts. Load 1500 Amperes. Direct or Alternating Current Direct

Generating 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
 Do the generators, do they comply with the requirements regarding rating yes are they compound wound yes
 by over compound yes, if not compound wound state distance between each generator —
 adjustable regulating resistance fitted in series with each shunt field yes Are all terminals accessible, clearly marked, and furnished with sockets yes
 are 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
 Are approved plans forwarded herewith for Shafting yes Receivers Bel. Rpt. Separate Tanks Bel. Rpt.
 (If not, state date of approval)
 GEAR As per attached list.

The foregoing is a correct description,

For HARLAND AND WOLFF, LIMITED,

Wm. J. Wright.

Manufacturer.

Finnlestone Secretary



© 2020

Lloyd's Register
Foundation

W1135-0117

Dates of Survey while building { During progress of work in shops - - 1934 Apr: 6. 10. 12. 24. 26 May: 2. 4. 7. 15. 18. 21. 22. 29. 30 June: 4. 14. 15. 19 July: 4. 27
 { During erection on board vessel - - - 30 Aug: 7. 8. 20. 21. 22. 28 Sep: 3. 28
 Total No. of visits 29

Dates of Examination of principal parts—Cylinders 22-8-34 Covers 27-7-34 Pistons 22-8-34 Piston rods ✓

Connecting rods 28-8-34 Crank and Flywheel shaft 21-5-34; 22-5-34 & 19-6-34 Intermediate shaft ✓

Crank and Flywheel shaft, Material Steel Identification Mark 4862 708 Intermediate shafts, Material ✓ Identification Marks ✓

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.) These three Auxiliary Engines have been built under special survey in accordance with the Society's Rules & the approved plans. The materials & workmanship are good. Together with the generators they have been examined under full power on the works' test bed & found satisfactory. The engines & generators have been forwarded to Belfast to be fitted in the vessel.

8/10/34.

These auxiliary engines have been efficiently installed on the vessel in the wings of the motor room. They have been tried out under working conditions with satisfactory results and are eligible, in an opinion, for use on a classed vessel

Rice Amess & Charles Hunter
 Belfast.

The amount of Fee ... £ 41: - : When applied for, 9-OCT-1934
 Travelling Expenses (if any) £ - : - : When received, 22nd Nov. 1934 See form Cst.

J. Doyle
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 9-OCT-1934

Assigned Deferred.

FRI. 11 JAN 1935

See Bel. J.E. 11436

© 2020

Lloyd's Register Foundation

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