

# REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 10429

Received at London Office JAN 13 1938

Date of writing Report 10 Jan. 1938. When handed in at Local Office 19 Port of Copenhagen.  
No. in Survey held at Copenhagen & Odense Date, First Survey 14 Dec. 1936 Last Survey 9 Dec. 1937.  
Reg. Book. Number of Visits 32

on the <sup>Single</sup> Twin <sup>Triple</sup> Screw vessel M.V. NOORDAM Tons { Gross Net

Built at Rotterdam By whom built P. Smits jr. Yard No. 515 When built

Owners Holland-America Line. Port belonging to

Oil Engines made at Copenhagen By whom made Burmeister & Wain Contract No. 2847-48-49-50 When made 1937.

Generators made at Odense By whom made Thomas B. Thriize Contract No. 229835-36-37-38. When made 1937.

No. of Sets 4. Engine Brake Horse Power 4 x 360. Nom. Horse Power as per Rule Total Capacity of Generators 960 Kilowatts.

OIL ENGINES, &c.—Type of Engines Diesel, trunk piston, gas insp. 2 or 4 stroke cycle 2 Single or double acting single

Maximum pressure in cylinders 49 kg/cm<sup>2</sup> Diameter of cylinders 220 mm Length of stroke 370 mm No. of cylinders 6. No. of cranks 6.

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 294. Is there a bearing between each crank yes.

Revolutions per minute 400. Flywheel dia. 980 mm. Weight 1310 kg. Means of ignition compression Kind of fuel used Diesel oil.

Crank Shaft, dia. of journals as per Rule 138 mm as fitted 180 mm Crank pin dia. 180 mm Crank Webs Mid. length breadth 280 mm Thickness parallel to axis 102 mm

Flywheel Shaft, diameter as per Rule 138 mm as fitted 180 mm Intermediate Shafts, diameter as per Rule as fitted Thickness of cylinder liners 18 mm.

Is a governor or other arrangement fitted to prevent racing of the engine when disconnected 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 lagged.

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

Lubricating Oil Pumps, No. and size 1 off 9.2 Tons/min, gearwheel type, on each engine.

Air Compressors, No. No. of stages Diameters Stroke Driven by

Scavenging Air <sup>BLOWERS</sup> Pumps, No. 1 off rotary Diameter 421 mm/min Stroke on each engine Driven by chain from crank shaft.

AIR RECEIVERS:—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 trip proof, ventilated.

Pressure of supply 220 volts. Load 1090 Amperes. Direct or Alternating Current direct.

If alternating current system, state frequency of periods per second

Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on or off yes.

Generators, do they comply with the requirements regarding rating yes. are they compound wound yes.

are they over compounded 5 per cent. yes. if not compound wound state distance between each generator

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.

PLANS. Are approved plans forwarded herewith for Shafting yes. Receivers Separate Tanks

SPARE GEAR as per Rules.

The foregoing is a correct description,

AKTIESELSKABET BURMEISTER & WAIN'S MASKIN- OG SKIBSBYGGERI

*A. Hømmølle*

Manufacturer.



© 2020

Lloyd's Register Foundation

005107-005117-0161

14/2 1936 - 22/6 - 5/7 - 20/7 - 9/8 - 14/9 - 15/9 - 20/9 - 29/9 - 12/10 - 26/10 - 29/10 - 2/11 - 3/11

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

9/11 - 10/11 - 11/11 - 15/11 - 14/11 - 17/11 - 18/11 - 22/11 - 23/11 - 24/11 - 25/11 - 27/11 - 29/11 - 30/11 - 4/12 - 7/12 - 9/12 1937.  
 32.

Dates of Examination of principal parts—Cylinders *with* Covers 29/10-9/11-27/11-24/11-9/12 Pistons 29/10-7/11-27/11-27/11-9/12 Piston rods ✓

Connecting rods 14/2 1936-27/7-12/10-23/11-27/11-29/11-37 Crank and Flywheel shafts 22/6-5/7-14/9-20/9-29/9-26/10-15/11-22/11-37 Intermediate shaft ✓

Crank and Flywheel shafts, Material *S. M. F. Steel* Identification Mark { Lloyd's No 3891-92 C.K. 26.10.37.  
 Lloyd's No 3917 C.V. 15.11.37.  
 Lloyd's No 3922 C.V. 22.11.37.

Intermediate shafts, Material ✓ Identification Marks -

Is this machinery duplicate of a previous case ✓ If so, state name of vessel ✓

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

The engines and generators have been constructed under special survey and in accordance with the Society's Rules, the approved plans and the requirements contained in the Secretary's letter E, dated 8<sup>th</sup> June 1937.

The material has been tested and examined as required by the Rules and found satisfactory, the workmanship is of good description throughout.

On completion the engines and generators were tested under full power working condition and found satisfactory.

*Atty.*

The amount of Fee ... *£1540.00* When applied for, 11.1.1938  
 Travelling Expenses (if any) £ : : When received, 23.3.1938

*Arthur W. Hesterly*  
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute *TUE 18 OCT 1938*  
 Assigned *See minute re machinery.*



1m.631—Transfer.  
 (The Surveyors are requested not to write on or below the space for Committee Minutes.)

(The Surveyors are requested not to write on or below the space for Committee's Minutes.)