

pt. 4c.

# REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 1051

Received at London Office

JUL 1941

Date of writing Report April 30, 1941 When handed in at Local Office Port of Cleveland, Ohio.

No. in Survey held at Grove City, Pa. Date, First Survey Jan. 27 th, Last Survey March 19, 1941. Reg. Book. Number of Visits 5

on the <sup>Single</sup> ~~Twin~~ ~~Triple~~ ~~Quadruple~~ Screw vessel **M/S ATLANTIC SUN.**

Tons <sup>Gross</sup> <sub>Net</sub>

Built at Chester, Pa. By whom built Sun S/B & D/D Co. Yard No. 212 When built 1941  
Owners **Sum Gee Co** Port belonging to **Philadelphia**

Oil Engines made at Grove City, Pa. By whom made Cooper-Bessemer Corp. Contract No. 1659 When made 1941

Generators made at - By whom made - Contract No. - When made -  
No. of Sets - Engine Brake Horse Power 150 Nom. Horse Power as per Rule - Total Capacity of Generators - Kilowatts.

**IL ENGINES, &c.**—Type of Engines Auxiliary Diesel 2 or 4 stroke cycle 4 Single or double acting S

Maximum pressure in cylinders 700 lbs. Diameter of cylinders 10.5" Length of stroke 13-1/2" No. of cylinders 3 No. of cranks 3  
*Estimated MIP 106 lb.*

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 12-1/8" Is there a bearing between each crank Yes

Revolutions per minute 400 Flywheel dia. 58-1/4" Weight 3800 lbs. Means of ignition Solid Kind of fuel used Diesel

**Crank Shaft, dia. of journals** as per Rule 5-63" as fitted 7-1/2" Crank pin dia. 7-1/2" Crank Webs Mid. length breadth 3-1/4" Thickness parallel to axis -  
Mid. length thickness 10-1/2" <sup>shrink</sup> Thickness around eye-hole -

**Flywheel Shaft, diameter** as per Rule - as fitted - **Intermediate Shafts, diameter** as per Rule - as fitted - Thickness of cylinder liners .875" - .437"

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 -

**Cooling Water Pumps, No.** (1) Centrifugal Is the sea suction provided with an efficient strainer which can be cleared within the vessel -  
25 G.M.P.

**Lubricating Oil Pumps, No. and size** (1) Gear Type 18 G.P.M.

**Air Compressors, No.** - No. of stages - Diameters - Stroke - Driven by -

**Scavenging Air Pumps, No.** - Diameter - Stroke - Driven by -

**AIR RECEIVERS:**—Have they been made under Survey - State No. of Report or Certificate -

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 Not furnished by Cooper-Bessemer Corp.

Pressure of supply - volts. Full Load Current - Amperes. Direct or Alternating Current -

If alternating current system, state the periodicity - Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on and off -

**Generators, are they compounded as per rule** - is an adjustable regulating resistance fitted in series with each shunt field -  
Are all terminals accessible, clearly marked, and furnished with sockets -

Are they so spaced or shielded that they cannot be accidentally earthed, short circuited, or touched - Are the lubricating arrangements of the generators as per Rule -

If the generators are under 100 kw. full load rating, have the Makers supplied certificates of test - and do the results comply with the requirements -

If the generators are 100 kw. or over have they been built and tested under survey -

**PLANS.** Are approved plans forwarded herewith for Shafting Yes Receivers - Separate Tanks -  
(If not, state date of approval)

**SPARE GEAR** To Rule requirements. ✓

The foregoing is a correct description.

*The Cooper Bessemer Corp. per Geo. Howard* <sup>X</sup> Manufacturer.



© 2021 Lloyd's Register Foundation 21166-0138

6

Dates of Survey while building { During progress of work in shops - - } January 27th, 28th; February 17th, 18th, 19th and March 19th, 1941.  
 { During erection on board vessel - - - }  
 Total No. of visits

Dates of Examination of principal parts—Cylinders 1/27/41 to 3/19/41 Covers 1/27/41 to 3/19/41 Pistons 1/27/41 to 3/19/41 Piston rods -

Connecting rods 1/27/41 to 3/19/41 Crank and Flywheel shafts 1/27/41 to 3/19/41 Intermediate shafts -

Crank and Flywheel shafts, Material - Identification Marks -

Crank shafts, Material O.H. Steel Identification Marks 3688 LLOYDS WJF 10-11-40

Identification marks on Air Receivers

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

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

The above mentioned engine was built in accordance with this Society's Rules, approved plans and under Special Survey. On completion it was thoroughly brake tested at the Builder's works. The materials, workmanship and tests were found efficient.

It is understood that the engine is to be used for driving a dynamo.

Attached to this report is Pittsburgh crank shaft forging report No. 3688. ✓

*This engine has been satisfactorily installed on board the vessel, tried out under working condition found satisfactory.*

Im. 11.37.—Transfer. (MADE IN ENGLAND.)

(The Surveymen are requested not to write on or below the space for Committee Minutes.)

The amount of Fee ... £ 75.00 : When applied for, 4/30/1941.  
 Travelling Expenses (if any) £ 12.00 : When received, 19.....

*J. D. Cameron*  
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute

NEW YORK MAY 28 1941

Assigned *See Pist Entry Report attached.*



© 2021

Lloyd's Register Foundation