

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 2069

Date of writing Report

11 SEP 1928

When handed in at Local Office

19

Port of

Received at London Office

London

No. in Survey held at
Reg. Book.

Bedford

Date, First Survey

17 FEB 1928

Last Survey

8 SEP 1928

1928

Number of Visits

Single
on the Twin
Triple
Quadruple

Screw vessel

"PORT ALMA"

Tons { Gross 7983
Net 4926

Built at Newcastle-on-Tyne

By whom built

Ivan Hunter & Higham Richardson

Yard No. 1242

When built 1928.

Owners Commonwealth & Dominion Line

Port belonging to

London.

Oil Engines made at

Bedford

By whom made

Messrs W. H. Allen Sons & Co.

Contract No.

9280/2/2

When made

1928

Generators made at

Bedford

By whom made

Messrs W. H. Allen Sons & Co.

Contract No.

92804/1/1

When made

1928

No. of Sets Three

Engine Brake Horse Power

1125 each

Nom. Horse Power as per Rule

321

Total Capacity of Generators

771

Kilowatts.

OIL ENGINES, &c.—Type of Engines Diesel (Burneish-Wain) 2 or 4 stroke cycle 4 Single or double acting S.A.

Maximum pressure in cylinders

500 lbs/sq

Diameter of cylinders

350 mm

Length of stroke

470 mm

No. of cylinders

6

No. of cranks

6

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge

420 mm

Is there a bearing between each crank

Yes

Revolutions per minute

250

Flywheel dia.

1800 mm

Weight

5.4 tons

Means of ignition Compression

Kind of fuel used

Diesel

Crank Shaft, dia. of journals

as per Rule 190 mm
as fitted 210 mm

Crank pin dia.

210 mm

Crank Webs

Mid. length breadth

310 mm

Mid. length thickness

105 mm

Thickness parallel to axis

SOLID FORGED

Flywheel Shaft, diameter

as per Rule 190 mm
as fitted 210 mm

Intermediate Shafts, diameter

as per Rule 190 mm
as fitted 210 mm

Thickness of cylinder liners

28 mm

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 geared to each Engine

Air Compressors, No.

One to each Engine

No. of stages

3

Diameters

292x260x57 mm

Stroke

214 mm

Driven by

Bank 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

fusible plug

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"

Thickness

3/8"

Seamless, lap welded or riveted longitudinal joint

Seamless

Material

Steel

Range of tensile strength

29/33 1/2"

Working pressure by Rules

1025 lbs/sq

Starting Air Receivers, No.

One per Engine

Total cubic capacity

150 litres

Internal diameter

12"

Thickness

1/2"

Seamless, lap welded or riveted longitudinal joint

Seamless

Material

Steel

Range of tensile strength

29/33 1/2"

Working pressure by Rules

1000 lbs/sq

ELECTRIC GENERATORS:—Type

Open

Pressure of supply

220 volts

Load

1170

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.

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

No. 27-6-27

Receivers

Separate Tanks

(If not, state date of approval)

PARE GEAR

As per attached List.

The foregoing is a correct description,

FOR MESSRS. W.H. ALLEN SONS & COMPANY. LIMITED. Manufacturer.

BEDFORD.

R. Hunter.

004900-004905-0030



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Lloyd's Register
Foundation

Dates of Survey while building { During progress of work in shops - - Feb. 17. 27 April 4. June 21. July 7. 10. 13. 17. 18. 23. 30 Aug. 19. 22. Sep 8.
During erection on board vessel - - -
Total No. of visits 14 partial = 6 full.

Dates of Examination of principal parts - Cylinders July 7. 10. 13. 17. 18. 23. 30 Covers Jan 2. July 13. 17. 23. 30 Pistons 23-7-28 Piston rods ✓
Connecting rods Feb. 17. 27 April 4. Crank and Flywheel shaft July 17. 30 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 "Port Fairy"

General Remarks (State quality of workmanship, opinions as to class, &c.)
Crank Shafts Identification Marks: -

ENG. D.	LLOYDS A	x 81	ENG. E.	95	ENG. F.	LLOYDS
	1313	84 R		LLOYDS		R
	20-4-28	MS & Co		336		1317
				RWF		8-5-28
				25-4-28		

This Machinery has been constructed under Special Survey in accordance with approved plans and Rule Requirements. The Workmanship & Materials, so far as can be seen, are good and satisfactory bench trials have been carried out under survey.

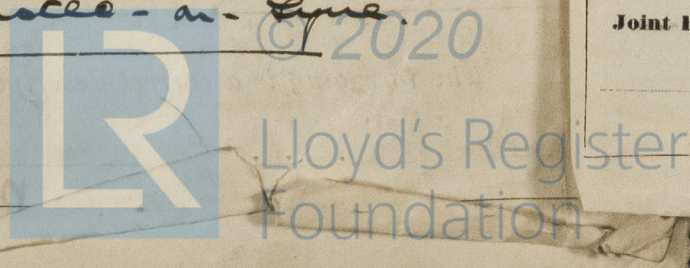
The three shafts which are numbered 92801/D/E/F. have been despatched to Newcastle-on-Tyne where they are to be installed on board and, in my opinion, will be eligible for inclusion in the Classification and record of T.M.C. of the vessel.

This Machinery has now been securely fitted on board the vessel, tried under full working conditions & found satisfactory.

The amount of Fee ... £32-2-0: When applied for, 11 SEP 1928
Travelling Expenses (if any) £9-0-11: When received, per letter 11/11/28 16.10.1928

Committee's Minute FRI. 14 DEC 1928
Assigned See Rec. To 1st No. 83570

Richard Palmer.
Surveyor to Lloyd's Register of Shipping.
Fred. A. Ferguson.
Newcastle-on-Tyne.



Rpt. No. 91570
Date of No. 1317
Reg. 8-5-28
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