

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

Slid No. 111,185

Date of writing Report 6 April 1943 When handed in at Local Office 15 JUN 1943 Port of London Received at London Office 15 JUN 1943
 No. in Survey held at Bedford. Date, First Survey 5 April Last Survey 12 May 1943
 Reg. Book. Number of Visits 9.
 Single on the Twin Triple Quadruple Screw vessel T.M.V. Chinese Prince Tons { Gross 9485 Net
 Built at Sunderland By whom built J. L. Thompson & Sons. Yard No. 625 When built 1943
 Owners Miss Furness Witty & Co. (Princes) Port belonging to
 Oil Engines made at Bedford. By whom made W. H. Allen Sons & Co. Contract No. K2/43970 When made 1943
 Generators made at do By whom made do. Contract No. E/43971 When made 1943
 No. of Sets 3. Engine Brake Horse Power 285 each Nom. Horse Power as per Rule Total Capacity of Generators 175 Kilowatts.

OIL ENGINES, &c.—Type of Engines Heavy Oil 2 or 4 stroke cycle 4 Single or double acting single
 Maximum pressure in cylinders 750 lb. Diameter of cylinders 230 Z Length of stroke 300 Z No. of cylinders 7 No. of cranks 7
 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 282 Z Is there a bearing between each crank yes
 Revolutions per minute 550 Flywheel dia. 1200 Z Weight 3600 lb. Means of ignition Compression Kind of fuel used Diesel oil
 Crank Shaft, dia. of journals as per Rule 139 Z as fitted 140 Z Crank pin dia. 150 Z Crank Webs Mid. length breadth 216 Z Thickness parallel to axis as fitted Mid. length thickness 70 Z Thickness around eye hole
 Flywheel Shaft, diameter as per Rule as fitted Crank shaft Intermediate Shafts, diameter as per Rule as fitted Thickness of cylinder liners 19 Z
 Is a governor or other arrangement fitted to prevent racing of the engine when declutched 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
 Cooling Water Pumps, No. one Is the sea suction provided with an efficient strainer which can be cleared within the vessel
 Lubricating Oil Pumps, No. and size one rotary
 Air Compressors, No. No. of stages Diameters Stroke Driven by
 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
 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 Open type
 Pressure of supply 220 volts. Full Load Current 796 Amperes. Direct or Alternating Current Direct
 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 yes
 Generators, are they compounded as per rule yes 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
 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

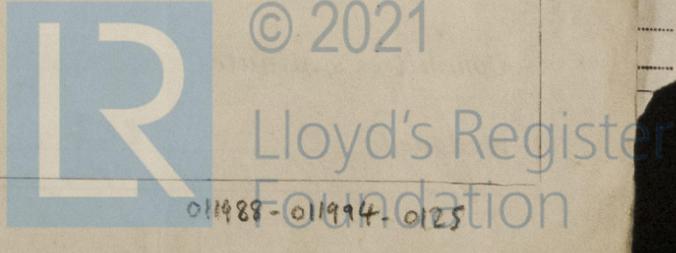
PLANS. Are approved plans forwarded herewith for Shafting 23-3-39 Receivers Separate Tanks
 (If not, state date of approval)

SPARE GEAR One set of valves for one cylinder; 4 woggles; 1 set of piston rings; 1 set of studs & nuts for one cylinder cover; 2 bolts & nuts for bottom end; 2 bolts & nuts for main bearing; one fuel pump; 1 quadrangle pin bush; 1 bottom end bearing; 1 fuel injection pipe etc. 2 brush holders with brushes;

These engines have been efficiently fitted on board & tried under working conditions with satisfactory results.
L. D. Horner

The foregoing is a correct description,

W. H. ALLEN, SONS & Co., Ltd. Manufacturer.
K. H. Clarke
9/6/43.



Dates of Survey while building { During progress of work in shops - - } 1943 April 5. 14. 16. 19. 20. 23. 29 May 11. 12.
 { During erection on board vessel - - - }
 Total No. of visits 9

Dates of Examination of principal parts—Cylinders 16. 4. 43 Covers 20. 4. 43 Pistons 20. 4. 43 Piston rods 14. 4. 43
 Connecting rods 5. 4. 43 Crank and Flywheel shaft 23. 4. 43 Intermediate shaft 14. 5. 43

Crank and Flywheel shafts, Material Steel Identification Mark 766 LLOYD'S T.T. 600 17. 7. 42 HAGG 4. 4. 43
 Intermediate shafts, Material ✓ Identification Marks 792 LLOYD'S T.T. 829. 26. 8. 42 HOG 14. 4. 43
 822 LLOYD'S T.T. 878. 21. 10. 42 HAG 20. 4. 43

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. These generator sets have been constructed under Special Survey in accordance with the requirements of the Rules & approved plans; the steel was made at Works approved by the Committee; the workmanship is good and on completion the sets were tested upon the bench under full and overload conditions with satisfactory results.

The Generator sets have been despatched to Sunderland for fitting on board the vessels.

The amount of Fee ... £ 22 : 1 : 0 When applied for, 1125 JUN 1943
 Travelling Expenses (if any) £ 2 : 7 : 4 When received, 19

M. T. Garnett
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUES. 16 NOV 1943

Assigned see minute on Sld J.S. Rpt



Im. 236. Transfer. (The Survivors are requested not to write on or below the space for Committee Minutes.)