

EMERGENCY

Rpt. 4c.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 100,714

Date of writing Report 27th Oct 1934 When handed in at Local Office 29 OCT 1934 Port of London Received at London Office 29 OCT 1934 30 JAN 1935

No. in Survey held at Bedford Reg. Book. Date, First Survey 13.6.34 Last Survey 28 Sept 1934

Single on the Twin Triple Quadruple Screw vessel Port Wyndham Tons Gross 8580 Net 5233

Built at Glasgow By whom built John Brown & Co. Ltd. Yard No. 541 When built 1934

Owners Commonwealth and Dominion Line Ltd. Port belonging to

Oil Engines made at Bedford By whom made W. H. Allen & Sons Ltd. Contract No. K1/43975 When made 1934

Generators made at Bedford By whom made W. H. Allen & Sons Ltd. Contract No. E1/43976 When made 1934

No. of Sets 1 Engine Brake Horse Power 80 Nom. Horse Power as per Rule Total Capacity of Generators 50 Kilowatts.

OIL ENGINES, &c. Type of Engines (3530) Heavy oil, Solid injection 2 or 4 stroke cycle 4 Single or double acting Single

Maximum pressure in cylinders 650 lb/sq in Diameter of cylinders 230 mm Length of stroke 300 mm No. of cylinders 3 No. of cranks 3

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 266 mm Is there a bearing between each crank 1/2

Revolutions per minute 400 Flywheel dia. 1290 Weight 3780 lb Means of ignition Compression Kind of fuel used Heavy oil.

Crank Shaft, dia. of journals as per Rule 127 mm as fitted 130 mm Crank pin dia. 130 mm Crank Webs Mid. length breadth 200 mm Thickness parallel to axis shrunk Mid. length thickness 60 mm Thickness around eyehole

Flywheel Shaft, diameter as per Rule as fitted on crank shaft Intermediate Shafts, diameter as per Rule as fitted Thickness of cylinder liners 17 mm

Is a governor or other arrangement fitted to prevent racing of the engine when decoupled 1/2 Means of lubrication Greased

Are the cylinders fitted with safety valves No Are the exhaust pipes and silencers water cooled or lagged with non-conducting material

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

Lubricating Oil Pumps, No. and size 1 rotary 6.2 gallons per minute

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 1/2

Can the internal surfaces of the receivers be examined Yes What means are provided for cleaning their inner surfaces

Is there a drain arrangement fitted at the lowest part of each receiver Yes

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. 1 Total cubic capacity 4 cu ft. Internal diameter 13 3/8 inches thickness 5/16 inch

Seamless, lap welded or riveted longitudinal joint D.R. Pap Material Steel Range of tensile strength 26/30 tons Working pressure by Rules 300 lb

ELECTRIC GENERATORS:—Type

Pressure of supply 220 volts. Load 227 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 Receivers 13.2.31 Separate Tanks

SPARE GEAR 1 rehaunt, 1 inlet & 1 starting air valve complete, 1 fuel injector, 3 maple valves

3 piston rings, 1 scraper ring, 4 cylinder cover studs, 2 main bearing studs

2 bottom end bolts, 1 fuel pump, 1 armature, 1 dynamo bearing

3 bush holders.

The foregoing is a correct description, W. H. ALLEN, SONS & Co., Ltd.,

Manufacturer.



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Dates of Survey while building
During progress of work in shops - - 1934. June, 13. 22. Aug 17. Sept. 13/26. 27 = 6 visits.
During erection on board vessel - - -
Total No. of visits

Dates of Examination of principal parts - Cylinders 13.9.34 Covers 13.9.34 Pistons 13.9.34 Piston rods ✓
Connecting rods 17.8.34 Crank and Flywheel shaft 13.6.34 Intermediate shaft -

Crank and Flywheel shafts, Material *Anged Ingot Steel* Identification Mark LLOYD 4559 G.A. 10.4.34
G.A.L. 13.6.34

Intermediate shafts, Material *142* 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.) *Workmanship good.*

This emergency generating set has been specially surveyed during construction. The materials used have been made at works approved by the Committee and tested by the Surveyor to this Society. It satisfactorily withstood full power, overload & imitation & governing trials in shop and has not been dispatched to Glasgow for fitting onboard.

Attached hereto: *Fitting certificate for crank shaft.*

The amount of Fee ... £ 3 : 3 0

When applied for, 30 OCT 1934

Travelling Expenses (if any) £ :

When received, 1/11/35

Geo. A. Lang
Surveyor to Lloyd's Register of Shipping.

TUE. 12 FEB. 1935

Committee's Minute *GLASGOW 29 JAN 1935*

Assigned *See G.S. Rpt. 55340*



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Im. 6.31—Transfer.
(The Surveyors are requested not to write on or below the space for Committee Minutes.)