

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 12932

MAY 20 1940

Date of writing Report 14th April 40 When handed in at Local Office 19th April 40 Port of **GOTHENBURG**
 No. in Survey held at **GOTHENBURG** Date, First Survey 25th August Last Survey 4th April 1940
 No. of opening in hull 1319 on the **Starboard** side of the vessel **M/S VARDEFJELL** Number of Visits 30

Tons Gross 8315.99
 Net 4938.99

Built at **GOTHENBURG** By whom built **ERIKSBERGS M.V. AB.** Yard No. 292 When built 1940
 Owners **A/S FILEFJELL** Port belonging to **OSLO**
 Engines made at **GOTHENBURG** By whom made **ERIKSBERGS M.V. AB.** ENGINE Contract No. 235-236 When made 1940
 Generators made at **ODENSE** By whom made **THOMAS B. THRIE** GENERATOR Contract No. 233319 When made 1940
 No. of Sets 2 Engine Brake Horse Power 2x150 Nom. Horse Power as per Rule 2x39.3 Total Capacity of Generators 2x100 Kilowatts.

IL ENGINES, &c.—Type of Engines **Diesel oil engines, solid injection** 2 or 4 stroke cycle 2 Single or double acting **Single**
 Maximum pressure in cylinders 49 kg/cm² Diameter of cylinders 220 mm Length of stroke 370 mm No. of cylinders 2x3 No. of cranks 2x3
 Mean of bearings, adjacent to the Crank, measured from inner edge to inner edge 237 mm Is there a bearing between each crank **Yes**
 Revolutions per minute 350 Flywheel dia. 1200 mm Weight 1550 kg Means of ignition **Compression** Kind of fuel used **Diesel fuel oil**
 Crank Shaft, dia. of journals as fitted 150 mm Crank pin dia. 150 mm Crank Webs Mid. length breadth 240 mm Thickness parallel to axis 85 mm
 Flywheel Shaft, diameter as fitted **Flywheel on crankshaft.** Intermediate Shafts, diameter as per Rule **18 mm** Thickness of cylinder liners 18 mm
 as fitted **on crankshaft.** as fitted **Yes** Means of lubrication **Forced**

Is there a governor or other arrangement fitted to prevent racing of the engine **Yes** Are the exhaust pipes and silencers water cooled or lagged with non-conducting material **Lagged**
 Cooling Water Pumps, No. **One, 250 lit/min** Is the sea suction provided with an efficient strainer which can be cleared within the vessel **Yes**
 Lubricating Oil Pumps, No. and size **One for each engine 275 lit/hour, direct driven**
 Air Compressors, No. **One on each eng.** No. of stages 2 Diameters 250 & 280 mm Stroke 190 mm Driven by **But engines**
 Sucking Air Pumps, No. **One on each engine** Diameter **✓** Stroke **✓** Driven by **" "**

R RECEIVERS:—Have they been made under Survey **Yes** State No. of Report or Certificate **✓**
 Each receiver, which can be isolated, fitted with a safety valve as per Rule **Yes**
 The internal surfaces of the receivers be examined **Yes** What means are provided for cleaning their inner surfaces **✓**
 Is there a drain arrangement fitted at the lowest part of each receiver **Yes**

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 by Rules **✓**
 Starting Air Receivers, No. **One for both engs.** Total cubic capacity 180 litres Internal diameter 370 mm thickness 14 mm
 Seamless, lap welded or riveted longitudinal joint **lap welded** Material **Steel** Range of tensile strength 37.5-41 kg/mm² Working pressure by Rules 40 kg/cm²

ELECTRIC GENERATORS:—Type **Drift proof, compound**
 Pressure of supply 220 volts Full Load Current 2x455 Amperes Direct or Alternating Current **Direct current**
 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 **Yes**
 Generators, are they compounded as per rule **Yes** Is an adjustable regulating resistance fitted in series with each **✓**
 Unit 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 **✓** and do the results comply with the requirements **✓**
 If the generators are 100 kw. or over have they been built and tested under survey **Yes**

ANS. Are approved plans forwarded herewith for Shafting **No, 13.2.38.** Receivers **No, 28.10.38.** Separate Tanks **No, 27.7.39.**
 (If not, state date of approval)

ARE GEAR as required by Rules has been supplied.

The foregoing is a correct description.

Eriksbergs Mek. Verkstads Aktieförsäkr.

Boend. 1940

Manufacturer.

Dates of Survey while building

During progress of work in shops - -
During erection on board vessel - - -
Total No. of visits

1939 Aug 26. Sept 25. Oct 3. 5. 31. Nov. 11. 15. 22. 24. Dec. 2. 6. 8. 9. 11. 1940 March 28
1940 Jan. 18. Feb. 7. 12. 21. 22. 29. March 1. 11. 12. 18. 19. 29. April 1. 3. 4.
30

Dates of Examination of principal parts—Cylinders 31.10.39. Covers 31.10.39. Pistons 26.10.39. Piston rods ✓

Connecting rods 26.10.39. Crank and Flywheel shafts 25.9.39. Intermediate shafts ✓

Crank and Flywheel shafts, Material ✓ I M. steel Identification Marks 91818 Lloyds L.S. 2781 & 2782 L.S. 3.5.39.

Intermediate shafts, Material ✓ Identification Marks ✓

Identification marks on Air Receivers
No 39
LLOYD'S TEST 80 Kg
W.P. 40 Kg
SA 2.12.39.
Nos 553 & 554
LLOYD'S TEST 40 Kg
W.P. 25 Kg
15.11.39. SA.

Is this machinery duplicate of a previous case No ✓ If so, state name of vessel.

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

These auxiliary engines have been built under special survey and fitted on board under my inspection and have been tested and found satisfactory.

The workmanship is good and all the Rule's requirements have been complied with.

Shafting as per forging reports attached herewith.

Im. 11. 17. Transfer. (MADE IN ENGLAND.)

The amount of Fee ... £

Travelling Expenses (if any) £

When applied for,

19

When received,

19

Committee's Minute

Assigned

FRI 24 MAY 1940

See fol. 76 12932

L. Aspelin

Surveyor to Lloyd's Register of Shipping.

LR-FAF-TB14-319

Rpt. 13.

Date of ...

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Reg. Book

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