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Rotterdam

DUPLICATE. REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 230.

Received at London Office JUN 29 1938
Port of **Düsseldorf**
Date, First Survey **1. 12. 1937** Last Survey **2.3. 1938**
When handed in at Local Office **7.3. 1938**
No. of writing Report **2.3.** **1038**
Number of Visits **6**

Survey held at **Cologne**
on the **Single** Screw vessel
Triple
Quadruple
Built at **Alblasserdam** By whom built **N.V. Scheepswerf voorh. J.Smit, Czn.** Yard No. **523** When built **1938**
Port belonging to **Eng. 490796/**
Eng. No. **98** When made **1938**
By whom made **Humboldt-Deutzmotoren A.G.**
Contract No. _____ When made **1938**
Generators made at _____
By whom made _____
No. of ~~Saxl~~ aux Engine Brake Horse Power **56** Nom. Horse Power as per Rule **13** Total Capacity of Generators _____ Kilowatts.

IL ENGINES, &c.—Type of Engines **Heavy oil engine A3M220** 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 **176 mm** Is there a bearing between each crank **yes**
Revolutions per minute **750** Flywheel dia. **750 mm** Weight **480 kg.** Means of ignition **sol. inject.** 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 _____ 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 _____ 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 ~~XXXXXX~~ water cooled or lagged with non-conducting material **water cooled**
Cooling Water Pumps, No. **two** 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 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. **one** Total cubic capacity **ltrs.** Internal diameter **191 mm** thickness **6,5 mm**
Seamless, lap welded or riveted longitudinal joint **seamless** Material **S.M. Steel** Range of tensile strength **55-61,3 kg/cm²** Working pressure by Rules **35 kg/cm²**

ELECTRIC GENERATORS:—Type _____ Amperes. **Direct or Alternating Current**
Pressure of supply _____ volts. **Full Load 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 **3436 7.7.33** Separate Tanks _____
(If not, state date of approval)

SPARE GEAR as per Rules.

The foregoing is a correct description,

Manufacturer.



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Dates of Survey while building { During progress of work in shops - - } 1.12.-10.12.-17.1.-10.2.-11.2.-2.3.1938.
 { During erection on board vessel - - - }
 { Total No. of visits }
 Dates of Examination of principal parts—Cylinders **Liners: 10.2.-11.2.-2.3.** Covers **11.2. 2.3.** Pistons **2.3.** Piston rods
 Connecting rods **1.12. 10.12. 2.3.** Crank and Flywheel shafts **17.1. 11.2. 2.3.** Intermediate shafts
 Crank shafts, Material **S.M. Steel** Identification Marks **LLOYD 2960 H.B. 11.2.38.**
 Intermediate shafts, Material Identification Marks
 Identification marks on Air Receivers.

Is this machinery duplicate of a previous case **yes** If so, state name of vessel **Messrs. Angelo Saxon Petr. Co. London Dusseldorf 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 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 ^{high} all working parts have been opened out for examination and were found in good condition.
 The main engine is also being built by Messrs. Humboldt-Deutzmotoren.
 The original-report has been sent to London, copy of same to Rotterdam Surveyors,

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

M. G. G. G. G. G.
 Surveyor Lloyd's Register of Shipping.

Committee's Minute **TUE 5 JUL 1938**
 Assigned *See original report*

1m. 5. 37. - Transfer.
 (The Surveyors are requested not to write on or below the space for Committee Minute.)