

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

Sld. No. 29510.

No. 91595.

17 SEP 1927

REMARKS.

-7 JUL 1927

-7 JUL 1927

Port of London

Survey held at

Bedford

Date, First Survey

13 May 1927

Last Survey

30 June 1927

Number of Visits

Single
on the Twin
Twin
Quadruple

MOTOR

Screw/vessel

"SILVERMAPLE" "SILVERHAZEL"

Tons { Gross 5310
Net 3096

Sunderland

By whom built

Li J. Laine & Sons Ltd.

Yard No.

When built

1927

SilverLine Ltd. (Stanley & John Thompson Ltd.)

Port belonging to

London

Engines made at

Bedford

By whom made

Messrs H. H. Allen Sons & Co.

Contract No.

39523/1/2 When made 1927

Generators made at

Sunderland

By whom made

Sunderland F & E Co. Ltd.

Contract No.

39523/1/2 When made 1927

Sets 4

Engine Brake Horse Power

600

Nom. Horse Power as per Rule

171

Total Capacity of Generators

400 Kilowatts.

ENGINES, &c.

Type of Engines

Diesel (Bunsen's Main)

2 or 4 stroke cycle

4 Single or double acting S.A.

Mean pressure in cylinders

530 lb/sq in

Diameter of cylinders

300 mm

Length of stroke

430 mm

No. of cylinders

3

No. of cranks

3

Bearings, adjacent to the Crank, measured from inner edge to inner edge

360 mm

Is there a bearing between each crank

Yes

Revolutions per minute

300

Flywheel dia.

1600 mm

Weight

4 Tons

Means of ignition

Compression

Kind of fuel used

Diesel oil

Shaft, dia. of journals

166 mm

Crank pin dia.

180 mm

Crank Webs

Mid. length breadth

230 mm

Mid. length thickness

100 mm

Thickness parallel to axis

SOLID FORGED

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SOLID FORGED

Governor or other arrangement fitted to prevent racing of the engine when declutched

Yes

Means of lubrication

Mechanical forced

Cylinders fitted with safety valves

Yes

Are the exhaust pipes and silencers water cooled or lagged with non-conducting material

Water Pumps, No.

2

2 1/2" motor driven

Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Operating Oil Pumps, No. and size

2

Driven from engine

Compressors, No.

4

No. of stages

3

Diameters

46/195/220 mm

Stroke

180 mm

Driven by Crankshaft

Operating Air Pumps, No.

1

Diameter

1 1/2"

Stroke

1 1/2"

Driven by

1 1/2"

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

Insensible

Shut.

Internal surfaces of the receivers be examined

Yes

What means are provided for cleaning their inner surfaces

Ends portable

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

Yes

Pressure Air Receivers, No.

4

Cubic capacity of each

35 litres

Internal diameter

7 1/4"

Thickness

3/8"

Seams, lap welded or riveted longitudinal joint

Seamless

Material

Steel

Range of tensile strength

29/33

Working pressure by Rules

1104 lb/sq in

Operating Air Receivers, No.

4

Total cubic capacity

150 litres

Internal diameter

12"

Thickness

1/2"

Seams, lap welded or riveted longitudinal joint

Seamless

Material

Steel

Range of tensile strength

29/33

Working pressure by Rules

1000 lb/sq in

ELECTRIC GENERATORS:—Type

Two bearing open; Rupt proof; 6 pole.

Volts of supply

220

Load

455

Amperes.

Direct

Direct or Alternating Current

Direct

Alternating current system, state frequency of periods per second

50

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 with Interpoles

Are they over compounded 5 per cent.

Level compounding

Yes

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

Are approved plans forwarded herewith for Shafting

Yes

Receivers

Yes

Separate Tanks

Yes

Are approved plans forwarded herewith for Shafting

Yes

Receivers

Yes

Separate Tanks

Yes

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Yes

Receivers

Yes

Separate Tanks

Yes

RE GEAR

See attached List

The foregoing is a correct description,

W.H. ALLEN SONS & COMPANY LTD.,

Manufacturer.

Approved

6/7/27



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Lloyd's Register Foundation

W475-0190

Dates of Survey while building { During progress of work in shops - - May 13/8, 24 June 14, 30
 { During erection on board vessel - - -
 Total No. of visits 5 partial = 3 full.

Dates of Examination of principal parts—Cylinders 24-5-27 Covers 18-5-27 Pistons 30-6-27 Piston rods ✓
 Connecting rods 14-6-27 Crank and Flywheel shaft 13-5-27 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 Silvernava (L.N. 91)

General Remarks (State quality of workmanship, opinions as to class, &c.)
Crank Shafts - Identification Marks:-

LLOYDS TEST C. J.P. LLOYDS 75-93 14-7-26 J.P. 13-5-27 LR	LLOYDS TEST D. J.P. LLOYDS 75-92 14-7-26 J.P. 13-5-27 LR	LLOYDS TEST E. J.P. 75-94 14-7-26 J.P. 13-5-27 LR	LLOYDS TEST F. J.P. LLOYDS 75-91 14-7-26 J.P. 13-5-27 LR
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This Machinery has been constructed under special survey in accordance with approved plans & Rule requirements. The workmanship & materials, so far as can be seen, are good and satisfactory bench trials have been carried out under survey.

The four sets which are numbered 39523/C/D/E/F have been despatched to Sunderland where they are now installed and, in my opinion, will be eligible for inclusion in the Classification and record of LMC of the vessel.

The installation has been tried under full working conditions with satisfactory results. The spare gear was examined & found complete. For notation see machinery report.

Harbottle.

The amount of Fee ... £ 17-2-0 When applied for, 7 JUL 1927
 Travelling Expenses (if any) £ 1-13-3 When received, 28 JULY 1927

Committee's Minute FRI. 23 SEP 1927
 Assigned See Sld P.E. up to 25910

Richard A. Robinson
 Surveyor to Lloyd's Register of Shipping.



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 Committee's Minute
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