

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS

Received at London Office

Date of writing Report Apr. 13 1931 When handed in at Local Office July 3rd 1931 Port of Chicago, Ill.
No. in Survey held at Beloit Wis. Date, First Survey March 2 Last Survey May 23 1931
Reg. Book. Number of Visits 3

on the Single Screw vessel (wood) "Maneco" Cruise stern.
Built at Nova Scotia. By whom built J. Ernst & Co. Yard No. 20 When built 1931
Owners Bell Isle Steamship Co. Ltd. Port belonging to Dunenburg N.S.
Oil Engines made at Beloit Wis. By whom made Fairbanks Morse Co. Contract No. 1 When made 1931-3
Generators made at Beloit Wis. By whom made Fairbanks Morse Co. Contract No. 1 When made 1931
No. of Sets 1 Engine Brake Horse Power 8 Nom. Horse Power as per Rule ✓ Total Capacity of Generators 2 3/4 Kilowatts.

Tons { Gross 248
Net 142

OIL ENGINES, &c.—Type of Engines Diesel 2 or 4 stroke cycle 2 Single or double acting 8.
Maximum pressure in cylinders 1 Diameter of cylinders 5" Length of stroke 6 1/4 No. of cylinders 1 No. of cranks 1
Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 6" Is there a bearing between each crank ✓
Revolutions per minute 800 Flywheel dia. 20" Weight 270 lbs. Means of ignition Solid Kind of fuel used Diesel
Crank Shaft, dia. of journals as per Rule 3" 2 1/4 8 Crank pin dia. 3 1/4" Crank Webs Mid. length breadth 4 1/4" Thickness parallel to axis Mid. length thickness 1 9/32" shrunk Thickness around eye-hole
Flywheel Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule Thickness of cylinder liners
Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication Lubricator
Are the cylinders fitted with safety valves No Are the exhaust pipes and silencers water cooled or lagged with non-conducting material No
Cooling Water Pumps, No. 1- Leaf type Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes
Lubricating Oil Pumps, No. and size 9 1/2 S.P.M. Lubricated by means of Madison Kipp lubricator.
Air Compressors, No. ✓ No. of stages 1 Diameters 12" Stroke 12" Driven by Electric
Sweeping Air Pumps, No. 1 Diameter 12" Stroke 12" Driven by Electric

AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule See Rpt 4b
Can the internal surfaces of the receivers be examined Yes What means are provided for cleaning their inner surfaces See Rpt 4b
Is there a drain arrangement fitted at the lowest part of each receiver Yes

High Pressure Air Receivers, No. 1 Cubic capacity of each 100 Internal diameter 12" thickness 1/2"
Seamless, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules
Starting Air Receivers, No. See Rpt 4b Total cubic capacity 100 Internal diameter 12" thickness 1/2"
Seamless, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules

ELECTRIC GENERATORS:—Type D.C. Shunt wound
Pressure of supply 36 volts. Load 76.5 Amperes. **Direct or Alternating Current** Direct
Is an 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 No
Do they over compounded 5 per cent. ✓ if not compound wound state distance between each generator ✓
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 Yes

ANS. Are approved plans forwarded herewith for Shafting Yes Receivers ✓ Separate Tanks ✓
ARE GEAR to Rule requirements

The foregoing is a correct description,
Fairbanks, Morse & Co. Manufacturer.
By C. E. Bohman, Chief Inspector

Dates of Survey while building { During progress of work in shops - - } *March 2, 3, 23, 1931*
 { During erection on board vessel - - - } *May 15^R - 20 - 22 - 28 - 30 - June 13 - 16 - 20*
 Total No. of visits *11*

Dates of Examination of principal parts—Cylinders *March 3* Covers *March 3* Pistons *March 3* Piston rods
 Connecting rods *March 3* Crank and Flywheel shaft *March 3* Intermediate shaft

Crank and Flywheel shafts, Material *Steel* Identification Mark
 Intermediate shafts, Material 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.) *The above mentioned engine, fitted to a bed plate with a generator, fire pump, & compressor, has been built under special survey, & on completion was tested under full load in the shop. The materials & workmanship were found to be sound & efficient. (Enclosed herewith is copy of approved crank shaft drawing). The above engine has been satisfactorily installed on the vessel and tried out under working conditions with satisfactory results.*

1m, 8, 88 - Transm. (The Surveyors are requested not to write on or below the space for Committee Minute.)

The amount of Fee £	When applied for,
Travelling Expenses (if any) £	When received,
	19.....
	19.....

Y. Moor.
E. Drummond *H. M. Walker.*
 Surveyor to Lloyd's Register of Shipping

Committee's Minute *TUE, 18 AUG 1931*
 Assigned *See F. B. Rep.*

