

# REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 2228

Date of writing Report 21 AUG 1929 When handed in at Local Office 21 AUG 1929 Port of London  
 No. in Survey held at Bedford Date, First Survey February 8<sup>th</sup> Last Survey 16 August 1929  
 Reg. Book. Single on the Twin Screw vessel "TERUKUNI MARU" Tons { Gross 467 Net 1929  
 Built at Nagasaki By whom built Mitsubishi Zosen Kaisha Yard No. 467 When built 1929  
 Owners Nippon Yusen Kaisha Port belonging to Bedford  
 Oil Engines made at Bedford By whom made Messrs H. H. Allen Sons & Co Contract No. K/4352/12/c When made 1929  
 Generators made at Bedford By whom made Messrs H. H. Allen Sons & Co Contract No. E/4357/12/3 When made 1929  
 No. of Sets 3 Engine Brake Horse Power 2025 Nom. Horse Power as per Rule 578 Total Capacity of Generators 1350 Kilowatts.

L ENGINES, &c.—Type of Engines Diesel (Burmeister-Hain) 2 or 4 stroke cycle 4 Single or double acting S.A.  
 Maximum pressure in cylinders 575 lbs/sq in Diameter of cylinders 410 in Length of stroke 600 in No. of cylinders 6 No. of cranks 6  
 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 506 in Is there a bearing between each crank Yes  
 Revolutions per minute 250 Flywheel dia. 2220 in Weight 6 Tons Means of ignition Compression Kind of fuel used Diesel  
 Crank Shaft, dia. of journals 227 in as per Rule 240 in Crank pin dia. 240 in Crank Webs 360 in Mid. length breadth 127 in Mid. length thickness 127 in Thickness parallel to axis SOLID FORGED  
 Flywheel Shaft, diameter CRANK SHAFT Intermediate Shafts, diameter 29.5 in as per Rule

Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication Mechanical Forced  
 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. 2-5 Driven by Engine Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes  
 Lubricating Oil Pumps, No. and size One geared to each engine  
 Air Compressors, No. One to each engine No. of stages 3 Diameters 340x304x70 in Stroke 260 in Driven by Crank on engine  
 scavenging Air Pumps, No. ✓ Diameter ✓ Stroke ✓ Driven by ✓

AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes (Fusible plug) Yes  
 Can the internal surfaces of the receivers be examined Yes What means are provided for cleaning their inner surfaces Ends portable  
 Is there a drain arrangement fitted at the lowest part of each receiver Yes  
 High Pressure Air Receivers, No. One per engine Cubic capacity of each 90 litres Internal diameter 9 3/4 in thickness 3/8 in  
 Seamless, lap welded or riveted longitudinal joint Seamless Material Steel Range of tensile strength 29/33/10 Working pressure by Rules 1026 lbs/sq in  
 Low Pressure Air Receivers, No. One per engine Total cubic capacity 290 litres Internal diameter 400 in thickness 16 in  
 Seamless, lap welded or riveted longitudinal joint Seamless Material Steel Range of tensile strength 29/33/10 Working pressure by Rules 1403 lbs/sq in

ELECTRIC GENERATORS:—Type Two bearing drip proof  
 Pressure of supply 225 volts. Load 2000 Amperes. Direct or Alternating Current Direct

Is an 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  
 Do the generators comply with the requirements regarding rating Yes Are they compound wound Yes  
 Are they over compounded 5 per cent. Level compounding 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  
 Are approved plans forwarded herewith for Shafting Approved Feb 16 1929 Receivers ✓ Separate Tanks ✓  
 (If not, state date of approval)

ARE GEAR  
As per attached List K/73792 1st list 5.

The foregoing is a correct description,

W. H. ALLEN, SONS & CO., LTD.

Manufacturer.



© 2020

Lloyd's Register Foundation

W283-0134



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

Feb. 8. 15 March 26. April. 16. 18. 26 May. 13. 24. 28. June. 8. 12. 17. 21. 27 July. 2. 6. 10. 16. 17. 24.

21 partial = 11 full.

Dates of Examination of principal parts—Cylinders July 2. 10. 16. 17 Covers July 22. June 8. 12. 17. 27 Pistons July 6. 16. 27 Piston rods ✓

Connecting rods Feb. 8. 15 March 26. April. 16. 18. 26 May. 13. 24. 28. June. 8. 12. 17. 21. 27 July. 2. 6. 10. 16. 17. 24. Crank and Flywheel shaft June 8. July 2. 16. 27 Intermediate shaft ✓

Crank and Flywheel shaft, Material Steel Identification Mark SEE BELOW Identification Marks

Is this machinery duplicate of a previous case Yes If so, state name of vessel "ASAMA MARU"

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

ENG. A.

LLOYDS  
SF  
14 8 3  
7-5-29  
x81  
101  
MS&Co

ENG. B.

TEST N°617  
LLOYDS 1738  
RWF  
7-5-29 RMF.

ENG. C.

LLOYDS  
R  
1508  
30-5-29

This Machinery has been constructed under Special Survey in accordance with approved plans and Rule Requirements. The Workmanship and Materials, so far as can be seen, are good and satisfactory bench trials have been carried out under survey. The three sets which are numbered 14352/A/B/C have been despatched to Nagasaki where they are to be installed on board and, in my opinion, will be eligible for inclusion in the Classification and record of T.M. of the vessel.

The amount of Fee ... £ 57-16-0  
Travelling Expenses (if any) £ 16. 10. 1

When applied for, 21 AUG 1929  
When received, 31 8/29

Arthur D. Palmer  
Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI 1 AUG 1930  
Assigned See F.E. Rpt.