

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

Std. No. 30561

Sen No. 959114

Received at London Office 11 JAN 1931 30 JAN 1931

Date of writing Report 19 When handed in at Local Office 11 JAN 1931 Port of London
 No. in Survey held at Reg. Book. Date, First Survey 16th June Last Survey 27th Dec 1930
 Number of Visits

Single on the Twin Triple Quadruple Screw vessel "BRITISH SCIENCE"
 Built at Newcastle-on-Tyne By whom built Palmer Shipt. & Son Ltd. Yard No. 1003 When built
 Owners British Tankers Co. Ltd. Port belonging to
 Oil Engines made at Bedford By whom made Messrs. H. H. Allen & Co. Ltd. Contract No. 11/23/62/8/13 When made 1930
 Generators made at do By whom made do Contract No. 11/23/63/1/2 When made 1930
 No. of Sets 2 Engine Brake Horse Power 200^{1/2} Nom. Horse Power as per Rule 64 Total Capacity of Generators 130 Kilowatts.

IL ENGINES, &c.—Type of Engines Allen Airless Injection 2 or 4 stroke cycle 4 Single or double acting S.A.
 Maximum pressure in cylinders 550 lb/sq. in. Diameter of cylinders 325^{3/4} Length of stroke 370^{3/4} No. of cylinders 2 No. of cranks 2
 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 400^{3/4} Is there a bearing between each crank Yes
 Revolutions per minute 300 Flywheel dia. 1600^{3/4} Weight 3.15 Tons Means of ignition Compression Kind of fuel used Diesel
 Crank Shaft, dia. of journals as per Rule 179.7^{3/4} as fitted 190^{3/4} Crank pin dia. 190^{3/4} Crank Webs Mid. length breadth 280^{3/4} Mid. length thickness 100^{3/4} Thickness parallel to axis shrunk SOLID FORGED Thickness around eye-hole
 Flywheel Shaft, diameter as per Rule CRANKSHAFT Intermediate Shafts, diameter as per Rule as fitted Thickness of cylinder liners 23.5^{3/4}

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
 Cooling Water Pumps, No. Is the sea suction provided with an efficient strainer which can be cleared within the vessel
 Lubricating Oil Pumps, No. and size One per Engine
 Air Compressors, No. No. of stages Diameters Stroke Driven by
 Scavenging Air Pumps, No. Diameter Stroke Driven by

IR 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 (Hermin Proof.) Direct.
 Pressure of supply 110 volts. Load 590 Amperes. Direct or Alternating Current
 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. 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
 PLANS. Are approved plans forwarded herewith for Shafting 26th Mar. 1929 Receivers Separate Tanks

SPARE GEAR
 As per List attached. Sfg. No. 4/76737. 1 set list 2.

The foregoing is a correct description,
 H. ALLEN, SURVYOR GENERAL, L.D.S.

Manufacturer.



© 2019
 Lloyd's Register
 Foundation

W11-0034

Dates of Survey while building { During progress of work in shops - - June 16. 19. 27
During erection on board vessel - - Oct. 10. 15. 28. 31. Nov 7. 18. Dec. 3. 16. 23. 1930
Total No. of visits 12 partial = 5 full

Dates of Examination of principal parts—Cylinders Oct 10. 15. Dec 16 Covers Oct 10 Dec 16 Pistons Dec 3. Piston rods ✓

Connecting rods June 16. 19. 27 Crank and Flywheel shaft Oct. 28. Intermediate shaft ✓

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

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.)

Crank Shaft Identification Marks:-
Eng. A. TEST
165
J.P.
LLOYDS
8793
23-7-30
A L R C
28-10-30

Eng. B. TEST

229
L.Y.
LLOYDS
25-8-30
A L R C
28-10-30

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. The two sets, which are numbered 23162/A/B, have been despatched to Newcastle where they are to be installed on board the vessel and, in my opinion, will be eligible for inclusion in the Classification and record of L.M.C. when this has been done.

This machinery has been satisfactorily fitted on board & tested under full working conditions.

The amount of Fee ... £ 6-8-0

When applied for, 11 JAN 1931

Travelling Expenses (if any) £ 4-7-9

When received, 7.2.1931

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

TUE. 10 FEB 1931

Assigned

See NWC 26. 86769



© 2019

Lloyd's Register Foundation