

Rpt. 4c.

# REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 6964

Date of writing Report 23/7 1948 When handed in at Local Office 19 Port of STOCKHOLM. Received at London Office 28 JUL 1948

No. in Survey held at Eskilstuna Date, First Survey and Last Survey 12.7. 19 48

Reg. Book. Single on the XXXXX Screw vessel. Number of Visits One.

Built at Kalmar By whom built Kalmar Varv Yard No. 361 When built -

Owners Rederi A/B Eystrasalt Port belonging to -

Oil Engines made at Eskilstuna By whom made A/B Bolinder-Munktell Engine XXXXX No. 38674/75 When made 1948

Generators made at - By whom made - Contract No. - When made -

No. of Sets One Engine Brake Horse Power 60 M.N. as per Rule 15 Total Capacity of Generators - Kilowatts.

Is Set intended for essential services -

**OIL ENGINES, &c.**—Type of Engines Bolinder Semi Diesel, W7S22 2 or 4 stroke cycle 2 Single or double acting SA

Maximum pressure in cylinders 21 kg/cm<sup>2</sup> Diameter of cylinders 180 mm Length of stroke 180 mm No. of cylinders 2 No. of cranks 2

Mean indicated pressure 3.95 kg/cm<sup>2</sup> Firing order in cylinders 1,2 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 450 mm

Is there a bearing between each crank No. Moment of inertia of flywheel (16 m<sup>2</sup> or Kg.-cm.<sup>2</sup>) 162.2 kg/cm<sup>2</sup> sec. 2 Revolutions per minute 1000

Flywheel dia. 700 mm. Weight 180 kgs. Means of ignition Hot bulb Kind of fuel used Shell solar

Crank Shaft, dia. of journals 80 mm. Crank pin dia. 95 mm. Crank Webs Mid. length breadth 140 mm Thickness parallel to axis -

Flywheel Shaft, diameter - Intermediate Shafts, diameter - General armature, moment of inertia (16 m<sup>2</sup> or Kg.-cm.<sup>2</sup>) -

Are means provided to prevent racing of the engine XXXXXX Yes  Means of lubrication Autom. Kind of damper if fitted None

Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material Lagged

Cooling Water Pumps, No. One Is the sea suction provided with an efficient strainer which can be cleared within the vessel -

Lubricating Oil Pumps, No. and size Automatic lubricators.

Air Compressors, No. None No. of stages - Diameters - Stroke - Driven by -

Scavenging Air Pumps, No. None Diameter - Stroke - Driven by -

**AIR RECEIVERS:**—Have they been made under Survey No air receiver. 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 -

Pressure of supply - volts. Full Load Current - Amperes. Direct or Alternating 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 - 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 -

Details of driven machinery other than generator -

**PLANS:**—Are approved plans forwarded herewith for Shafting "E" 3.3.48. Receivers - Separate Tanks -

Have Torsional Vibration characteristics if applicable been approved Not applicable. Armature shaft Drawing No. -

**SPARE GEAR** To be checked onboard.

The foregoing is a correct description,

Aktiebolaget Bolinder-Munktell  
Förordningsavdelningen  
Manufacturer.



010631-010639-0236

4<sup>c</sup> 6967.

Dates of Survey while building  
During progress of work in shops - - 12th July, 1948.  
During erection on board vessel - - -  
Total No. of visits One in shop.

Dates of Examination of principal parts—Cylinders 12.7.48. Covers 12.7.48. Pistons 12.7.48. Piston rods -  
Connecting rods 12.7.48. Crank ~~and Flywheel~~ shafts 12.7.48. Intermediate shafts -

Crank shaft { Material S.M. Steel Tensile strength 59.2 kg/mm<sup>2</sup> ✓  
Elongation 26.0 % on 50 mm. Identification Marks LLOYD'S 5162 TB 12.7.48.

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 Kalmar Varv Yard No. 359. Skm. Rpt. No. 6738.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

This auxiliary engine has been constructed under Special Survey in accordance with the Rules and approved plan. The workmanship and materials are good.

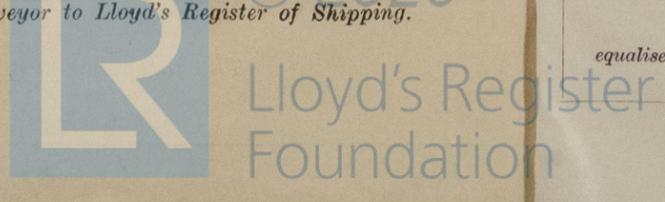
The engine has been examined under working conditions in the shop and found satisfactory.

The Surveyors are requested not to write on or below the space for Committee Minute.

The amount of Fee ... Kr. 80:-- : When applied for 23/7 1948  
Travelling Expenses (if any) Kr. 30:-- : When received 19

Committee's Minute FRI 29 APR 1948  
Assigned Su F. E. Welch, rpt.

*Frank A. ...*  
Surveyor to Lloyd's Register of Shipping.



Rpt. ...  
Date of ...  
No. in Reg. B ... 9137  
Built ...  
Owner ...  
Electr ...  
Is vess ...  
Have p ...  
Heating ...  
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material ...  
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double ...  
on eac ...  
and for ...  
Are comp ...  
ammeters ...  
equaliser