

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 1619

Received at London Office

Date of writing Report 3rd May 1934 When handed in at Local Office 19 Port of Bremen and Vienna
 No. in Survey held at Augsburg and Budapest Date, First Survey 13. 9. 1933 Last Survey 11. 11. 1933
 Reg. Book. 2. 3. 1934 Number of Visits 26

on the ^{Single} ~~Twin~~ ~~Triple~~ ~~Quadruple~~ Screw vessel motor-tanker, named "Danube Shell II" Tons { Gross _____ Net _____

Built at Budapest (Hungary) By whom built Ganz & Co. Ltd. Yard No. 1430 When built 1933/34

Owners International Inland Waterway Co. London Port belonging to London

Oil Engines made at Augsburg By whom made Maschinenfabr. Augsb. Nürnberg No. 491450 When made 1933

Generators made at Budapest By whom made Ganz & Co. Ltd. Contract No. 1217/346 When made 1933/34

No. of Sets 1 Engine Brake Horse Power 45 Nom. Horse Power as per Rule 11.6 Total Capacity of Generators 30 Kilowatts.

IL ENGINES, &c.—Type of Engines W 3 V 16/22 heavy oil engine 2 or 4 stroke cycle 4 Single or double acting single

Maximum pressure in cylinders 50 atm Diameter of cylinders 160 mm Length of stroke 220 mm No. of cylinders 3 No. of cranks 3

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 202 mm Is there a bearing between each crank yes

Revolutions per minute 550 Flywheel dia. 1100 mm Weight 507 kg Means of ignition solid inject Kind of fuel used gas-oil

Crank Shaft, dia. of journals ^{as per Rule} 105 mm ^{as fitted} 105 mm Crank pin dia. 105 mm Crank Webs Mid. length breadth 150 mm Thickness parallel to axis shrunk

Flywheel Shaft, diameter ^{as per Rule} — ^{as fitted} — Intermediate Shafts, diameter ^{as per Rule} — ^{as fitted} — Thickness of cylinder liners 13.5/8 mm

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 water cooled

Cooling Water Pumps, No. 1, worked from engine Is the sea suction provided with an efficient strainer which can be cleared within the vessel common with main engines

Lubricating Oil Pumps, No. and size 1 about 435 l/hour, at 550 r.p.m.

Air Compressors, No. — No. of stages — Diameters — Stroke — Driven by —

Scavenging Air Pumps, No. — Diameter — Stroke — Driven by —

IR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve yes

Can the internal surfaces of the receivers be examined yes What means are provided for cleaning their inner surfaces cover on top of the air-receiver

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

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. 1 Total cubic capacity 55 liter Internal diameter 249 mm thickness 9 mm

Seamless, lap welded or riveted longitudinal joint seamless Material S. A. Steel Range of tensile strength — Working pressure by Rules 30 atm

ELECTRIC GENERATORS:—Type Ganz EBC 22

Pressure of supply 220 volts. Load 131 Amperes. Direct or Alternating Current Direct current

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 The engines governor has been tested on the test bed and was found satisfactory, as well as on board, when the electric load to be suddenly thrown off.

Generators, do they comply with the requirements regarding rating yes are they compound wound yes

Are they over compounded 5 per cent. yes, if not compound wound state distance between each generator —

Are there any adjustable regulating resistance fitted in series with each shunt field yes Are all terminals accessible, clearly marked, and furnished with sockets yes

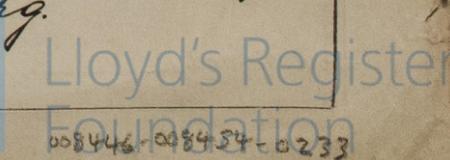
Are they so spaced or shielded that they cannot be accidentally earthed, short circuited, or touched yes Are the lubricating arrangements of the generators as per Rule yes

Are approved plans forwarded herewith for Shafting yes Receivers yes Separate Tanks —

ARE GEAR as per Rules and additional gear.

The foregoing is a correct description, *
GANZ & Co. Ltd.,
 Electrical & Mechanical Engineers,
 Railway-Carriage Manufacturers & Shipbuilders
 Manufacturer.

* Relating details not mentioned in the report of Surveyor of Augsburg.



008446-008454-0233

Dates of Survey while building
 During progress of work in shops - - Sept. 1933; 18. 29. 30. Oct. 1933; 3. 9. 11. 12. 16. 17. 23. 24. 25. Nov. 1933; 2. 4. 6. 7. 8. 11.
 During erection on board vessel - - March 1934; 2. 16. April 1934; 6. 11. 14. 20. 25. 28. April 1934.
 Total No. of visits 26

Dates of Examination of principal parts—Cylinders 29. X. 8. XI. 1933 Covers 3. X. 8. XI. 1933 Pistons 3. X. 8. XI. 1933 Piston rods

Connecting rods 3. X. 1933 Crank and Flywheel shaft 18. X. 8. XI. 1933 Intermediate shaft

Crank and Flywheel shafts, Material S. S. Steel Identification Mark LLOYD'S, V.S. 1577, 18. IX. 1934

Intermediate shafts, Material Identification Marks

Is this machinery duplicate of a previous case yes If so, state name of vessel main engines for Messrs. P. de Vries & Co. Amsterdam

General Remarks (State quality of workmanship, opinions as to class, &c.) This heavy oil engine has been constructed under special Survey in accordance with the Soc. Rules and Regulations as well as with the approved plans and instructions thereto. The materials used in the construction are good and the workmanship is satisfactory. The engine has been tested on the makers test bed during 8 hours incl. 2 hours 10% overload in the presence of Mr. V. Schrowok of Augsburg and was found to work satisfactorily. In my opinion the vessel for which this aux.-engine is intended will be eligible for the notation of * LMC April 1934 because the whole machinery has been fitted on board and tried under full working conditions.

100.6.31—Transfer. (The Surveyors are requested not to write on or below the space for Committee Minute.)

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

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

Committee's Minute JUN 8 1934
 Assigned See Tri. 7E. 10408

