

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 21978

Received at London Office 27 JUL 1936

Date of writing Report 29/6/36 19 When handed in at Local Office 19 Port of Hamburg

No. in Survey held at Kiel Date, First Survey 12/5/36 Last Survey 24/6/36 19
Reg. Book. Number of Visits 5

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

Built at Hamburg By whom built Deutsche Werft A.G. Yard No. 187 When built _____

Owners _____ Port belonging to _____

Oil Engines made at Kiel By whom made Bohn & Kähler A.G. Contract No. 10393 When made 1936

Generators made at Bremen By whom made Allg. Elektrizitäts-Ges. Contract No. _____ When made 1936

No. of Sets 1 Engine Brake Horse Power 36.5 Nom. Horse Power as per Rule 10.5 Total Capacity of Generators 22 Kilowatts.

OIL ENGINES, &c.—Type of Engines Bohn & Kähler's type 12 R 10 V 2 or 4 stroke cycle 4 Single or double acting sgl.

Maximum pressure in cylinders 50 kg/cm² Diameter of cylinders 140 mm Length of stroke 190 mm No. of cylinders 4 No. of cranks 4

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 180 mm Is there a bearing between each crank yes

Revolutions per minute 550 Flywheel dia. 750 mm Weight 315 kgs Means of ignition Diesel syst. Kind of fuel used Diesel Oil

Crank Shaft, dia. of journals as per Rule 75.4 mm as fitted 75 mm Crank pin dia. 75 mm Crank Webs Mid. length breadth 110 mm Thickness parallel to axis solid shrunk Mid. length thickness 43 mm Thickness around eyehole _____

Flywheel Shaft, diameter as per Rule 75.4 mm as fitted 70 mm Intermediate Shafts, diameter as per Rule _____ as fitted _____ Thickness of cylinder liners 11 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 oil-cooled~~ water cooled ~~or lagged with non-conducting material~~ yes

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 rotary of 500 kgs per hour.

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 Allgemeine Elektrizitäts-Gesellschaft's type A.H. 95

Pressure of supply 115 volts. Load 191 Amperes. Direct or Alternating Current D.C.

If 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 yes

are they over compounded 5 per cent. yes, 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 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

PLANS. Are approved plans forwarded herewith for Shafting 3-5-35 Receivers _____ Separate Tanks _____
(If not, state date of approval)

SPARE GEAR _____

As required by the Rules ✓

The foregoing is a correct description,

Bohn & Kähler

Motoren- und Maschinenfabrik
Aktiengesellschaft

Manufacturer.

Geiffel



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Lloyd's Register
Foundation

003671-003678-0195

1936:
 Dates of Survey while building { During progress of work in shops - - } May: 12, 22, 29 June: 15, 25
 { During erection on board vessel - - - } ✓
 Total No. of visits 5

Dates of Examination of principal parts—Cylinders 15.6.36 Covers 15.6.36 Pistons 15.6.36 Piston rods ✓
 Connecting rods 15.6.36 Crank and Flywheel shaft 12.6.36 Intermediate shaft ✓

Crank and Flywheel shafts, Material O.H. Steel Identification Mark LLOYD'S 279 H.B. 21.2.36.
 Intermediate shafts, Material ✓ Identification Marks ✓

Is this machinery duplicate of a previous case *yes* If so, state name of vessel *Ham. Rpt. no. 21900, dated 4.5.36 and no. 21567, m.s. "Marina"*

General Remarks (State quality of workmanship, opinions as to class, &c.)
This auxiliary oil engine generating set has been built under Special Survey in accordance with the Society's Rules, the approved plans and instructions thereto. Material and workmanship are of good quality. In my opinion this generating set is eligible to be classed in the Society's Register Book with notation of +LMC-with date, as part of the machinery of the vessel for which it is intended when it has been satisfactorily fitted on board.

Im. 6.31—Transfer. (The Surveyors are requested not to write on or below the space for Committee Minute.)

The amount of Fee	<i>2 Mths £ 55.-</i>	When applied for,	<i>16.7. 1936</i>
Travelling Expenses (if any)	£ <i>16.-</i>	When received,	<i>11.8. 1936</i>

J.A. Mitchell
 Surveyor to Lloyd's Register of Shipping

Committee's Minute **FRI. 16 OCT 1936**
 Assigned *See F.E. mchey report.*

