

Rpt. 4c.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS. No. 1969.

Date of writing Report 31st Oct. 37 When handed in at Local Office 3.11.37 Port of Bremen / Hamburg
No. in Survey held at Mannheim Date, First Survey 29th April, 37 Last Survey 29th Octob 1937
Reg. Book. Number of Visits 6

Single on the Twin Triple Quadruple Screw vessel
Built at Lubeck By whom built Herr Lubecker Maschinenbau Yard No. 367 When built 1937/38
Owners Messrs. Knäuper + Burchardt Port belonging to Hamburg

Oil Engines made at Mannheim By whom made Herr Motoren-Werke - Mannheim Contract No. 50134 When made 1937
Generators made at Nürnberg By whom made Herr Siemens-Schuckert-Werke Contract No. 4489939 When made 1937

No. of Sets 1 Engine Brake Horse Power 30 Nom. Horse Power as per Rule 7 Total Capacity of Generators 15 Kilowatts.

OIL ENGINES, &c.—Type of Engines R. S. K. 20 Z. / 39447 2 or 4 stroke cycle 4 Single or double acting single

Maximum pressure in cylinders 45 kg Diameter of cylinders 150 mm Length of stroke 200 mm No. of cylinders 2 No. of cranks 2

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 186 mm Is there a bearing between each crank yes

Revolutions per minute 750 Flywheel dia. 1100 mm Weight 355 kg Means of ignition solid inj Kind of fuel used gas oil on fed bed

Crank Shaft, dia. of journals as per Rule ✓ as fitted 100 mm Crank pin dia. 90 mm Crank Webs Mid. length breadth 125 mm Thickness parallel to axis ✓
Mid. length thickness 39.5 mm Thickness around eye-hole ✓

Flywheel Shaft, diameter as per Rule ✓ as fitted ✓ Intermediate Shafts, diameter as per Rule ✓ as fitted ✓ Thickness of cylinder liners 10 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, 2, 5 1/4 Is the sea suction provided with an efficient strainer which can be cleared within the vessel ✓

Lubricating Oil Pumps, No. and size 1, 1, 4 1/4

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 yes State No. of Report or Certificate Dusseldorf Rpt 10/3-3-37, N. Test. J. 6. 1138
127-4-37, 67 Test. V. S. 350

Is each receiver, which can be isolated, fitted with a safety valve as per Rule yes

Can the internal surfaces of the receivers be examined yes What means are provided for cleaning their inner surfaces removal of bottle head

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. 2 Total cubic capacity 1 x 75 ltr; 1 x 40 ltr Internal diameter 255, 2 mm; 198 mm thickness 5.9 mm; 5.5 mm

Seamless, lap welded or riveted longitudinal joint seamless Material S. M. Steel Range of tensile strength 56.6 + 59.8 Working pressure by Rules 46.8 + 59.5 kg/cm²

ELECTRIC GENERATORS:—Type G. 197. N° 4489939 / Siemens-Schuckert-Werke, Nürnberg

Pressure of supply 115 volts. Full Load Current 130 Amperes. Direct or Alternating Current direct 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 yes

Generators, are they compounded as per rule yes is an 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

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 25th Feb. 1937 Receivers plan n° 9403 = 1-1-37 Separate Tanks ✓
(If not, state date of approval) 4869 = 10-4-37

SPARE GEAR as per Rules.

The foregoing is a correct description,
MOTOREN-WERKE MANNHEIM A.-S.
WILHELM BENZ ABT. STAT. MOTORENBAU
M. Forstner

Manufacturer.



W1183-0210

REPORT ON OIL ENGINE ELECTRIC GENERATOR
 Dates of Survey while building: During progress of work in shops - April 29, June 8, Aug 21, Sept 15, Oct 28, 29 - 1937
 During erection on board vessel -
 Total No. of visits 0

Dates of Examination of principal parts - Cylinders 3/8 + 29/10/37 Covers 8/6 + 29/10/37 Pistons 29-10-37 Piston rods ✓
 Connecting rods 29-10-37 Crank and Flywheel shafts 31/8 + 29-10-37 Intermediate shafts 29-4-37
 Crank and Flywheel shafts, Material Siemens-Martin-Steel Identification Marks Lloyd's 12 116 J.B. 24-5-37
 Intermediate shafts, Material ✓ Identification Marks ✓
 Identification marks on Air Receivers 75 lb = N^o 1138 - Lloyd's Test 853, 52 lb - W.P. 426, 7 lb - J.B. 22-1-37
 40 lb = Lloyd's Test - V.S. 350 - 60 atm - W.P. 30 atm - 26-4-37

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. This auxiliary heavy oil engine has been constructed under special survey in accordance with the Society's Rules and Regulations, as well as with the approved plan and instructions thereto. The material used in the construction is good and the workmanship was found to be satisfactory. The auxiliary heavy oil engine has been tested running under full + 10% overload on the maker's test bed in the presence of the undersigned and was found to work satisfactory during these trials. In my opinion the vessel for which this engine is intended will be eligible for the notation of L.M.C. (with date) when the whole machinery has been satisfactorily fitted on board and tried under full working conditions.

The amount of Fee ... £ 84.00 : When applied for, 6.11.1937
 1 x bed test trial " 42.00
 Travelling Expenses (if any) £ 70.00 : When received, 10/12 1937
 Committee's Minute FRI 30 JUL 1938
 Assigned See Ham. J.C. 22840

M. Schneider
 Surveyor to Lloyd's Register of Shipping.

