

# REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 4609

Date of writing Report 12<sup>th</sup> March 1938 When handed in at Local Office Stockholm Port of Stockholm Received at London Office MAR 17 1938

No. in Survey held at Siepla. Sku. District Date, First Survey 8.3.35 Last Survey 21.1.38 19  
Reg. Book. Number of Visits 18

on the Single Twin Triple Quadruple Screw vessel "NORVIKEN" Tons { Gross \_\_\_\_\_ Net \_\_\_\_\_

Built at Landskrona By whom built Ossundsvaret A-B Yard No. 49 When built 1938

Owners Wallem & Co. A/S. Port belonging to Bergen

Oil Engines made at Stockholm By whom made A-B Atlas Diesel Contract No. 85508/09 When made 1938

Generators made at \_\_\_\_\_ By whom made \_\_\_\_\_ Contract No. \_\_\_\_\_ When made \_\_\_\_\_

No. of Sets 2 Engine Brake Horse Power 2x160 Nom. Horse Power as per Rule 2x35 Total Capacity of Generators \_\_\_\_\_ Kilowatts.

## OIL ENGINES, &c.—Type of Engines Stationary Diesel Oil Engines type K44E or 4 stroke cycle 2 Single or double acting Single

Maximum pressure in cylinders 60 kg/cm<sup>2</sup> Diameter of cylinders 180 mm Length of stroke 300 mm No. of cylinders 4 No. of cranks 4

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 218 mm Is there a bearing between each crank Yes

Revolutions per minute 500 Flywheel dia. 800 mm Weight 285 kgs Means of ignition Compression Kind of fuel used Heavy Diesel Oil

Crank Shaft, dia. of journals 125 mm as per Rule \_\_\_\_\_ as fitted \_\_\_\_\_ Crank pin dia. 120 mm Crank Webs \_\_\_\_\_ Mid. length breadth 214 mm Thickness parallel to axis \_\_\_\_\_ Mid. length thickness 54 mm Thickness around eye-hole \_\_\_\_\_

Flywheel Shaft, diameter \_\_\_\_\_ as per Rule \_\_\_\_\_ as fitted \_\_\_\_\_ Intermediate Shafts, diameter \_\_\_\_\_ Thickness of cylinder liners 12 mm

Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication pumps

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

Cooling Water Pumps, No. 2x1 Is the sea suction provided with an efficient strainer which can be cleared within the vessel \_\_\_\_\_

Lubricating Oil Pumps, No. and size 2x1 52 litres/min.

Air Compressors, No. None fitted No. of stages \_\_\_\_\_ Diameters \_\_\_\_\_ Stroke \_\_\_\_\_ Driven by \_\_\_\_\_

Scavenging Air Pumps, No. 2x1 Diameter 360 mm Stroke 230 mm Driven by Engine

## AIR RECEIVERS:—Have they been made under Survey Yes State No. of Report or Certificate \_\_\_\_\_

Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes

Can the internal surfaces of the receivers be examined Yes What means are provided for cleaning their inner surfaces studholes

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

High Pressure Air Receivers, No. None fitted 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. 2x1 Total cubic capacity 200 litres Internal diameter 340 mm thickness 16 mm

Seamless, lap welded or riveted longitudinal joint lapwelded Material S.H. steel Range of tensile strength 38 kg/mm<sup>2</sup> Working pressure by Rules 50 kg/cm<sup>2</sup> as a rule.

## 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 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 E. 7.1.37 Receivers E 25.4.35 Separate Tanks \_\_\_\_\_

SPARE GEAR As per enclosed list. The spare gear has been examined before it was despatched.

The foregoing is a correct description,

**AKTIEBOLAGET ATLAS DIESEL**

*Manufactured*

Manufacturer.



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Lloyd's Register

Foundation

W349-0179

Dates of Survey while building  
 During progress of work in shops - -  
 During erection on board vessel - - -  
 Total No. of visits 18 in shop.

8, 27, 18, 35, 7, 20, 8, 14, 29, 23, 28, 36, 12, 20, 17, 7, 19, 37, 7, 13, 21, 38.  
 3, 5, 12, 2, 8, 9, 10, 12, 1, 6, 7, 11, 1

Dates of Examination of principal parts—Cylinders 13/1/38. Covers 13/1/38. Pistons 13/1/38. Piston rods ✓

Connecting rods 12, 37, 13, 38. Crank and Flywheel shafts 8, 29, 28, 36, 20, 37, 13, 38. Generator intermediate shafts 17, 7, 37, 13, 38.  
 3, 5, 12, 2, 8, 9, 12, 9, 10, 12, 1, 1, 6, 7, 11, 1

Crank and Flywheel shafts, Material S. H. Steel. Identification Marks LLOYDS No 6870 K.A. 20.1.37 LLOYDS No 6765 K.A. 29.10.36

Generator intermediate shafts, Material S. H. Steel. Identification Marks LLOYDS No 7045 T.B. 7.7.37 LLOYDS No 7046 T.B. 7.7.37

Identification marks on Air Receivers

No 7183. LLOYDSTEST 100 kg. W. P. 50 kg. T.B. 19.11.37.	No 7184. LLOYDSTEST 100 kg. W. P. 50 kg. T.B. 19.11.37.
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Is this machinery duplicate of a previous case yes. If so, state name of vessel Please see Spec. Rpt No 448

General Remarks (State quality of workmanship, opinions as to class, &c.)

We are of opinion that these engines are of superior material and workmanship, and as they have been designed and constructed under special survey, we respectfully submit that they be approved as auxiliaries, when installed into Messrs. Oresunds vessel A.B., of Landskrona, No 49, to the satisfaction of the Society's Surveyors.

1m.537.—Transfer.  
 (The Surveyors are requested not to write on or below the space for Committee Minute.)

The amount of Fee ... £ No. 456:2  
 Travelling Expenses (if any) £

When applied for, 19...  
 When received, 19...

*K. H. Anderson & Thomas Talow*  
 Surveyor to Lloyd's Register of Shipping.

(456-Received as per Sec. Letter T of the 3.6.1938 to the Hbg Surveyor.)  
 FRI. 24 JUN 1938

Committee's Minute  
 Assigned

See Hbg J.E. 1187



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