

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 50639

JUL 1930

Received at London Office

Date of writing Report 1st July, 1930 When handed in at Local Office 3rd July, 1930 Port of GLASGOW.
 No. in Survey held at Glasgow Date, First Survey 9.12.29 Last Survey 30-6-1930.
 Reg. Book. 84463 on the Single Screw vessel "SILVERTEAK" Tons { Gross 18 Net 18
Triple
Quadruple

Built at Belfast By whom built Harland & Wolff Ltd. Yard No. 884. When built 1930.

Owners Silver Line Ltd. Port belonging to London

Oil Engines made at Glasgow By whom made Harland & Wolff Ltd. Contract No. 884-1. When made 1930.

Generators made at Sunderland By whom made Sunderland Engineering Co. Contract No. — When made 1930

No. of Sets 4. Engine Brake Horse Power 151 each Nom. Horse Power as per Rule 172 to 184 Total Capacity of Generators 400 Kilowatts.

OIL ENGINES, &c.—Type of Engines Diesel, Vertical Reciprocating 2 or 4 stroke cycle 4 Single or double acting Single

Maximum pressure in cylinders 500 lb./in.² Diameter of cylinders 230 mm. Length of stroke 380 mm. No. of cylinders 6 No. of cranks 6

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 302 mm. Is there a bearing between each crank yes

Revolutions per minute 300 Flywheel dia. 1225 mm. Weight 1.08 tons Means of ignition compression Kind of fuel used Diesel

Crank Shaft, dia. of journals as per Rule 132 mm. Crank pin dia. 140 mm. Crank Webs Mid. length breadth 335 mm. Thickness parallel to axis solid
as fitted 140 mm. Mid. length thickness 78 mm. Thickness around eyehole ridged.

Flywheel Shaft, diameter as per Rule 132 mm. Intermediate Shafts, diameter as per Rule 140 mm. Thickness of cylinder liners 18 to 14 mm.
as fitted 140 mm.

Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes Means of lubrication Forced & gravity.

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 off each engine — each 2 tons/hr.

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

Scavenging Air Pumps, No. None Diameter — Stroke — Driven by —

AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule fusible plug; safety valve on pipe line.

Can the internal surfaces of the receivers be examined yes What means are provided for cleaning their inner surfaces Loose ends.

Is there a drain arrangement fitted at the lowest part of each receiver yes.

High Pressure Air Receivers, No. None 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. One Total cubic capacity 150 litres Internal diameter 295 mm. thickness .71 in. = 18 mm.

Seamless, lap welded or riveted longitudinal joint seamless Material steel Range of tensile strength 28,320 lb./in.² Working pressure by Rules 1680 lb./in.²

ELECTRIC GENERATORS:—Type Open type.

Pressure of supply 220 volts. Load 455 (each) 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 compound yes 5 per cent. —, 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 12th Oct. 1929 Receivers No Separate Tanks None

SPARE GEAR As per attached list — in accordance with the Rules

and in excess.

The foregoing is a correct description,
For HARLAND & WOLFF, LTD.

MANAGER FINNIESTON WORKS.

Manufacturer.



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Dates of Survey while building { During progress of work in shops - -) 1929 Dec 9. 10. 20 (1930) Feb 14. 20. 26 Mar 3. 7. 19 Apr 16. 28 May 6. 7. 20. 23 30 June
During erection on board vessel - - -) 18. 30
Total No. of visits 18

Dates of Examination of principal parts—Cylinders 7-5-30 Covers 7-5-30 Pistons 16-4-30 Piston rods 16-4-30
Connecting rods 16-4-30 Crank and Flywheel shafts { 20-2-30, 3-3-30
26-2-30, 7-3-30 Intermediate shaft None.

Crank and Flywheel shaft, Material Steel Identification Mark 2740, 2880 Intermediate shafts, Material Identification Marks

Is this machinery duplicate of a previous case Yes If so, state name of vessel M.V. "Silverwalnut."

General Remarks (State quality of workmanship, opinions as to class, &c.) These four 6-cylinder Auxiliary Diesel Engines have been built under Special Survey in accordance with this Society's Rules. The material & workmanship are good. They have been tried on the test bed under full power load with satisfactory results. The Engines & their generators have been forwarded to Belfast to be fitted in the vessel.

These engines have been efficiently fastened on seats in the motor room of the vessel and tried out under full working conditions with satisfactory results.

R. Lee Amess
Belfast

3-7-30

The amount of Fee ... £ 17 : 4 :
Travelling Expenses (if any) £ - : - :
When applied for, 7 - JUL 1930
When received, 24.9.30

J. D. Boyle
Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 8 - JUL 1930
Assigned Defered

FRI. 26 SEP 1930



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