

# REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 11757

Received at London Office 25 AUG 1945

Date of writing Report 2<sup>nd</sup> August 1945 When handed in at Local Office 19 Port of Copenhagen  
 No. in Survey held at Halundborg & Odense Date, First Survey 10<sup>th</sup> October 1939 Last Survey 4<sup>th</sup> July 1945  
 Number of Visits 13

on the Motor CAROLINE MERSH. Tons Gross 10043.07 Net 6096.87  
 Single Twin Triple Quadruple Screw vessel  
 Built at Odense By whom built Odense Skibskonstruktørskolen Yard No. 83 When built  
 Owners Dampskibsselskabet af 1912 1/2 Dampskibsselskabet "Randbørg" belonging to Fredericia  
 Engines made at Halundborg By whom made Motofabrikken Bueh 1/2 ENGINE 4682 When made 1940  
 Generators made at Odense By whom made Thomas B Thirge GENERATOR 234673 When made 1940  
 No. of Sets 1 Engine Brake Horse Power 30/36 Nom. Horse Power as per Rule 11 Total Capacity of Generators 18 Kilowatts.

OIL ENGINES, &c.—Type of Engines Heavy oil engine, trunk piston, solid ring 2 or 4 stroke cycle 4 Single or double acting single  
 Maximum pressure in cylinders 49 kg/cm<sup>2</sup> Diameter of cylinders 135 3/4 Length of stroke 180 3/4 No. of cylinders 4 No. of cranks 4  
 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 138 3/4 Is there a bearing between each crank yes  
 revolutions per minute 600 Flywheel dia. 675 3/4 Weight 264 kg Means of ignition Compression kind of fuel used F.A.D. 150F  
 Crank Shaft, dia. of journals as per Rule 71.5 3/4 as fitted 95.4 3/4 Crank pin dia. 85 3/4 Crank Webs Mid. length breadth 135 3/4 Thickness parallel to axis 37 3/4 shrunk  
 Flywheel Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted Thickness of cylinder liners 15 3/4  
 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 off 800 liter/hour Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes  
 Lubricating Oil Pumps, No. and size 1 off 400 liter/hour

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 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. 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 Drip proof ventilated  
 Pressure of supply 110 volts Full Load Current 164 Amperes Direct or Alternating Current direct current  
 If 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  
 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 yes and do the results comply with the requirements yes  
 If the generators are 100 kw. or over have they been built and tested under survey

PLANS.—Are approved plans forwarded herewith for Shafting London 4.1.39 Receivers Separate Tanks  
 SPARE GEAR as per Rule

The foregoing is a correct description,

E. M. M. M.

Manufacturer.



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Dates of Survey while building { During progress of work in shops - - 1939: 10/10 - 14/11 - 5/12 1940: 9/2  
During erection on board vessel - - 1944: 26/4 - 27/4 - 8/5 - 24/5 - 10/6 - 20/11 1945 27 - 31/7 - 4/7  
Total No. of visits 13

Dates of Examination of principal parts—Cylinders 9/2.40 Covers 9/2.40 Pistons 9/2.40 Piston rods ✓

Connecting rods 10/10 - 14/11 - 8/12 1939. Crank and Flywheel shafts 9/2.40 Intermediate shafts ✓

Crank shaft { Material Siemens Martin forged steel Tensile strength 31.2 tons per sq. in.  
Elongation 34% Identification Marks Lloyd's no 14604 4 9.2.40

Flywheel shaft, Material ✓ Identification Marks ✓

Is this machinery duplicate of a previous case yes. Identification Marks

Identification marks on Air Receivers ✓

Is this machinery duplicate of a previous case yes. If so, state name of vessel Marine Mark, Odessa Yard No 88.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This engine has been constructed under Special Survey in accordance with the Rules and the approved plan of the crank shaft. The material used has been tested as required by the Rules and the workmanship is good.  
On completion of the installation the engine was tested under working conditions and found satisfactory

The amount of Fee ... £4 175.00 When applied for 1/8 19 45  
Travelling Expenses (if any) £4 30.40 When received 19

FRI. 1 MAR 1946

Committee's Minute

Assigned See minute on fe. rth

Surveyor to Lloyd's Register of Shipping  
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