

London

Auxiliary

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 256

pt. 4c.

nm. 683580

Received at London Office

JUN - 3 1938

Date of writing Report 20.5.38 When handed in at Local Office 27.5.38 Port of Düsseldorf

No. in Survey held at Cologne Date, First Survey 5.11.37 Last Survey 10.12.37
Reg. Book. Number of Visits 6

on the ^{Single} ~~Twin~~ ^{Triple} ~~Quadruple~~ Screw vessel Tons { Gross Net

Built at Hongkong By whom built W.S. Bailey & Co., Yard No. 291 When built

Owners Port belonging to Eng. 469454/56

Oil Engines made at Cologne By whom made Humboldt-Deutzmotoren Contract No. When made

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/cm² 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 550 ✓ Flywheel dia. 780 mm ✓ Weight 770 kg ✓ Means of ignition sol inject. Kind of fuel used on test bed gas oil

Crank Shaft, dia. of journals as per Rule 120 mm ✓ as fitted Crank pin dia. 110 mm ✓ Crank Webs Mid. length breadth 160 mm ✓ Thickness parallel to axis 42,5 mm ✓ Mid. length thickness 42,5 mm ✓ Thickness around eyehole

Flywheel Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted 125 mm ✓ 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. none ✓ 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: —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,

Humboldt-Deutzmotoren
Aktiengesellschaft

Manufacturer.



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Lloyd's Register
Foundation

009116 - 009121 - 6029

B.S.B.
8-6-38

Dates of Survey while building
 During progress of work in shops - - 5.11.- 9.11.- 19.11.- 23.11.- 24.11.- 10.12.-
 During erection on board vessel - - -
 Total No. of visits

Liners: 23.11.- 10.12.-
 Dates of Examination of principal parts—Cylinders 23.11.- 10.12.- Covers 19.11.- 10.12.- Pistons 10.12. Piston rods
 Connecting rods 9.11.-24.11.-10.12. Crank and Flywheel shaft 5.11.-23.11.-10.12.- Intermediate shaft
 Crank shafts, Material ~~XXXXXXXX~~ S.M.Steel ✓ Identification Mark LLOYD'S 2826 H.B. 23.11.37.
 Intermediate shafts, Material S. M. Steel ✓ Identification Marks Sample No 247 H.B.

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. This auxiliary engine has been tested on Maker's test bed in the presence of the undersigned under full load during 7 hours and 10% overload during 1 hour and was found working satisfactorily during these trials. After trials all working parts have been opened out for examination and were found in good condition.

The fusion welded bed plate has been manufactured under survey in accordance with the approved plan No. 714680 date of approval 24th December 1937.

Identification marks: 3136 H.B. 9.4.38.

The main engine is also being built by Messrs. Humboldt-Deutzmotoren.

A copy of this report has been sent to Hongkong Office.

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

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

Committee's Minute
 Assigned

FRI 20 JAN 1939

See H.K. J.C. Rpt 8342



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Im. 236.—Transfer.
 (The Surveyors are requested not to write on or below the space for Committee Minute.)