

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

Bel 12500

No. 61248.

JUN 21 1939

Date of writing Report

When handed in at Local Office

Port of Glasgow

No. in Survey held at Reg. Book.

Date, First Survey

15th March 39

Last Survey

15th June 1939.

Number of Visits

36311 on the ^{Single} Twin ^{Triple} Screw vessel

"WAHOTIRA"

Tons { Gross
Net

Built at Belfast

By whom built Harland & Wolff Ltd

Yard No. 1019 When built 1939

Owners Messrs Shaw Savill & Albion Co. Ltd

Port belonging to

Oil Engines made at Glasgow

By whom made British Auxiliary Ltd

Contract No. 330/331/332/333 When made 1939

Generators made at Belfast

By whom made Harland & Wolff Ltd

Contract No. 3825/8 When made 1939

No. of Sets 4 Engine Brake Horse Power 1800 Nom. Horse Power as per Rule 514 Total Capacity of Generators 1200 Kilowatts.

OIL ENGINES, &c.—Type of Engines Heavy Oil Type K.461 2 or 4 stroke cycle 2 Single or double acting Single

Maximum pressure in cylinders 780 lbs. M.I.P. 95" Diameter of cylinders 250 mm Length of stroke 420 mm No. of cylinders 24 No. of cranks 24

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 360 mm Is there a bearing between each crank Yes

Revolutions per minute 340 Flywheel dia. 1050 mm Weight 1551 lbs. Means of ignition compression Kind of fuel used Diesel

Crank Shaft, dia. of journals as per Rule 158 mm as fitted 160 mm Crank pin dia. 160 mm Crank Webs Mid. length breadth 214 mm Thickness parallel to axis shrunk Thickness around eye hole

Flywheel Shaft, diameter as per Rule 158 mm as fitted 160 mm Intermediate Shafts, diameter as per Rule as fitted Thickness of cylinder liners 19.5 mm

Is a governor or other arrangement fitted to prevent racing of the engine when disengaged 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 Yes

Cooling Water Pumps, No. none fitted Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Lubricating Oil Pumps, No. and size One each engine 165 litres per min. (each)

Air Compressors, No. none No. of stages Diameters Stroke Driven by

Scavenging Air Pumps, No. One each engine Diameter 720 mm Stroke 240 mm Driven by Main engines

AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes

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

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

High Pressure Air Receivers, No. none 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. Two Grimsby Cent. No. 3232/3 A.S. 6-3-38 Total cubic capacity 400 litres Internal diameter 15 3/4" thickness 1/2"

Seamless, lap welded or riveted longitudinal joint Yes Material steel Range of tensile strength 24-28 tons Working pressure by Rules 450 lbs

ELECTRIC GENERATORS:—Type Open type drip proof

Pressure of supply 222 volts. Load 1350 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 7-4-33 Receivers 6-5-37 Separate Tanks

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The foregoing is a summary description,
FOR BRITISH AUXILIARIES LIMITEDT. J. Jones.
General Manager

Manufacturer.



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Lloyd's Register
Foundation

W1139-049

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

Dates of Examination of principal parts - Cylinders 24.3.39 21.4.39 15.3.39 24.4.39 24.3.39
 4.4.39 24.4.39 17.3.39 15.3.39
 Covers 21.3.39 Pistons 24.4.39 Piston rods 11.4.39

Connecting rods 11.4.39 Crank and Flywheel shaft 11.4.39 Intermediate shaft
 Crank and Flywheel shaft, Material steel Identification Mark 9433 6.RC 31.1.39 9397
 Identification Marks

Is this machinery duplicate of a previous case Yes If so, state name of vessel M/V "Marama" Gls. No. 59802

General Remarks (State quality of workmanship, opinions as to class, &c.) These engines have been built under special survey in accordance with the Rules and approved plans. The materials and workmanship are good. On completion they have been tried on the bench at full power coupled to their respective generators with satisfactory results. They are to the order of Messrs Harland & Wolff Ltd Belfast and intended for their job No. 1019 building at their yard.

906
 19/6/39

These engines have been efficiently installed aboard in accordance with the Rules and tried out under working conditions with satisfactory results.

The main generators were constructed under survey, the electrical installation tested satisfactorily.

The amount of Fee ... £ 51 : 8 : 0

Travelling Expenses (if any) £ :

When applied for, 20 JUN 1939
 When received, 10 Aug 1939

See Sec. C.4.

G. E. Murchie & R. P. Murchie
 Surveyors to Lloyd's Register of Shipping.
 R. P. Murchie

Committee's Minute GLASGOW 20 JUN 1939

Assigned Deferred.

TUE 12 DEC 1939

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