

3pt. 4c.

Comm: 683663.

# REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS

No. 316

Date of writing Report 20.3. 1939 When handed in at Local Office 27.3. 1939 Port of Dusseldorf  
 No. in Survey held at Cologne Date, First Survey 14.7. 1938 Last Survey 17.3. 1939  
 Reg. Book. Number of Visits 6

on the <sup>Single</sup> ~~Triple~~ ~~Quadruple~~ Screw vessel motor tanker "MILDRED"

Tons { Gross  
Net

Built at Alblasserdam By whom built My. De Noord Yard No. 577 When built 1939  
 Owners N. V. Tank Rustraad My. Port belonging to Rotterdam  
 Oil Engines made at Cologne By whom made Klöckner-Humboldt-Deutz A.G. Köln-Deutz Contract No. 584809/11 When made 1939  
 Generators made at By whom made Contract No. When made  
 No. of ~~Eng.~~ aux. Engine Brake Horse Power 56 Nom. Horse Power as per Rule 16 Total Capacity of Generators Kilowatts.

OIL ENGINES, &c.—Type of Engines Heavy oil engine A3M 220 2 or 4 stroke cycle 4 Single or double acting single  
 Maximum pressure in cylinders 50 kg/cm<sup>2</sup> Diameter of cylinders 170 mm Length of stroke 200 mm No. of cylinders 3 No. of cranks 3  
 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 191 mm Is there a bearing between each crank yes  
 Revolutions per minute 750 Flywheel dia. 750 mm Weight 480 kg Means of ignition sol. inj. Kind of fuel used on test bed gas oil  
 Crank Shaft, dia. of journals as per Rule as fitted 120 mm Crank pin dia. 110 mm Crank Webs Mid. length breadth 160 mm Thickness parallel to axis 42.5 mm shrunk Thickness around eye hole  
 Flywheel Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted Thickness of cylinder liners 16 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. one Is the sea suction provided with an efficient strainer which can be cleared within the vessel  
 Lubricating Oil Pumps, No. and size 1 tooth wheel pump capacity 24 ltrs/min at 990 r.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

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

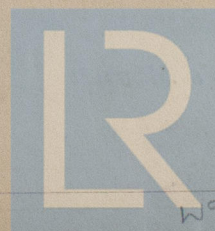
PLANS. Are approved plans forwarded herewith for Shafting 209836 A 6.12.37 Receivers Separate Tanks  
 (If not, state date of approval)

SPARE GEAR As per Rules

The foregoing is a correct description.

Klöckner-Humboldt-Deutz AG

Manufacturer.



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Dates of Survey while building { During progress of work in shops - - } 14.7.- 19.7.38.- 27.2.- 23.- 6.3.- 17.3.-39.  
{ During erection on board vessel - - }  
Total No. of visits  
Liners: 27.2.- 17.3.-  
27.2.  
Covers 27.2.-17.3. Pistons 17.3. Piston rods  
Dates of Examination of principal parts—Cylinders  
Connecting rods 14.7.-19.7.-17.3. Crank and Flywheel shafts 2.3.- 6.3.- 17.3.- Intermediate shafts  
Crank and Flywheel shafts, Material S.M.Steel Identification Marks Lloyd's: 3772 H.B. 6.3.39.  
Intermediate shafts, Material connecting rods Identification Marks 329, 330, 332 H.B.  
Identification marks on Air Receivers

Is this machinery duplicate of a previous case yes If so, state name of vessel Messrs. Anglo Saxon Petr. Co. London  
Düsseldorf Report No. 93

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

This auxiliary engine has been constructed under special survey in accordance with the Society's Rules and Regulations as well as with the approved plan and the instructions thereto. The material used in the construction was found to be good and the workmanship satisfactory. The auxiliary engine has been tested on Makers' test bed in the presence of the undersigned under full load during six hours and 10 % overload during one hour and was found working satisfactory during these trials. After trials all working parts have been opened out for examination and were found in good condition.

The main engine is also being built by Messrs. Klöckner-Humboldt-Deutz A.G., Köln-Deutz.

A copy of this report has been forwarded to the Rotterdam Surveyors

The amount of Fee ... £

Travelling Expenses (if any) £

When applied for,

19

When received,

19

W. Springemann  
Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI 4 AUG 1939

Assigned

See Rep. J.C. 20422



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