

# REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 7111.

Received at London Office

28 NOV 1930

Report made at Kobe 1-10-30 19 When handed in at Local Office 13-10-30 19 Port of Kobe  
Date, First Survey 18 January 1930 Last Survey 10 Sept. 1930  
Number of Visits 57

Single the Twin Triple Quadruple } Screw vessel Asano Dockyard No 270 Tons } Gross  
Yokohama } By whom built Asano Dockyard Yard No 270 When built  
Port belonging to

made at Kobe By whom made Kobe Steel Works Contract No. 104 When made 1930

made at Tsurumi By whom made Fuji Denki Seizo K.K. Contract No. When made 1930  
Engine Brake Horse Power 175 Nom. Horse Power as per Rule 114 Total Capacity of Generators 345 Kilowatts.

ENGINES, &c. Type of Engines 43-C.S.A Airless Injection 2 or 4 stroke cycle 4 Single or double acting Single

Area in cylinders 43 kg/cm<sup>2</sup> Diameter of cylinders 290 mm Length of stroke 430 mm No. of cylinders 3 No. of cranks 3  
Pitch circle diameter, adjacent to the Crank, measured from inner edge to inner edge 350 mm Is there a bearing between each crank yes

Revolution per minute 335 Flywheel dia. 1200 mm Weight 3660 Kg. Means of ignition Compression Kind of fuel used Heavy oil

Dia. of journals as per Rule 157 mm as fitted 184 mm Crank pin dia. 184 mm Crank Webs Mid. length breadth 282 mm Thickness parallel to axis shrunk  
Mid. length thickness 93 mm Thickness around eyehole

Shaft diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted Thickness of cylinder liners Top 26 mm Bottom 20 mm

Other arrangement fitted to prevent racing of the engine when declutched Governor Means of lubrication Forced  
Are the exhaust pipes and silencers water cooled or lagged with non-conducting material Exhaust Pipes water cooled Silencers lagged with mineral cotton

Oil Pumps, No. 1 Is the sea suction provided with an efficient strainer which can be cleared within the vessel  
Oil Pumps, No. and size 1 Gear Pump P.C.D. of wheel teeth 54 mm No. of TEETH 12 LENGTH of TOOTH 105 mm

Water Pumps, No. 1 No. of stages Diameters Stroke Driven by  
Air Pumps, No. 1 Diameter Stroke Driven by

RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule  
Surfaces of the receivers be examined What means are provided for cleaning their inner surfaces

Arrangement fitted at the lowest part of each receiver  
Air Receivers, No. Cubic capacity of each Internal diameter thickness

Welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules  
Receivers, No. Total cubic capacity Internal diameter thickness

Welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules

GENERATORS:—Type Compound Wound D.C.  
Supply 230 volts. Load 500 Amperes. Direct or Alternating Current Direct

Current system, state frequency of periods per second  
Automatic Governor been tested and found efficient when the whole load is suddenly thrown on or off Noted, efficient

Do they comply with the requirements regarding rating yes are they compound wound yes  
Compounded 5 per cent. yes, if not compound wound state distance between each generator

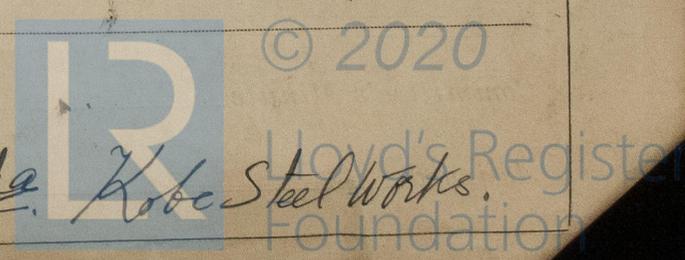
Regulating resistance fitted in series with each shunt field yes Are all terminals accessible, clearly marked, and furnished with sockets yes  
Ear or shielded that they cannot be accidentally earthed, short circuited, or touched yes Are the lubricating arrangements of the generators as per Rule yes

Approved plans forwarded herewith for Shafting 16 May 1930 Receivers Separate Tanks  
(If not, state date of approval)

EAR As per accompanying list

6 foregoing is a correct description,

Manufacturer. H. Ikeda, Kobe Steel Works.



Dates of Survey while building } During progress of work in shops - - -  
 } During erection on board vessel - - -  
 Total No. of visits *In works 57*

Jan 1930. 18. 21. 24. 28. Feb. 6. 18. 20. 21. 24. 25. 27. March. 1. 12. 13. 14. 17. 18. 22. 24. 26. April. 1. 4. 8. 9. 14. 15. 16. 17. 18. 21. 22. 23. 26. 29. 30. June 3. 4. 6. 7. 9. 12. 20. 24. 27. July 2. 24. August 9. 21. Sept. 3.

Dates of Examination of principal parts - Cylinders *4.5.30, 3.6.30, 24.6.30*  
 Covers *4.6.30, 12.6.30, 6.6.30, 20.6.30, 7.6.30, 24.7.30*  
 Pistons *10.5.30, 12.5.30, 17.5.30*  
 Piston rods held at *Steel*

Connecting rods *22.3.30, 15.4.30, 12.6.30*  
 Crank and Flywheel shaft *24.3.30, 4.4.30, 19.4.30, 24.4.30, 9.6.30*  
 Intermediate shaft

Crank and Flywheel shaft, Material *Forged Steel*  
 Identification Mark *LLOYD'S N° 2529, 9.6.30, A.D.M.R.*  
 Intermediate shafts, Material   
 Identification Mark *Steel*

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.) *The machinery herein described is constructed under Special Survey in accordance with the Rules and approved for use. The materials and workmanship are good and the test bed results are satisfactory. The three auxiliary engines are being forwarded to Yokohama, and will be assembled for Arano Dockyard Co. N° 270, where the survey will be completed. A copy of this report has been forwarded to Yokohama Surveyors.*

*Machinery Direct Register stamped there:*

|                  |                  |                  |
|------------------|------------------|------------------|
| <i>N.S.W 141</i> | <i>N.S.W 142</i> | <i>N.S.W 143</i> |
| <i>LLOYD'S</i>   | <i>LLOYD'S</i>   | <i>LLOYD'S</i>   |
| <i>N° 2526</i>   | <i>N° 2527</i>   | <i>N° 2528</i>   |
| <i>5.9.30</i>    | <i>10.9.30</i>   | <i>5.9.30</i>    |
| <i>A.D.M.R.</i>  | <i>A.D.M.R.</i>  | <i>A.D.M.R.</i>  |

7.26-Transfer. (The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Fee ... *¥ 675-* : When applied for, *23rd Oct. 1930*  
 Travelling Expenses (if any) £ *10-* : When received, *31.12.30*

Committee's Minute *FRI. 27 FEB. 1931*  
 Assigned *See YKa 26 H640*  
 Surveyor to Lloyd's Register of Shipping *A.D. Morrison*  
 TUE. 10 NOV 1931  
 TUE. 17 NOV 1931  
 FRI. 28 JUL 1933  
 TUE. 1 MAR 1933  
 FRI. 16 SEP 1932  
 TUE. 25 APR 1933

