

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 2023

Date of writing Report **8th Sept. 19 52** When handed in at Local Office **19** Port of **HAMBURG** Received at London Office **27 OCT 1952**

No. in Survey held at **HAMBURG** Date, First Survey **10th July** Last Survey **26th August 19 52**

Book No. **95289** on the **Single** Screw vessel **"MOSOIL"** Number of Visits **seven** Tons **11.348**
Triple **Net 6.713**
Quadruple

Built at **Hamburg** By whom built **Deutsche Werft A.G.,** Yard No. **640** When built **1952**

Owners **Compania de Navegacion Martora S.A.** Port belonging to **Panama City**

Engines made at **Augsburg** By whom made **M.A.N.** Engine No. **430 740 - 741 - 742** When made **1952**

Generators made at **Bremen** By whom made **Lloyd Dynamowerke A.G.** Generator No. **618 -047- 048 -049** When made **1952**

No. of Sets **3** B.H.P. of each Set **195** M.N. as per Rule **39** Capacity of each Generator **130** Kilowatts.

Set intended for essential services **yes**

II. ENGINES, &c.—Type of Engines **Airless Injection Type G 5 V 33** 2 or 4 stroke cycle **4** Single or double acting **single**

Maximum pressure in cylinders **50 kgs/cm²** Diameter of cylinders **220 mm** Length of stroke **330mm** No. of cylinders **5** No. of cranks **5**

Mean indicated pressure **7.22 kg/cm²** Span of bearings (i.e., distance between inner edges of bearings in way of a crank) **260 mm**

Is there a bearing between each crank **yes** Moment of inertia of flywheel (16 m² or Kg.-cm.²) **790 kgm²** Revolutions per minute **500**

Flywheel dia. **1200 mm** Weight **780 kgs** Means of ignition **comp.** Kind of fuel used **diesel**

Crank Shaft, Solid forged dia. of journals **130mm** as per Rule **130mm** Crank pin dia. **130 mm** Crank Webs Mid. length breadth **240 mm** Thickness parallel to axis **-**

Flywheel Shaft, diameter as per Rule **-** as fitted **-** Generator armature, moment of inertia (16 m² or Kg.-cm.²) **-**

Are means provided to prevent racing of the engine **yes** Means of lubrication **forced** Kind of damper if fitted **-**

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. and how driven **2 electric** Is the sea suction provided with an efficient strainer which can be cleared within the vessel **yes**

Lubricating Oil Pumps, No. and size **1 - 3.34 m³/h each (attached gear pumps)**

Air Compressors, No. **2 (Independent)** No. of stages **2** Diameters **140 x 160 mm** Stroke **130 mm** Driven by **DC Motor**

Saving Air Pumps or Blowers, No. **none** How driven **-**

AIR RECEIVERS:—Have they been made under Survey **none** State No. of Report or Certificate **-**

State full details of safety devices **-**

Were the internal surfaces of the receivers be examined and cleaned **-**

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

High Pressure Air Receivers, No. **none** Cubic capacity of each **-** Internal diameter **-** thickness **-**

Seamless, lap welded or riveted longitudinal joint **-** Material **-** Range of tensile strength **-** Working pressure **-**

Working Air Receivers, No. **none** Total cubic capacity **-** Internal diameter **-** thickness **-**

Seamless, lap welded or riveted longitudinal joint **-** Material **-** Range of tensile strength **-** Working pressure **-**

ELECTRIC GENERATORS:—Type **A.E.G. AW 117 mod., spray water proof, ventilated**

Pressure of supply **230** volts. Full Load Current **565** Amperes. Direct or Alternating Current **direct**

Is it an alternating current system, state the periodicity **-** Has the Automatic Governor been tested and found as per Rule when full 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 **-**

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

Do the generators are under 100 kw. full load rating, have the makers supplied certificates of test **-** and do the results comply with the requirements **-**

Do the generators are 100 kw. or over have they been built and tested under survey **yes**

State full details of driven machinery other than generator **none**

SHAFTS:—Are approved plans forwarded herewith for Shafting **4.7.51** Receivers **-** Separate Tanks **-**

Have Torsional Vibration characteristics if applicable been approved **15.5.52 (GRONLAND, MOSTANK)** Armature shaft Drawing No. **-**

Is the spare gear required by the Rules been supplied **yes**

The foregoing is a correct description,

DEUTSCHE WERFT AKTIENGESELLSCHAFT

Manufacturer.

Handwritten signature



© 2021

Lloyd's Register Foundation

010300 010308-0040

Handwritten note: 22.10.52

Dates of Survey while building { During progress of work in shops - - }
 { During erection on board vessel - - } **Jul: 10, 23, Aug: 1, 4, 13, 18, 26,**
 Total No. of visits **7**

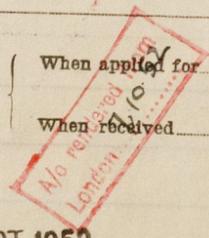
Dates of Examination of principal parts—Cylinders _____ Covers _____ Pistons _____ Piston rods _____
 Connecting rods _____ Crank and Flywheel shafts _____ Intermediate shafts _____
 Crank shaft { Material _____ Tensile strength _____
 { Elongation _____ Identification Marks _____ }
 Flywheel shaft, Material _____ Identification Marks _____
 Identification marks on Air Receivers _____

Is this machinery duplicate of a previous case **yes** If so, state name of vessel **GRONLAND (M.A.N Standard type of auxiliary engine**

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) **These generators have been built under Special Survey, (See Augsburg Rpt. No. 121, dated 21.5.52), properly installed in the above vessel, full load, overload, full speed and overspeed running and governor trials have been completed with good results.**

3m, 651.-T. (MADE AND PRINTED IN ENGLAND)
 (The Surveyors are requested not to write on or below the space for Committee Minute.)

The amount of Fee ... £ **26 : 10 : 0** { When applied for _____ 19
 Travelling Expenses (if any) £ **6 : 10 : 0** { When received _____ 19



FRI. 24 OCT 1952

Wilhelm ... + R. ...
 Surveyors to Lloyd's Register of Shipping.

Committee's Minute _____
 Assigned *See F.E. ...*

